# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### **FORM 20-F**

# ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2017

Commission file number: 1-12102

### YPF Sociedad Anónima

(Exact name of registrant as specified in its charter)

Republic of Argentina (Jurisdiction of incorporation or organization)

Macacha Güemes 515 C1106BKK Ciudad Autónoma de Buenos Aires, Argentina (Address of principal executive offices)

> Diego M. Pando Tel: (011-54-11) 5441-1276 Facsimile Number: (011-54-11) 5441-3726 Macacha Güemes 515

C1106BKK Ciudad Autónoma de Buenos Aires, Argentina (Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

American Depositary Shares, each representing one Class D
Share, par value 10 pesos per share
Class D Shares

Name of Each Exchange on Which Registered

New York Stock Exchange New York Stock Exchange\*

\* Listed not for trading but only in connection with the registration of American Depositary Shares.

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

The number of outstanding shares of each class of stock of YPF Sociedad Anónima as of December 31, 2017 was:

| Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes $\boxtimes$ No $\square$  |
|---|
| If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes $\square$ No $\boxtimes$   |
| Note – Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.  |
| Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes $\boxtimes$ No $\square$             |
| Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ⊠ No □ |
| Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or an emerging growth company. See definition of "accelerated filer," "large accelerated filer" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):   |
| Large accelerated filer   Accelerated filer □   |
| Non-accelerated filer □ Emerging growth company □   |
| If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.  |
| Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:   |
| U.S. GAAP ☐ International Financial Reporting Standards as issued by the International Accounting Standards Board: ☐  |
| If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 □ Item 18 ⊠   |
| If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act) Yes $\square$ No $\boxtimes$   |

Class A Shares Class B Shares Class C Shares Class D Shares 3,764 7,624 40,422

393,260,983 393,312,793

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#### **Conversion Table**

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1 ton = 1 metric ton = 1,000 kilograms = 2,204 pounds
1 barrel = 42 U.S. gallons
1 ton of oil = approximately 7.3 barrels (assuming a specific gravity of 34 degrees API (American Petroleum Institute))
1 barrel of oil equivalent = 5,615 cubic feet of gas = 1 barrel of oil, condensate or natural gas liquids
1 barrel of oil, condensate or natural gas liquids = 0.159 cubic meters
1 kilometer = 0.63 miles
1 million Btu = 252 termies
1 cubic meter of gas = 35.3147 cubic feet of gas
1 cubic meter of gas = 10 termies
1,000 acres = approximately 4 square kilometers
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#### References

YPF Sociedad Anónima is a stock corporation organized under the laws of the Republic of Argentina ("Argentina"). As used in this annual report, "YPF," "the Company," "we," "our" and "us" refer to YPF Sociedad Anónima and its controlled companies or, if the context requires, its predecessor companies. "YPF Sociedad Anónima" refers to YPF Sociedad Anónima only. "Repsol" refers to Repsol S.A., its affiliates and consolidated companies. We maintain our financial books and records and publish our financial statements in Argentine pesos. In this annual report, references to "pesos" or "Ps." are to Argentine pesos, and references to "dollars," "U.S. dollars" or "U.S.\$" are to United States dollars.

### **Disclosure of Certain Information**

In this annual report, references to "Audited Consolidated Financial Statements" are to YPF's audited consolidated statement of financial position as of December 31, 2017, 2016 and 2015, YPF's audited consolidated statements of comprehensive income for the years ended December 31, 2017, 2016 and 2015, YPF's audited consolidated statements of cash flows for the years ended December 31, 2017, 2016 and 2015, YPF's audited consolidated statements of changes in shareholders' equity for the years ended December 31, 2017, 2016 and 2015 and the related notes thereto.

Unless otherwise indicated, the information contained in this annual report reflects:

- for the subsidiaries that were consolidated using the global integration method at the date or for the periods indicated, 100% of the assets, liabilities and results of operations of such subsidiaries without excluding minority interests, and
- for those joint operations whose results were consolidated using the proportional integration method, a *pro rata* amount of the assets, liabilities and results of operations for such joint operations at the date or for the periods indicated.

For information regarding consolidation, see Notes 2.a and 2.b.5 to the Audited Consolidated Financial Statements.

Certain monetary amounts and other figures included in this annual report have been subject to rounding adjustments. Any discrepancies in any tables between the totals and the sums of the amounts are due to rounding.

### **Forward-Looking Statements**

This annual report, including any documents incorporated by reference, contains statements that we believe constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements may include statements regarding the intent, belief or current expectations of us and our management, including statements with respect to trends affecting our financial condition, financial ratios, results of operations, business, strategy, geographic concentration, reserves, future hydrocarbon production volumes and the Company's ability to satisfy our long-term sales commitments from future supplies available to the Company, our ability to pay dividends in the future and to service our outstanding debt, dates or periods in which production is scheduled or expected to come on-stream, as well as our plans with respect to capital expenditures, business, strategy, geographic concentration, cost savings, investments and dividends payout policies. These statements are not a guarantee of future performance and are subject to material risks, uncertainties, changes and other factors which may be beyond our control or may be difficult to predict. Accordingly, our future financial condition, prices, financial ratios, results of operations, business, strategy, geographic concentration, production volumes, reserves, capital expenditures, cost savings, WACC (weighted average cost of capital) investments and ability to meet our long-term sales commitments or pay dividends or service our outstanding debt could differ materially from those expressed or implied in any such forward-looking statements. Such factors include, but are not limited to, currency fluctuations, inflation, the domestic and international prices for crude oil and its derivatives, the ability to realize cost

reductions and operating efficiencies without unduly disrupting business operations, replacement of hydrocarbon reserves, environmental, regulatory and legal considerations, including the imposition of further government restrictions on the Company's business, changes in our business strategy and operations, our ability to find partners or raise funding under our current control, the ability to maintain the Company's concessions, and general economic and business conditions in Argentina, as well as those factors described in the filings made by YPF and its affiliates with the Securities and Exchange Commission, in particular, those described in "Item 3. Key Information—Risk Factors" and "Item 5. Operating and Financial Review and Prospects." YPF does not undertake to publicly update or revise these forward-looking statements even if experience or future changes make it clear that the projected results or condition expressed or implied therein will not be realized.

### Oil and Gas Terms

Oil and gas reserves definitions used in this annual report are in accordance with Regulations S-X and S-K, as amended by the U.S. Securities and Exchange Commission's ("SEC") final rule, Modernization of Oil and Gas Reporting (Release Nos. 33-8995; 34-59192; FR-78; File No. S7-15-08; December 31, 2008) and relevant guidance notes and letters issued by the SEC's Staff.

The reported reserves contained in this annual report include only our proved reserves and do not include probable reserves or possible reserves.

The following terms have the meanings shown below unless the context indicates otherwise:

"acreage": The total area, expressed in acres or km2, over which YPF has interests in exploration or production. Net acreage is YPF's interest in the relevant exploration or production area.

"basin": A depression in the crust of the Earth formed by plate tectonic activity in which sediments accumulate. Continued sediment accumulation can cause further depression or subsidence.

"block": Areas defined by concession contracts or operating contracts signed by YPF.

"concession contracts": A grant of access for a defined area and time period that transfers certain entitlements to produce hydrocarbons from the host country to an enterprise. The company holding the concession generally has rights and responsibilities for the exploration, development, production and sale of hydrocarbons, and typically, an obligation to make payments at the signing of the concession and once production begins pursuant to applicable laws and regulations.

"crude oil": Crude oil with respect to YPF's production and reserves includes condensate.

"field": One or more reservoirs grouped by or related to the same general geologic structural feature or stratigraphic condition.

"formation": The fundamental unit of lithostratigraphy. A body of rock that is sufficiently distinctive and continuous that it can be mapped.

"gas": Natural gas.

"hydrocarbons": Crude oil, natural gas liquids and natural gas.

"surface conditions": Represents the pressure and temperature conditions at which volumes of oil, gas, condensate and natural gas liquids are measured for reporting purposes. It is also referred to as standard conditions. For YPF these conditions are 14.7 psi for pressure and 60 degrees Fahrenheit for temperature. All volume units expressed in this report are at surface conditions.

### **Abbreviations:**

"bbl" Barrels. "bbl/d" Barrels per day. "bcf" Billion cubic feet. "bcf/d" Billion cubic feet per day. "bcm" Billion cubic meters. "bcm/d" Billion cubic meters per day. "boe" Barrels of oil equivalent. "boe/d" Barrels of oil equivalent per day. "cm" Cubic meter. "cm/d" Cubic meters per day. "dam3" Cubic decameters (thousand cubic meters). "GWh" Gigawatt hours. "HP" Horsepower. "km" Kilometers. "km2" Square kilometers. "liquids" Crude oil, condensate and natural gas liquids. "LNG" Liquefied natural gas. "LPG" Liquefied petroleum gas. Thousand. "m" "mbbl" Thousand barrels. "mbbl/d" Thousand barrels per day. "mcf" Thousand cubic feet. "mcf/d" Thousand cubic feet per day. Thousand cubic meters. "mcm" "mcm/d" Thousand cubic meters per day. "mboe" Thousand barrels of oil equivalent. "mboe/d" Thousand barrels of oil equivalent per day. "mm" Million. "mmbbl" Million barrels. "mmbbl/d" Million barrels per day. "mmboe" Million barrels of oil equivalent. "mmboe/d" Million barrels of oil equivalent per day. "mmBtu" Million British thermal units. "mmcf" Million cubic feet. "mmcf/d" Million cubic feet per day. "mmcm" Million cubic meters. "mmcm/d" Million cubic meters per day. "mtn" Thousand tons. "MW" Megawatts. "NGL" Natural gas liquids. "psi" Pound per square inch. "WTI" West Texas Intermediate.

### ITEM 1. Identity of Directors, Senior Managers and Advisers

Not applicable.

### ITEM 2. Offer Statistics and Expected Timetable

Not applicable.

### ITEM 3. Key Information

### **Selected Financial Data**

The following tables present our selected financial data. This information should be read in conjunction with our Audited Consolidated Financial Statements, and the information under "Item 5. Operating and Financial Review and Prospects" included elsewhere in this annual report.

Our Audited Consolidated Financial Statements are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

In this annual report, except as otherwise specified, references to "\$," "U.S.\$" and "dollars" are to U.S. dollars, and references to "Ps." and "pesos" are to Argentine pesos. Solely for the convenience of the reader, peso amounts as of and for the year ended December 31, 2017 have been translated into U.S. dollars at the exchange rate quoted by the Argentine Central Bank (*Banco Central de la República Argentina*) (the "Central Bank") on December 31, 2017 of Ps. 18.77 to U.S.\$1.00, unless otherwise specified. The exchange rate quoted by the Central Bank on April 19, 2018 was Ps. 20.16 to U.S.\$1.00. The U.S. dollar equivalent information should not be construed to imply that the peso amounts represent, or could have been or could be converted into U.S. dollars at such rates or any other rate. See "—Exchange Rates."

The financial data contained in this annual report as of and for the years ended December 31, 2017, 2016 and 2015 has been derived from our Audited Consolidated Financial Statements included in this annual report. The financial data contained in this annual report as of December 31, 2014 and 2013 and for the years ended December 31, 2014 and 2013 have been derived from our audited consolidated financial statements as of and for the years ended December 31, 2014 and 2013 not included in this annual report.

|  | As of and for the year ended December 31,                        |          |          |          |         |
|--|--|----------|----------|----------|---------|
|  | 2017   | 2016     | 2015     | 2014     | 2013    |
|  | (in millions of pesos, except for per share<br>and per ADS data) |          |          |          |         |
| Consolidated Statement of Comprehensive Income Data(1):                        |  |          |          |          |         |
| Revenues (2)   | 252,813  | 210,100  | 156,136  | 141,942  | 90,113  |
| Gross profit   | 41,001   | 32,796   | 36,599   | 37,450   | 22,019  |
| Administrative expenses  | (8,736)  | (7,126)  | (5,586)  | (4,530)  | (2,686) |
| Selling expenses   | (17,954)   | (15,212) | (11,099) | (10,114) | (7,571) |
| Exploration expenses   | (2,456)  | (3,155)  | (2,473)  | (2,034)  | (829)   |
| Recovery / (Impairment) of property, plant and equipment and intangible assets | 5,032  | (34,943) | (2,535)  | _        | —       |
| Other net operating results  | (814)  | 3,394    | 1,682    | (1,030)  | 227     |
| Operating profit (loss)  | 16,073   | (24,246) | 16,588   | 19,742   | 11,160  |
| Income from equity interests in associates and joint ventures                  | 1,428  | 588      | 318      | 558      | 353     |
| Net financial results  | (8,798)  | (6,146)  | 12,157   | 1,772    | 2,835   |
| Net profit / (loss) before income tax  | 8,703  | (29,804) | 29,063   | 22,072   | 14,348  |
| Income tax   | 3,969  | 1,425    | (24,637) | (13,223) | (9,269) |
| Net profit / (loss) for the year   | 12,672   | (28,379) | 4,426    | 8,849    | 5,079   |
| Total other comprehensive income for the year                                  | 21,917   | 27,414   | 43,758   | 16,276   | 12,031  |
| Total comprehensive income / (loss) for the year                               | 34,589   | (965)    | 48,184   | 25,125   | 17,110  |
| Earnings and dividends per share and per ADS                                   |  |          |          |          |         |
| Earnings per share and per ADS (4)   | 31.43  | (72.13)  | 11.68    | 22.95    | 13.05   |
| Dividends per share and per ADS (in pesos)                                     | 1.82   | 2.26     | 1.28     | 1.18     | 0.83    |
| Dividends per share and per ADS <sup>(5)</sup> (in U.S. dollars)               | 0.10   | 0.15     | 0.14     | 0.14     | 0.13    |
| Consolidated Statement of Financial Position Data                              |  |          |          |          |         |

|   | As of and for the year ended December 31,   |         |         |          |         |
|---|---|---------|---------|----------|---------|
|   | 2017  | 2016    | 2015    | 2014     | 2013    |
|   | (in millions of pesos, except for per share |         |         |          | ;       |
|   | and per ADS data)                           |         |         |          |         |
| Cash and cash equivalents   | 28,738                                      | 10,757  | 15,387  | 9,758    | 10,713  |
| Working capital (3)   | 19,564                                      | 4,760   | (2,818) | (11,266) | 1,706   |
| Total assets  | 505,718                                     | 421,139 | 363,453 | 208,554  | 135,595 |
| Total loans (6)   | 191,063                                     | 154,345 | 105,751 | 49,305   | 31,890  |
| Shareholders' equity (7)  | 152,533                                     | 118,661 | 120,461 | 72,781   | 48,240  |
| Other Consolidated Financial Data   |   |         |         |          |         |
| Depreciation of property, plant and equipment and amortization of intangible    |   |         |         |          |         |
| assets  | 54,350                                      | 45,469  | 27,008  | 20,405   | 11,433  |
| Cash used in acquisition of property, plant and equipment and intangible assets | 59,618                                      | 64,160  | 63,774  | 50,213   | 27,639  |

- (1) The consolidated financial statements reflect the effect of the application on the functional and reporting currency. See Note 2.b.1 to the Audited Consolidated Financial Statements.
- (2) Revenues are net of payments on account of fuel transfer taxes and turnover taxes. Customs duties on hydrocarbon exports are disclosed in taxes, charges and contributions, as indicated in Note 21 to the Audited Consolidated Financial Statements. Royalties with respect to our production are accounted for as a cost of production and are not deducted in determining revenues. See Note 2.b.15 to the Audited Consolidated Financial Statements.
- (3) Working capital consists of consolidated total current assets minus consolidated total current liabilities as of December 31, 2017, 2016, 2015, 2014 and 2013.
- (4) Information has been calculated as detailed in Note 26 to the Audited Consolidated Financial Statements. Each ADS represents one Class D share.
- (5) Amounts expressed in U.S. dollars are based on the exchange rate as of the date of the dividend payment.
- Total loans include non-current loans of Ps. 151,727 million, Ps. 127,568 million, Ps. 77,934 million, Ps. 36,030 million and Ps. 23,076 million as of December 31, 2017, 2016, 2015, 2014 and 2013, respectively, and current loans of Ps. 39,336 million, Ps. 26,777 million, Ps. 27,817 million, Ps. 13,275 million and Ps. 8,814 million as of December 31, 2017, 2016, 2015, 2014 and 2013, respectively. See Note 16 to the Audited Consolidated Financial Statements.
- (7) Our subscribed share capital as of December 31, 2017 is represented by 393,312,793 shares of common stock and divided into four classes of shares, with a par value of Ps. 10 and one vote per share. These shares are fully subscribed, paid-in and authorized for stock exchange listing. See "Item 6. Directors, Senior Management and Employees—Compensation of members of our Board of Directors and Supervisory Committee," "Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers" and Note 2.b.10.iii to the Audited Consolidated Financial Statements in relation to shares purchased by YPF and allocated to our employees as part of our employee compensation plans.

For information regarding macroeconomic conditions such as exchange rates and inflation rates that affected our results of operations, see "Item 3. Key Information—Selected Financial Data—Exchange Rates" and "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions." In addition, for an explanation of our results of operations, see "Item 5. Operating and Financial Review and Prospects—Principal Income Statement Line Items—Results of Operations."

### Exchange Rates

From April 1, 1991 until the end of 2001, the Convertibility Law (Law No. 23,928) established a fixed exchange rate which required the Central Bank to sell U.S. dollars at one peso per U.S. dollar. On January 6, 2002, the Argentine congress enacted the Public Emergency and Foreign Exchange System Reform Law (Law No. 25,561, the "Public Emergency Law"), formally putting an end to the Convertibility Law regime and abandoning the U.S. dollar-peso parity. The Public Emergency Law, which had been periodically extended and expired on December 31, 2017, by virtue of Law No. 27,200, had granted the National Executive Office the

power to set the exchange rate between the peso and foreign currencies and to issue regulations related to the foreign exchange market. Following a brief period during which the Argentine government established a temporary dual exchange rate system pursuant to the Public Emergency Law, the peso has been allowed to float freely against other currencies since February 2002, although the government has the power to intervene by buying and selling foreign currency for its own account, a practice in which it engages on a regular basis. The annual rate of devaluation of the peso was approximately 18.4% from December 31, 2016 to December 31, 2017, based on the period-end exchange rates for U.S. dollars as of December 31, 2017 and 2016. See "—Risk Factors—Risks Relating to Argentina—Our business is highly dependent upon economic conditions in Argentina."

The following table sets forth the annual high, low, average and period-end exchange rates for U.S. dollars for the periods indicated, expressed in nominal pesos per U.S. dollar, based on rates quoted by the Central Bank. The Federal Reserve Bank of New York does not report a noon buying rate for Argentine pesos.

|                         | Low   | High     | Average (1)     | Period End |
|-------------------------|-------|----------|-----------------|------------|
|                         |       | (pesos p | er U.S. dollar) |            |
| Year ended December 31, |       |          |                 |            |
| 2013                    | 4.92  | 6.52     | 5.54            | 6.52       |
| 2014                    | 6.54  | 8.56     | 8.23            | 8.55       |
| 2015                    | 8.73  | 13.76    | 9.39            | 13.01      |
| 2016                    | 13.07 | 16.04    | 14.78           | 15.85      |
| 2017                    | 15.17 | 18.83    | 16.76           | 18.77      |
| Month                   |       |          |                 |            |
| October 2017            | 17.33 | 17.51    | 17.40           | 17.40      |
| November 2017           | 17.33 | 17.67    | 17.49           | 17.38      |
| December 2017           | 17.26 | 18.83    | 17.70           | 18.77      |
| January 2018            | 18.42 | 19.65    | 19.03           | 19.65      |
| February 2018           | 19.47 | 20.16    | 19.84           | 20.12      |
| March 2018              | 20.14 | 20.39    | 20.24           | 20.14      |
| April 2018 (2)          | 20.15 | 20.22    | 20.18           | 20.16      |

Source: Central Bank

- (1) Calculated using the average of the exchange rates on the last day of each month during the period (for annual periods), and the average of the exchange rates on each day during the period (for monthly periods).
- (2) Through April 19, 2018.

No representation is made that peso amounts have been, could have been or could be converted into U.S. dollars at the foregoing rates on any of the dates indicated.

### **Exchange Regulations**

Prior to December 1989, the Argentine foreign exchange market was subject to exchange controls. From December 1989 until April 1991, Argentina had a freely floating exchange rate for all foreign currency transactions, and the transfer of dividend payments in foreign currency abroad and the repatriation of capital were permitted without prior approval of the Central Bank. From April 1, 1991, when the Convertibility Law became effective, until December 21, 2001, when the Central Bank closed the foreign exchange market, the Argentine peso was freely convertible into U.S. dollars.

On December 3, 2001, the Argentine government imposed a number of monetary and currency exchange control measures through Decree 1570/01, which included restrictions on the free disposition of funds deposited with banks and tight restrictions on transferring funds abroad (including the transfer of funds to pay dividends) without the Central Bank's prior authorization subject to specific exceptions for transfers related to foreign trade.

In June 2003, the Argentine government set restrictions on capital flows that came into Argentina, which mainly consisted of a prohibition against the transfer abroad of any funds until 180 days after their entry into the country.

On June 9, 2005, by means of Decree No. 616/2005, the Argentine Executive Branch established that (a) all inflows of funds into the domestic foreign exchange market arising from foreign debts incurred by individuals or entities of the private sector, excluding foreign trade financing and primary issuances of debt securities admitted to public offering and authorized to be listed and/or traded on self-regulatory markets; and (b) all inflows of funds of non-residents channeled through the local foreign exchange market to be applied to: holdings of local currency, acquisition of all types of financial assets or liabilities in the financial or non-financial private sector, to the exclusion of direct foreign investment and primary issuances of debt securities and shares admitted to public offering and authorized to be listed and/or traded in self-regulatory markets, and investments in Government securities acquired in secondary markets must meet the following requirements: (i) the funds entering the country may only be transferred out of the local foreign exchange market at the expiration of a term of 365 calendar days counted as beginning on the date the funds were received in Argentina; (ii) the proceeds of the foreign exchange settlement of the funds received in Argentina must be credited to an account in the local banking system; (iii) a registered, non-transferable and non-interest bearing deposit equivalent to 30% of the amount involved in the relevant transaction is to be maintained for a term of 365 calendar days in the conditions prescribed by the regulations (the "Mandatory Deposit"); and (iv) the Mandatory Deposit is to be made in US dollars and held in a financial institution in Argentina. The Mandatory Deposit shall not accrue interest nor any other type of benefits and it shall not be used to secure credit facilities of any type. There are various exceptions to the requirements of Decree No. 616/2005, including but not limited to, those detailed below.

However, Resolution No. 3/2015 issued by the Ministry of Budget and Public Finances reduced the Mandatory Deposit percentage created by Decree No. 616/2005 from 30% to 0% and reduced the period in which the incoming funds must remain in Argentina from 365 calendar days to 120 calendar days. Moreover, in January 2017, the Ministry of Treasury reduced the holding period of the Mandatory Deposit from 120 calendar days to 0 calendar days. As a result of these two changes to the regulations, the Mandatory Deposit is currently not required.

On August 8, 2016, the Central Bank of the Argentine Republic ("BCRA" or "Central Bank") established a new exchange rate regime through Communication "A" 6037, substantially modifying existing exchange regulations and facilitating access to the Free Single Exchange Market (Mercado Unico Libre de Cambios—"MULC"). On May 19, 2017, the Central Bank issued Communication "A" 6244 which, effective as of July 1, 2017, significantly modified and relaxed all the regulations that regulated the operation of the MULC. By virtue of this last Communication, all the rules that regulated the exchange operations were replaced by this new regulation, including—among others- the exchange rate transaction, the general position of changes, the provisions adopted by Decree No. 616 / 05, and maintaining the validity of the norms related to information regimes, surveys or follow-ups related to such topics.

Recently, through Communication "A" 6401 of December 26, 2017, the Central Bank replaced the information regimes and surveys established by Communications "A" 3602 and "A" 4237 with a unified regime, applicable from the corresponding information as of December 31, 2017.

The information required will be used exclusively for statistical purposes, framed in the provisions of the Law on Statistics and Census No. 17.622. According to the new regime, individuals and legal entities, assets and other universal residents are subject (for example: trusts, joint ventures, business collaboration groups, cooperation consortiums or other plurilateral associative contracts), which are not included in the category of General Government according to the definition of the Sixth Edition of the Balance of Payments Manual of the International Monetary Fund.

Three sample levels are contemplated, whose participants will be determined each calendar year based on: 1) the sum of the flows of external assets and liabilities during the previous calendar year; and 2) the balance of holdings of external assets and liabilities at the end of the previous calendar year; a) Main sample: any individual or legal entity for which the sum of the flows of external assets and liabilities during the previous calendar year, or the balance of external assets and liabilities at the end of that calendar year reaches or exceeds the equivalent of U.S.\$ 50 million; b) Secondary sample: any individual or legal entity for which the sum of the flows of external assets and liabilities during the previous calendar year, or the balance of external assets and liabilities at the end of that calendar year, is between the equivalent of U.S.\$ 10 million and U.S.\$ 50 million; and c) Complementary sample: any individual or legal entity for which the sum of the flows of external assets and liabilities during the previous calendar year, or the balance of external assets and liabilities at the end of that calendar year is between the equivalent of U.S.\$ 1 million and U.S.\$ 10 million. For the rest of the individuals or legal entities, the declaration will be optional. In the three samples, an annual declaration must be presented and, in the first case, an advance for each of the quarters. External assets and liabilities must be reported according to the following classification: (i) shares and equity interests; (ii) non-negotiable debt instruments; (iii) negotiable debt instruments; (iv) financial derivatives; and (v) land, structures and real estate.

As a result, as of the date of this annual report, the Argentine government has eliminated the restrictions on access to the MULC and there are no limitations for the repatriation of investments by non-residents, without prejudice to the fact that new exchange control policies could be established in the future.

Additionally, Decree No. 893 dated November 1, 2017, in order to improve the competitiveness of Argentine exports, make financing conditions more flexible and improve financial predictability, repealed the mandatory entry and settlement of export currencies, as well as the obligation to negotiate the currencies so that the exporter could have access to the collection of export refunds. In accordance with the aforementioned decree, Communication "A" 3636 of the Central Bank dated November 10, 2017 repealed the sections and other provisions related to the entry and settlement of foreign currency from exports.

For more information regarding current foreign exchange restrictions and control regulations, you should seek advice from your legal advisors and read the applicable rules mentioned herein, as well as their amendments and complementary regulations, which are available at the website: <a href="http://www.infoleg.gob.ar/">http://www.infoleg.gob.ar/</a>, or the Central Bank's website: <a href="http://www.infoleg.gob.ar/">www.infoleg.gob.ar/</a>, or the Central Bank's website: <a href="http://www.infoleg.gob.ar/">www.infoleg.gob.ar/</a>, or the Central Bank's website: <a href="http://www.infoleg.gob.ar/">http://www.infoleg.gob.ar/</a>, or the

#### **Risk Factors**

The risks and uncertainties described below are those known by us as of the date of this report. However, such risks and uncertainties may not be the only ones that we could face. Additional risks and uncertainties that are unknown to us or that we currently think are immaterial also may impair our business operations.

### Risks Relating to Argentina

### The Argentine Republic owns 51% of the shares of the Company.

The Argentine Republic owns 51% of the shares of the Company (see "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—The Expropriation Law"), and consequently, the federal government is able to determine all matters requiring approval by a majority of shareholders, including the election of a majority of directors. We cannot assure you that the decisions taken by our controlling shareholder would not differ from your interests as a shareholder. In addition, according to the Argentine Constitution, presidential elections take place every four years. Accordingly, changes in government or its policies may occur. We cannot assure you if and when any such changes may occur, nor the impact they may have on our business.

### Our business is largely dependent upon economic conditions in Argentina.

Most of our operations, properties and customers are located in Argentina, and, as a result, our business is to a large extent dependent upon economic conditions prevailing in Argentina. The changes in economic, political and regulatory conditions in Argentina and measures taken by the Argentine government have had and are expected to continue to have a significant impact on us. You should make your own assessment about Argentina and prevailing conditions in the country before taking an investment decision in us.

The Argentine economy has experienced significant volatility in past decades, including numerous periods of low or negative growth and high and variable levels of inflation and currency devaluation. No assurances can be given that the rate of growth experienced over past years will be achieved in subsequent years or that the national economy will not suffer recession. If economic conditions in Argentina were to slow down, or contract, if inflation were to accelerate further, or if the Argentine government's measures to attract or retain foreign investment and international financing in the future are unsuccessful, such developments could adversely affect Argentina's economic growth and in turn affect our financial health and results of operations.

Argentina has confronted and continues to confront inflationary pressures. According to inflation data published by the National Statistics Institute (*Instituto Nacional de Estadística y Censos*) ("INDEC"), in 2017 the Argentine alternative consumer price index ("CPI") and the wholesale price index increased by 24.8% and 18.8%, respectively.

Argentine economic conditions are dependent on a variety of factors, including, but not limited to, the following:

- domestic production, international demand and prices for Argentina's principal commodity exports;
- stability and competitiveness of the Argentine peso against foreign currencies;
- competitiveness and efficiency of domestic industries and services;
- levels of consumer consumption;
- foreign and domestic investment and financing; and
- the rate of inflation.

The Argentine economy is also sensitive to local political developments. Despite significant measures taken by the Argentine government that was elected on December 10, 2015, such as the elimination of exchange restrictions, the partial adjustment of gas and electricity prices and the elimination or reduction of export taxes for certain products, Argentina's economy continues to face challenges. Inflation remains a challenge for Argentina given its persistent nature in recent years. The Macri administration has announced its intention to reduce the primary fiscal deficit as a percentage of GDP over time and also reduce the Government's reliance on Central Bank financing. If, despite the measures adopted by the Macri administration, these measures fail to address Argentina's structural inflationary imbalances, the current levels of inflation may continue and have an adverse effect on Argentina's economy and, indirectly, our business, financial condition and results of operations. Inflation can also lead to an increase in the Republic's debt and have an adverse effect on the Republic's ability to service its debt, principally in the medium and long term when most inflationindexed debt matures. In addition, weaker fiscal results could have a material adverse effect on the Government's ability to access long term financing, which, in turn, could adversely Argentina's economy and financial condition. Furthermore, considering the Government current macroeconomic program, which has been and is also expected to require domestic and international financing, in the future, the Argentine Republic may not be able or willing to access international or domestic capital markets, and the Republic's ability to service its outstanding public debt could be adversely affected, and consequently adversely affect Argentina's economic and our financial health and results of operations. See "Item 5. Operating and Financial Review and Prospects-Factors Affecting Our Operations—Macroeconomic conditions."

Argentina's economy is also vulnerable to adverse developments affecting its principal trading partners. A deterioration of economic conditions in Brazil, Argentina's main trading partner, and a deterioration of the economies of Argentina's other major trading partners, such as China or the United States, could have a material adverse impact on Argentina's balance of trade and adversely affect Argentina's economic growth and may consequently adversely affect our financial health and results of operations. Furthermore, a significant devaluation of the currencies of our trading partners or trade competitors may adversely affect the competitiveness of Argentina and consequently adversely affect Argentina's economic and our financial health and results of operations.

In 2005, Argentina restructured a substantial portion of its bond indebtedness with approximately 76% of its bondholders, and in 2006 it settled all of its debt with the International Monetary Fund ("IMF"). In June 2010, Argentina restructured additional defaulted bond indebtedness that was not swapped in 2005. As a result of the 2005 and 2010 debt swaps, over 92% of the bond indebtedness on which Argentina had defaulted in 2002 has been restructured ("Exchange Bonds").

Certain holders of bonds that were not swapped in the debt restructuring sued Argentina for payment ("Holdout Bondholders"). After several years, in February 2016, Argentina negotiated and reached agreements in principle with respect to a substantial number of the Holdout Bondholders. On April 22, 2016, Argentina issued U.S.\$16.5 billion of new debt securities in the international capital markets, and applied U.S.\$9.3 billion to satisfy settlement payments on agreements with holders of approximately U.S.\$8.2 billion principal amount of defaulted bonds. The District Court ordered the vacatur of all *pari passu* injunctions upon confirmation of such payments. For additional information related to the evolution of the Argentine economy see "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions."

### Certain risks are inherent in any investment in a company operating in an emerging market such as Argentina.

Argentina is an emerging market economy, and investing in emerging markets generally carries risks. These risks include political, social and economic instability that may affect Argentina's economic results which can stem from many factors, including the following:

- high interest rates;
- abrupt changes in currency values;
- high levels of inflation;

- exchange and capital controls;
- wage and price controls;
- regulations to import equipment and other necessities relevant for operations;
- changes in governmental economic or tax policies; and
- political and social tensions.

In particular, we continue to actively manage our schedule of work, contracting, procurement and supply-chain activities to effectively manage costs. However, price levels for capital and exploratory costs and operating expenses associated with the production of crude oil and natural gas can be subject to external factors beyond our control including, among other things, the general level of inflation, commodity prices and prices charged by the industry's material and service providers, which can be affected by the volatility of the industry's own supply and demand for such materials and services. In the past, we and the oil and gas industry generally experienced an increase in certain costs that exceeded the general trend of inflation.

Any of these factors, as well as volatility in the capital and foreign exchange markets, may adversely affect our financial condition and results of operations or the liquidity, trading markets and value of our securities.

### The Argentine economy has been adversely affected by economic developments in other markets.

Financial and securities markets in Argentina, and also the Argentine economy, are influenced by economic and market conditions in other markets worldwide. Argentina's economy remains vulnerable to external shocks, including those relating to a potential trade war between China and the United States. Although economic conditions vary from country to country, investors' reactions to events occurring in one country sometimes demonstrate a "contagion" effect in which an entire region or class of investment is disfavored by international investors. Consequently, there can be no assurance that the Argentine financial system and securities markets will not continue to be adversely affected by events in developed countries' economies or events in other emerging markets, which could in turn, adversely affect the Argentine economy and, indirectly, our business, financial condition and results of operations, and the market value of our ADSs.

### The implementation of new export duties, other taxes and import regulations could adversely affect our results.

Although the Argentine government recently eliminated export taxes to hydrocarbon products, including crude oil, in the past, the Argentine government established export taxes on certain hydrocarbon products. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation."

We cannot assure you that taxes and import regulations of this nature will not be reinstated or modified in the future or that other new taxes or import regulations will not be imposed.

### We may be exposed to fluctuations in foreign exchange rates.

Our results of operations are exposed to currency fluctuations, and any devaluation of the peso against the U.S. dollar and other hard currencies may adversely affect our business and results of operations. The value of the peso has fluctuated significantly in the past, such as in January 2014 when the Argentine peso declined approximately 23% against the U.S. dollar and in December 2015 when the Argentine peso declined approximately 40% against the U.S. dollar. The peso may fluctuate in the future. See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions" for additional information. The main effects of the devaluation of the Argentine peso on our net income are related to the accounting treatment of (i) deferred income tax related mainly to fixed assets, which we expect would have a negative effect; (ii) current income tax, which we expect would have a positive effect; (iii) increased depreciation and amortization resulting from the remeasurement in pesos of our fixed and intangible assets; (iv) exchange rate differences as a result of our exposure to the peso, which we expect would have a positive effect due to the fact that our functional currency is the U.S. dollar and (v) higher revenues because domestic prices in Argentina for our main products are based on international prices (See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions."). In addition, regarding our financial position the majority of our debt is denominated in currencies other than the peso; consequently, a devaluation of the peso against such currencies will increase the amount of pesos we need to cope with in the terms of loans.

We are unable to predict whether, and to what extent, the value of the peso may further depreciate or appreciate against the U.S. dollar and how any such fluctuations could affect our business.

### Variations in interest rates and exchange rate on our current and/or future financing arrangements may result in significant increases in our borrowing costs.

Under our financing arrangements, we are permitted to borrow funds to finance the purchase of assets, incur capital expenditures, repay other obligations and finance working capital. As of December 31, 2017, approximately 22% of our total debt is sensitive to changes in interest rates, mainly those prevailing in the domestic market. See "Item 11. Quantitative and Qualitative Disclosures about Market Risk—Interest rate exposure." Consequently, variations in interest rates could result in significant changes in the amount required to cover our debt service obligations and in our interest expense, thus affecting our results and financial condition. In addition, interest and principal amounts payable pursuant to debt obligations denominated in or indexed to U.S. dollars are subject to variations in the Argentine peso/U.S. dollar exchange rate that could result in a significant increase in peso terms in the amount of the interest and principal payments in respect of such debt obligations.

### We could be subject to exchange and capital controls.

In the past, Argentina imposed exchange controls and transfer restrictions substantially limiting the ability of companies to retain foreign currency or make payments abroad. Beginning in 2011, additional foreign exchange controls have been imposed that restrict or limit purchases of foreign currency and transfers of foreign currency abroad. Since 2011, oil and gas companies (including YPF), among other entities, were required to repatriate 100% of their foreign currency export receivables. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Repatriation of Foreign Currency." In December 2015, the new administration eliminated certain exchange controls imposed by the previous administration, such as (i) the requirement that foreign currency be deposited and exchanged in Argentina in respect of finance transactions outside Argentina, and (ii) the requirement that 30% of funds in U.S. dollars held in Argentina be frozen pursuant to Decree No. 616/05. Following these changes, the peso fell to Ps. 12.99 per U.S.\$1.00, as of December 31, 2015, a decrease of approximately 52% compared to December 31, 2014. Between December 16, 2015 and December 31, 2015, the peso decreased approximately 40% against the U.S. dollar. As of April 19, 2018, the peso fell to Ps. 20.16 per U.S.\$1.00, an increase of approximately 7.4% compared to December 31, 2017. There can be no assurance that future regulatory changes related to exchange and capital controls will not adversely affect our financial condition or results of operations, our ability to meet our obligations denominated in foreign currency or our ability to execute our financing and capital expenditure plans.

## Our access to international capital markets and the market price of our shares are influenced by the perception of risk in Argentina and other emerging economies.

International investors consider Argentina to be an emerging market. Economic and market conditions in other emerging market countries, especially those in Latin America, influence the market for securities issued by Argentine companies. Volatility in securities markets in Latin America and in other emerging market countries may have a negative impact on the trading value of our securities and on our ability and the terms on which we are able to access international capital markets. Moreover, regulatory and policy developments in Argentina that occurred in recent years, including the enactment of the Expropriation Law, as well as the litigation of the Argentine government with Holdout Bondholders have led to considerable volatility in the market price of our shares and ADSs. See "—Our business is largely dependent upon economic conditions in Argentina." We cannot assure that the perception of risk in Argentina and other emerging markets may not have a material adverse effect on our ability to raise capital, including our ability to refinance our debt at maturity, which would negatively affect our investments plans and consequently our financial condition and results of operations, and also have a negatively impact on the trading values of our debt or equity securities. We can give no assurance as to potential adverse impact of the factors discussed above on our financial condition and/or results of operations. See "Item 4. Information on the Company—History and Development of YPF."

### **Risks Relating to Our Business**

### We are exposed to the effects of fluctuations in the prices of oil, gas and refined products.

Most of our revenue in Argentina is derived from sales of refined products (mainly gasoline and diesel) and, to a lesser extent, natural gas. International prices for oil and oil products are volatile and, since the recent liberalization of the domestic market, the prices of our oil products, are strongly influenced by conditions and expectations of world supply and demand, among other factors. Volatility and uncertainty in international prices for crude oil, oil products will most likely continue.

After the above mentioned recent liberalization of the domestic market, our pricing policy of fuels depends on several factors such as international crude oil prices, international refining spreads, processing and distribution costs, biofuel prices, exchange currencies, local demand and supply, competition, stocks, local taxation, and domestic margins for our products, among others. Notwithstanding our expectation to substantially maintain our domestic prices with reference to those in international markets (see "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions"), we cannot assure you that other factors that are also considered into account in our pricing policy as mentioned before, lead us not to completely reflect import

parity prices in our domestic prices, thus affecting our business, results of operations and financial condition. In addition, substantial or extended declines in international crude oil prices or its derivatives, , may also have a material adverse effect on our business, results of operations and financial condition.

In terms of investments, we budget capital expenditures related to exploration, development, refining and distribution activities by considering, among other things, current and expected local and international market prices for our hydrocarbon products. The Argentine government has adopted a policy geared towards the convergence between domestic prices for crude oil and related products and international benchmark prices for such products. This convergence finally occurred during the second semester of 2017 (see "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions"). The international price of crude oil has fluctuated significantly in the past and if crude oil prices in the domestic market drop for an extended period (or if prices for certain products do not match cost increases), this could cause reduce the economic viability of our drilling projects. These reductions could lead to changes to our development plans, which could lead to the loss of proved developed reserves and proved undeveloped reserves, and could also adversely affect our ability to improve our hydrocarbon recovery rates, find new reserves, develop unconventional resources and carry out certain of our other capital expenditure plans. In turn, this change in conditions could have an adverse effect on our financial condition and results of operations. Additionally, they could also have an impact on our operating assumptions and estimates and, as a result, affect the recovery value of certain assets.

Furthermore, we may be required to further write down the carrying value of our properties if estimated oil prices decline or if we have substantial downward adjustments to our estimated proved reserves, increases in our operating costs, increases in the discount rate of return, among others. See additionally "Item 5. Operating and Financing Review and Prospects—Critical Accounting Policies" for information regarding our sensitivity analysis related to impairment. In addition, if a reduction in our capital expenditures materializes, including the capital expenditures of our domestic competitors, it would likely have a negative impact on the number of active drilling rigs, workovers and pulling equipment in Argentina, including related services, thus affecting the number of active workers in the industry. We are unable to predict whether, and to what extent, the potential consequences of such measures could affect our business, have an impact on our production and consequently affect our financial condition and results of operations.

### Our domestic operations are subject to extensive regulation.

The Argentine oil and gas industry is subject to government regulation and control. As a result, our business is to a large extent dependent upon regulatory and political conditions prevailing in Argentina and our results of operations may be adversely affected by regulatory and political changes in Argentina.

In addition, until recently domestic prices for crude oil and certain oil products were not closely co-related or linked to those prevailing in international market. The Argentine government has adopted a policy geared towards the convergence between domestic prices for crude oil and related products and international benchmark prices for such products. This convergence finally occurred during the second semester of 2017 (see "Limitations on local pricing in Argentina may adversely affect our results of operations" and "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions"). Therefore, we may face risks and challenges relating to government regulation and control of the energy sector, including those set forth below and elsewhere in these risk factors:

- limitations on our ability to increase local prices or to reflect the effects of higher domestic taxes, increases in production costs or increases in international prices of crude oil and other hydrocarbon fuels and exchange rate fluctuations on our domestic prices. See "—Limitations on local pricing in Argentina may adversely affect our results of operations";
- new export duties, similar taxes or regulations on imports;
- limitations on hydrocarbon export volumes, driven mainly by the requirement to satisfy domestic demand;
- in connection with the Argentine government's policy to provide absolute priority to domestic demand, regulatory orders to supply natural gas and other hydrocarbon products to the domestic retail market in excess of previously contracted amounts. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Natural gas";
- in connection with the former and current incentive programs established by the Argentine government for the oil and gas industry, such as the "Natural Gas Additional Injection Stimulus Program" and the "Investment in Natural Gas Production from Non-Conventional Reservoirs Stimulus Program" ("Gas Plan") (see "—A significant percentage of our cash flow from operations is derived from counterparties that are governmental entities") and cash collection of balances with the Argentine government;
- legislation and regulatory initiatives relating to hydraulic stimulation and other drilling activities for unconventional
  oil and gas hydrocarbons, which could increase our cost of doing business or cause delays and adversely affect our
  operations;

- restrictions on imports of products which could affect our ability to meet our delivery commitments or growth plans, as the case may be; and
- the implementation or imposition of stricter quality requirements for petroleum products in Argentina.

In past years, the Argentine government has made certain changes in regulations and policies governing the energy sector to give absolute priority to domestic supply at stable prices in order to sustain economic recovery. As a result of the above-mentioned changes, for example, on days during which a gas shortage occurs, exports of natural gas (which are also affected by other government curtailment orders) and the provision of gas supplies to industries, electricity generation plants and service stations selling compressed natural gas are interrupted for priority to be given to residential consumers at lower prices. The Expropriation Law has declared achieving self-sufficiency in the supply of hydrocarbons as well as in the exploitation, industrialization, transportation and sale of hydrocarbons, a national public interest and a priority for Argentina. In addition, its stated goal is to guarantee socially equitable economic development, the creation of jobs, the increase of the competitiveness of various economic sectors and the equitable and sustainable growth of the Argentine provinces and regions. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—The Expropriation Law," and "—Risks Relating to Argentina—The Argentine Republic owns 51% of the shares of the Company." Moreover, we cannot assure you that changes in applicable laws and regulations, or adverse judicial or administrative interpretations of such laws and regulations, will not adversely affect our results of operations. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government."

### Limitations on local pricing in Argentina may adversely affect our results of operations.

In the past, due to regulatory, economic and government policy factors, our domestic gasoline, diesel, natural gas and other fuel prices have differed substantially from prevailing international and regional market prices for such products, and our ability to increase prices in connection with international price increases or domestic cost increases, including those resulting from the peso devaluation, has been limited from time to time. In January 2017, the Argentine government adopted a policy geared towards the convergence between domestic prices for crude oil and related products and international benchmark prices for such products and in October 2017 eliminated the price-setting system for domestically-consumed fuel, which led to the current free float of fuel prices. (see "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions"). After the above mentioned recent liberalization of the domestic market, our pricing policy of fuels depends on several factors such as international crude oil prices, international refining spreads, processing and distribution costs, biofuel prices, exchange currencies, local demand and supply, competition, stocks, local taxation, and domestic margins for our products, among others. Notwithstanding our expectation to substantially maintain our domestic prices with reference to those in international markets (see "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions"), we cannot assure that we will be successful in implementing this policy, as a result of different factors (such as, among others, strong competition or new regulatory or potential legal limitations).

Regarding natural gas markets, revenues we obtain as a result of selling natural gas in Argentina (including amounts received through the Gas Plan, see "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Natural gas") are subject to government regulations and could be negatively affected, principally considering the evolution of gas prices for residential consumers which in turn are still subject to subsidies. In addition, a new stimulus program for natural gas production from non-conventional reservoirs was created (see "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—MINEM Resolution No. 46/2017"). The prices that we are able to obtain for our hydrocarbon products affect the viability of investments in new exploration, development and refining and, as a result, the timing and amount of our projected capital expenditures for such purposes. We budget capital expenditures by taking into account, among other things, market prices for our hydrocarbon products. For additional information on domestic pricing for our products, see "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation."

### A significant percentage of our cash flow from operations is derived from counterparties that are governmental entities.

In the normal course of business, and considering that we are the primary oil and gas company in Argentina, our portfolio of clients and suppliers includes both private sector and governmental entities. All material transactions and balances with related parties as of December 31, 2017 are set forth in Note 31 to the Audited Consolidated Financial Statements, including those related to the Natural Gas Additional Injection Stimulus Program. As of December 31, 2017, the accounts receivable balance corresponding to the Natural Gas Additional Injection Stimulus Program reflects twelve months of accrued, unpaid payments, representing Ps. 13.4 billion. As of the date of this annual report, we have not received additional payments related to amounts accrued and unpaid as of December 31, 2017 under such programs. See additionally "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government— MINEM Resolution No. 97/2018.". If certain governmental counterparties were

(i) not able to pay or redeem such accrued amounts in cash or cash equivalents, or (ii) only able to make such payments or redemptions through delivery of financial instruments which may delay collection of working capital payments in excess of our estimates, our financial condition and results of operations could be adversely affected.

We are subject to direct and indirect import and export restrictions, which have affected our results of operations and caused us to declare force majeure under certain of our export contracts.

The Argentine Hydrocarbons Law No. 17,319, allows for hydrocarbon exports as long as they are not required for the domestic market and are sold at reasonable prices. In the case of natural gas, Law No. 24,076 and related regulations require that the needs of the domestic market be taken into account when authorizing long-term natural gas exports.

During the last several years, the Argentine authorities have adopted a number of measures that have resulted in restrictions on exports of natural gas from Argentina. Due to the foregoing, we have been obliged to sell a part of our natural gas production previously destined for the export market in the local Argentine market and have not been able to meet our contractual gas export commitments in whole or, in some cases, in part, leading to disputes with our export clients and forcing us to declare force majeure under our export sales agreements. We believe that the measures mentioned above constitute force majeure events, although no assurance can be given that this position will prevail.

See "Item 4. Information on the Company—Exploration and Production—Delivery commitments—Natural gas supply contracts," "Item 4. Information on the Company—Exploration and Production—The Argentine natural gas market," and "Item 8. Financial Information—Legal Proceedings."

Crude oil exports, as well as the export of most of our hydrocarbon products, currently required prior authorization from the Argentine Secretariat of Energy pursuant to the regime established under S.E. Resolution No. 241-E/17, as amended and supplemented by other regulation. Oil companies seeking to export crude oil or LPG must first demonstrate that the local demand for such product is satisfied or that an offer to sell the product to local purchasers has been made and rejected. Oil refineries seeking to export diesel must also first demonstrate that the local demand for diesel is duly satisfied.

In addition, on March 21, 2017, Decree No. 192/2017 was published in the Official Gazette of the Republic of Argentina, which created the "Oil and its Byproducts Import Operations Registry" (the "Registry"), and set forth that the MINEM (through the Secretariat of Hydrocarbon Resources) would be responsible controlling the Registry. The Registry involved import operations of: (i) crude oil and (ii) certain other specific byproducts listed in section 2 of the decree. By means of this regulation, any company that wished to perform such import operations was obligated to register such operation in the Registry and to obtain authorization from MINEM before the import took place. According to this decree, MINEM had to set the methodology applicable to issue import authorizations, which will be based in the following criteria: (a) lack of crude oil with the same characteristics offered in the domestic market; (b) lack of additional treatment capacity in domestic refineries with domestic crude oil; and (c) lack of byproducts listed in section 2 of the decree offered in the domestic market. This regime exempted any import by CAMMESA in order to supply power plants with the main purpose of technical supply to the "Inter-connection Argentinean System" (Sistema Argentino de Interconexión or "SADI"). On November 24, 2017, Decree No. 962/2017 was published in the Official Gazette amending Decree No. 192/2017 by providing that the Registry would be in effect until December 31, 2017. Decree No. 962/2017 provided that the need for the Registry was temporary and therefore, since December 31, 2017, the import operations related to crude oil, gasoline, and diesel oil included in Decree No. 192/2017 are no longer subject to registration.

We are unable to predict how long these restrictions will be in place, or whether any further measures will be adopted that adversely affect our ability to export or import gas, crude oil and diesel or other products and, accordingly, our results of operations.

### Our reserves and production are likely to decline.

Most of our existing oil and gas producing fields in Argentina are mature and, as a result, our reserves and production are likely to decline as reserves are depleted. Our production decreased in 2017 compared to 2016 by 3.9% and our reserves replacement ratio (increases in reserves in the year, net divided by the production of the year) was 9% in 2017, compared to 46% in 2016.

We face certain challenges in order to replace our proved reserves with other categories of hydrocarbons. However, the continuous comprehensive technical review of our oil and gas fields allows us to identify opportunities to rejuvenate mature fields and optimize new field developments in Argentine basins with the aim of achieving results similar to those achieved by mature fields in other regions of the world (which have achieved substantially higher recovery factors with the application of new technology). Additionally, we have been completing the renewal of most of our concessions, allowing us to develop certain strategic projects related to water-flooding, enhanced oil recovery and unconventional resources, which represent an important opportunity not only for us but also for Argentina. We expect that unconventional development will require higher investment in future years, principally in connection with the Vaca Muerta formation. These investments are expected to yield economies of scale, de risk undeveloped acreage and to significantly increase recovery rates from this resource play. Other resource plays, unconventional prospects, exist in Argentina and have positioned the country amongst the most attractive in terms of worldwide unconventional resource potential. Nevertheless, the financial viability of these investments and reserve recovery efforts will generally depend on the prevailing economic and regulatory conditions in Argentina, as well as the market prices of hydrocarbon products, and are also subject to material risks inherent to the oil and gas industry and may prove unsuccessful. See "—Our business plan includes future drilling activities for unconventional oil and gas reserves, such as shale oil and gas extraction, and if we are unable to successfully acquire and use the necessary new technologies and other support as well as obtain financing and venture partners, our business may be adversely affected."

### Our oil and natural gas reserves are estimates.

Our oil and gas proved reserves are estimated using geological and engineering data to determine with reasonable certainty whether the crude oil or natural gas in known reservoirs is recoverable under existing economic and operating conditions. The accuracy of proved reserve estimates depends on a number of factors, assumptions and variables, some of which are beyond our control. Factors susceptible to our control include drilling, testing and production after the date of the estimates, which may require substantial revisions to reserves estimates; the quality of available geological, technical and economic data used by us and our interpretation thereof; the production performance of our reservoirs and our recovery rates, both of which depend in significant part on available technologies as well as our ability to implement such technologies and the relevant know-how; the selection of third parties with which we enter into business; and the accuracy of our estimates of initial hydrocarbons in place, which may prove to be incorrect or require substantial revisions. Factors mainly beyond our control include changes in prevailing oil and natural gas prices, which could have an effect on the quantities of our proved reserves (since the estimates of reserves are calculated under existing economic conditions when such estimates are made); changes in the prevailing tax rules, other government regulations and contractual conditions after the date estimates are made (which could make reserves no longer economically viable to exploit); and certain actions of third parties, including the operators of fields in which we have an interest.

Information on net proved reserves as of December 31, 2017, 2016 and 2015 was calculated in accordance with SEC rules and FASB's ASC 932, as amended. Accordingly, crude oil prices used to determine reserves were calculated each month, for crude oils of different quality produced by us.

As previously discussed, the Argentine government has adopted a policy geared towards the convergence between domestic prices for crude oil and related products and international benchmark prices for such products. This convergence finally occurred during the second semester of 2017. See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions". Accordingly, for calculations of our net proved reserves as of December 31, 2017, we considered the realized prices for crude oil in the domestic market, taking into account the unweighted average price for each month within the twelve-month period ending December 31, 2017.

The international price of crude oil has fluctuated significantly in the past. If these prices decrease significantly in the future, our future calculations of estimated proved reserves would be based on lower prices. This could result in our having to remove non-economic reserves from our proved reserves in future periods. Holding all other factors constant, if commodity reference prices used in our year-end reserve estimates were decreased by 10% for crude oil, our total proved reserves as of December 31, 2017 would decrease by approximately 12.3%. Furthermore, holding all other factors constant, if costs used in our year-end reserve estimates were increased by 10% for crude oil and natural gas, our total proved reserves as of December 31, 2017 would decrease by approximately 11.7%. In addition, as a result of the prices used to calculate the present value of future net revenues from our proved reserves, in accordance with SEC rules, which are similar to the calculation of proved reserves described above, the present value of future net revenues from our proved reserves will not necessarily be the same as the current market value of our estimated crude oil and natural gas reserves.

As a result of the foregoing, measures of reserves are not precise and are subject to revision. Any downward revision in our estimated quantities of proved reserves could adversely impact our financial results by leading to increased depreciation, depletion and amortization charges or impairment, which could reduce earnings and shareholders' equity. See "—We are exposed to the effects of fluctuations in the prices of oil, gas and oil products"

### Oil and gas activities are subject to significant economic, environmental and operational risks.

Oil and gas exploration and production activities are subject to particular economic and industry-specific operational risks, some of which are beyond our control, such as production, equipment and transportation risks, as well as natural hazards and other uncertainties, including those relating to the physical characteristics of onshore and offshore oil or natural gas fields. Our operations may be curtailed, delayed or cancelled due to bad weather conditions, mechanical difficulties, shortages or delays in the delivery of equipment, compliance with governmental requirements, fire, explosions, blow-outs, pipe failure, abnormally pressured formations, and environmental hazards, such as oil spills, gas leaks, ruptures or discharges of toxic gases. In addition, we operate in politically sensitive areas where the native population has interests that from time to time may conflict with our production or development objectives. If these risks materialize, we may suffer substantial operational losses and disruptions to our operations and harm to our reputation. Additionally, if any operational incident occurs that affects local communities and ethnic communities in nearby areas, we will need to incur in additional costs and expenses in order to return affected areas to normality and to compensate for any damages we may cause. These additional costs may have a negative impact on the profitability of the projects we may decide to undertake. Drilling may be unprofitable, not only with respect to dry wells, but also with respect to wells that are productive but do not produce sufficient revenues to return a profit after drilling, operating and other costs are taken into account.

Furthermore, historically our results have been subject to seasonal fluctuations during the year, particularly as a result of increased demand for natural gas during the colder winter months. In the fourth quarter of 2017, an unusually lower natural gas demand forced us to reduce natural gas output. We could be subject to seasonal fluctuations in our sales volumes and consequently our level of natural gas production could be negatively affected. (See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Seasonality.")

Our business plan includes future drilling activities for unconventional oil and gas reserves, such as shale oil and gas extraction, and if we are unable to successfully acquire and use the necessary new technologies and other support as well as obtain financing and venture partners, our business may be adversely affected.

Our ability to execute and carry out our business plan depends upon our ability to obtain financing at a reasonable cost and on reasonable terms. We have identified drilling locations and prospects for future drilling opportunities of unconventional oil and gas reserves, such as the shale oil and gas in the Vaca Muerta formation. These drilling locations and prospects represent a part of our future drilling plans. Our ability to drill and develop these locations depends on a number of factors, including seasonal conditions, regulatory approvals, negotiation of agreements with third parties, commodity prices, costs, access to and availability of equipment, services and personnel and drilling results. In addition, the drilling and exploitation of unconventional oil and gas reserves depends on our ability to acquire the necessary technology and hire personnel and other support needed for extraction or obtain financing and venture partners to develop such activities. Furthermore, in order to implement our business plan, including the development of our oil and natural gas exploration activities and the development of refining capacity sufficient to process increasing production volumes, we will need to raise significant amounts of debt capital in the financial and capital markets. We cannot guarantee that we will be able to obtain the necessary financing or obtain financing in the international or local financial markets at reasonable cost and on reasonable terms to implement our new business plan or that we would be able to successfully develop our oil and natural gas reserves and resources (mainly those related to our unconventional oil and gas business plan). Because of these uncertainties, we cannot give any assurance as to the timing of these activities or that they will ultimately result in the realization of proved reserves or meet our expectations for success, which could adversely affect our production levels, financial condition and results of operations.

### We may not have sufficient insurance to cover all the operating hazards to which we are subject.

As discussed under "—Oil and gas activities are subject to significant economic, environmental and operational risks" and "—We may incur significant costs and liabilities related to environmental, health and safety matters," our exploration and production operations are subject to extensive economic, operational, regulatory and legal risks. We maintain insurance covering us against certain risks inherent in the oil and gas industry in line with industry practice, including loss of or damage to property and equipment, control-of well incidents, loss of production or income incidents, removal of debris, sudden and accidental seepage pollution, contamination and clean up and third-party liability claims, including personal injury and loss of life, among other business risks. However, our insurance coverage is subject to deductibles and limits that in certain cases may be materially exceeded by our liabilities. In addition, certain of our insurance policies contain exclusions that could leave us with limited coverage in certain events. See "Item 4. Information on the Company—Insurance." In addition, we may not be able to maintain adequate insurance at rates or on terms that we consider reasonable or acceptable or be able to obtain insurance against certain risks that materialize in the future. If we experience an incident against which we are not insured, or the costs of which materially exceed our coverage, it could have a material adverse effect on our business, financial condition and results of operations.

### Argentine oil and gas production concessions and exploration permits are subject to certain conditions and may be cancelled or not renewed.

As modified by Law No. 27,007, the Hydrocarbons Law provides for oil and gas concessions to remain in effect for 25 years as from the date of their award, 35 years for unconventional concessions and 30 years for offshore concessions. It further provides that concession terms may be extended for periods of up to 10 years each. The authority to extend the terms of current and new permits, concessions and contracts has been vested in the governments of the provinces in which the relevant area is located (and the federal government in respect of offshore areas beyond 12 nautical miles). In order to be eligible for an extension of a concession, under the modifications of Law No. 27,007, concessionaires must (i) have complied with their obligations, (ii) be producing hydrocarbons in the concession under consideration and (iii) submit an investment plan for the development of such areas as requested by the competent authorities up to a year prior to the termination of each term of the concession. Under the Hydrocarbons Law, non-compliance with the obligations and standards set out therein may also result in the imposition of fines and in the case of material breaches, following the expiration of applicable cure periods, the revocation of the concession or permit.

We cannot provide assurances that any of our concessions will be extended as a result of the consideration by the relevant authorities of the investment plans we would submit in the future for the development of the areas as of the date of requesting the extension periods for our relevant areas, or other requirements will not be imposed on us in order to obtain extensions as of the date of expiration. Additional royalty payments of 3%, up to a maximum of 18%, are provided for in extensions under Law No. 27,007. The termination of, or failure to obtain the extension of, a concession or permit, or its revocation, could have a material adverse effect on our business and results of operations.

### Our acquisition of exploratory acreage and crude oil and natural gas reserves is subject to heavy competition.

We face intense competition in bidding for crude oil and natural gas production areas, especially those areas with the most attractive crude oil and natural gas reserves. As a result, the conditions under which we are able to access new exploratory or productive areas could be adversely affected. In addition, fewer offerings of exploratory acreages available to be bid upon could affect our future results.

### We may incur significant costs and liabilities related to environmental, health and safety matters.

Operations in the oil and gas industry in which we participate, including those related to our mining and use of sand for purposes of our oil and gas operations, are subject to a wide range of environmental, health and safety laws and regulations in the countries in which we operate. These laws and regulations have a substantial impact on our operations and those of our subsidiaries, and could result in material adverse effects on our financial position and results of operation. In addition, we or YPF Holdings, our wholly-owned subsidiary, may have certain environmental liabilities through certain subsidiaries. See "—We may be responsible for significant costs and liabilities depending on the outcome of the reorganization proceedings involving our YPF Holdings subsidiaries and the alter ego claims." A number of events related to environmental, health and safety matters, including changes in applicable laws and regulations, adverse judicial or administrative interpretations of such laws and regulations, changes in enforcement policy, the occurrence of new litigation or development of pending litigation, and the development of information concerning these matters, could result in new or increased liabilities, capital expenditures, reserves, losses and other impacts that could have a material adverse effect on our financial condition and results of operations. In addition, the Company's sand mining operations and hydraulic stimulation may result in silicarelated health issues and litigation that could have a material adverse effect on the Company in the future. See "Item 8. Financial Information—Legal Proceedings" and "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Argentine Environmental Regulations."

Environmental, health and safety regulation and jurisprudence in Argentina is developing at a rapid pace and no assurance can be provided that such developments will not increase our cost of doing business and liabilities, including with respect to drilling and exploitation of our unconventional oil and gas reserves. In addition, due to concern over the risk of climate change, a number of countries have adopted, or are considering the adoption of, new regulatory requirements to reduce greenhouse gas emissions, such as carbon taxes, increased efficiency standards or the adoption of cap and trade regimes. Argentina recently issued new rules which began to phase-in more stringent regulations to lower the amount of sulfur contained in diesel and gasoline fuels that will result in an increase in our investments and relative costs for such production in following years, thus potentially affecting our results of operations depending on the future prices of fuels. Furthermore, if additional requirements were adopted in Argentina, these requirements could make our products more expensive as well as shift hydrocarbon demand toward relatively lower-carbon sources such as renewable energies.

Furthermore, water is an essential component of both the drilling and hydraulic fracturing processes. Consequently, the Company regularly disposes of the fluids produced from oil and gas production operations directly or through the use of third party vendors. Increased regulation or limitations to the use of water for our operations, or increased scrutiny or limitations on the injection of produced water through injection wells (which could also result in increased litigation), could adversely affect our operation and our financial condition.

### We may be responsible for significant costs and liabilities depending on the outcome of the reorganization proceedings involving our YPF Holdings subsidiaries and the alter ego claims.

As discussed in Note 27 to the Audited Consolidated Financial Statements, on June 17, 2016, Maxus Energy Corporation, Tierra Solutions Inc., Maxus International Energy Company, Maxus (US) Exploration Company and Gateway Coal Company (collectively, the "Maxus Entities"), subsidiaries of YPF Holdings, Inc., filed for reorganization proceedings in Wilmington, Delaware under Chapter 11 of the U.S. Bankruptcy Code. In conjunction with those proceedings, the Maxus Entities entered into an agreement with YPF along with its subsidiaries YPF Holdings Inc., CLH Holdings Inc., YPF International S.A. and YPF Services USA Corp (collectively, the "YPF Entities") to settle any and all claims held by Maxus against the YPF Entities, including any alter ego claims, all of which claims the YPF Entities believe are without merit, and to release the YPF entities of any and all claims held by the Maxus Entities (the "Agreement").

The Agreement provided for a payment of U.S.\$130 million to the Maxus Entities ("Settlement Payment") and for the provision of a U.S.\$63.1 million debtor-in-possession loan ("DIP Loan") by YPF Holdings Inc.

However, on March 28, 2017 the Maxus Entities and the Creditors' Committee submitted an alternative restructuring plan (the "Alternative Plan") which does not include the Agreement with the YPF Entities. Under the Alternative Plan, a Liquidating Trust may submit alter ego claims and any other claim belonging to the insolvent's estate against the Company and the YPF Entities. The liquidating trust would be financed by Occidental Chemical Corporation in its capacity as creditor of the Maxus Entities. As YPF did not approve such Alternative Plan and the Alternative Plan did not contemplate the implementation of the originally submitted Agreements, on April 10, 2017 YPF Holdings, Inc. sent a note giving notice that this situation constituted an event of default under the loan granted under the Agreement with YPF and the YPF Entities.

Together with the approval of the financing offered by Occidental ("Pospetition DIP Facility") under the Alternative Plan, the Judge ordered the repayment of the outstanding amounts (approximately US\$12.2 millon) under the terms of the DIP Loan, which were subsequently received.

On May 22, 2017, the Bankruptcy Court of the Delaware District issued an order confirming the Alternative Plan submitted by the Creditors' Committee and the Maxus Entities. The effective date of the Alternative Plan was July 14, 2017, as the conditions set forth in Article XII.B of the Alternative Plan were met. On July 14, 2017, a Liquidating Trust was also created. The Liquidating Trust stated to the Bankruptcy Court that it intends to file claims in 2018.

Depending on the final outcome of these matters, including the alter ego claims, our financial condition and results of operation could be materially and adversely affected. See "Item 8. Financial Information—Legal Proceedings."

### We face risks relating to certain legal proceedings.

As described under "Item 8. Financial Information—Legal Proceedings," we are party to a number of labor, commercial, civil, tax, criminal, environmental and administrative proceedings that, either alone or in combination with other proceedings, could, if resolved in whole or in part adversely to us, result in the imposition of material costs, fines, judgments or other losses. While we believe that we have provisioned such risks appropriately based on the opinions and advice of our external legal advisors and in accordance with applicable accounting rules, certain loss contingencies, particularly those relating to environmental matters, are subject to change as new information develops and it is possible that losses resulting from such risks, if proceedings are decided in whole or in part adversely to us, could significantly exceed any accruals we have provided.

In addition, we may be subject to undisclosed liabilities related to labor, commercial, civil, tax, criminal or environmental contingencies incurred by businesses we acquire as part of our growth strategy, that we may not be able to identify or that may not be adequately indemnified under our acquisition agreements with the sellers of such businesses, in which case our business, financial condition and results of operation may be materially and adversely affected.

### Our business depends to a significant extent on our production and refining facilities and logistics network.

Our oil and natural gas field facilities, refineries and logistics network are our principal production facilities and distribution network on which a significant portion of our revenues depends. Although we insure our properties on terms we consider prudent and have adopted and maintain safety measures, any significant damage to, accident or other production stoppage at our facilities or network could materially and adversely affect our production capabilities, financial condition and results of operations.

For instance, on April 2, 2013, our facilities in the La Plata refinery were hit by a severe and unprecedented storm, recording over 400 mm of rainfall. The rainfall set a new record for the area and disrupted refinery systems, causing a fire that affected the Coke A and Topping C units in the refinery. This incident temporarily affected the crude processing capacity of the refinery, which had to be stopped entirely during certain days.

In addition, on March 21, 2014, a fire occurred at the Cerro Divisadero crude oil treatment plant, located 20 kilometers from the town of Bardas Blancas in the province of Mendoza. The Cerro Divisadero plant, which has six tanks, four of which are for processing and two are for dispatch of treated crude oil, concentrates the production of ten fields in the Malargue area. This constitutes a daily production of approximately 9,200 barrels of oil as of the date of the incident. The new oil treatment plant was put into production in December 2016.

### We could be subject to organized labor action.

Our operations have been affected by organized work disruptions and stoppages in the past and we cannot assure you that we will not experience them in the future, which could adversely affect our business and revenues, especially in the context of activity reduction. Labor demands are commonplace in Argentina's energy sector and unionized workers have blocked access to and damaged our plants in the recent past. Our operations were affected occasionally by labor strikes in recent years. See "—Oil and gas prices, including the recent decline in global prices for oil and gas, could affect our business" and "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions."

#### We may not be able to pay, maintain or increase dividends.

On April 30, 2015, our shareholders approved a dividend of Ps. 503 million (Ps. 1.28 per share or ADS), which was paid during July 2015. On April 29, 2016, our shareholders approved a dividend of Ps. 889 million (Ps. 2.26 per share or ADS), which was paid during July 2016. On April 28, 2017, our shareholders approved a dividend of Ps. 716 million (Ps. 1.82 per share or ADS), which was paid during December 2017. On March 2, 2018, our Board of Directors proposed a dividend of Ps. 1.200 million. Our next shareholder's meeting, to be held on April 27, 2018, will consider this proposal. Notwithstanding the foregoing, our ability to pay, maintain or increase dividends is based on many factors, including our net income, capital expenditures required under our investment plans, future debt service payments, working capital needs, legal or contractual restrictions, and general economic and financial conditions. A change in any of these factors could affect our ability to pay, maintain or increase dividends, and the exact amount of any dividend paid may vary from year to year.

### Our performance is largely dependent on recruiting and retaining key personnel

Our current and future performance, the successful implementation of our strategy and the operation of our business are dependent upon the contributions of our senior management and our highly skilled team of engineers and other employees. Our ability to continue to rely on these key individuals is dependent on our success attracting, training, motivating and retaining key management and commercial and technical personnel with the necessary skills and experience. There is no assurance that we will be successful in retaining and attracting key personnel and the replacement of any key personnel who were to leave could be difficult and time consuming.

The Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. Consequently, the Argentine government has the majority of votes which allows it to appoint the majority of members of our board of directors at the General Shareholder's meeting. See "—The Argentine Republic owns 51% of the shares of the Company" and "—Our business is largely

dependent upon economic conditions in Argentina." The loss of the experience and services of key personnel or the inability to recruit suitable replacements or additional staff could have a material adverse effect on our business, financial condition and our results of operations.

We could be subject to information technology system failures, network disruptions, and breaches in data security which could negatively affect our business, financial position, results of operations, and cash flows.

As dependence on digital technologies has increased, cyber incidents, including deliberate attacks or unintentional events, have also increased in the world. Computers and telecommunication systems are used to conduct our exploration, development and production activities and have become an integral part of our business. We use these systems to analyze and store financial and operating data and to communicate internally and with outside business partners. Cyber-attacks could compromise our computer and telecommunications systems and result in disruptions to our business operations or the loss of our data. In addition, computers control oil and gas production, processing equipment, and distribution systems and are necessary to deliver our production to market.

Although we have extended our security policy to the industrial systems, reinforcing the defenses in case of denial of service and increasing the monitoring of suspicious activities, our technologies, systems, networks, and those of our business partners have been and may continue to be the target of cyber-attacks or information security breaches, which could lead to disruptions in critical systems (Eg: SCADAs, DCS Systems), unauthorized release of confidential or protected information, corruption of data or other disruptions of our business operations. In addition, certain cyber incidents, such as surveillance, may remain undetected for an extended period.

As cybersecurity threats continue to evolve, we may be required to expend additional resources to continue to modify or enhance our protective measures or to investigate or remediate any cybersecurity or information technology infrastructure vulnerabilities. For example, during the last fiscal year we have increased the budget assigned to cyber security.

The Company's reputation is an important corporate asset. An operating incident, significant cybersecurity disruption or other similar adverse event, may have a negative impact on our reputation, which in turn could make it more difficult for us to compete successfully for new opportunities or could reduce consumer demand for the company's branded products.

In the past we have been the target of many attack attempts and we are exposed to malware infections like other companies in the industry, which did not result in a significant loss. There can be no assurance that the Company will not incur such losses in the future. The Company's risk and exposure to these matters cannot be fully calculated nor mitigated because of, among other things, the evolving nature of these threats.

A cyber-attack involving our information systems and related infrastructure, or those of our business partners, could disrupt our business and negatively impact our operations in a variety of ways, including but not limited to:

- unauthorized access to seismic data, reserves information, strategic information, or other sensitive or proprietary information could have a negative impact on our ability to compete for oil and gas resources;
- data corruption or operational disruption of production-related infrastructure could result in a loss of production, or accidental discharge;
- disruption of our operations, communications, or processing of transactions or the loss of, or damage to, sensitive information, facilities, infrastructure and systems which are essential to our business and operations which could have a material adverse effect on our business, financial position, results of operations, and cash flows;
- a cyber-attack on a service provider could result in supply chain disruptions, which could delay or halt our major development projects;
- a cyber-attack on our accounting or accounts payable systems could expose us to liability to employees and third parties if their sensitive personal information is obtained.

#### Our derivative risk management activities could result in financial losses.

As of the date of this annual report, the Company has not entered into any derivative arrangement. Notwithstanding, in case we were to evaluate and decide to enter into contracts of this nature, we could be exposed to adverse variations in the price of the assets underlying the derivative contract, which would in turn affect our results of operations and financial condition. In addition, any failure in the performance of their obligations by our counterparties to any of these agreements could also have a material adverse effect on the Company's results of operations.

#### Our actual production could differ materially from our forecasts.

From time to time, we provide forecasts of expected quantities of future oil and gas production and other financial and operating results. These forecasts are based on a number of estimates and assumptions, including that none of the risks associated with our oil and gas operations summarized in this "Item 3. Key Information—Risk Factors" occur. Production forecasts, specifically, are based on assumptions such as expectations of production from existing wells and the level and outcome of future drilling activity, and the absence of facility or equipment malfunctions, adverse weather effects, or downturns in commodity prices or significant increases in costs, which could make certain drilling activities or production uneconomical. Should any of these estimates prove inaccurate, or should our development plans change, actual production could be materially and adversely affected.

#### We have limited control over the day to day activities carried out on properties which we do not operate.

Some of the properties in which we have an interest are operated by other companies and involve third-party working interest owners. As a result, we have limited ability to influence or control the day to day operations of these companies and third-parties, including their compliance with environmental, safety and other regulations, which, in turn, could have a material adverse effect on our business, financial position, results of operations, cash flows and/or our reputation.

# We could be affected by violations to anticorruption, anti-bribery, anti-money laundering and other national and international regulations.

We are subject to anticorruption, anti-bribery, anti-money laundering and other national and international regulations. We are required to comply with the regulations of Argentina and various jurisdictions where we conduct operations. Although we have internal policies and procedures designed to ensure compliance with applicable anti-fraud, anti-bribery and anti-corruption laws and sanctions regulations, potential violations of anti-corruption laws could be identified on occasion as part of our compliance and internal control processes. In case such issues arise, we plan to attempt to act promptly to learn relevant facts, conduct appropriate due diligence, and take any appropriate remedial action to address the risk. Given the size of our operations and the complexity of the production chain, there can be no assurance that our internal policies and procedures will be sufficient to prevent or detect all inappropriate practices, fraud or violations of law by our employees, directors, officers, partners, agents and service providers or that such persons will not take actions in violation of our policies and procedures (or otherwise in violation of the relevant anti-corruption laws and sanctions regulations) for which we or they may be ultimately held responsible. Violations of anti-bribery and anti-corruption laws and sanctions regulations could have a material adverse effect on our business, reputation, results of operations and financial condition. In addition, we may be subject to one or more enforcement actions, investigations and proceedings by authorities for alleged infringements of these laws. These proceedings may result in penalties, fines, sanctions or other forms of liability and could have a material adverse effect on our reputation, business, financial condition and results of operations.

#### Risks Relating to Our Class D Shares and ADSs

#### The market price for our shares and ADSs may be subject to significant volatility

The market price of our ordinary shares and ADSs may fluctuate significantly due to a number of factors, including, among others, our actual or anticipated results of operations and financial condition; speculation over the impact of the Argentine government as our controlling shareholder on our business and operations, investor perceptions of investments relating to Argentina and political and regulatory developments affecting our industry or the Company. In addition, recent regulatory and policy developments in Argentina, including the passage of the Expropriation Law, as well as the litigation of the Argentine government with Holdout Bondholders (see "—Risks Relating to Argentina—Our business is largely dependent upon economic conditions in Argentina"), have led to considerable volatility in the market price of our shares and ADSs. For example, the price of our ADSs has varied from U.S.\$54.58 on January 5, 2011 to U.S.\$9.57 on November 16, 2012. The price hit a high closing price of U.S.\$36.99 on July 1, 2014, but subsequently fell to U.S.\$12.83 on January 20, 2016. See "Item 9. The Offer and Listing." We cannot assure you that concerns about factors that could affect the market price of our ordinary shares as previously mentioned may have a material adverse effect on the trading values of our securities.

# Certain strategic transactions require the approval of the holder of our Class A shares or may entail a cash tender offer for all of our outstanding capital stock.

Under our by-laws, the approval of the Argentine government, the sole holder of our Class A shares, is required to undertake certain strategic transactions, including a merger, an acquisition that results in the purchaser holding 15% or more of our capital stock or an acquisition that results in the purchaser holding a majority of our capital stock, requiring consequently the approval of the National State (the holder of our Class A shares) for such decisions.

In addition, under our by-laws, an acquisition that results in the purchaser holding 15% or more of our capital stock would require such purchaser to make a public cash tender offer for all of our outstanding shares and convertible securities, which could discourage certain investors from acquiring significant stakes in our capital stock. See "Item 10. Additional Information—Certain Provisions Relating to Acquisitions of Shares."

# Restrictions on the movement of capital out of Argentina may impair your ability to receive dividends and distributions on, and the proceeds of any sale of, the Class D shares underlying the ADSs.

The government is empowered, for reasons of public emergency, as defined in Article 1 of Law No. 25,561, to establish the system that will determine the exchange rate between the peso and foreign currency and to impose exchange regulations. Although the transfer of funds abroad in order to pay dividends currently does not require Argentine Central Bank approval, restrictions on the movement of capital to and from Argentina may, if imposed, impair or prevent the conversion of dividends, distributions, or the proceeds from any sale of Class D shares, as the case may be, from pesos into U.S. dollars and the remittance of the U.S. dollars abroad.

Under the terms of our deposit agreement with the depositary for the ADSs, the depositary will convert any cash dividend or other cash distribution we pay on the shares underlying the ADSs into U.S. dollars, if it can do so on a reasonable basis and can transfer the U.S. dollars to the United States. If this conversion is not possible for any reason, including regulations of the type described in the preceding paragraph, the deposit agreement allows the depositary to distribute the foreign currency only to those ADR holders to whom it is possible to do so. If the exchange rate fluctuates significantly during a time when the depositary cannot convert the foreign currency, you may lose some or all of the value of the dividend distribution.

# We are traded on more than one market and this may result in price variations; in addition, investors may not be able to easily move shares for trading between such markets.

Trading in the ADSs or Class D Shares underlying ADSs in the United States and Argentina, respectively, will use different currencies (U.S. dollars on the New York Stock Exchange ("NYSE") and pesos on the MERVAL), and take place at different times (resulting from different trading platforms, different time zones, different trading days and different public holidays in the United States and Argentina). The trading prices of the Class D Shares underlying ADSs on these two markets may differ due to these and other factors. Any decrease in the price of the Class D Shares underlying ADSs on the MERVAL could cause a decrease in the trading price of the ADSs on the NYSE. Investors could seek to sell or buy the Class D Shares underlying ADSs to take advantage of any price differences between the markets through a practice referred to as "arbitrage." Any arbitrage activity could create unexpected volatility in both our share prices on one exchange, and the ADSs available for trading on the other exchange. In addition, holders of ADSs will not be immediately able to surrender their ADSs and withdraw the underlying Class D Shares for trading on the other market without effecting necessary procedures with the depositary. This could result in time delays and additional cost for holders of ADSs.

#### Under Argentine law, shareholder rights may be different from other jurisdictions.

Our corporate affairs are governed by our by-laws and by Argentine corporate law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States or in other jurisdictions outside Argentina. In addition, rules governing the Argentine securities markets are different and may be subject to different enforcement in Argentina than in other jurisdictions.

## Actual or anticipated sales of a substantial number of Class D shares could decrease the market prices of our Class D shares and the ADSs.

Sales of a substantial number of Class D shares or ADSs by any present or future relevant shareholder could decrease the trading price of our Class D shares and the ADSs.

#### You may be unable to exercise preemptive, accretion or other rights with respect to the Class D shares underlying your ADSs.

Holders of ADSs may not be able to exercise the preemptive or accretion rights relating to the shares underlying the ADSs (see "Item 10. Additional Information—Preemptive and Accretion Rights") unless a registration statement under the U.S. Securities Act of 1933 (the "Securities Act") is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to the shares relating to these preemptive rights, and we cannot assure you that we will file any such registration statement. Unless we file a registration statement or an exemption from registration is available, holders may receive only the net proceeds from the sale of their preemptive rights by the depositary or, if the preemptive rights cannot be sold, they will be allowed to lapse. As a result, U.S. holders of Class D shares or ADSs may suffer dilution of their interest in our company upon future capital increases.

In addition, under the Argentine Corporations Law, foreign companies that own shares in an Argentine corporation are required to register with the Superintendence of Corporations (*Inspección General de Justicia*) ("IGJ") in order to exercise certain shareholder rights, including voting rights. If you own our Class D shares directly (rather than in the form of ADSs) and you are a non-Argentine company and you fail to register with IGJ, your ability to exercise your rights as a holder of our Class D shares may be limited.

## You may be unable to exercise voting rights with respect to the Class D shares underlying your ADSs at our shareholders' meetings.

The depositary will be treated by us for all purposes as the shareholder with respect to the shares underlying ADSs. A holder of ADRs representing the ADSs being held by the depositary will not have direct shareholder rights and may exercise voting rights with respect to the Class D shares represented by the ADSs only in accordance with the deposit agreement relating to the ADSs. There are no provisions under Argentine law or under our by-laws that limit the exercise by ADS holders of their voting rights through the depositary with respect to the underlying Class D shares. However, there are practical limitations on the ability of ADS holders to exercise their voting rights due to the additional procedural steps involved in communicating with these holders. For example, holders of our shares will receive notice of shareholders' meetings through publication of a notice in an official gazette in Argentina, an Argentine newspaper of general circulation and the bulletin of the Buenos Aires Stock Exchange, and will be able to exercise their voting rights by either attending the meeting in person or voting by proxy. ADS holders, by comparison, will not receive notice directly from us. Instead, in accordance with the deposit agreement, we will provide the notice to the depositary. If we ask it to do so, the depositary will mail to holders of ADSs the notice of the meeting and a statement as to the manner in which instructions may be given by holders. To exercise their voting rights, ADS holders must then instruct the depositary as to voting the Class D shares represented by their ADSs. Due to these procedural steps involving the depositary, the process for exercising voting rights may take longer for ADS holders than for holders of Class D shares, and Class D shares represented by ADSs may not be voted as you desire. Class D shares represented by ADSs for which the depositary fails to receive timely voting instructions may, if requested by us, be voted as we instruct at the corresponding meeting.

## Shareholders outside of Argentina may face additional investment risk from currency exchange rate fluctuations in connection with their holding of our Class D shares or the ADSs.

We are an Argentine company and any future payments of dividends on our Class D shares will be denominated in pesos. The peso has historically and recently fluctuated significantly against many major world currencies, including the U.S. dollar. A devaluation of the peso would likely adversely affect the U.S. dollar or other currency equivalent of any dividends paid on our Class D shares and could result in a decline in the value of our Class D shares and the ADSs as measured in U.S. dollars.

### ITEM 4. Information on the Company

### History and Development of YPF

#### **Overview**

YPF is a corporation (*sociedad anónima*), incorporated under the laws of Argentina for a limited term. Our address is Macacha Güemes 515, C1106BKK Ciudad Autónoma de Buenos Aires, Argentina and our telephone number is (011-54-11) 5441-2000. Our legal name is YPF Sociedad Anónima and we conduct our business under the commercial name "YPF."

We are Argentina's leading energy company, operating a fully integrated oil and gas chain with leading market positions across the domestic upstream, downstream and gas and power segments. Our upstream operations consist of the exploration, development and production of crude oil, natural gas and LPG. Our downstream operations include the refining, marketing, transportation and distribution of oil and a wide range of petroleum products, petroleum derivatives, petrochemicals, LPG and bio-fuels. Additionally, we are active in the gas separation and natural gas distribution sectors both directly and through our investments in several affiliated companies and in power generation through YPF Energía Eléctrica, our controlled company (see "Item 4—Information of the

Company—Gas and Power—YPF in Power Generation."). In 2017, we had consolidated revenues of Ps. 252,813 million and consolidated net profit of Ps. 12,672 million.

Beginning in the 1920s and until 1990, both the upstream and downstream segments of the Argentine oil and gas industry were effectively monopolies of the Argentine government. During this period, we and our predecessors were owned by the state, which controlled the exploration and production of oil and natural gas, as well as the refining of crude oil and marketing of refined petroleum products. In August 1989, Argentina enacted laws aimed at the deregulation of the economy and the privatization of Argentina's state-owned companies, including us. Following the enactment of these laws, a series of presidential decrees were promulgated, which required, among other things, us to sell majority interests in our production rights to certain major producing areas and to undertake an internal management and operational restructuring program.

In November 1992, the Argentine government enacted the Privatization Law (Law No. 24,145), which established the procedures for our privatization. In accordance with the Privatization Law, in July 1993, we completed a worldwide offering of 160 million Class D shares that had previously been owned by the Argentine government. As a result of that offering and other transactions, the Argentine government's ownership interest in our capital stock was reduced from 100% to approximately 20% by the end of 1993.

In January 1999, Repsol YPF acquired 52,914,700 Class A shares (14.99% of our shares) which were converted to Class D shares. Additionally, on April 30, 1999, Repsol YPF announced a tender offer to purchase all outstanding Class A, B, C and D shares (the "Offer"). Pursuant to the Offer, in June 1999, Repsol YPF acquired an additional 82.47% of our outstanding capital stock. Repsol YPF acquired additional stakes in us from minority shareholders and other transactions in 1999 and 2000.

Repsol YPF owned approximately 99% of our capital stock from 2000 until 2008, when Petersen Energía ("PEISA") aquired 15% of our capital stock, from Repsol YPF. On May 3, 2011, PEISA exercised an option to acquire, from Repsol YPF, shares or ADSs representing 10.0% of our capital stock and on May 4, 2011, Repsol YPF acknowledged and accepted such exercise. See "—Legal and Regulatory Framework and Relationship with the Argentine Government—The Expropriation Law" and "Item 7. Major Shareholders and Related Party Transactions," for a detail of our current major shareholders.

On May 3, 2012, the Argentine congress passed the Expropriation Law. Among other matters, the Expropriation Law provided for the expropriation of 51% of the share capital of YPF represented by an identical stake of Class D shares owned, directly or indirectly, by Repsol YPF and its controlled or controlling entities. The shares subject to expropriation, which have been declared of public interest, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—The Argentine Republic owns 51% of the shares of the Company." As of the date of this annual report, the transfer of the shares subject expropriation between the National Executive Office and the provinces that compose the National Organization of Hydrocarbon Producing States was still pending. According to Article 8 of the Expropriation Law, the distribution of the shares among the provinces that accept their transfer must be conducted in an equitable manner, considering their respective levels of hydrocarbon production and proved reserves. To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. In addition, in accordance with Article 9 of the Expropriation Law, each of the Argentine provinces to which shares subject to expropriation are allocated must enter into a shareholder's agreement with the federal government that will provide for the unified exercise of its rights as a shareholder. See "—Legal and Regulatory Framework and Relationship with the Argentine Government—The Expropriation Law," "Item 7. Major Shareholders and Related Party Transactions." See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—We face risk relating to certain legal proceedings" for a description of the Repsol Agreement relating to compensation for the expropriation of 51% of the share capital of YPF owned, directly or indirectly, by Repsol.

In addition, on February 25, 2014, the Republic of Argentina and Repsol reached an agreement (the "Repsol Agreement") in relation to compensation for the expropriation of 200,589,525 of YPF's Class D shares pursuant to the Expropriation Law under the Repsol Agreement. Repsol accepted U.S.\$5.0 billion in sovereign bonds from the Republic of Argentina and withdrew judicial and arbitral claims it had filed, including claims against YPF, and waived additional claims. YPF and Repsol also executed a separate agreement (the "Repsol Arrangement") on February 27, 2014, pursuant to which YPF and Repsol each withdrew, subject to certain exclusions, all present and future actions and/or claims based on causes occurring prior to the date of execution of Repsol Arrangement arising from the expropriation of the YPF shares owned by Repsol pursuant to the Expropriation Law, including the intervention and temporary possession for public purposes of YPF's shares. YPF and Repsol agreed to withdraw reciprocal actions and claims with respect to third parties and/or pursued by them and to grant a series of mutual indemnities, which at the time were subject to certain conditions precedent. The Repsol Arrangement entered into force the day after Repsol notified YPF that the Repsol Agreement had entered into force. The Repsol Agreement was ratified on March 28, 2014 at a Repsol general shareholders' meeting and approved by the Argentine congress by Law No. 26,932 enacted by Decree No. 600/2014. On May 8, 2014, YPF was notified of the entry into force of the Repsol Agreement. As of that date, the expropriation pursuant to the Expropriation Law was concluded, and as a result the Republic of Argentina is definitively the owner of 51% of the capital stock of each of YPF and YPF GAS S.A.

We are strongly committed to the country's energy development and seek to lead the transformation of the industry within the context of industry change at an international level.

In order to achieve our vision of being a company that generates sustainable, profitable and accessible energy for our customers, YPF'strategy is based on the following pillars:

- Extract the maximum value from conventional fields
- Develop and achieve efficient costs in shale operations
- Partner with leading companies worldwide
- Expand our power generation capacity in order to become a major player in the sector
- Maintain a disciplined corporate portfolio management
- Create a new supply chain organization in order to modernize the procurement processes, contracts and associated logistics
- Incorporate technology and innovation in all business segments to improve productivity and service to our customers
- Implement a transformation program that modernizes the company, enhances efficiency and seeks growth initiatives that support our vision
- Reduce the company's specific CO2 emissions in the upcoming years as part of our commitment to sustainability

The investment plan related to our growth needs to be accompanied by an appropriate financial plan, whereby we intend to reinvest earnings, search for strategic partners and raise debt financing at levels we consider prudent for companies in our industry. Consequently, the financial viability of these investments and hydrocarbon recovery efforts will generally depend, among other factors, on the prevailing economic and regulatory conditions in Argentina, the ability to obtain financing in satisfactory amounts at competitive costs, as well as the market prices of hydrocarbon products. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina." and "Item 5. Factors Affecting Our Operations" for additional information regarding 2017 activity.

#### **Upstream Operations**

- As of December 31, 2017, we held interests in 112 oil and gas fields in Argentina. According to the Ministry of Energy and Mining, in 2017 these assets accounted for approximately 49.7% of the country's total production of crude oil, excluding NGLs, and approximately 42.6% of its total natural gas production, including NGLs.
- We had proved reserves, as estimated as of December 31, 2017, of approximately 480 mmbbl of oil, including condensates and NGLs, and approximately 2,520 bcf of gas, representing aggregate reserves of approximately 929 mmboe as of such date, compared to approximately 592 mmbbl of oil, including condensates and NGLs, and approximately 2,924 bcf of gas, representing aggregate reserves of approximately 1,113 mmboe as of December 31, 2016.
- In 2017, we produced approximately 83 mmbbl of oil (approximately 228 mbbl/d), including condensates, approximately 18 mmbbl of NGLs (approximately 50 mbbl/d), and approximately 568 bcf of gas (approximately 1,556 mmcf/d), representing a total production of approximately 203 mmboe (approximately 555 mboe/d), compared to approximately 90 mmbbl of oil (approximately 245 mbbl/d), including condensates, approximately 19 mmbbl of NGLs (approximately 52 mbbl/d), and approximately 576 bcf of gas (approximately 1,573 mmcf/d), representing a total production of approximately 211 mmboe (approximately 577 mboe/d) in 2016.

### **Downstream Operations**

- We are Argentina's leading refiner with operations conducted at three wholly-owned refineries with combined annual refining capacity of approximately 116 mmbbl (319.5 mbbl/d). See "—Downstream—Refining division." We also own a 50% equity interest in Refinería del Norte, S.A. ("Refinor"), an entity jointly controlled with and operated by Petrobras Energía S.A., which has a refining capacity of 26.1 mbbl/d.
- Our retail distribution network for automotive petroleum products as of December 31, 2017 consisted of 1,563 YPF-branded service stations, of which we own 113 directly and through our 100%-owned subsidiary Operadora de Estaciones de Servicios S.A. ("OPESSA"), and we estimate we held approximately 35.3% of all gasoline service stations in Argentina.

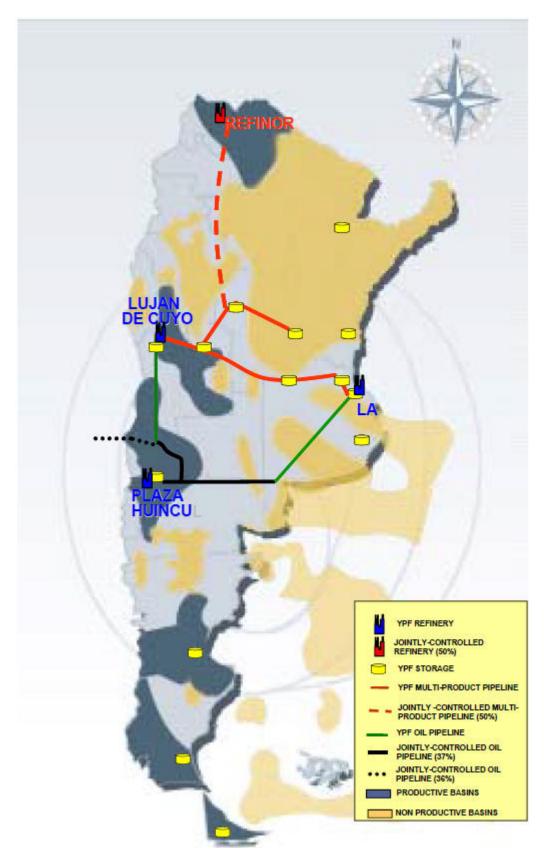
• We are one of the leading petrochemical producers in Argentina and in the Southern Cone of Latin America, with operations conducted through our Ensenada industrial complex ("CIE") and Plaza Huincul site. In addition, Profertil S.A. ("Profertil"), a company that we jointly control with Agrium Holdco Spain S.L. ("Agrium"), is one of the leading producers of urea in the Southern Cone.

### Gas and Power Operations

- We are the largest producer of natural gas in Argentina with total natural gas sales of 14,544.2 mmcm in 2017, accounting for 30.1% of the market.
- We participated in three power generation plants with an aggregate installed capacity of 1,367 MW. In addition, as a consequence of Law No. 27,191 related to renewable energy, YPF EE started in 2016 the construction of its renewable generation project, Manantiales Behr Wind Farm, near Comodoro Rivadavia in the Chubut province, in order to supply the percentage of YPF total demand with clean generation that will be required by law in 2018. This project is expected to be finished by 2018 with the generation of 99 MW.
  - On December 14, 2017, the Board of Directors of the Company approved the terms of a memorandum of understanding signed with GE Energy Financial Services, Inc. ("GE EFS") and on February 6, 2018, YPF entered into a definitive and binding agreement with EFS Global Energy B.V. ("GE") and GE Capital Global Energy Investments B.V., companies indirectly controlled by GE EFS, which establishes the conditions for the capitalization of YPF EE. On March 20, 2018, GE EFS Power Investments B.V. ("GE"), a subsidiary of EFS Global Energy B.V. (both corporations indirectly controlled by GE Energy Financial Services, Inc.), subscribed for shares of YPF Energía Eléctrica S.A. ("YPF EE") in an amount equal to 24.99% of YPF EE's capital stock through a cash contribution of US\$ 275,000,000, plus a contingent payment for up to US\$35,000,000. See "Item 4—Information of the Company—Gas and Power—YPF in Power Generation."
- We are the operator of UTE Escobar (a joint venture formed by YPF and ENARSA) and Bahia Blanca Terminal, which operates an LNG Regasification Terminal, "LNG Escobar" and "LNG Bahía Blanca," respectively. See "—Gas and Power—Argentine natural gas supplies." We also distribute natural gas through our subsidiary Metrogas a natural gas distribution company in the capital region and southern suburbs of Buenos Aires, and one of the main distributors in Argentina. During 2017, Metrogas distributed approximately 20.4 mmcm (or 719.7 mmcf) of natural gas per day to 2.3 million customers. See "Item 4—Information of the Company—Gas and Power—Natural Gas Distribution."

For a chart illustrating our organizational structure, including our principal subsidiaries, please see Note 1 to the Audited Consolidated Financial Statements.

The map below illustrates the location of our productive basins, refineries, storage facilities and crude oil and multi-product pipeline networks as of December 31, 2017.



For a description of our principal capital expenditures and divestitures, see "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Capital investments, expenditures and divestitures."

#### The Argentine Market

Argentina is the largest producer of natural gas and the fourth largest producer of crude oil in Central and South America, based on 2016 production, according to the 2017 edition of the BP Statistical Review of World Energy, published in June 2017.

In response to the economic crisis of 2001 and 2002, the Argentine government, pursuant to the Public Emergency Law, established export taxes on certain hydrocarbon products. In subsequent years, in order to satisfy growing domestic demand and abate inflationary pressures, this policy was supplemented by constraints on domestic prices, temporary export restrictions and subsidies on imports of natural gas and diesel. As a result, until 2008, local prices for oil and natural gas products had remained significantly below those prevalent in neighboring countries and international commodity exchanges.

In 2012, Argentina's GDP experienced a slowdown, with GDP increasing 1.9% on an annual basis compared to the preceding year according to the methodology of calculation prevailing until March 2014. On March 27, 2014, the Argentine government announced a new method of calculating GDP using 2004 as the base reference year (as opposed to 1993, which was the base reference year under the prior method of calculating GDP). However, on January 7, 2016 through Decree No. 55/2016, the new leadership of INDEC issued a report declaring a "national statistical emergency." INDEC stated that since 2006 its administration has been irregular and due to that they revised the published data from 2005 to 2015. As a result of this revision, the GDP growth rate for 2013 and 2014 was revised from 2.9% to 2.4% and from 0.5% to a decline rate of 2.5%, respectively. As of the date of this annual report, Argentina's provisional GDP growth rate for 2015, the preliminary GDP growth rate for 2016 and the preliminary GDP growth rate for 2017 published by INDEC were positive 2.6%, negative 2.3% and positive 2.9%, respectively.

Driven by economic expansion and stable domestic prices, energy demand has increased significantly during last years, outpacing energy supply (which, in the case of oil, declined). As a result of a high number of power outages caused by the consumption increase, the Ministry of Energy requested that the Executive Branch declare a National Electric System Emergency through December 31, 2017. This decree instructs the Minister of Energy to develop and propose measures and to ensure adequate power supplies. Also the Ministry of Energy and Mining established new seasonal reference prices for power and energy in the Wholesale Electricity Market ("MEM"). See "ITEM 4—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Electricity."

In 2003, Argentina's net exports of diesel amounted to approximately 1,349 mcm, while in 2017 its net imports of diesel amounted to approximately 2,131 mcm, according to preliminary information provided by the Argentine Secretariat of Energy. Significant investments in the energy sector are being carried out, and additional investments are expected to be required in order to support continued economic growth, as the industry is currently operating near full capacity.

Demand for diesel in Argentina exceeds domestic production. In addition, prior to the decline in international oil prices, the import prices of refined products have been in general substantially higher than the average domestic sales prices of such products, rendering the import and resale of such products less profitable. As a result, from time to time in the past, service stations experience temporary shortages and are required to suspend or curtail diesel sales.

With regard to the analysis of prior periods, until recently, the applicable domestic prices of petroleum products were established for the short term mainly on the basis of negotiations between Producers and Refiners of the country, without keeping a direct or specific reference with respect to the international quotations of such products. That is, the domestic market was decoupled from the international market in terms of prices, which was evidenced in certain periods with movements of prices in meanings (or values) substantially different from those observed in the international market. Notwithstanding the foregoing, the local market started a process to achieve an orderly transition towards international prices (which evidenced a substantial reduction since mid-2014), all of which caused a gradual 6% reduction in the prices of sales of Medanito and Escalante crude oil on the local market (2% monthly as of August 2016).

In January 2017, the Producers and Refiners reached a new agreement (the "Transitional Agreement") for the aforementioned transition, in which a price path was established for the commercialization of oil in the domestic market, with the objective of achieving parity with international markets during the course of 2017. This took place during the last quarter of 2017, taking into account the internalization costs in the domestic market of the referred products, the expected margins and the demand, among other factors. After the completion of the 2017 Transitional Agreement, according to Argentina's Ministry of Energy and Mining, the hydrocarbons market in Argentina became a liberalized market, and oil and fuel prices must be set by the free market and, thus, fluctuate. This decision formally ended the transition to international oil price parity. See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions

### **Business Organization**

We currently conduct our business according to the following organization:

- Upstream segment, which consists of our "Exploration and Production" activity;
- Downstream segment, which consists of our "Refining and Marketing" and "Chemicals" activities;
- · Gas and Power segment, which consists of our "Natural Gas Distribution and Electricity Generation" activity; and
- Central Administration and other segment, which consists of our remaining activities.

For a description related to the activities developed by each business segment see Note 5 to our Audited Consolidated Financial Statements.

Substantially all of our operations, properties and customers are located in Argentina. See "—Exploration and Production Overview—Main properties." Additionally, we market lubricants and specialties in Brazil and Chile, and carry out exploration activities in Chile and Bolivia.

The following table sets forth revenues and operating income for each of our business segments for the years ended December 31, 2017, 2016 and 2015:

|                                     | For the ye             | For the year ended December 31, |         |  |
|-------------------------------------|------------------------|---------------------------------|---------|--|
|                                     | 2017                   | 2016                            | 2015    |  |
|                                     | (in millions of pesos) |                                 |         |  |
| Revenues (1)                        |                        |                                 |         |  |
| Upstream                            |                        |                                 |         |  |
| Revenues from sales                 | 739                    | 18,745                          | 16,044  |  |
| Revenue from intersegment sales (3) | 115,955                | 95,398                          | 64,243  |  |
| Total Upstream                      | 116,694                | 114,143                         | 80,287  |  |
| Gas and Power                       |                        |                                 |         |  |
| Revenues from sales                 | 56,805                 | 26,514                          | 14,003  |  |
| Revenue from intersegment sales     | 4,075                  | 3,212                           | 2,184   |  |
| Total Gas and Power                 | 60,880                 | 29,726                          | 16,187  |  |
| Downstream                          |                        |                                 |         |  |
| Revenues from sales                 | 195,321                | 162,538                         | 124,959 |  |
| Revenue from intersegment sales     | 988                    | 925                             | 807     |  |
| Total Downstream                    | 196,309                | 163,463                         | 125,766 |  |

|   | For the year ended December 31, |           |          |  |
|---|---------------------------------|-----------|----------|--|
|   | 2017                            | 2016      | 2015     |  |
|   | (in millions of pesos)          |           |          |  |
| Central Administration and Others       |                                 |           |          |  |
| Revenues from sales                     | 2,534                           | 2,303     | 1,130    |  |
| Revenue from intersegment sales         | 7,133                           | 7,447     | 6,182    |  |
| Total Central Administration and Others | 9,667                           | 9,750     | 7,312    |  |
| Less inter-segment sales and fees       | (130,737)                       | (106,982) | (73,416) |  |
| Total Revenues                          | 252,813                         | 210,100   | 156,136  |  |
| Operating income (Loss) (2)             |                                 |           |          |  |
| Upstream                                | 3,877                           | (26,845)  | 7,535    |  |
| Gas and Power                           | 3,529                           | 2,008     | 1,498    |  |
| Downstream                              | 15,813                          | 3,093     | 6,948    |  |
| Central Administration and Others       | (4,400)                         | (1,615)   | (2,331)  |  |
| Consolidation adjustments               | (2,476)                         | (887)     | 2,938    |  |
| Total Operating Income (loss)           | 16,073                          | (24,246)  | 16,588   |  |

- (1) Revenues are net of payment of a fuel transfer tax and turnover tax. Customs duties on hydrocarbon exports are disclosed in "Taxes, charges and contributions," as indicated in Note 21 to the Audited Consolidated Financial Statements. Royalties with respect to our production are accounted for as a cost of production and are not deducted in determining revenues. See Note 2.b.15 to the Audited Consolidated Financial Statements.
- (2) Includes exploration costs in Argentina and the United States and production operations in Argentina and the United States.
- (3) Intersegment revenues of crude oil to Downstream are recorded at transfer prices that reflect our estimate of Argentine market prices.

#### Upstream overview

Development and Exploration Upstream projects represent our integrated vision of optimal field development, identifying each project's reserves category, stage of maturity, risk and strategy.

In addition to development projects for proved reserves, our portfolio of projects is composed of more than 280 new integral development projects, including new Vaca Muerta developments, which gives us the opportunity for considerable growth of our proved reserves. In line with this objective, we are planning a massive pilot phase to develop 13 differents clusters in the Non Conventional zone. We also have a portfolio of visualized exploratory opportunities which includes more than 700 cases related to contingent and prospective resources that contemplate potential development in the event of exploratory success.

The international and local situation challenges us to adjust our efficiency and costs to be sustainable. In that context, it is critical that our portfolio of projects and the production and development of initiatives to reduce costs for our operations and investments are properly executed. Part of those initiatives are related to labor efficiency, where we have started to work with labor unions and the Argentine government and entered into addenda to the labor agreements with various unions during 2016, as well as the Santa Cruz and Chubut agreement during 2017, both aiming for a reduction of development costs. See "Item 6. Directors, Senior Management and Employees—Employee Matters."

Our business growth objectives, whereby we seek to maximize the productivity and profitability of our portfolio, are based on the following key concepts: the rejuvenation of mature fields, an ongoing focus on gas development and the intensive development of unconventional reservoirs. See "Item 3. Key Information—Risk Factors."

The projects selected to be pursued and their schedules for completion are periodically determined by a portfolio optimization process, in accordance with our strategic guidelines.

#### Meeting the challenge of the mature oil and gas fields

Most of our oil and gas producing fields in Argentina are mature, requiring strong commitments to overcome their decline.

During recent years, we have been working in mature areas that present profitable opportunities for increases in the recovery factor by employing techniques including infill wells, extension of secondary recovery, and tertiary recovery testing. We are focused on identifying new opportunities in both infill potential and improved sweep efficiency in our mature fields. These efforts are guided by subsurface modeling conducted by in-house multidisciplinary teams. Furthermore, we place a strong emphasis on surveillance and

conformance activities to improve current mature water injection projects. Tertiary recovery is being pursued with polymer and surfactant water-flooding in mature reservoirs in the Golfo de San Jorge, Cuyana and Neuquén basins.

Continuous technical reviews of our oil and gas fields allow us to identify opportunities to rejuvenate mature fields and optimize new field developments in Argentine basins in order to achieve similar recovery factors that mature fields have already reached in other regions of the world, with the application of new technologies.

We have managed, through the extension of most of our concessions with relatively favorable terms and conditions, to continue with the development of strategic water-flooding and improved oil recovery projects, improving our perspectives of production and reserves. Nevertheless, we cannot assure you that our efforts will achieve the expected results, mainly because of the risks related to our activities (See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business.").

In addition, we are also focused on producing and developing initiatives related to reducing costs, in operating expenses and capital expenditures.

Nevertheless, the financial viability of these investments and reserve recovery efforts will generally depend on prevailing economic and regulatory conditions in Argentina, as well as the market prices of hydrocarbon products. See "Item 3. Key Information—Risk Factors." and "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations" for additional information regarding 2018 activity.

#### Staying the Path of Unconventional Resources

During 2017, we continued extending our leadership in this area. We reaffirmed our commitment to the objective of growing our production and reserves through the development of unconventional resources, which we began in 2013. More than 500 wells were drilled with Vaca Muerta shale as the target, mostly in the Loma Campana field in association with Chevron, continuing the massive development that began in 2013. The remaining wells were targeted to continue the development phase in the El Orejano block in association with Dow Chemical, the Narambuena project in association with Chevron, the La Amarga Chica pilot in association with Petronas, the Bandurria Sur pilot in association with SPM Argentina S.A., the Bajada de Añelo pilot in association with Shell, and the Rincon del Mangrullo, Aguada de la Arena and La Ribera pilots where YPF holds 100% of the working interest in those blocks. The purpose of these projects is to determine the potential of Vaca Muerta as a shale oil/gas reservoir.

The development of unconventional resources in the Vaca Muerta formation demands significant capital investment. As we rapidly progress on our learning curve, substantially improving productivity and reducing well cost by 13% in 2017 compared to 2016, we expect to continue yielding substantial savings due to operational optimizations, economies of scale and increasing well productivity through a better understanding of the subsurface and the use of new technologies. In this context, our controlled technological-based company of YPF (Y-TEC) has contributed providing: innovative laboratory and operational techniques and protocols; better understanding of the rocks behavior; improvements in reservoir simulation and modelling tools; drilling and completion products; among others. See "Research and Development".

Nevertheless, the financial viability of these investments and resource recovery efforts will depend on the prevailing economic and regulatory conditions, as well as the market prices of hydrocarbons in Argentina. See "Item 3. Key Information—Risk Factors." and "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations" for additional information regarding 2018 activity.

Tight sands in Rincón del Mangrullo and Aguada de la Arena also contributed to the increase of natural gas production and reserves in 2017. 19 wells were drilled in these marine tight sands, increasing gas production to 4.2 mmcm/d.

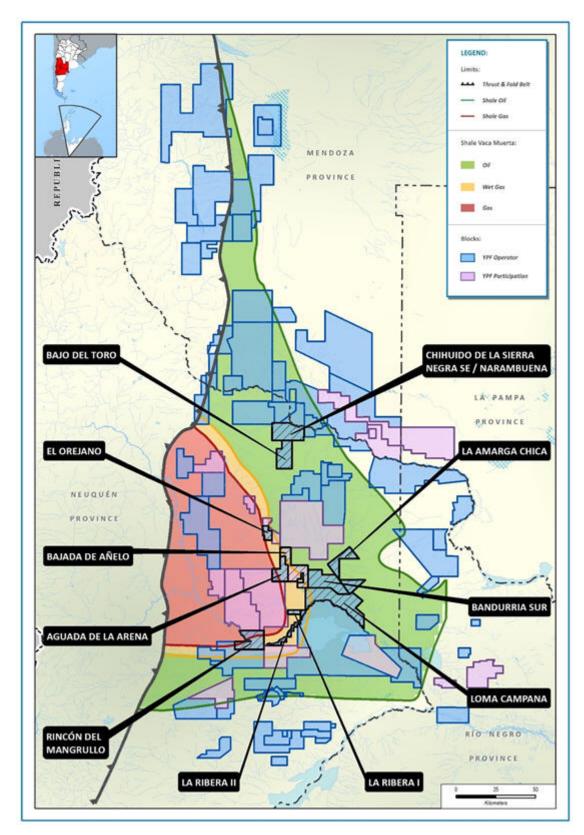
The important 57 km long evacuation gas pipeline built between Rincón del Mangrullo and the facilities of Loma La Lata, today allows gas evacuation of the tight development of the Rincón del Mangrullo block and the shale pilots in the Rincón del Mangrullo and La Ribera. During 2017, the construction of a 16 inch loop commenced to this gas pipeline that will allow the evacuation of the gas coming from the shale development of these and other areas of this zone.

Since 2016, we have been supplying domestic sand as proppant (to be injected in the hydraulic stimulation that allows for the development of unconventional hydrocarbons) and finalized the sand processing plant.

We are planning a pilot in 2018 using domestic sand from a quarry in Rio Negro (200 km from Añelo city) which we expect will allow to get higher reductions in well cost.

During 2017, we commenced testing of dissolvable plugs, chemical and mechanical diverters, frac sleeves, and different types of stimulation fluids, in connection with the completion of our shale gas/oil wells, seeking improved operational efficiency and well performance. We are continuing to study the data from these tests, analyzing the results of productivity in the medium term. Many of these activities were carried out, and continue to be supported by Y-TEC.

## Vaca Muerta Formation



• Loma Campana Area: On July 16, 2013, YPF and Chevron signed an investment project agreement for the joint exploitation of unconventional hydrocarbons in Neuquén Province.

During 2017, 27 horizontal wells were drilled and 30 horizontal wells were put into production, achieving a performance that, on average, met the expectations set by the Type Well. The well design has been gradually changing, from 1,500 m of lateral length and 18

frac stages to 2,500 m of lateral length and 32 frac stages (while the space between frac stages was maintained at 80 m), in order to continue the reduction of the development cost.

The Cocina target (deeper productive interval within Vaca Muerta formation) was re-incorporated as a productive interval and is expected to double the potential area for drilling. Also, the first infill well to the Cocina was drilled in order to analyze the opportunity to develop this target in areas where only wells to the Organico (productive interval within Vaca Muerta formation) were drilled. We commenced drilling of a longer lateral well of 3,200 m of lateral length in November 2017. This well was successfully drilled and established a national record. Its stimulation is planned for April 2018. Two horizontal wells of 2,000 m targeting Organico and Cocina were drilled and completed in the southeast zone of Loma Campana. Those two wells were successfully stimulated in December 2017 and are expected to start production during the first quarter of 2018. The goal of these activities is data acquisition to incorporate the area into the development plan.

Due to continued improvements in our drilling performance, drilling time was reduced by 21% between 2015 and 2017. An average drilling time of 35 days to drill a 4700 m measured depth ("MD") well was achieved during 2015, with an improvement to 29 days for a 4800 m MD in 2016 and an improvement to 22 days for a 4800 m MD in 2017. This reduction in drilling time is also reflected in drilling costs of an average well cost reduction of 13% between 2016 and 2017 for a horizontal well of 1500 m lateral length and a reduction in development cost of 8.3% in the same period.

In 2017 we conducted various pilots in an effort to reduce our development cost through economically improving EUR (Estimated Ultimate Recovery) or reducing well cost with a minimal or negligible impact to well EUR. The key pilots that we executed to enable us to achieve this objective were:

- Lateral length: A 4 well pilot was executed on a single location to understand the impact to well productivity and well cost by increasing well length from 1500m to 2500m.
- Proppant Intensity & Frac Fluid Intensity: A 4 well Design-of-Experiment (DoE) pilot was conducted on a single location at varying proppant intensities (lbs/ft) and frac fluid intensities (gals/ft) to identify the incremental well productivity obtained per feet of lateral given the incremental cost per additional pound of proppant or gal of fluid, and thereby identify the optimum economic point for these two well design variables.
- Chemical diverter: A chemical diverter pilot was conducted on a single well of a three well pad to understand what incremental productivity could be achieved if we could improve the perforation cluster efficiency across a given fracture stage.
- Geosteering (technology that allows the drilling of the horizontal section of the well throughout the productive interval without detours): Two geosteering pilots were executed on two different locations in which two wells were geosteered on a given location and then compared against two wells on the same location which had not been geosteered. The objective was to determine what the incremental productivity gain could be from geosteering within a desired target zone.

Due its geographical location and its potentially expandable treatment capacity, Loma Campana Crude Oil Treatment Plant became the central treatment facility for the Vaca Muerta oil cluster starting in January, 2017.

In addition, in 2017 a 33 Kilovolt electrical power line, a generation power station and a transformer substation were put on line. These facilities allow increasing power and give more reliability to the system as well as facilitating power for neighboring blocks.

Activity in this area in 2017 involved a gross investment of U.S.\$362 million in drilling and completion (D&C) and U.S.\$47 million in production facilities.

• La Amarga Chica Area: On December 10, 2014, YPF and PETRONAS E&P ARGENTINA S.A., an affiliate of PETRONAS E&P Overseas Ventures Sdn. Bhd ("PEPOV") of Malaysia, executed a Project Investment Agreement (the "Investment Agreement") aiming to perform joint exploitation of unconventional hydrocarbons in the La Amarga Chica area in the Neuquén province. YPF will be the operator of the area.

The Pilot Plan, comprising 30 wells in three years, started in May 2015. At the end of the first phase, a total of six horizontal and three vertical wells were drilled, with results over performing previous expectations. Based on those positive results, PETRONAS E&P ARGENTINA S.A. agreed to continue co-investing in a second phase of the pilot project. By the end of 2016, four additional horizontal wells from this phase were drilled, reaching a total of nine drilled wells during 2016, with a drilling rig fully dedicated to the project. During 2017, 12 horizontal wells were drilled, completing phase 2 of the project and paving the way for the final phase of the project. Nine of those wells were put into production with the expected performance (the other 3 wells will be put into production

in 2018). All of the drilled horizontal drains were standardized at 1,500 m long except for 2 wells that reached 2,000 m. An improvement in performance of drilling (time and cost) is still observed, with drilling time and well cost being reduced by 16% and 21%, respectively, between 2016 and 2017. This drilling and completion activity developed during 2017 comprised a total gross investment of U.S.\$132 million, with an additional U.S.\$41 million expended on production facilities.

The development phase of the block is estimated to start in September 2018, incorporating a second drilling rig.

Additionally, both parties in the Investment Agreement ratified their intention to continue with the Pilot in the La Amarga Chica block located in the Province of Neuquén. During the third and final phase of the La Amarga Chica Pilot, both companies are considering the drilling of 10 horizontal wells and the construction of new facilities and installations in order to transport the shale oil production derived from the area. The joint investment commitment for this third Pilot phase amounts to 192.5 million U.S. Dollars. This phase is expected to be completed in the third quarter of 2018, after which both parties will be able to decide on the full development of the block.

During the second half of 2017 the first production battery was put in production with a total gross capacity of 1,000 m3/d.

We completed the facilities of the southern sector for water supply on a continuous basis (flexipipe) in order to ensure continuous water supply when fracturing the PADs with multiple wells (drilling practice that allows drilling multiple wells from a single portion of compact land known as PAD). Work associated with the gathering and acquisition of production (internal pipelines and field collectors) in the southern and central parts of the area are being executed. In addition, the center and south triangles were connected by an oil pipeline, reducing oil transportation and associated production delay.

An electrical power line was built to provide more reliability to the system, reducing expenses associated with electrical generator rentals.

By the end of 2017, the total oil production increased to 680 m3/d (113% higher than December 2016) with a total of 21 wells in production.

• **Bandurria Sur Area:** On July 5, 2017, YPF and SPM Argentina S.A. executed an agreement defining the main terms and conditions for the joint development of a shale oil pilot in two phases. YPF will be the operator of the area.

Prior to the agreement, between 2012 and early 2016, YPF drilled and completed two vertical and two horizontal wells. Currently one vertical and two horizontal wells are in production. Three additional horizontal wells were drilled, one of which being completed by December 2017, with performance exceeding expectations. The objective of these wells is to test productivity in different landing zones within the Vaca Muerta organic-rich section. These wells will be evaluated during the first months of 2018.

The standard design for horizontal wells was 2000 m of lateral length and 25 frac stages.

Additionally, in 2017, the pipeline of dispatch to the PTC LC, the construction of EPF (Early Production Facility) and the point of measurement were completed. These facilities allow for evacuating the production of the pilot without the need to use trucks.

This activity comprised a total investment of U.S.\$35.1 million in D&C and U.S.\$1.7 million in production facilities.

• El Orejano Area: On September 23, 2013, YPF and Dow Europe Holding B.V. and PBB Polisur S.A. (our current 50% partner in the area) signed an agreement relating to the joint development of an unconventional gas pilot project in the Neuquén Province.

The Project has been in the development phase since July 2016, and three targets are being drilled and produced. Through December 2017, 78 wells have been drilled and 64 wells have been put on line. During 2017, 19 horizontal wells were drilled reducing the well spacing to 300 m at the same landing zone, and 25 wells were put into production, with a gross investment of U.S.\$262.2 million in D&C and U.S.\$24.9 million in production facilities.

Drilling time and well cost were reduced by 37% and 39%, respectively, between 2016 and 2017, with a reduction in development cost of 42.3% in the same period.

February 2017 marked the start up of the UPS2 (Unidad de Separación Primaria 2), with the treatment and the separation capacity being upgraded to 4Mm3/d. A 16 inch Loop was built in the gas sale pipeline to Gas Pacífico Sale Point to increase gas transport capacity. A wellhead compression pilot began by the end of 2016 (2900 HP installed) and the central compression is planned for December 2018.

In 2017, the well lateral length was increased to around 2,100 meters. The maximum length drilled was 2,715 meters. The first 6 wells inline pad were drilled at beginning of 2017 reducing the drilling and completion costs. The performance of these wells exceeded expectations. A space reduction pilot was carried out in the southern area of the block at the higher production performance level. Static and Geomechanic Model generation allowed us to select the development zone based on the petrophysical and geomechanical properties.

Regarding the frac plan, new technologies were evaluated such as mechanical diverters and different slickwater frac designs, in order to achieve better operational efficiency as well as better well performance. In 2018, a pilot is planned using domestic sand in all hydraulic stimulations in order to reduce well cost. In addition, new technologies such as open hole sleeves and high density completion designs are expected to be tested.

By the end of 2017, the total field gas production was 3.9 Mm3/d (105% higher than December 2016).

Rincón del Mangrullo Area: In the Mulichinco formation at the Rincón del Mangrullo concession, Pampa Energía S.A. ("Pampa Energía") acquired 50% of the working interest during 2015. By the end of 2017, 88 wells (74 directed wells and 14 horizontal wells) were drilled in these marine tight sands, achieving an average gas production of 4.2 mmcm/d through a pipeline that connects to the Loma La Lata facilities. During 2016, a pilot of 3 horizontal wells was developed in 2 different zones of very low permeability (very tight sand), with results exceeding expectations. These results were encouraging for continued development of horizontal wells.

During 2017, 11 horizontal wells were drilled in a very tight zone and 8 vertical wells in a tight zone with a standard design of 1,000 m lateral length and 7 frac stages for the first one.

Drilling time and well cost were reduced by 18% and 12%, respectively, between 2016 and 2017, with a reduction in development cost of 6% in the same period, with a total investment of U.S.\$80.7 million in D&C, and an additional U.S.\$17 million expended on production facilities.

On the other hand, the Vaca Muerta Formation in this block is 100% owned by YPF. During 2017, one vertical pilot well and three horizontal wells were drilled targeting the Vaca Muerta formation. The objective of the vertical well was data acquisition and landing zone definition. The objective of the horizontal wells was to test productivity in three different landing zones across the Vaca Muerta organic rich section. The three horizontal wells were put into production by the end of September 2017. Two of the wells' production levels have exceeded expectations and the other one below expectations while the third has fallen short of meeting expectations.

In the production facilities, a 16 inch Loop of 33 kms long was started in the existing gas sale pipeline to Loma La Lata to increase gas transport capacity.

This activity, developed during 2017, comprised a total investment of U.S.\$34.8 million in D&C and U.S.\$1.8 million in production facilities.

• Aguada de la Arena Area: On May 13, 2016, YPF and Pampa Energía executed an agreement that subjects them to certain conditions precedent under which, upon closing of the acquisition by Pampa Energía of a controlling stake in Petrobras Argentina S.A ("PESA"). PESA will assign to YPF certain participating interests in two exploitation concessions in areas with gas production and significant gas development potential (tight and shale) located in the Neuquina basin, which shall be operated by YPF. The conditions previously mentioned, and the assignment to YPF of the participating interest were concluded during 2016. As a result, the participating interests acquired were: (i) a 33.33% participating interest in the Río Neuquén block located in the province of Neuquén and the province of Río Negro and (ii) an 80% participating interest in the Aguada de la Arena block located in the province of Neuquén. In addition, on February 23, 2017, YPF and PetroUruguay S.A. signed a definitive agreement for the transfer of a 20% participating interest in the Aguada de la Arena area. As a result, YPF has increased its participating interest in the Aguada de la Arena area to 100%.

By the end of 2016, 14 wells were operating in the Mulichinco formation.

During 2017, all activity was oriented to the Vaca Muerta formation. One vertical pilot well and three horizontal wells were drilled targeting these formation. The objective of the pilot well was data acquisition and landing zone definition. The horizontal wells targeted three different landing zones across the Vaca Muerta organic rich section.

Total investment in connection therewith was U.S.\$32.3 million in D&C.

**Bajada de Añelo Area:** In February 23, 2017, YPF and O&G Developments Ltd. S.A. (hereinafter "O&G"), an affiliate of Shell Compañía Argentina de Petróleo S.A., executed an agreement, through which YPF and O&G agreed on the main terms and conditions for the joint development of a shale oil and shale gas pilot in two phases. O&G will be the operator of the area. On August 15, 2017, the Province of Neuquén authorized the assignments provided for in the Agreement concluded between YPF S.A. and O & G Developments Ltd. S.A., an affiliate of Shell Compañía Argentina de Petroleo S.A., with the objective of carrying out the joint exploitation of hydrocarbons in the Bajada de Añelo area in the Province of Neuquén.

Although there was no drilling and completion activity during 2016, YPF acquired 3D seismic data covering 618 km2 in this area.

Drilling activity in 2017 started in the southeast corner of the block with one vertical pilot well dedicated to data acquisition (core across the entire Vaca Muerta organic-rich section and complete suite of logs). By the end of 2017, we commenced drilling three horizontal wells, targeting 3 landing zones, were started to drill from the same pad using the skidding methodology.

The foregoing activity in 2017 comprised a total investment of U.S.\$6.6 million.

**La Ribera Area:** This block, located in the center on the Neuquén basin, is 100% owned by YPF. The concession area comprises two separated regions: La Ribera I, covering 21.85 km2, and La Ribera II, covering 49.8 km2. Two vertical exploratory wells (one in each region) targeting the Vaca Muerta formation were drilled and completed in 2014. Both wells tested gas and condensate. During 2017, two horizontal wells targeting two landing zones in the Vaca Muerta organic-rich section were drilled and completed. These wells were connected in October 2017, and have obtained results in accordance with expectations.

• Chihuido de la Sierra Negra Sudeste – Narambuena Area: During April 2014, YPF and subsidiaries of Chevron Corporation executed a new agreement with the objective of the joint exploration of unconventional hydrocarbons in Neuquén, within the area Chihuido de la Sierra Negra Sudeste – Narambuena. During 2015, this activity began with the drilling and completion of two vertical wells that allowed for the defining of the location and landing zone for the horizontal well. This well was drilled at the end of 2015 and the beginning of 2016, covering 1200 m of lateral length at 2400 m of vertical depth, within the younger internal sequence of Vaca Muerta and becoming the first well in the basin with this objective. Subsequently, a third vertical well was drilled to delineate the extension of the play to the eastern sector of the block. By the drilling, completion and testing of these wells, the commitment for the initial phase of the project signed in April 2014 was fulfilled. During the second half of 2016, the joint venture between YPF and subsidiaries of Chevron Corporation continued the exploratory stage by evaluating the long term tests of the horizontal well and third vertical well in this area located in the black oil window of the play.

During 2017, Chevron evaluated the results of the drilled wells, and informed YPF of its interest in continuing to a second phase, which was negotiated during the second half of 2017.

During 2017, Unconventional Regional production was 84.7 mboe/d, representing 15% of YPF's total production.

1. **Non-Operated Areas—Development Activities: Aguada Pichana Este:** This block is operated by Total S.A. YPF holds in this block a 27.2% working interest in the Mulichinco Formation, and a 22.50% working interest in the Vaca Muerta Formation.

Tight gas projects: during 2017, we continued tight gas development in different areas of the block and 4 wells were drilled. One of those wells and another three production wells drilled in 2016 were put into production in 2017. One of the well drilled in 2016 was abandoned and the others produced less than expected.

Shale project: six shale gas wells were drilled in 2017. These wells are part of a 22 well pre-development project that we expect to continue in the following years. Sixteen of these wells are expected to be connected in 2018.

2. Aguada San Roque block: This block is operated by Total S.A., and YPF holds a 34.11% working interest.

Shale oil pilot project: two wells were drilled during 2017. These wells are expected to be completed and connected during first quarter of 2018.

#### 3. Other Blocks:

**Aguada Pichana Oeste** is operated by PAE, and YPF holds a 30% working interest in this block. One well started drilling operations during November 2017. Drilling pilot activities are planned to continue in 2018.

**Pampa de las Yeguas I** is operated by EXXON, YPF holds a 50% working interest in this block. One well has been drilled in 2017 and two more wells are expected to be drilled in 2018 as part of a pilot project. Three wells are expected to be connected in 2019.

**La Calera** is operated by Pluspetrol, and YPF holds a 50% working interest. One exploration well was drilled and completed during 2017. This well is expected to be connected during first quarter 2018.

**Lindero Atravesado** is operated by PAE, and YPF holds a 37.5% working interest. During 2017, 19 tight and development wells were drilled to the Lajas Formation. Twelve of these wells were put into production in 2017 with performance being less than expected.

#### Main properties

Our production is concentrated in the following basins in Argentina: Neuquina, Golfo San Jorge, Cuyana, Noroeste and Austral.

Our domestic operations are subject to certain risks. See "Item 3. Key Information—Risk Factors."

In 2017, 2016 and 2015, we finalized agreements related to the acquisition and development of properties that are part of our core business. In connection with those agreements, see Notes 3 and 29.b to the Audited Consolidated Financial Statements.

In addition, in connection with the extension of concessions, see Note 29.a to the Audited Consolidated Financial Statements.

The following table sets forth information with regard to our developed and undeveloped acreage by geographic area as of December 31, 2017:

|                          | A        | As of December 31, 2017 |                      |                    |  |
|--------------------------|----------|-------------------------|----------------------|--------------------|--|
|                          | Develo   | Developed(1)            |                      | Undeveloped(2)     |  |
|                          | Gross(3) | Net <sup>(4)</sup>      | Gross <sup>(3)</sup> | Net <sup>(4)</sup> |  |
|                          |          | (thousands of acres)    |                      |                    |  |
| South America            | 1,221    | 941                     | 32,535               | 18,007             |  |
| Argentina                | 1,221    | 941                     | 31,990               | 17,684             |  |
| Rest of South America(5) | _        | _                       | 545                  | 323                |  |
| Total                    | 1,221    | 941                     | 32,535               | 18,007             |  |

- (1) Developed acreage is spaced or assignable to productive wells.
- (2) Undeveloped acreage encompasses those leased acres on which wells have not been drilled or completed to a point that would permit the production of economic quantities of oil or gas regardless of whether such acreage contains proved reserves.
- (3) A "gross acre" is an acre in which we own a working interest.
- (4) "Net" acreage equals gross acreage after deducting third-party interests.
- (5) Relates to Colombia, Bolivia and Chile. In the case of Colombia, YPF and its partners notified the Colombian National Hydrocarbons Agency ("ANH") of the decision to relinquish the COR 12 and COR 33 blocks. In Bolivia, YPF's net undeveloped surface acreage totaled 147,000 acres. Finally, in Chile, YPF's net undeveloped surface acreage totaled 3,000 acres needed to finish the testing of one exploration well.

Except for the information provided in the next paragraph, as of December 31, 2017, none of our exploration permits considered as a whole, which include undeveloped acreage, will expire in 2018 in accordance with the Hydrocarbons Law and complementary provincial laws. In addition, according to Law No. 27,007 that amended the Hydrocarbons Law, all national offshore permits and offshore hydrocarbon production concessions that did not have association agreements with ENARSA as of the date of the new law reverted and were transferred to the Argentine Secretariat of Energy. Permits and concessions granted prior to Law No. 25,943 will be exempt from this provision. In September 2015, the National Executive Office and YPF began negotiating the conversion of association agreements signed with ENARSA. On December 29, 2017 YPF filed a note before the Ministry of Energy confirming its willingess to negotiate the conversion of association agreement related to the Area identified as "ENARSA 1". In the same note, YPF informed that it communicated its decision not to convert the association agreements related such Areas to the Operators of Areas "ENARSA 2" and "ENARSA 3". As of the date of this annual report, negotiations related to Area ENARSA 1 are ongoing. YPF currently participates in three offshore blocks in association with ENARSA, which represent approximately 55% of our net

exploratory undeveloped acreage. We cannot guarantee that as a result of such negotiations we would not decide to relinquish to the Argentine Secretariat of Energy part or all of the acreage included in our current association with ENARSA. With the exception of the above, none of our exploration permits are regulated by Law No. 27,007. See "—Legal and Regulatory Framework and Relationship with the Argentine Government—Law No. 27,007, amending the Hydrocarbons Law—Exploration and Production."

However, as a result of the expiration in 2018 of the First, Second or Third Exploration Terms of certain of our exploration permits (according to the original terms of the Hydrocarbons Law, which applied to our existing exploration permits), we would be required to relinquish a fixed portion of the acreage related to each such expiring permit, as set forth in the Hydrocarbons Law, as long as exploitable quantities of oil or gas are not discovered in such areas (in which case we may seek to obtain a declaration of their commercial viability from the relevant authorities, and the related areas would then be subject to exploitation concessions). Additionally, and depending on the circumstances that could arise in each case (for instance, the state of exploratory activity in a certain area), we could request an extension of the expiration of the exploration permit, which would be subject to the approval of the respective governing authority. As a result, if no discoveries are made in 2018, we would be required to relinquish approximately 2,600 km2 of exploratory undeveloped acreage (approximately 6% of our 43,400 km2 of net exploratory undeveloped acreage as of December 31, 2017) during 2018.

Additionally, based on information available as of the date of this annual report, if we fail to make any discoveries or to engage in new activity that could extend the expirations of the exploration permits, we could be required or could decide to relinquish a maximum of approximately 7,200 km2 of exploratory undeveloped acreage (approximately 17% of our 43,400 km2 of net exploratory undeveloped acreage as of December 31, 2017) during 2019 and 2020.

According to the Hydrocarbons Law, we are entitled to decide, according to our best interest, which acreage related to each exploration permit to keep if we remain within the required relinquishment percentage. Therefore, the areas to be relinquished consist usually of acreage where drilling has not been successful and are considered non-core lease acreage.

Except as described above, we do not have any material undeveloped acreage related to our production concessions expiring in the near term.

See "—Legal and Regulatory Framework and Relationship with the Argentine Government—Law No. 27,007, amending the Hydrocarbons Law" for a description of new terms that apply to new production concessions or exploration permits, other than those already governed by previous laws.

#### **Argentine Exploration Permits and Exploitation Concessions**

Based on 2016 production, Argentina is the largest producer of natural gas and the fourth largest producer of crude oil in Central and South America, according to the 2017 edition of the BP Statistical Review of World Energy published in June 2017. Oil has historically accounted for the majority of the country's hydrocarbon production and consumption, although the relative share of natural gas has increased rapidly in recent years. As of the date of this annual report, a total of 24 sedimentary basins were re-evaluated in the country, in the line with (*Plan Exploratorio Argentina*). The total surface area of the continent represents approximately 408 million acres and the total offshore surface area includes 194 million acres on the South Atlantic shelf within the 200-meter line. Of the total 602 million acres of the sedimentary basins, a significant part still needs to be evaluated through exploratory and study drilling.

The following table shows our gross and net interests in productive oil and gas wells in Argentina by basin, as of December 31, 2017:

|                 |             | $Wells^{(l)}$ |       |       |
|-----------------|-------------|---------------|-------|-------|
|                 |             | il            | Ga    | as    |
| Basin           | Gross       | Net           | Gross | Net   |
| Onshore         | 12.791      | 11.456        | 2.004 | 1.432 |
| Neuquina        | 4.664       | 3.845         | 1.828 | 1.286 |
| Golfo San Jorge | 7.231       | 6.784         | 64    | 64    |
| Cuyana          | 777         | 712           | 0     | 0     |
| Noroeste        | 9           | 5             | 54    | 23    |
| Austral         | 110         | 110           | 58    | 58    |
| Offshore        | <del></del> | _             | 24    | 12    |
| Total           | 12.791      | 11.456        | 2.028 | 1.444 |

(1) A "gross well" is a well in which we own a working interest. A "net well" is deemed to exist when the sum of fractional ownership working interests in gross wells equals one. The number of net wells is the sum of the fractional working interests owned in gross wells expressed as whole numbers and fractions of whole numbers. Gross and net wells include one oil well and three gas wells with multiple completions.

As of December 31, 2017, we held 133 exploration permits and production concessions in Argentina. We directly operate 98 of them, including 17 exploration permits and 81 production concessions.

• Exploration permits. As of December 31, 2017, we held 21 exploration permits in Argentina, 18 of which were onshore exploration permits and 3 of which were offshore exploration permits. We had 100% ownership of 8 onshore permits, and our participating interests in the remainder varied between 50% and 80%. Our participating interests in the 3 offshore permits varied between 30 % and 35%.

Production concessions. As of December 31, 2017, we had 112 production concessions in Argentina. We had a 100% ownership interest in 67 production concessions, and our participating interests in the remaining 45 production concessions varied between 7% and 98%.

In addition, we have 36 crude oil treatment plants and 10 pumping plants where oil is processed and stored. The purpose of these plants is to receive and treat oil from different fields prior to shipment to our refineries and/or commercialization to third parties, as applicable. See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Our business depends to a significant extent on our production and refining facilities and logistics network."

In connection with our principal properties, see "—Exploration & Production Activity in Argentina." Production for each of the last three fiscal years by geographic area and by field containing 15% or more of our total proved reserves are set forth under "—Oil and gas production, production prices and production costs."

Approximately 92% of our proved crude oil reserves in Argentina are concentrated in the Neuquina (49%) and Golfo San Jorge (43%) basins, and approximately 87% of our proved gas reserves in Argentina are concentrated in the Neuquina (79%), and Golfo San Jorge (8%) basins.

### Joint ventures and contractual arrangements in Argentina

As of December 31, 2017, we participated in 11 exploration and 37 production joint ventures and contractual arrangements (26 of which were not operated by us) in Argentina. Our interests in these joint ventures and contractual arrangements ranged from 7% to 98%, and our obligations to share exploration and development costs varied under these agreements. In addition, under the terms of some of these joint ventures, we have agreed to indemnify our joint venture partners in the event that our rights with respect to such areas are restricted or affected in such a way that the purpose of the joint venture cannot be achieved. For a list of the main exploration and production joint ventures in which we participated as of December 31, 2017, see Note 24 to the Audited Consolidated Financial Statements. We are also a party to a number of other contractual arrangements that arose through the renegotiation of service contracts and risk contracts and their conversion in exploitation concessions and exploration permits, respectively.

#### Oil and Gas Reserves

Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible (from a given date forward, from known reservoirs, and under existing economic conditions, operating methods and government regulations) prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within reasonable time. In some cases, substantial investments in new wells and related facilities may be required to recover proved reserves.

Information on net proved reserves as of December 31, 2017, 2016 and 2015 was calculated in accordance with the SEC rules and Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 932, as amended. Accordingly, crude oil prices used to determine reserves were calculated each month for crude oils of different quality produced by the Company. Consequently, to calculate our net proved reserves as of December 31, 2017, the Company considered the realized prices for crude oil in the domestic market (which were higher than those that had prevailed in the international market), taking into account the unweighted average price for each month within the twelve-month period ended December 31, 2017. Additionally, since there are no benchmark market natural gas prices available in Argentina, the Company used average realized gas prices during the year to determine its gas reserves.

Notwithstanding the foregoing, commodity prices have declined significantly since 2014. See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Our oil and natural gas reserves are estimates" and "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Our reserves and production are likely to decline."

Net reserves are defined as that portion of the gross reserves attributable to the interest of YPF after deducting interests owned by third parties. In determining net reserves, the Company excludes from its reported reserves royalties due to others, whether payable in cash or in kind, where the royalty owner has a direct interest in the underlying production and is able to make lifting and sales arrangements independently. By contrast, to the extent that royalty payments required to be made to a third party, whether payable in cash or in kind, are a financial obligation, or are substantially equivalent to a production or severance tax, the related reserves are not excluded from the reported reserves despite the fact that such payments are referred to as "royalties" under local rules. The same methodology is followed in reporting our production amounts.

Gas reserves exclude the gaseous equivalent of liquids expected to be removed from the gas on concessions and leases, at field facilities and at gas processing plants. These liquids are included in net proved reserves of NGLs.

#### Technology used in establishing proved reserves additions

YPF's estimated proved reserves as of December 31, 2017 are based on estimates generated through the integration of available and appropriate data, utilizing well-established technologies that have been demonstrated in the field to yield repeatable and consistent results. Data used in these integrated assessments include information obtained directly from the subsurface via wellbore, such as well logs, reservoir core samples, fluid samples, static and dynamic pressure information, production test data, and surveillance and performance information. The data utilized also include subsurface information obtained through indirect measurements, including high quality 2-D and 3-D seismic data, calibrated with available well control. Where applicable, geological outcrop information was also utilized. The tools used to interpret and integrate all this data included both proprietary and commercial software for reservoir modeling, simulation and data analysis. In some circumstances, where appropriate analog reservoir models are available, reservoir parameters from these analog models were used to increase the reliability of our reserves estimates.

For further information on the estimation process of our proved reserves, see "-Internal controls on reserves and reserves audits."

### Net Proved Developed and Undeveloped Reserves as of December 31, 2017

The following table sets forth our estimated net proved developed and undeveloped reserves of crude oil, NGLs and natural gas at December 31, 2017.

| Proved Developed Reserves         | Oil (1)<br>(mmbbl)            | NGL<br>(mmbl)  | Natural Gas<br>(bcf) | Total (2)<br>(mmboe) |
|-----------------------------------|-------------------------------|----------------|----------------------|----------------------|
| Consolidated Entities             |                               | <u></u>        |                      |                      |
| South America                     |                               |                |                      |                      |
| Argentina                         | 286                           | 47             | 1,850                | 663                  |
| North America                     |                               |                |                      |                      |
| United States                     | <u> </u>                      |                |                      |                      |
| Total Consolidated Entities       | 286                           | 47             | 1,850                | 663                  |
| <b>Equity-Accounted Entities</b>  |                               |                |                      |                      |
| South America                     |                               |                |                      |                      |
| Argentina                         | _                             | _              | _                    | _                    |
| North America                     |                               |                |                      |                      |
| United States                     | <u> </u>                      |                | <u> </u>             |                      |
| Total Equity-Accounted Entities   | <del></del>                   |                | _                    |                      |
| Total Proved Developed Reserves   | 286                           | 47             | 1,850                | 663                  |
| •                                 |                               |                |                      |                      |
|                                   | Oil (1)                       | NGL            | Natural Gas          | Total (2)            |
| Proved Undeveloped Reserves       | (mmbbl)                       | (mmbbl)        | (bcf)                | (mmboe)              |
| Consolidated Entities             |                               |                |                      |                      |
| South America                     |                               |                |                      |                      |
| Argentina                         | 136                           | 11             | 670                  | 266                  |
| North America                     |                               |                |                      |                      |
| United States                     | <u> </u>                      |                |                      |                      |
| Total Consolidated Entities       | 136                           | 11             | 670                  | 266                  |
| <b>Equity-Accounted Entities</b>  |                               |                |                      |                      |
| South America                     |                               |                |                      |                      |
| Argentina                         | <del>-</del>                  | _              | _                    | _                    |
| North America                     |                               |                |                      |                      |
| United States                     |                               |                |                      |                      |
| Total Equity-Accounted Entities   |                               |                |                      |                      |
| Total Proved Undeveloped Reserves | <u>136</u>                    | 11             | 670                  | 266                  |
|                                   |                               |                |                      |                      |
| Total Proved Reserves (2) (3)     | Oil <sup>(1)</sup><br>(mmbbl) | NGL<br>(mmbbl) | Natural Gas<br>(bcf) | Total (2)<br>(mmboe) |
| Consolidated Entities             | <u> </u>                      | <u> </u>       |                      | <u> </u>             |
| Developed Reserves                | 286                           | 47             | 1,850                | 663                  |
| Undeveloped Reserves              | 136                           | 11             | 670                  | 266                  |
| Total Consolidated Entities       | 422                           | 58             | 2,520                | 929                  |
| Equity-accounted entities         |                               |                | ·                    |                      |

| Developed Reserves              |             |    |             |     |
|---------------------------------|-------------|----|-------------|-----|
| Undeveloped Reserves            | <del></del> | _  | <del></del> | _   |
| Total Equity-Accounted Entities |             |    |             |     |
| Total Proved Reserves           | 422         | 58 | 2,520       | 929 |

- (1) Includes crude oil (oil and condensate).
- (2) Volumes of natural gas in the table above and elsewhere in this annual report have been converted to barrels of oil equivalent at 5,615 cubic feet per barrel.
- (3) Proved crude oil and NGL reserves of consolidated entities include an estimated approximately 61 mmbbl of crude oil and 6 mmbl of NGLs in respect of royalty payments which, as described above, are a financial obligation or are substantially equivalent to a production or similar tax. Proved natural gas reserves of consolidated entities include an estimated approximately 289 bcf in respect of such payments. Equity-accounted entities reserves in respect of royalty payments that are a financial obligation or are substantially equivalent to a production or similar tax are not material.

For information regarding changes in our estimated proved reserves during 2017, 2016 and 2015, see Note 35 to the Audited Consolidated Financial Statements.

The paragraphs below explain in further detail the most significant changes in our proved undeveloped reserves during 2017, 2016 and 2015.

#### Changes in our proved undeveloped reserves during 2017

YPF had estimated a volume of net proved undeveloped reserves of 266 mmboe at December 31, 2017, which represented approximately 29% of the 929 mmboe total reported proved reserves as of such date. This compares to estimated net proved undeveloped reserves of 298 mmboe as of December 31, 2016 (approximately 27% of the 1,113 mmboe total reported proved reserves as of such date).

The 11% total net decrease in net proved undeveloped reserves in 2017 is mainly attributable to:

- Ongoing successful development activities related to proved undeveloped reserves projects, which allowed a transfer of approximately 82 mmboe to proved developed reserves. Main contributions are related to Development Wells (62 mmboe) mainly in Neuquina basin, Improved Recovery Projects (9,5 mmboe) mainly in Golfo San Jorge and Neuquina basins, and Gas Compression Projects (9,5 mmboe) in Austral and Neuquina basins.
- New economic conditions with lower gas and oil average prices and higher operating costs affected scheduled projects
  economics, resulting in a 20 mmboe Proved Undeveloped Reserves reduction mainly from oil fields of Neuquina basin (-16
  mmboe) and Golfo San Jorge basin (-3 mmboe).
- Some primary and improved recovery oil projects development schedule was modified or canceled, resulting in a 2,5 mmboe proved undeveloped reserves reduction, mainly in Neuquina and Golfo San Jorge basins.

This was partially offset by:

- Extensions and discoveries, which added 54 mmboe (219 mmscf of Gas and 12 mmbbl of Oil) of proved undeveloped reserves mainly from Neuquina and Austral basins.
- New improved recovery projects, adding approximately 21 mmboe of proved undeveloped secondary recovery reserves.
   Most important additions belong to Golfo San Jorge and Neuquina basins.
- New project studies in Golfo San Jorge and Neuquina basins added approximately 5 mmboe of proved undeveloped reserves.
- The extension of Rincón del Mangrullo and Magallanes fields' concessions resulted in approximately 4 mmboe reserves addition in proved undeveloped reserves.

YPF's total capital expenditure to continue the development of reserves was approximately U.S.\$ 1,113 million during 2017, of which U.S.\$ 693 million was allocated to projects related to proved undeveloped reserves.

As of December 31, 2017, we did not have material amounts of proved undeveloped reserves in individual fields or countries that have remained undeveloped for five years or more after being disclosed as proved undeveloped reserves.

#### Changes in our proved undeveloped reserves during 2016

YPF had estimated a volume of net proved undeveloped reserves of 298 mmboe at December 31, 2016, which represented approximately 27% of the 1,113 mmboe total reported proved reserves as of such date. This compares to estimated net proved undeveloped reserves of 337 mmboe as of December 31, 2015 (approximately 27% of the 1,226 mmboe total reported proved reserves as of such date).

The approximately 11% net decrease in net proved undeveloped reserves in 2016 is mainly attributable to:

- Ongoing successful development activities related to proved undeveloped reserves projects, which allowed a transfer of approximately 116 mmboe to proved developed reserves. Main contributions are related to development wells (75 mmboe), mainly in the Neuquina basin, improved recovery projects (14 mmboe), mainly in the Golfo San Jorge and Neuquina basins, and gas compression projects in the Neuquina basin (12 mmboe).
- New economic conditions with lower average oil prices that affected the economics of scheduled projects, resulting in a reduction of proved undeveloped reserves of 45 mmboe, mainly from the oil fields of the Golfo San Jorge basin (-16 mmboe), the Neuquina basin (-14 mmboe) and the Austral basin (-12 mmboe).
- In the Golfo San Jorge basin, the development schedules of several primary and improved recovery oil projects were modified or canceled, resulting in a reduction of proved undeveloped reserves of 20 mmboe.

This was partially offset by:

- Extensions and discoveries, which added 80 mmboe (242 mmcf of gas and 29 mmbbl of oil) of proved undeveloped reserves, mainly from the Neuquina basin.
- New project studies, which added approximately 12 mmboe of proved undeveloped reserves, mainly from the Neuquina basin.
- New improved recovery projects, adding approximately 30 mmboe of proved undeveloped secondary recovery reserves. The most important additions belong to the Golfo San Jorge and Neuquina basins.

The acquisition of interests in the Rio Neuquen gas field located in the Neuquina basin resulted in the addition of approximately 11 mmboe of proved undeveloped reserves.

YPF's total capital expenditure to continue the development of reserves was approximately U.S.\$2,930 million during 2016, of which U.S.\$ 1,214 million was allocated to projects related to proved undeveloped reserves.

As of December 31, 2016, we did not have material amounts of proved undeveloped reserves in individual fields or countries that have remained undeveloped for five years or more after being disclosed as proved undeveloped reserves.

#### Changes in our proved undeveloped reserves during 2015

YPF had estimated a volume of net proved undeveloped reserves of 337 mmboe at December 31, 2015, which represented approximately 27% of the 1,226 mmboe total reported proved reserves as of such date. This compares to estimated net proved undeveloped reserves of 307 mmboe as of December 31, 2014 (approximately 25% of the 1,212 mmboe total reported proved reserves as of such date).

The approximately 10% net increase in net proved undeveloped reserves in 2015 is mainly attributable to:

- Extensions and discoveries, which added 93 mmboe (24.5 mmbbl of crude oil, 7.3 mmbbl of NGL and 341.8 bcf of natural gas) of proved reserves, mainly in the Neuquina basin.
- New project studies and revisions of gas and oil development projects, which added approximately 18 mmboe (7.5 mmbbl of crude oil, 0.9 mmbbl of NGL and 52.4 bcf of natural gas) of proved undeveloped reserves. The main contributions came from fields in the Neuquina, Golfo San Jorge, and Austral basins.
- New improved recovery projects, which added approximately 10 mmbbl of proved undeveloped secondary recovery reserves of crude oil. The most important additions belong to the Golfo San Jorge, Neuquina and Cuyana Basins.

This was partially offset by:

• Ongoing successful development activities related to proved undeveloped reserves projects, which allowed a transfer of approximately 77 mmboe (29 mmbbl of crude oil, 10.2 mmbbl of NGL and 212 bcf of natural gas) to proved developed reserves. The main contributions are related to development wells (51 mmboe), gas compression projects (15 mmboe) and improved recovery projects (8 mmboe).

• A new joint venture agreement for the Rincón del Mangrullo field resulted in a reduction of approximately 8 mmboe (0.3 mmbbl of crude oil, 1.6 mmbbl of NGL and 34.7 bcf of natural gas) of proved undeveloped reserves, due to a change in YPF's working interest in this area.

YPF's total capital expenditure to continue the development of reserves was approximately U.S.\$4,592 million during 2015, of which U.S.\$1,557 million was allocated to projects related to proved undeveloped reserves.

As of December 31, 2015, we did not have material amounts of proved undeveloped reserves in individual fields or countries that have remained undeveloped for five years or more after being disclosed as proved undeveloped reserves.

#### Internal controls on reserves and reserves audits

All of our oil and gas reserves held in consolidated companies have been estimated by our petroleum engineers. In order to meet the high standard of "reasonable certainty," reserves estimates are stated taking into consideration additional guidance as to reservoir economic producibility requirements, acceptable proved area extensions, drive mechanisms and improved recovery methods, marketability under existing economic and operating conditions and project maturity.

Where applicable, the volumetric method is used to determine the original quantities of petroleum in place. Estimates are made by using various types of logs, core analysis and other available data. Formation tops, gross thickness and representative values for net pay thickness, porosity and interstitial fluid saturations are used to prepare structural maps to delineate each reservoir and isopachous maps to determine reservoir volume. Where adequate data is available and where circumstances are justified, material-balance and other engineering methods are used to estimate the original hydrocarbon in place.

Estimates of ultimate recovery are obtained by applying recovery factors to the original quantities of petroleum in place. These factors are based on the drive mechanisms inherent in the reservoir, analysis of the fluid and rock properties, the structural position of the reservoir and its production history. In some instances, comparisons are made with similar production reservoirs in the areas where more complete data is available.

Where adequate data is available and where circumstances are justified, material-balance and other engineering methods are used to estimate ultimate recovery. In these instances, reservoir performance parameters such as cumulative production, production rate, reservoir pressure, gas to oil ratio behavior and water production are considered in estimating ultimate recovery.

In certain cases where the above methods could not be used, proved reserves are estimated by analogy to similar reservoirs where more complete data are available.

To control the quality of reserves booking, a process has been established that is integrated into the internal control system of YPF. This process to manage reserves booking is centrally controlled and has the following components:

- (a) The Reserves Audit ("RA") is separate and independent from the Upstream segment. RA's activity is overseen by YPF's Audit Committee, which is also responsible for supervising the procedures and systems used in the recording of and internal control over the Company's hydrocarbon reserves. The primary objectives of the RA are to ensure that YPF's proved reserves estimates and disclosure are in compliance with the rules of the SEC, the FASB, and the Sarbanes-Oxley Act, and to review annual changes in reserves estimates and the reporting of YPF's proved reserves. The RA is responsible for preparing the information to be publicly disclosed concerning YPF's reported proved reserves of crude oil, NGLs, and natural gas. In addition, the RA is also responsible for providing training to personnel involved in the reserves estimation and reporting process within YPF. The RA is managed by and staffed with individuals that have an average of more than 20 years of technical experience in the petroleum industry, including in the classification and categorization of reserves under the SEC guidelines. The RA staff includes several individuals who hold advanced degrees in either engineering or geology, as well as individuals who hold bachelor's degrees in various technical studies. Several members of the RA are registered with or affiliated to the relevant professional bodies in their fields of expertise.
- (b) The Reserves Auditor, who has headed the RA since July 2017, is responsible for overseeing the preparation of the reserves estimates and reserves audits conducted by third party engineers. The current director has over 35 years of experience in geology and geophysics, reserves estimates, project development, finance and general accounting regulations. Prior to becoming the Reserves Auditor, he was the General Manager in E&D and before that he worked as the Director for Exploration in YPF.

He holds a degree in geology from the National University of Patagonia, and postgraduate courses at IAE Austral University. Consistent with our internal control system requirements, the Reserves Auditor's compensation is not affected by changes in reported reserves.

- (c) A quarterly internal review by the RA of changes in proved reserves submitted by the Upstream business segment and associated with properties where technical, operational or commercial issues have arisen.
- (d) A Quality Reserve Coordinator ("QRC") is assigned to each Upstream business segment of YPF to ensure that there are effective controls in the proved reserves estimation and approval process of the estimates of YPF and the timely reporting of the related financial impact of proved reserves changes. Our QRCs are responsible for reviewing proved reserves estimates. The qualification of each QRC is made on a case-by-case basis with reference to the recognition and respect of such QRC's peers. YPF would normally consider a QRC to be qualified if such person (i) has a minimum of 5 years of practical experience in petroleum engineering or petroleum production geology, with at least three years of such experience in charge of the estimation and evaluation of reserves, and (ii) has either (A) obtained, from a college or university of recognized stature, a bachelor's or advanced degree in petroleum engineering, geology or other related discipline of engineering or physical science, or (B) received, and is maintaining in good standing, a registered or certified professional engineer's license or a registered or certified professional geologist's license, or the equivalent thereof, from an appropriate governmental authority or professional organization.
- (e) A formal review through technical review committees to ensure that both technical and commercial criteria are met prior to the commitment of capital to projects.
- (f) Our internal audit team examines the effectiveness of YPF's financial controls, which are designed to ensure the reliability of reporting and safeguarding of all the assets and examines YPF's compliance with the law, regulations and internal standards.
- (g) All volumes booked are submitted to a third party reserves audit on a periodic basis. The properties selected for a third party reserves audit in any given year are selected on the following basis:
  - i. all properties on a three-year cycle; and
  - ii. recently acquired properties not submitted to a third party reserves audit in the previous cycle and properties with respect to which there is new information which could materially affect prior reserves estimates.

For those areas submitted to a third party reserves audit, YPF's proved reserves figures have to be within 7% or 10 mmboe of the third party reserves audit figures for YPF to declare that the volumes have been ratified by a third party reserves audit. In the event that the difference is greater than the tolerance, YPF will re-estimate its proved reserves to achieve this tolerance level or should disclose the third party figures. YPF has adopted the above-mentioned procedure by approving the corresponding internal policy.

In 2017, Gaffney, Cline & Associates audited certain YPF operated and non-operated areas in the Neuquina, Golfo San Jorge, Austral and Cuyana basins of Argentina. These audits were performed as of December 31, 2017, and the audited fields contain in aggregate, according to our estimates, approximately 262 mmboe proved reserves (90.82 mmboe of which were proved undeveloped reserves) as of such date, which represented approximately 28.2% of our proved reserves and 34.1% of our proved undeveloped reserves as of December 31, 2017. Copies of the related reserves audit reports are filed as an exhibit to this annual report.

We are required, in accordance with Resolutions No. 324/06 and 69/16 of the Argentine Secretariat of Hydrocarbon Resources, to annually file by March 31 details of our estimates of our oil and gas reserves and resources with the Argentine Secretariat of Hydrocarbon Resources, as defined in that resolution and certified by an external auditor. The aforementioned certification and external audit only have the meaning established by Resolutions No. 324/06 and 69/16, and are not to be interpreted as a certification or external audit of oil and gas reserves under SEC rules. We last filed such a report for the year ended December 31, 2017. Estimates of our oil and gas reserves filed with the Argentine Secretariat of Hydrocarbon Resources are materially higher than the estimates of our proved oil and gas reserves contained in this annual report mainly because: (i) information filed with the Argentine Secretariat of Hydrocarbon Resources includes all properties of which we are operators, irrespective of the level of our ownership interests in such properties; (ii) information filed with the Argentine Secretariat of Hydrocarbon Resources includes other categories of reserves and resources that are not included in this annual report, which are different from estimates of proved reserves consistent with the SEC's guidance contained in this annual report; and (iii) the definition of proved reserves under Resolutions No. 324/06 and 69/16 is different from the definition of "proved oil and gas reserves" established in Rule 4-10(a) of Regulation S-X. Accordingly, all proved oil and gas reserve estimates included in this annual report reflect only proved oil and gas reserves consistent with the rules and disclosure requirements of the SEC.

## Oil and gas production, production prices and production costs

The following table shows our crude oil (including oil and condensate), NGL, and gas production on an as sold and annual basis for the years indicated. In determining net production, we exclude royalties due to others, whether payable in cash or in kind, where the royalty owner has a direct interest in such production and is able to make lifting and sales arrangements independently. By contrast, to the extent that royalty payments required to be made to a third party, whether payable in cash or in kind, are a financial obligation or are substantially equivalent to a production or severance tax, they are not excluded from our net production amounts despite the fact that such payments are referred to as "royalties" under local rules. This is the case for our production in Argentina, where royalty expense is accounted for as a production cost.

| Consolidated Entities  | Oil and Condensate Production (1)  | <u>2017</u>        | 2016<br>(mmbbl) | 2015 |      |
|--|--|--------------------|-----------------|------|------|
| North America  |  |                    |                 |      |      |
| North America  |  |                    |                 |      |      |
| United States  |  | 83                 | 90              | 91   |      |
| Total Consolidated Entities   83   90   91   |  |                    |                 |      |      |
| Page   |  | <u>—</u>           |                 |      |      |
| South America  |  | 83                 | 90              | 91   |      |
| Argentina  |  |                    |                 |      |      |
| North America  |  |                    |                 |      |      |
| United States  |  | <del>-</del>       | _               | _    |      |
| Total Equity-Accounted Entities  |  |                    |                 |      |      |
| Total Oil Production (²)         83         90         91           NGL Production (²)         2015         2016         2015           Consolidated Entities         South America         South America         Page 19         18           North America         9         19         18           United States         9         19         18           Equity-Accounted Entities         9         19         18           Equity-Accounted Entities         9         19         18           South America         9         19         18           United States         9         -         -         -           Total NGL Production (³)         19         19         18           Natural Gas Production (³)         2015         2015         2015           Consolidated Entities         9         4         4         4         4         4         4         4         4         4         5         4         5         4   | United States  | <u>—</u>           |                 |      |      |
| Total Oil Production (²)         83         90         91           NGL Production (²)         2015         2016         2015           Consolidated Entities         South America         South America         Page 19         18           North America         9         19         18           United States         9         19         18           Equity-Accounted Entities         9         19         18           Equity-Accounted Entities         9         19         18           South America         9         19         18           United States         9         -         -         -           Total NGL Production (³)         19         19         18           Natural Gas Production (³)         2015         2015         2015           Consolidated Entities         9         4         4         4         4         4         4         4         4         4         5         4         5         4   | Total Equity-Accounted Entities  | <del></del>        | _               | _    |      |
| NGL Production (1)         2017 (mmbh)         2016 (mmbh)           Consolidated Entities         South America           Argentina         19         19         18           North America         —         —         —         —           Total Consolidated Entities         19         19         18           Equity-Accounted Entities         —         —         —         —           Argentina         —         —         —         —         —           North America         — </td <td></td> <td>83</td> <td>90</td> <td>91</td>  |  | 83                 | 90              | 91   |      |
| Consolidated Entities  |  |                    |                 | _    |      |
| Consolidated Entities         South America       19       19       18         North America       United States       — <td colspa<="" td=""><td>NGL Production (1)</td><td><u>2017</u></td><td></td><td>2015</td></td>   | <td>NGL Production (1)</td> <td><u>2017</u></td> <td></td> <td>2015</td> | NGL Production (1) | <u>2017</u>     |      | 2015 |
| South America  | Consolidated Entities  |                    | (IIIIIIIII)     |      |      |
| Argentina   19   19   18   North America   |  |                    |                 |      |      |
| North America  |  | 19                 | 19              | 18   |      |
| United States  |  |                    |                 |      |      |
| Total Consolidated Entities       19       19       18         Equity-Accounted Entities       South America       —   |  | <u> </u>           | _               |      |      |
| Equity-Accounted Entities   South America   Argentina   South America   Sout |  | 19                 | 19              | 18   |      |
| South America  |  | 17                 | 17              | 10   |      |
| Argentina  |  |                    |                 |      |      |
| North America   United States   — — — — — — — — — — — — — — — — — —  |  |                    |                 |      |      |
| United States  |  |                    |                 |      |      |
| Total Equity-Accounted Entities  |  |                    |                 | _    |      |
| Natural Gas Production (3)         19         19         18           Natural Gas Production (4)         2017         2016 (bef)         2015 (bef)           Consolidated Entities           South America         475         457         452           North America         -         *         *           United States         -         *         452           Equity-Accounted Entities         -         -         -         -           South America         -         -         -         -           North America         -         -         -         -           United States         -         -         -         -           Total Equity-Accounted Entities         -         -         -         -  |  |                    | <u> </u>        |      |      |
| Natural Gas Production (1)         2017 (bef)         2016 (bef)         2015 (bef)           Consolidated Entities           South America         475 457 452           North America         * *         *           United States         - *         *         *           Total Consolidated Entities         475 457 452         *         *           Equity-Accounted Entities         South America          -           North America         United States          -           Total Equity-Accounted Entities          -         -   |  |                    |                 | 10   |      |
| Consolidated Entities   South America  | Total NGL Production (9)   | <u> </u>           |                 | 18   |      |
| Consolidated Entities   South America  |  |                    |                 |      |      |
| Consolidated Entities         South America       475       457       452         North America       —       *       *         United States       —       *       *         Total Consolidated Entities       475       457       452         Equity-Accounted Entities       South America       —       —       —         Argentina       —  | Natural Gas Production (1)   | 2017               |                 | 2015 |      |
| South America       475       457       452         North America       —       *       *         United States       —       *       *         Total Consolidated Entities       475       457       452         Equity-Accounted Entities       —       —       —         South America       —       —       —       —         North America       —       —       —       —       —         United States       —       —       —       —       —         Total Equity-Accounted Entities       —       —       —       —       —  | Consolidated Entities  |                    | (DCI)           |      |      |
| Argentina       475       457       452         North America       United States       — * *        |  |                    |                 |      |      |
| North America       —       *       *       *         United States       —       *  |  | 475                | 457             | 452  |      |
| United States       —       *       *       *         Total Consolidated Entities       475       457       452         Equity-Accounted Entities       South America       —  |  | 173                | 157             | 132  |      |
| Total Consolidated Entities 475 452  Equity-Accounted Entities  South America Argentina North America United States Total Equity-Accounted Entities  |  |                    | *               | *    |      |
| Equity-Accounted Entities  South America Argentina  North America United States  Total Equity-Accounted Entities   |  | 775                | 157             | 452  |      |
| South America       —       —         Argentina       —       —         North America       —       —         United States       —       —         Total Equity-Accounted Entities       —       —  |  | 7/3                | 737             | 732  |      |
| Argentina       —       —         North America       —       —         United States       —       —         Total Equity-Accounted Entities       —       —  |  |                    |                 |      |      |
| North America United States  Total Equity-Accounted Entities   |  |                    |                 |      |      |
| United States Total Equity-Accounted Entities  |  |                    |                 |      |      |
| Total Equity-Accounted Entities  |  | <u>—</u>           |                 |      |      |
|  |  |                    |                 |      |      |
| Total Natural Gas Production (9) (9) 45/ 45/ 45/   |  | 475                | 457             | 452  |      |
|  | Total Natural Gas Production (7) (3)                                     | 4/5                | 45/             | 452  |      |

| Oil Equivalent Production (1) (6) | 2017 | 2016<br>(mmboe) | 2015 |
|-----------------------------------|------|-----------------|------|
| Consolidated Entities             |      |                 |      |
| Oil and Condensate                | 83   | 90              | 91   |
| NGL                               | 19   | 19              | 18   |
| Natural Gas                       | 85   | 81              | 81   |
| Equity-Accounted Entities         |      |                 |      |
| Oil and Condensate                |      |                 |      |
| NGL                               | _    | _               | _    |
| Natural Gas                       |      |                 |      |
| Total Oil Equivalent Production   | 187  | 190             | 190  |

- \* Not material (less than 1).
- (1) Loma La Lata Central and Loma La Lata Norte (southern and northern parts of the Loma La Lata field) in Argentina contain approximately 17% of our total proved reserves expressed on an oil equivalent barrel basis. Oil and condensate production in these fields was approximately 6, 6 and 6 mmbbl for the years ended December 31, 2017, 2016 and 2015, respectively. NGL production in these fields was approximately 8, 8 and 8 mmbbl for the years ended December 31, 2017, 2016 and 2015, respectively. Natural gas production in the Loma La Lata field was 127, 132 and 133 bcf for the years ended December 31, 2017, 2016 and 2015, respectively.
- (2) Crude oil production for the years ended in December 31, 2017, 2016 and 2015 includes an estimated 12, 13 and 13 mmbbl, respectively, in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax. Equity-accounted entities production of crude oil in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax is not material.
- (3) NGL production for the years ended in December 31, 2017, 2016 and 2015 includes an estimated 2, 2 and 2 mmbbl, respectively, in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax. Equity-accounted entities production of NGL in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax is not material.
- (4) Natural gas production for the years December 31, 2017, 2016 and 2015 includes an estimated 64, 60 and 58 bcf, respectively, in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax. Equity-accounted entities production of natural gas in respect of royalty payments which are a financial obligation or are substantially equivalent to a production or similar tax is not material.
- (5) Does not include volumes consumed or flared in operations (whereas sale volumes shown in the reserves table included in "Supplemental Information on Oil and Gas Exploration and Production Activities—Oil and Gas Reserves" include volumes consumed in operations).
- (6) Volumes of natural gas have been converted to barrels of oil equivalent at 5,615 cubic feet per barrel.

The composition of the crude oil produced by us in Argentina varies by geographic area. Almost all crude oil produced by us in Argentina has very low or no sulfur content. We sell substantially all the crude oil we produce in Argentina to our Refining and Marketing business segment. Most of the natural gas produced by us is of pipeline quality. All of our gas fields produce commercial quantities of condensate, and substantially all of our oil fields produce associated gas.

The following table sets forth the average production costs and average sales price by geographic area for 2017, 2016 and 2015:

| Production costs and sales price     | Total  | Argentina<br>(Ps/boe) | United States |
|--------------------------------------|--------|-----------------------|---------------|
| Year ended December 31, 2017         |        |                       |               |
| Lifting costs                        | 228.68 | 228.68                |               |
| Local taxes and similar payments (1) | 7.49   | 7.49                  |               |
| Transportation and other costs       | 48.19  | 48.19                 |               |
| Average production costs             | 284.36 | 284.36                |               |
| Average oil sales price              | 888.48 | 888.48                |               |
| Average NGL sales price              | 368.07 | 368.07                |               |
| Average natural gas sales price (2)  | 477.00 | 477.00                |               |
| Year ended December 31, 2016         |        |                       |               |
| Lifting costs                        | 195.80 | 196.30                | 121.66        |
| Local taxes and similar payments (1) | 8.35   | 8.37                  |               |
| Transportation and other costs       | 38.93  | 39.02                 | 32.81         |
| Average production costs             | 243.08 | 243.70                | 154.47        |
| Average oil sales price              | 861.74 | 863.25                | 510.01        |
| Average NGL sales price              | 222.71 | 223.35                | 50.35         |
| Average natural gas sales price (2)  | 417.95 | 418.00                | 193.08        |
| Year ended December 31, 2015         |        |                       |               |
| Lifting costs                        | 151.77 | 151.85                | 125.66        |
| Local taxes and similar payments (1) | 4.82   | 4.83                  |               |
| Transportation and other costs       | 14.93  | 14.91                 | 21.45         |
| Average production costs             | 171.51 | 171.59                | 147.11        |
| Average oil sales price              | 620.77 | 621.85                | 392.86        |
| Average NGL sales price              | 133.92 | 133.59                | 175.25        |
| Average natural gas sales price (2)  | 249.71 | 249.75                | 129.73        |

<sup>(1)</sup> Does not include *ad valorem* and severance taxes, including the effect of royalty payments which are a financial obligation or are substantially equivalent to such taxes, in an amount of approximately Ps. 89.67 per boe, Ps. 86.82 per boe and Ps. 60.39 per boe for the years ended December 31, 2017, 2016 and 2015, respectively.

# **Drilling activity in Argentina**

The following table shows the number of wells drilled by us or consortiums in which we had a working interest in Argentina during the periods indicated.

| Wells Drilled in Argentina | For the | For the Year Ended December 31, |      |  |
|----------------------------|---------|---------------------------------|------|--|
|                            | 2017    | 2016                            | 2015 |  |
| Gross wells drilled (1)    |         |                                 |      |  |
| Exploratory productive     | 17      | 19                              | 35   |  |
| Oil                        | 10      | 14                              | 24   |  |
| Gas                        | 7       | 5                               | 11   |  |
| Dry                        | 2       | 12                              | 5    |  |
| Total                      | 19      | 31                              | 40   |  |
| Development productive     | 483     | 697                             | 962  |  |
| Oil                        | 325     | 504                             | 766  |  |
| Gas                        | 158     | 193                             | 196  |  |
| Dry                        | 4       | 2                               | 10   |  |
| Total                      | 487     | 699                             | 972  |  |
|                            |         |                                 |      |  |

<sup>(2)</sup> Includes revenues from the Gas Plan.

| Wells Drilled in Argentina | For the Y | For the Year Ended December 31, |      |
|----------------------------|-----------|---------------------------------|------|
|                            | 2017      | 2016                            | 2015 |
| Net wells drilled (2)      |           |                                 |      |
| Exploratory productive     | 14        | 14                              | 27   |
| Oil                        | 7         | 11                              | 22   |
| Gas                        | 6         | 3                               | 6    |
| Dry                        | 1         | 9                               | 4    |
| Total                      | 15        | 23                              | 31   |
| Development productive     | 363       | 548                             | 766  |
| Oil                        | 247       | 409                             | 629  |
| Gas                        | 116       | 139                             | 137  |
| Dry                        | 4         | 2                               | 8    |
| Total                      | 367       | 550                             | 774  |

- (1) "Gross" wells include all wells in which we have an interest.
- (2) "Net" wells equal gross wells after deducting third-party interests.

## **Exploration & Production Activity in Argentina**

During 2017, our main exploratory and development activities in Argentina have had the following principal focus,

## 1. Operated Areas—Exploratory Activities

During 2017, our exploratory activities in Argentina were mainly focused on:

#### 1.1 Onshore

## Unconventional activities

The successful exploration results achieved in 2015 continued into 2016 and 2017. We continued the regional exploration of the Vaca Muerta formation to determine the productivity of the wet and dry gas in different areas of the Neuquina Basin. During 2017, we focused on the regional definition of the shale gas strip area obtaining positive results in Cerro Arena and Salinas del Huitrín blocks. Discoveries will be evaluated further in order to establish their commercial production potential.

· Neuquina Basin:

*Tight gas:* Exploration of tight gas continued during 2017 in Estación Fernández Oro, Loma La Lata-Sierra Barrosa and Paso de las Bardas Blocks. Positive results were obtained in two wells, three wells continue to be evaluated and work on one well is still ongoing.

# Conventional activities

· Neuquina Basin:

A total of 13 wells targeting conventional oil and gas reservoirs were drilled in the basin, obtaining seven positive results, in the following blocks,

- Chachahuén (oil)
- Señal Picada Punta Barda (gas).

Results in six other wells were below expectations.

From the results obtained in Chachahuén, we have notified the Mendoza Province, and waiting for their answer, of the following:

Chachahuén Exploration Permit: decision to enter the Third Exploration Period and to relinquish a fixed portion of the area (50%) as it is considered non-core lease acreage.

Chachahuén Norte Evaluation Area: decision to relinquish 40% of the area and the need to extend the permit of the remaining acreage until February 2020.

*Chachahuén Sur Evaluation Area:* commercial exploitation for part of the block (Cerro Morado Este) and the need to extend the permit of the remaining acreage until February 2020.

We also have requested that the Mendoza province allow commercial exploitation of the Payún Oeste block. As of the date of this annual report, we are still awaiting final approval from the province.

## Golfo San Jorge basin

During 2017, the exploration activity targeted conventional oil and gas reservoirs in the Golfo San Jorge basin, with positive results in two wells in the Cañadón de la Escondida Block (oil).

We also continued to conduct exploration activities targeting conventional gas in the Escalante—El Trébol Block (where one well is currently awaiting termination), Los Perales Block (where one well was completed and is currently being evaluated and a second well is close to completion) and Cañadón de la Escondida Block (where one well is currently awaiting termination).

## · Cuyana basin

One well targeting conventional oil was drilled in Zampal Norte with no positive results and two other wells were drilled in Mesa Verde Block (currently under evaluation). Zampal Norte Block: having fulfilled all commitments and considering that the drilled well does not show evidence of hydrocarbons, we decided not to continue with the third exploratory period and, as a result, the block was relinquished to the province of Mendoza. CCyB 17/B Block: we have been awarded an extension for the 3<sup>rd</sup> Exploration Period until June 2018.

# Austral basin

Drilling activities took place in Tierra del Fuego Province. Positive results were obtained in the wells drilled in the Lago Fuego Block (gas) and the ones drilled in Tierra del Fuego Fracción "E" Block are currently subject to completion (gas).

In addition, during 2017 the El Turbio Block has been awarded. Commitments for the First Exploration Period are mainly related to seismic activities.

With respect of Seismic activities a long-term 2D-3D seismic survey campaign began in 2015 and continued through 2016 and 2017. During 2017, seismic 3D data covering 239 km2 was recorded in Chihuido de la Sierra Negra Block (Neuquén Province, Neuquina basin).

After performing the survey, seismic data processing will be carried out for subsequent interpretation. The purpose of recording and processing the seismic data is to identify new exploration opportunities.

#### 1.2 Offshore:

According to the amendments to the Hydrocarbons Law adopted by Law No. 27,007, all exploration permits owned by ENARSA will be transferred to the Secretariat of Energy. YPF currently participates in three offshore blocks in association with ENARSA (E1 block: YPF 35%, E2 block: YPF 33% and E3 block: YPF 30%) with total acreage of 23,700 km2. In September 2015, the National Executive Office and YPF began negotiating the conversion of association agreements signed with ENARSA. On December 29, 2017 YPF filed a note before the Ministry of Energy confirming its willingnessto negotiate the conversion of association agreement related to the Area identified as "ENARSA 1". In the same note, YPF informed that it communicated its decision not to convert the association agreements related such Areas to the Operators of Areas "ENARSA 2" and "ENARSA 3". As of the date of this annual report, negotiations related to Area ENARSA 1 are ongoing. As of December 31, 2017, we do not have registered assets in these blocks. See "—Legal and Regulatory Framework and Relationship with the Argentine Government—Law No. 27,007, amending the Hydrocarbons Law" for a description of new terms which apply to new production concessions or exploitation permits.

# 2. Non-Operated Areas—Exploratory Activities

Exploration wells have been drilled in La Calera and CNQ-7 Blocks, which are operated by Pluspetrol (both under evaluation) and in Aguada Salada, operated by Tecpetrol, with positive results.

# 3. Development Activities

During 2017, our development activities in Argentina were mainly focused, according to the organizational structure in force in 2017, on the following regions and blocks:

#### 3.1 Neuquén—Río Negro Region

During 2017, Neuquén—Río Negro Region production was 218.8 mboe/d, representing 39% of YPF's total production.

- Neuquén concession:
  - Operated Areas—Development Activities:

#### 1. Octógono block:

Continuing with the activity of the previous year, during 2017, 5 wells were drilled in the northern sector of the field, targeting gas-bearing intervals in the Lajas formation. Four of those had positive results and the other one are being studied for optimization. Based on these results in 2018 we plan the development of the field with 6 more wells with Lajas formation as its principal objective.

# 2. Al Norte de la Dorsal block:

Guanaco field: During 2017, 4 wells were drilled, 3 of them are completed and 1 is in process of completion. All of them targeting gas in Lajas formation and their results are still under review. Lajas 2018 training campaign includes the plan to drill 6 more wells in the area. The Basamento formations is also planned to be evaluated in 2 wells to determine its potential for future development. To that end, we plan to complete and test this formation on 2 of the wells planned to be drill in 2018.

Several actions for well productivity and economic improvement are planned to be conducted in 2018.

*Barda Gonzalez field:* During 2017, 1 well was drilled targeting gas in Lajas formation and its result is still under review. If the results are positive, the activity on the Lajas formation will continue in 2018 by drilling 1 more well in the area.

## 3. Cerro Bandera Block:

La Vía field: During 2017, 1 well was drilled targeting gas in Lajas formation. The well is not currently in production (it is without facilities), and we made five PLT (Production Logging Tool) studies to determinate its potential.

On November 22, 2017, YPF entered into an assignment agreement in respect of 100% of the exploitation concession in the Cerro Bandera area. See "—Exploration and Production Overview—Main properties."

# 4. Anticlinal Block:

Bardita Zapala Field: During 2017, 1 well was drilled targeting gas in Chachil formation and its result is still under review.

#### 5. Loma La Lata – Sierra Barrosa block:

Loma La Lata field: The Sierras Blancas Infill project in the southeast area continues its development with 5 wells drilled (2 horizontal and 3 directional) during 2017. All of them are already in production and the production rate achieved was as expected. During 2017 a successful recompletion of a horizontal well, using stage frack technology was performed. During 2018, we plan to drill 15 wells and recomplete 4 horizontal wells.

## 6. Aguada Toledo–Sierra Barrosa field: Tight gas segment 5 (Lajas formation)

During 2017, 18 wells were drilled in Lajas formation, based on infill development activity. In addition, deeper wells in the Precuyano and Los Molles formations are being drilled and tested in two of these infill wells, taking advantage of the low incremental cost as a result of the deepening of wells raised to meet our objectives for the Lajas formation. We continue with implementation of several actions to reduce well cost successfully not only in the drilling phase, but also in the completion phase, improving project economics.

A second horizontal well was drilled in the Sierra Barrosa field as part of a pilot to improve the recovery factor in the tightest sands of the formation (in the lowest section). It produced gas over expectations

## 7. Barrosa Norte tight gas field (Lajas formation)

During 2017, three wells were drilled in this area, as a part of a plan to investigate different objectives: Precuyano and Los Molles Formation are two of them, also investigating the west structure of the area, and the third, is an infill type well (reducing distancing from 40 to 20 acres). The first two successfully confirmed very interesting accumulation for those deep reservoirs, and the infill well has verified original pressure and initial gas productivity was better than expected.

#### 8. El Triángulo Field (Tordillo formation)

During 2017 an outpost well was drilled in order to investigate Tordillo formation, and is scheduled to be completed and tested in 2018 to determine its potential.

#### 9. Sierra Barrosa Este tight gas field (Lajas formation)

During 2017 an outpost well was drilled in nearby structure to Barrosa Norte field. It produced gas at low levels, and failed to achieve expected rates.

## 10. Loma Campana Block:

The use of new technologies allowed the drilling of a pilot well to evaluate the development of gas and condensate near the gas water contact in Sierras Blancas formation. The well was drilled during 2017 and the production rate achieved was as expected. The drilling of a second well was completed in early 2018 using the same technology.

## 11. Rio Neuquén block:

During 2017, the four wells drilled in 2016 were completed, all of them above the average estimated production. An Integral Field Development Plan (FDP) was defined, considering appraisal, infill and development sub-projects. The goal of these projects is to define the optimum production rate. In any case, from the proposed plan investments will be made in facilities to increase the production capacity from 3.5 up to 5.5 million cubic meters per day. As a result of the FDP 6 wells were drilled during 2017 (2 of them were already completed, one of them with initial production rate above the expected average and the other was an appraisal with results under expectations). 12 new wells are expected to be drilled in 2018.

## 12. Volcán Auca Mahuida and Las Manadas blocks:

We continued with the appraisal and development of the Centenario and Mulichinco formations from the previous years. Four new wells were completed during 2017, two of them being appraisal wells. Positive results were provided by three of the four wells and the other one tested dry gas and is currently shut-in. Further appraisal and development wells are scheduled to be drilled in 2018.

#### 13. Señal Picada – Punta Barda block:

*Piedras Negras field*: one exploration well was completed during 2017 and began production in May 2017 and is currently active. Also we acquired 210 sq.km of new 3D seismic to the west of the block. No drilling activity is expected during 2018.

## 14. Chihuido de la Sierra Negra block:

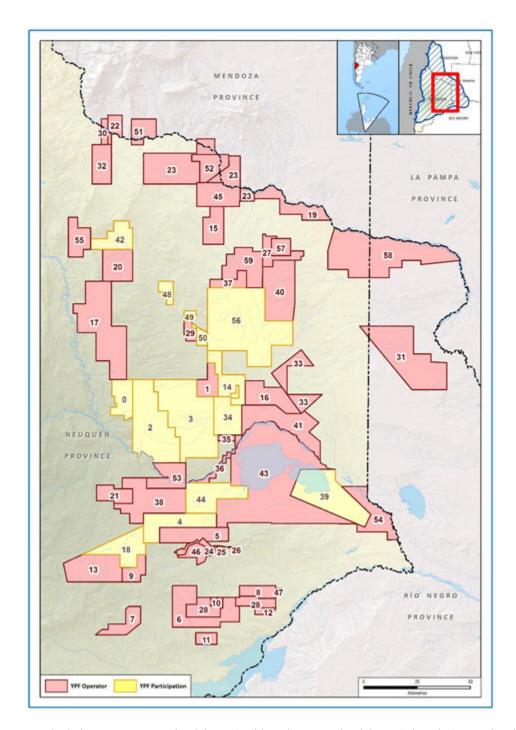
Chihuido de la Sierra Negra field: In this mature field, we completed a 3D seismic survey on the western area. Also, in order to evaluate tertiary recovery potential, a second single well chemical tracer test and log-inject-log operation (assay technique) was performed and it confirmed the previous positive results achieved in 2015 in displacing post water-flooding residual oil by an Alkali Surfactant Polymer formulation.

• Non-Operated Areas—Development Activities:

#### 15. Lindero Atravesado block:

This block is operated by Pan American Energy LLC. We hold a 37.5% working interest in this block. During 2017, 20 new wells were drilled, 22 were completed (6 of them drilled in 2016); all of them in tight gas projects, Lindero Oriental (33% of the wells had lower results than estimated) and Lindero Occidental (all new wells were above what was expected). The 5 remaining completions are planned to be finished in 2018. In addition, the drilling plan consists of 1 more well of the tight gas project, 2 oil wells to Quintuco Formation., an exploratory well to Los Molles Formation (shale gas), 2 exploratory wells to Vaca Muerta Formation (shale oil).

Neuquén YPF Concession



0 Aguada de Castro; 1 Aguada de la Arena; 2 Aguada Pichana Occidental; 3 Aguada Pichana Oriental; 4 Aguada Villanueva; 5 Al Norte de La Dorsal; 6 Al Sur de La Dorsal I; 7 Al Sur de La Dorsal II; 8 Al Sur de La Dorsal III; 9 Al Sur de La Dorsal IV; 10 Al Sur De La Dorsal V; 11 Al Sur De La Dorsal VI; 12 Al Sur de La Dorsal VII; 13 Anticlinal Campamento; 14 Bajada de Añelo; 15 Bajo Del Toro; 16 Bandurria Sur; 17 Cerro Arena; 18 Cerro Bandera; 19 Cerro Hamaca; 20 Cerro Las Minas; 21 Chasquivil; 22 Chihuido de La Salina Sur; 23 Chihuido de La Sierra Negra; 24 Dadin – Lote I; 25 Dadin – Lote II; 26 Dadin – Lote III; 27 Don Ruiz; 28 Dos Hermanas; 29 El Orejano; 30 El Portón; 31 El Santiagueño; 32 Filo Morado; 33 La Amarga Chica; 34 La Calera; 35 La Ribera I; 36 La Ribera II; 37 Las Manadas (Calandria Mora); 38 Las Tacanas; 39 Lindero Atravesado; 40 Loma Amarilla; 41 Loma Campana; 42 Loma Del Molle; 43 Loma La Lata—Sierra Barrosa; 44 Meseta Buena Esperanza; 45 Narambuena; 46 Octogono; 47 Ojo De Agua; 48 Pampa de Las Yeguas I; 49 Pampa de Las Yeguas II Norte; 50 Pampa de Las Yeguas II Sur; 51 Paso de Las Bardas Norte; 52 Puesto Hernandez; 53 Rincón Del Mangrullo; 54 Río Neuquén; 55 Salinas del Huitrin; 56 San Roque; 57 Señal Cerro Bayo; 58 Señal—Punta Barda; 59 Volcán Auca Mahuida.

## Río Negro concession:

• Operated Areas—Development Activities:

#### 16. Estación Fernández Oro block

During 2017, several projects were completed that allowed for an increase in production, treatment and compression capabilities:

- Stage I Increase dispatch capacity to Neuba I (Concessioned gas pipeline)
- Put in operation an LTS (Low Temperature Separator)
- Enlargement network gathering

With respect to drilling activity, we completed 34 gas wells targeting the Lajas formation (29 development gas wells, and 5 step-out gas wells) in general with positive results for the development wells; however, one step-out wells have not yet been evaluated. On September 2016, we started to drill with a fourth rig until November 2017, when we reverted to three rigs.

The development of the gas field will continue during 2018, focusing on drilling activity, 34 new wells are planned to be drilled. In addition, work in the first quarter of 2018 to increase the gas pipeline sales capacity has been planned, and an LTS plant of 2 Mm3/d capacities. We plan to install it in third quarter 2018.

#### 17. Señal Picada-Punta Barda block:

Señal Picada Block: During 2017 only workover activities were performed in this mature oil field, 12 wells were intervened, 6 for gas and 6 water injectors. Drilling of new wells is planned for 2018.

In the Punta Barda area no rig activity was performed in 2017. Three injector wells became active, as they started water injection during the first half of 2017. We plan to drill 14 new wells during 2018.

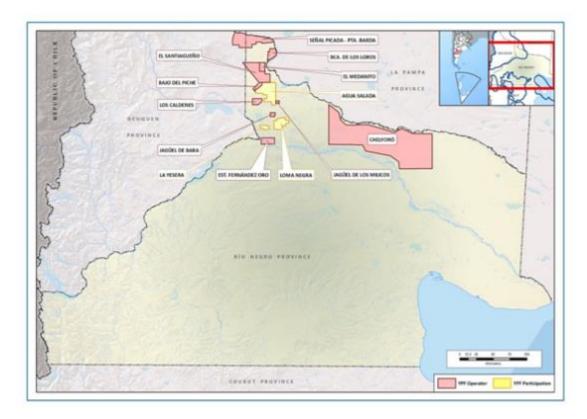
Six workovers were executed in this block, in order to test gas from the Neuquén Group formation. Four of them proved gas production and the other two were dry.

#### 18. Los Caldenes block:

Manzano Grande field, oil target: In order to continue with the development activity in the oil block, in early 2018 we plan to drill two wells in the Manzano Grande block. No drilling activity was conducted during 2017 in this block.

Los Caldenes field, gas target: one appraisal well was drilled during 2017, and completion was achieved in 2018. According to well log information, reservoir properties are according as expected. A second appraisal well is planned to be completed during first quarter 2018.

Río Negro YPF Concession



## 3.2 Mendoza Region

During 2017, Mendoza Region production was 118.3 mboe/d, representing 21% of YPF's total production.

# **Operated Areas**

• Mendoza Norte concession:

#### 1. Barrancas block:

The drilling activity during the last years focused in the following fields:

- **a. Barrancas:** During 2017, the development of the northwest zone continued in order to expand the area discovered in 2014, through the drilling of six oil producing wells. The target is the Barrancas Formation. The results of the wells drilled in the western flank found the limits of the field. It was also included in this zone a Secondary Recovery Project. The Development Plan of the area, including this Secondary Recovery Project, provides for the drilling of new producing wells and the conversion of other wells to water injectors during the upcoming years.
- **b. Ugarteche:** After ten years without activity in this area, the drilling of two development wells in 2015 showed that there were still related opportunities in the Western zone. This scenario allowed the rejuvenation of the area through a redefinition of its development plan. As a result, four wells were drilled during 2016 and four wells in 2017, all of them with results over expectations. It is expected to continue drilling wells in order to expand the field to the south and west.
- **c. Estructura Cruz de Piedra:** During 2017, two production wells were drilled with results below expectations, and the project of secondary recovery expansion continued through workover activity. It is planned to continue this activity by drilling more wells.

## 2. Mesa Verde block:

In 2014, exploration well MV.x-1 revealed the Río Blanco formation to be a productive horizon. The exploitation concession of this block was obtained during the second half of 2016. This allowed us to drill an appraisal well, which confirmed the expansion of the field.

During 2017, the delineation and development continued through the drilling of nine wells (between advanced and development wells), with results according to expectations. The field is not yet fully delineated. The opportunity includes the drilling of development and advanced wells during the upcoming years.

#### 3. La Ventana block:

Continuing with the activity of the previous years, during 2017, three infill wells were drilled in La Ventana Central area and two wells in Vacas Muertas Sur area. The results were below expectations, so the activity has been temporarily suspended, prioritizing other opportunities in the block, including the revamping of some surface installations.

Additionally, La Ventana was selected as part of a regional study to the Barrancas formation to develop EOR (tertiary recovery) with the objective of determining if it is convenient to start or not a pilot project. During 2016 the identification of the ASP (Alcali Surfactant Polymer) formulation compatible with the temperature and salinity of the formation was made, while a workover to do a single well test is planned for 2018, prior to the possible identification of a tertiary recovery pilot.

#### 4. Vizcacheras block:

During 2017, seven wells were drilled to the Barrancas and Papagayos formations, with mixed results (four wells with results over expectations and the other three below expectations).

Four interventions were carried out with radial drilling technology (technique that seeks to increase the productivity of the formation), which technically met the stated objective (be able to make the horizontal branches and navigate inside the reservoir), but the wells did not respond with the expectation of oil production.

Additionally, Vizcacheras was selected as part of a regional study to the Barrancas formation to develop EOR (tertiary recovery) with the objective of determining if it is convenient to start or not a pilot project. During 2016 the identification of the ASP formulation compatible with the temperature and salinity of the formation was made, and in 2017 a workover and a Single Well Chemilcal Tracer Test (SWCTT) were carried out with very good results, obtaining almost 50% of reduction of residual saturation. Pilot implementations are been studied. Prior to the identification of a tertiary recovery pilot, another SWCTT has been planned in another well in Vizcacheras Block and another one in La Ventana Block.

## 5. Llancanelo block:

During 2017 there was no drilling activity, due to negotiations with new partner, which will continue in 2018. As a remarkable fact, a bottom heater was installed in one well with the objective of increasing production by improving the mobility of the heavy crude oil. The initial results regarding the operation of the tool were as expected. Currently the well is in evaluation regarding its productivity.

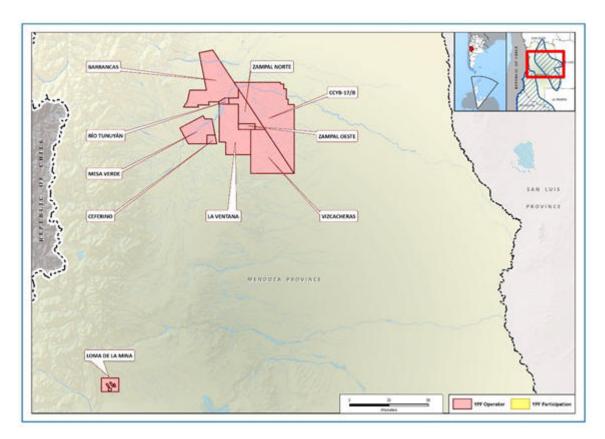
#### 6. Cerro Fortunoso block:

Since 2016, the new water treatment plant has been in operation, which allowed the expansion of the secondary recovery project in the Northeast Block. The very good Secondary response obtained meant that during the year 2017 an expansion was made to the Central East North zone. In the two zones (Northeast Zone and Central East Zone), 16 wells were drilled, with results over expectations. The expansion of the secondary to the entire field will be completed with the drilling of new wells (between producers and injectors) and the repair of another wells. This activity will be carried out during the upcoming years.

## 7. Valle del Río Grande Block:

After visualizing a development opportunity for the Grupo Neuquén Formation at the Malal del Medio field, two wells were drilled in 2017. The good results obtained, allowed for a reinterpretation that increased the mineralized area. During 2018 the activity will be focus on the delineation of this opportunity.

Mendoza Norte YPF Concession



• Mendoza Sur YPF concession:

#### 8. Chihuido de la Sierra Negra Block:

- a. **Desfiladero Bayo:** The Secondary Optimization project started in 2016, which included workover injection wells, wellhead acids, the adequacy of the injection facilities (with the installation of a Water Injection Plant) in order to guarantee the Water quality required, allowed to recover the production of the field to the expected volumes. During 2017 41 workovers were carried out. Additionally, a Polymer Injection Pilot Project (Tertiary Recovery) has been implemented in 2016, which included drilling of producing wells, workovers, and the construction and assembly of a polymer injection plant. The injection began in August 2016. As of the date of this annual report change in the vertical profile has been observed waiting for oil response. In the Desfiladero Bayo East area, six wells were drilled during 2017: two injectors and four producers (two with results over expectations and the other two below expectations.) in order to expand the southern zone and optimize development. As of the date of this annual report a Polymer Injection Pilot is also being implemented. Drilling activity has been completed and the pilot is on secondary recovery base line. Polymer plant will be installed by the end of 2018.
- b. **Puesto Molina:** During 2017, the Secondary Optimization Project continued through the drilling of five producing wells, with good results, and two water injector wells. Additionally, an opportunity was visualized to identify a mineralized zone in the eastern flank where there is no production, which would allow the drilling of new wells during the upcoming years. As of the date of this anual report, the first advanced well of this project was drilled. The well is producing a high percentage of water. If current flows are maintained, the project will be re-evaluated..

## 9. Chachahuén Sur Block:

During 2017 the drilling activity in the block continued with the drilling of 124 wells (102 development producers, one horizontal producer, seven advanced wells, five extension wells and 9 water injectors), in order to complete the development of productive formations Rayoso Clástico Cycles 1a, 2a and 3a. The results were as expected. The secondary recovery project for Cycle 2a and Cycle 3a is also under execution, where response is already observed. The results were as expected. New wells will be drilled in the next years.

#### 10. Cañadón Amarillo Block:

During 2017 nine wells were drilled corresponding to the Cañadón Amarillo Somero project (La Tosca and Chorreado in both the North and the South areas). 7 of those wells had results below expectations and 2 wells had very good productivity. We plan to drill 3 wells in 2018.

# CO. MOLLAR NORTE LLANCANELO R MENDOZA PROVINCE EL MANZANO OESTE CAJÓN DE LOS CABALLOS - SEC. ORIENTAL VALLE DEL FI COIRON II CERRO FORTUNOSO EL MANZANO EL CORRON I PUNTILLA DEL HUINCAN CHACHAHUEN NORTE LA PAMPA ALTIPLANICIE DEL PAYÚN PRYUN OESTE CONFLUENCIA SUR CHACHAHUEN NORTE AMARILLO CHINIDO DE LA PUESTO MOUNA NORTE EL ATAMISOUI CHIHUIDO DE LA **PUESTO PINTO** PASO DE LAS PUESTO CHIRLIDO DE LA CHACHAHUEN SIERRA NEGRA NEUGUEN YPF Operat YPF Participation

Mendoza Sur YPF Concession

## **Non Operated Areas**

# 1. Puesto Pinto (CNQ7/A) y Jagüel Casa de Piedra Blocks:

During 2017, 34 producing wells with results as expected and 14 water injection wells were drilled to the Centenario Formation. They were drilled in order to continue with the Secondary Recovery Project development which started in 2006 and also expanding this project to border areas. Likewise, during 2018 we plan to drill 27 producing wells and 13 injectors. It is also planned to start the construction of facilities for the expansion of the polymer injection project, whose pilot was implemented in 2012.

#### 2. Gobernador Ayala (CNQ7) Block:

During 2017, 19 producing wells with results as expected and four water injection wells were drilled to the Centenario Formation in order to continue the development of secondary recovery in the area (started in 2009) and also to develop the area of Jagüel Casa de Piedra Sur.

During 2018, we plan to drill 11 producing wells and 11 injectors in order to continue with the development and implementation of secondary recovery in the field.

## 3. Campo Durán – Madrejones Block:

One well was drilled, targeting the Tupambi Block II Formation. As of the date of this annual report the well is awaiting termination. Another well is planned to be drilled during 2018, the same target.

#### 4. Confluencia Sur Block:

Towards the middle of 2017, one well was drilled, with the objective of the Troncoso Inferior Formation with good results. Another well is expected to be drilled during 2018.

· Chubut-Tierra del Fuego Region

During 2017, Chubut-Tierra del Fuego Region production was 49 mboe/d, representing 9% of YPF's total production.

Operated Areas—Development activities

Chubut concession:

During 2017 the activities in Chubut Province oilfields were affected by the occurrence of two severe climatic events that led to significant production losses and also delays in the development execution programs.

In March 2017, an unprecedented rainstorm occurred in the city of Comodoro Rivadavia and surrounding areas, declaring government of the province of Chubut a disaster zone. In June of 2017, a large-scale snow storm occurred, also declared by the government of the province of Chubut climatic emergency.

That was the reason for which the production decreases as it was detailed previously.

In order to recover production losses additional development plans were launched. In November 2017 the daily production reach the targeted values, and the delay in the execution of the drilling and workover activity was recovered.

#### 1. Manantiales Behr block:

Despite the climatic issues, the gas production increased 3,3% in 2017 compared to 2016, due to the optimization of gas exploitation, with the adaptation and expansion of the facilities.

48 wells were drilled in 2017. 24 of those wells reached expected results, and 24 resulted below expectations. The 24 that did not reach expectations were recently finished and are still under production optimization.

The workover activity carried out gave positive results in all the fields except in La Carolina.

The assisted recovery project in Grimbeek began in 2013 with a focus on standard water-flooding. The field was divided in three main areas (GbkII, GbkN and GbkNII).

GBKII field is currently in an advanced stage of development with results, over expectations. On the other hand, activity in the GBKN / GNKNII fields is in the initial stage.

Also, the construction of the facilities for the assisted recovery project in Grimbeek, has already begun and will be completed by 2019.

During 2017, progress was made with the conceptualization of the second stage of the polymer injection development in GBKII, foreseeing the installation of new modular plants for the injection of polymers in 2018 and 2019.

A third stage of development is being evaluated for the subsequent years.

The short-term focus on the Manantiales Behr block is to extend water-flooding projects along the field (GbkN full area and GbkNII) in order to sustain production growth.

Throughout 2017 progress was made with the construction of water flooding facilities and conversion of wells to extend the secondary recovery area in La Carolina field where low reservoir pressure affects results in primary production new wells and workovers..

## 2. El Trébol – Escalante block:

8 wells were drilled in the deepest reservoirs related to structural and stratigraphic traps with positive results. One of them, is an advanced well, that will allow the development of a new zone.

The Workover activity also gave positive results

#### 3. Zona Central – Cañadón Perdido block:

This block is located in the urban area of Comodoro Rivadavia.

Since 2016, there has been no drilling of wells, due to legal issues relating to a claim from a group of neighbors of the city regarding the extension of the Bella Vista Sur drilling project. The project was reformulated so that it can be executed in 2018, from another geographical location.

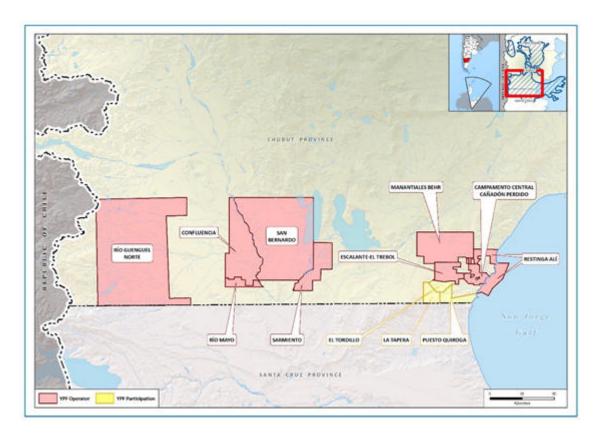
## 4. Restinga Alí block:

Located on the coast between the urban area and the sea, development in this block was reactivated in 2013.

Despite the climatic issues, oil production increased 4,3 % in 2017 compared to 2016, due to the construction of facilities (oil pipelines), allowing production optimization.

Two wells were drilled in 2017. The first was an oil well with positive results, and the other a gas well that is under study, due to lower than expected production results.

**Chubut YPF Concession** 



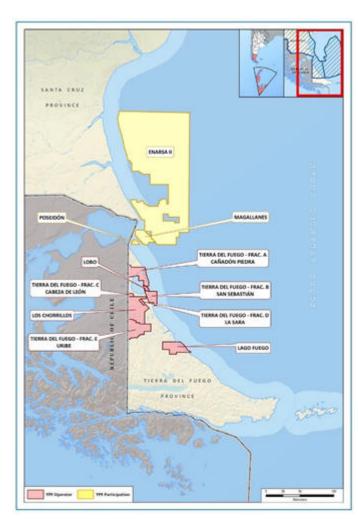
• Tierra del Fuego concession:

Since 2016, the drilling activity in Tierra del Fuego focused on gas in the Lago Fuego field.

The main objective was the exploitation of the Springhill formation and the exploration of the Tobífera series. We have completed 6 wells during 2017, with 3 wells reaching expected results, and 3 wells under evaluation due to lower than expected production results, where fracking and flow back programs are being analyzed in order to improve productivity. Additionally, source rock "Pampa Rincon" is present in these wells so studies are performed to define workover activity in Lago Fuego.

Other activities in the San Sebastian field were aimed at improving the production of gas through the installation of compressors, dewatering artificial lift systems such as capillary injection and the optimization of the vertical performance with high water gas ratio wells. These activities slowed the declining output in the field, as expected.

In the Uribe block, 2 exploration wells were drilled targeting Springhill formation and the exploration of Tobífera series and unconventional resources. 2 core samples were taken during both drills; whose analysis, allows to focus future activity in the sector of the block with the best petro physical characteristics. Completion of the two wells are pending, and will be executed in 2018.



Tierra del Fuego YPF Concession

Non Operated Areas:

5. El Tordillo and La Tapera-Puesto Quiroga blocks:

Beginning in January 2014, under an agreement with the province of Chubut related to the negotiation of an extension of YPF concessions there, we transferred 41% of our working interest in the joint venture, El Tordillo and La Tapera-Puesto Quiroga, to Petrominera Chubut S.E. As a result, our interest in the joint venture will decreased from 12.196% to 7.196% since 2019.

During 2016 and 2017, no Wells were drilled due to the low Price of oil barrel.

In 2017 a new agreement was signed with Chubut Province, in which it was established the future compliance scheme of the pending investments, under the Agreement for the implementation of an activity commitment and investment in hydrocarbon areas of Chubut Province. It is planned to drill 10 wells during 2018.

• Santa Cruz Region

During 2017, Santa Cruz Region production was 81.6 mboe/d, representing 15% of YPF's total production.

During 2017, our development activities in Argentina were mainly focused on the following regions and blocks:

## **Operated Areas—Development activities**

During 2017, we implemented 18 integral development projects across six major development areas in the province of Santa Cruz (Cañadon de la Escondida, Las Heras, El Guadal, Los Perales, Cañadon Yatel and Cañadon Seco), comprising a total portfolio of 22 projects. The main projects include the following reserve areas: Cañadón Escondida, Las Heras, Cerro Grande, Seco León, Los Perales, Cañadon Yatel and El Guadal. 14 wells were drilled (13 development wells and 1 exploration well) meeting expectations in the Cañadon Seco, Cañadon Yatel and Los Perales blocks and 348 workovers and associated facilities were executed focusing our strategy mainly on conversions and repairs of water injectors, which allow us to sustain our secondary production.

The main objectives of these integral projects are:

- Comprehensively developing the areas through the drilling of new wells and deep formations with gas objectives.
- Acquiring the necessary information with electrical logs, rotated plugs and well testing.
- Increasing the recovery factor with new enhanced oil recovery projects.
- Increasing water injection to improve sweep efficiency.
- Extending horizontal and vertical limits with new appraisal and exploration wells.
- Providing development support through appropriate surface facilities.

In the fourth quarter of 2017, we started an additional and challenging cost optimization plan, which as of the date of this annual report has progressed significantly, achieving results as expected.

## 6. Cañadón Seco

During 2017, 7 wells were drilled and 83 workovers were executed, with positive results. The drilling activity was concentrated in the Mina El Carmen formation, and the D-129 geological formation (an important formation from which studies are demonstrating its potential and the results of the activities carried out so far encourage us to continue with the planned activities) continues to be delineated. During 2018 we plan to take samples of rock and fluids in order to characterize better the D129 Formation and decrease the risk of the area, to be able to propose a development plan in the medium term. From the point of view of improved recovery, the objective continues to center on the geological formation of Cañadón Seco. Several projects were executed, some of them still ongoing, in which injection is expanded horizontally as well as vertically, improving the efficiency in the production-injector wells relationship. In addition, we continue to expand the secondary recovery in the Mina El Carmen Formation, which has the challenge of higher depth and injection pressures than those required for the Cañadon Seco formation.

#### 7. Barranca Baya

During 2017, 88 workovers were executed with results as expected. All the models that supported the drilling activity in previous years were based on 2D models. During 2017, 3D models were started to increase the original oil in situ, but the economic nature of the projects is being analyzed based on the price of crude oil.

We deepened the secondary recovery control, in addition to the integrity of the facilities, which allows us to obtain a better quality of the water that is injected into the formations.

#### 8. Las Heras

During 2017, 32 workovers were executed with results as expected. The activity was focused on the secondary recovery projects. The projects continued to be expanded both horizontal and vertically, incorporating both new layers to be flooded and optimizing the existing secondary recovery, with activity in cleaning injectors, re-layering and maintenance of the installation in the well.

## 9. Lomas del Cuy

During 2017, 29 workovers were executed. Secondary recovery was concentrated in Cerro Doce Grande Oeste, El Guadal Batería 2, Lomas del Cuy Norte and La Chitita Este blocks, implementing new projects and expanding existing projects.. We continued our improvements in water quality.

Although in 2016 deeper drilling had been carried out in El Guadal Sur with the objective of Castillo and D129 geological formations, due to the economic conditions of 2017, it was decided not to continue with this activity. We plan to continue with the study of the block during 2018, to propose some horizontal well during 2019 with objective of D129 formation.

## 10. Los Perales—Las Mesetas

During 2017, 2 wells (including one replacement injector and one producing well of polymer project) and 78 workovers were drilled, with results as expected. There are several expectations with this polymer project and this well is aimed at gas.

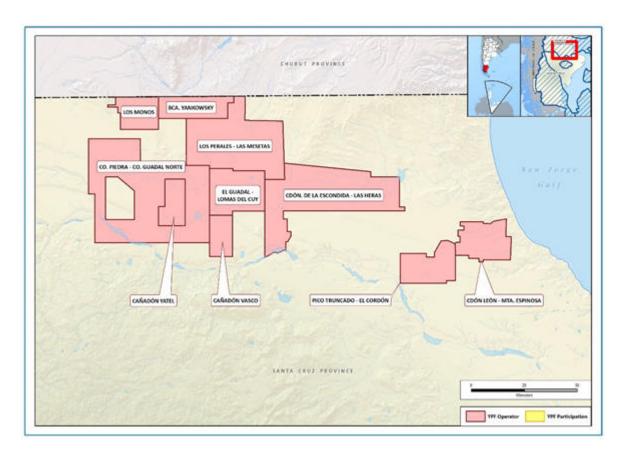
Secondary activity is present in all blocks; however we have injected water only in the Bajo Barreal geological formation. We have focused on maintaining the existing secondary and expanding projects from the vertical and aeral point of view, incorporating new layers and completing existing meshes.

The first pilot of polymer injection was started in the Santa Cruz regional, in Los Perales Central B III block at December 2017.

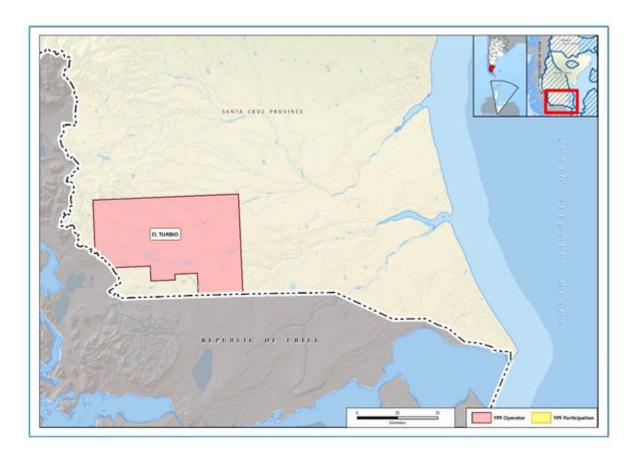
#### 11. Cañadón Yatel

During 2017, 5 wells and 38 workovers were drilled with positive results. Drilling activity was concentrated at the Estancia Cholita reservoir. An oil reservoir under the gas cap of the D-129 formation began to be developed in the southern and central blocks. The electrification of the block began in 2016, and continued during 2017 allowing us to exploit the wells with greater reliability and minimize mechanical problems. We plan to continue such activities during 2018.

Santa Cruz, Norte YPF Concession



Santa Cruz Sur YPF Concession



4. Non-Operated Areas—Development Activities:

## 12. Magallanes block:

On November 17, 2014, we agreed to extend the joint venture contract with ENAP Sipetrol Argentina S.A. in the Magallanes block. The objective of this agreement was to extend the rights and obligations of ENAP in the original joint venture agreement and confirm its role as operator, maintaining its 50% share until the end of the concession. On January 8, 2016, the Argentine government approved a concession extension through November 17, 2027. See "—Main Properties".

During 2017, we continued to develop an incremental production project, known as the "PIAM-Magallanes Block Incremental Project." This project aims to increase the production capacity of the area by approximately 1.6 mmcm/d of gas with the start up originally expected in 2017 and then postponed to March 2018. During 2017, we signed an Engineering and Procurement Contract (EPC) to manage the engineering tasks. This project involves laying a marine pipeline and expanding compression capacity. The total estimated value of the project is approximately U.S.\$387 million.

# Properties and Exploration and Production Activities in Rest of South America

- 1. Bolivia: On July 26, 2017, the formalization of the contract with YPFB originally signed in January 2017 was signed, to begin exploration work in Charagua, Bolivia, in a block that has a potential in natural gas resources. In addition, one exploration block was awarded in 2017 (Charagua Block). Activities to fulfill commitments are planned to begin early 2018. YPF holds a 100% working interest in the Charagua Block. However, a partnership agreement has been signed by YPF and YPFB Chaco, whereby YPF would operate holding a 60% working interest and YPFB Chaco would hold 40%. As of the date of this annual report, both parties are still waiting for the Legislative Assembly of Bolivia to formalize the agreement.
- 2. Chile: From the results obtained in San Sebastián Block we did not foresee any new exploratory opportunities so we:
  - Asked the National Authority for the commercial exploitation concession of only a portion of the area where wells with positive results had been drilled;
  - Informed the National Authority of our decision not to enter the Third Exploration Period, and to relinquish the rest of the area except for 3,000 acres needed to finish the testing of one exploration well. For this exception, we have requested a period of 2 years, starting on December 2017.
- 3. Colombia: Blocks COR 12 and COR 33 are located in the Cordillera Oriental basin, which we operate pursuant to authorization by the Colombian National Hydrocarbons Agency (Agencia Nacional de Hidrocarburos or "ANH"). Our working interest is 60% in COR 12 and 55% in COR 33. The combined net acreage in these blocks is 700 km2. We and our partners informed the ANH of our decision to relinquish both blocks. As of the date of this annual report, the parties are in the process of formalizing and executing the final agreements for the relinquishment.

## Additional information on our current activities

The following table shows the number of wells in the process of being drilled as of December 31, 2017.

|   | As of Decem | As of December 31, 2017 |  |  |
|---|-------------|-------------------------|--|--|
| Number of wells in the process of being drilled | Gross       | Net                     |  |  |
| Argentina                                       | 61          | 43                      |  |  |
| Rest of South America                           |             | _                       |  |  |
| Total   | 61          | 43                      |  |  |

#### **Downstream**

During 2017, our Downstream activities included crude oil refining and transportation, and the marketing and transportation of refined fuels, lubricants, LPG, and other refined petroleum products in the domestic wholesale and retail markets and certain export markets.

During 2017, the Downstream segment was organized into the following divisions:

- Refining Division (oil refining and petrochemical production);
- Domestic Marketing and Chemicals Division (commercialization of refined and petrochemical products obtained from such processes); and
- Logistic and Trading Division (logistics related to the transportation of oil and gas to refineries and the transportation and distribution of refined and petrochemical products to be marketed in the different sales Channels).

We market a wide range of refined petroleum products throughout Argentina through an extensive network of sales personnel, YPF-owned and independent distributors, and a broad retail distribution system. In addition, we export refined products, mainly from the port at La Plata. The refined petroleum products marketed by us include gasoline, diesel, jet fuel, kerosene, heavy fuel oil and other crude oil products, such as motor oils, industrial lubricants, LPG and asphalts.

## Refining division

We wholly own and operate three refineries in Argentina:

- La Plata refinery, located in the province of Buenos Aires;
- · Luján de Cuyo refinery, located in the province of Mendoza; and
- Plaza Huincul refinery, located in the province of Neuquén.

Our three wholly-owned refineries have an aggregate refining capacity of approximately 319,500 boe/d. The refineries are strategically located along our crude oil pipeline and product pipeline distribution systems. In 2017, our crude oil production was substantially destined to our refineries, represented approximately 78.6 % of the total crude oil processed by our refineries, while in 2016 it was 85.7%. Through our stake in Refinor, we also own a 50% interest in a 26,100 boe/d refinery located in the province of Salta, known as Campo Durán.

The following table sets forth the throughputs and production yields for our three wholly-owned refineries for each of the three years ended December 31, 2017, 2016 and 2015:

|                                | For the Year Ended December 31, |         |       |
|--------------------------------|---------------------------------|---------|-------|
|                                | 2017                            | 2016    | 2015  |
|                                |                                 | (mmboe) |       |
| Throughput crude               | 107.0                           | 107.4   | 109.1 |
| Throughput feedstock           | 4.3                             | 4.0     | 4.4   |
| Throughput crude and feedstock | 111.2                           | 111.4   | 113.5 |
| Production                     |                                 |         |       |
| Diesel                         | 41.0                            | 40.6    | 40.6  |
| Motor gasoline                 | 25.2                            | 24.6    | 24.5  |
| Petrochemical naphtha          | 7.9                             | 7.6     | 7.0   |
| Jet fuel                       | 6.8                             | 5.9     | 6.1   |
| Base oils                      | 1.0                             | 1.0     | 1.1   |

|          | For the | For the Year Ended December 31, |       |  |
|----------|---------|---------------------------------|-------|--|
|          | 2017    | 2016                            | 2015  |  |
|          |         | (thousands of tons)             |       |  |
| Fuel oil | 935     | 1,554                           | 1,878 |  |
| Coke     | 925     | 839                             | 770   |  |
| LPG      | 644     | 670                             | 612   |  |
| Asphalt  | 313     | 145                             | 171   |  |

During 2017, our global refinery utilization reached 91.73%, compared to 91.87% in 2016, based on a nominal capacity of 319.5 mboe/d.

The La Plata refinery is the largest refinery in Argentina, with a nominal capacity of 189,000 bbl/d. The refinery includes three distillation units, two vacuum distillation units, two fluid catalytic cracking units, two coking units, a coker naphtha hydrotreater unit, a platforming unit, two diesel hydrofinishing units, a gasoline hydrotreater, an isomerization unit, an FCC (fluid cracking catalysts) naphtha splitter and desulfuration unit and a lubricants complex, in addition to a petrochemical complex that generates MTBE, TAME and aromatics compounds used for blending gasoline, and other chemical products for sale. The refinery is located at the port in the city of La Plata, in the province of Buenos Aires, approximately 60 km from the City of Buenos Aires. During 2017, the refinery processed approximately 172.3 mbbl/d. The capacity utilization rate at the La Plata refinery for 2017 was 91.15 % compared with 165.5 mbbl/d processed in 2016, with a utilization rate of 87.6 %. The crude oil processed at the La Plata refinery, 77.96 % of which was YPF-produced in 2017, comes mainly from the Neuquina and San Jorge basins. Its crude oil supplies come from the Neuquina basin by pipeline and from the San Jorge basin by vessel, in each case to Puerto Rosales, and then by pipeline from Puerto Rosales to the refinery.

A new Coke A facility that allowed for an increase in the conversion capacity was officially started up in September 2016, and the test run was made in October 2016. The capacity of the new unit is 1,160 bbl/h of fresh feed pumped from the bottoms of the Topping and Vacuum units, providing the refinery with an increase in crude processing of 23,800 bbl/d, representing an increase of almost 12% in the capacity utilization rate. The production of this facility is a component for the blend to be used in the generation of diesel, motor gasoline and coke.

The Luján de Cuyo refinery has a nominal capacity of 105,500 bbl/d, the third largest capacity among Argentine refineries. The refinery includes two distillation units, a vacuum distillation unit, two coking units, one fluid catalytic cracking unit (FCCU), a platforming unit, a MTBE unit, an isomerization unit, an alkylation unit, an FCC naphtha splitter, a hydrocracking unit, an FCC naphtha hydrotreater unit and two gasoil hydrotreating units. During 2017, the refinery processed approximately 98.0 mbbl/d, with a capacity utilization rate of more than 92.9%. In 2016, the refinery processed 106.0 mbbl/d, with a capacity utilization rate of more than 100%. The lower capacity utilization during 2017 was due to planned maintenance shut-downs of the topping, isomerization, gasoil hydrotreating and coking units from June to July.

Due to its location in the western province of Mendoza and its proximity to significant distribution terminals we own, the Luján de Cuyo refinery has become the primary facility responsible for providing to the central and northwest provinces of Argentina with petroleum products for domestic consumption. The Luján de Cuyo refinery receives crude supplies from the Neuquina and Cuyana basins by pipeline directly into the facility. Approximately 77.5% of the crude oil processed at the Luján de Cuyo refinery in 2017 (and 77.8% of the crude oil processed in this refinery in 2016) was produced by us. Most of the crude oil purchased from third parties comes from oil fields located in the provinces of Neuquén and Mendoza.

The Plaza Huincul refinery, located in the province of Neuquén, has an installed capacity of 25,000 bbl/d. During 2017, the refinery processed approximately 22.8 mbbl/d, with a capacity utilization rate of 91.2%, compared with 22.0 mbbl/d processed in 2016 with a capacity utilization rate of 88.1%.

The only products currently produced at the refinery are gasoline, diesel and jet fuel, which are sold primarily in nearby areas and in the southern regions of Argentina. Heavier products, to the extent production exceeds local demand, are blended with crude oil and transported by pipeline from the refinery to our facilities in La Plata for further processing. The Plaza Huincul refinery receives its crude supplies from the Neuquina basin by pipeline. In 2017, 100% of the refinery's crude supplies (and 98.2% of the crude oil processed in this refinery in 2016) were produced by us.

According to Ministry of Energy regulations, sales of gasoline and diesel must be blended by biofuels. The gasoline requires a 12% blend of ethanol (resolution 37/2016) and diesel requires a 10% blend of FAME (resolution 1125/2013), the same blend request of 2016 and 2015, except from gasoline which blend requirement was 10% in 2015.

Since 1997 and 1998, each of our refineries (La Plata, Luján de Cuyo, and Plaza Huincul) have been certified under International Organization for Standardization ("ISO") 9001 (quality performance) and ISO 14001 (environmental performance). All of them are also certified under the OHSAS 18001 (occupational health and safety performance) standard. Inventories of industrial greenhouse gases and savings of CO2 emissions equivalent (MDL projects) have been verified in accordance with ISO 14064 in the three refineries (2009 La Plata and Lujan de Cuyo; 2017 Plaza Huincul). The refineries maintain their systems under continuous improvement and revision by authorized organizations.

## **Marketing Division**

Our Marketing Division supplies gasoline, diesel, LPG and other petroleum products throughout Argentina and other countries in the region. We supply several industries, including retail, transport and agriculture.

During 2017, YPF maintained its leading position in Argentina, reaching a market share of 56.1% for liquefied fuels.

YPF sells two types of gasoline: Infinia, a premium 98 octane gasoline, and Super, a regular 95 octane gasoline.

Our market share of Infinia and Super gasolines, according to our estimates, was 61.3 % and 52.4%, respectively, as of December 31, 2017, compared with 60.7% and 52.8%, respectively, as of December 31, 2016. Our sales volume for Infinia was 1,774 mcm in 2017 (20.1% higher than in 2016) and 3,344 mcm for Super in 2017 (2.1% less than in 2016).

With respect to diesel, according to our own estimates, our market share of diesel (500 and 1500 ppm) and Infinia diesel (10 ppm) was 56.5% and 57.6%, respectively, as of December 31, 2017, compared with 55.7% and 58.1%, respectively, as of December 31, 2016. Along with Infinia diesel (10 ppm), for which sales volume was 1,750 mcm in 2017 compared to 1,372 mcm in 2016, our diesel (500 and 1500 ppm) decreased a sales volume of 5,947 mcm compared to 6,239 mcm in 2016. Finally, sales volume of Infinia diesel reached 22.7% of total diesel sales volumes, up from 18% in 2016.

During 2017, the competition was fiercer in the domestic Argentine market than in previous years, with our competitors implementing several aggressive marketing activities. Due to new market conditions for fuels in Argentina (see "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions"), we expect that this competition will continue, challenging us to respond with effective marketing and promotional tools. Consequently, during 2017 we worked on regional promotions based on the needs of each market. Micro-marketing kits have been created in order to maintain and increment sales in markets that have become competitive due to new competitor operations, such us promotion "Promo Rally" in Cordoba, "Double KM Serviclub", "Tall Cafee" in our YPF Full stores, "YPF Collections Competitions Cars", among others.

We continue with certain promotions based on the Serviclub loyalty program which allowed us to improve sales of Infinia gasoline and diesel and increase the base of members of the program. As of December 31, 2017 the loyalty Serviclub program has more than 2.6 millon members (67% higher than 2016).

The communication and relationship actions carried out during 2017 have been focused on our Premium fuels in order to maintain the perceived quality of our premium products.

In November 2016, YPF launched Infinia diesel, a new premium diesel with a new formulation. The release plan involved an ambitious campaign in mass media and at sales points, and strong internal training of our salesforce. The launch of this product is aligned with the projected migration of heavy duty vehicles fleets to Euro 5 and 6 technology (regulatory command) in the coming years and, to a lesser extent, to capture particular premium customers.

YPF markets lubricants through three segments of the domestic market: retail, agriculture and industry. Our three manufacturing facilities, part of the La Plata industrial complex, include lubricant, asphalt and paraffin production lines. Our line of automotive lubricants, including mono-grade, multi-grade and oil, has received approval and recommendations from leading global automotive and engine manufacturers, including Ford, Volkswagen, Renault, Audi, Deutz, Cummins, Volvo, MAN Truck, GM, Porsche, Scania, Detroit Diesel and Caterpillar.

We are engaged in the LPG wholesale business, which encompasses LPG storage, logistics and commercialization to domestic and foreign markets. We obtain LPG from natural gas processing plants and refineries, as well as from third parties. In addition to butane and propane, we also sell propellants used in the aerosols manufacturing processes.

YPF also markets lubricants in Brazil and Chile, where we have subsidiary companies. Additionally, through a network of exclusive resellers, we market lubricants in three bordering countries (Uruguay, Paraguay and Bolivia).

The Domestic Marketing Division includes five main segments: Retail, Agriculture, Industry, Lubricants and Specialties and LPG.

## a) Retail Division

As of December 31, 2017, the Retail Division's sales network in Argentina consisted of 1,563 retail service stations, compared to 1,547 as of December 31, 2016. Of these, 113 are owned by YPF. The remaining 1,450 service stations are associated service stations. OPESSA, our wholly-owned subsidiary, actively operates 172 retail service stations, of which 88 are owned by YPF, 26 are leased to

the Automóvil Club Argentino and 58 are leased to independent owners. Additionally, YPF owns 50% of Refinor, a company operating 66 service stations.

According to our estimates, as of December 31, 2017, we were the main fuel retailer in Argentina, with 35.3% of the country's gasoline service stations, followed by Shell, Axion, Oil and Petrobras and with 14.2%, 11.8%, 6.3% and 6.0%, respectively. During 2017, our market share in diesel and gasoline, marketed in all segments, increased from 55.6% to 56.1%, from December 31, 2016 to December 31, 2017.

Our convenience stores, YPF Full and YPF Full Express, are present in 435 and 107 points of sale, respectively, as of December 31, 2017. Additionally, a modern oil change service shop called YPF Boxes is present in 283 service stations across the country.

We highlight the opening of 35 new service stations in our network during 2017. This marks a milestone in the development of the YPF retail service station network in recent years because of its relevance in investment, sales volume and the full national coverage, as the openings were made in 14 of the 23 provinces of Argentina.

We became the first retailer in the Argentinian market to implement ATMs (automatic teller machines), reaching an amount of 15 machines working in service station owned by YPF. The cash in the machines comes from the service station operation, optimizing the operative process of cash recollection.

With the purpose of providing technological solutions to contribute the competitiveness of our network, we began the Intelligent Operation Control (CIO) project. This new solution replaces the actual system that links YPF to the service station. It allows a superior transactional processing of our clients information, with an on-line visualization of each individual operation. As of December 31, 2017, the project was implemented in 125 service stations and we plan to finish the system implementation during the first half of 2019.

With the commitment to streamline payment processes at service stations and continue to improve our consumer's experience, we recently launched two virtual payment methods (QR payment method and "Serviclub PASS").

In July 2017, we renew the AUBASA service stations on the Buenos Aires—La Plata highway, becoming the largest service area in the country.

## b) Agriculture Division

The Agriculture Division provides an extensive portfolio of products and services to agricultural producers, including agricultural advice, and delivery and application of products at the consumption site, under a unified brand image, directly or through a network of 104 sale points (nine owned by YPF) with exclusive commercial areas in 19 provinces, offering diesel, fertilizers, lubricants, phytosanitaries, and ensiling bags, among other products. During 2017, YPF launched 9 new products (phytosanitaries, fertilizers and adjuvants), under the YPF brand. Additionally, through distribution agreements with leading local and international suppliers, the product palette has been extended to 29 more completing an offer of 120 different agro products. This year our market share of fertilizers, according to our estimate, was 9.6% compare to 8.7% (2016).

YPF developed crop financing with instruments such as credit cards with local banks, for more than U.S. \$ 100 million. YPF accepts different types of grains as payment (*canje*), mainly soybean, but also corn, rice, wheat, sorghum, sunflower, barley and blueberries. Some of soybeans are processed by third-party companies to obtain soybean oil, meal and hulls that we generally export. Furthermore, part of the soybean oil is processed into fatty acid methyl esters ("FAME") (a natural product added to commercial grade diesel), which covers approximately 7% of YPF's refinery needs. During 2017, we received approximately 1.5 million tons of grains (a 27% increase compared to 1.2 million tons in 2016), primarily soybeans, that positions YPF among the top five exchangers in Argentina. As December 31, 2017 the revenue from these exports represented approximately U.S. \$ 371.6 million, a 9.2% increase compared with 2016. It is worth noting that in 2017 YPF is the tenth exporter in the argentine market of soybean meal and also is the tenth exporter in the argentine market of soybean oil.

# c) Industry Division

This division supplies the entire national industry and transportation (ground and air) sectors, which require a broad portfolio of products and services that meet the needs of the customers. The division develops specific solutions for the mining, oil & gas, aviation, transport, infrastructure and construction sectors. We supply products such as fuels (diesel, gasoline, fuel oil, Jet A-1), lubricants, coal, asphalts, paraffin and derivatives (sulfur, CO2, decanted oil, aromatic extract), either directly from our refineries to the point of consumption (more than 10,000 direct customers) through our own ground and waterway network, or through a network of 11 industrial distributors with national coverage.

Our mission is to promote efficiency in the value chains of the industries we serve through energy solutions, supplies and services. Accordingly, our strategy is based on close relationships with our clients and the development of innovative solutions focused on creating value for YPF and the region's industries.

During 2017 we implemented a control and traceability solution for the gasoline and lubricants consumption which was offered to all industrial segments customers to improve efficiency in bulk fuel management.

In the transport segment, in 2017 we completed long term agreements with main argentine railway companies to supply diesel, gasoline, lubricants and services.

Another highlight of the year 2017 in the transportation segment was the steady growth of sales through the YER (YPF en ruta) fleet card, which resulted in an increase of 36% of volume sales than 2016, mainly as a result of certain incentive programs that were launched. This card is designed to cover the supply and administration needs of vehicles of cargo and passengers.

Regarding to the aviation segment, low cost airlines have recently entered the Argentine market. Consequently, during 2017 the company completed agreements for the supply of JET A1 with two low-cost companies which recently started to operate in Argentina. We expect this market to increase in the future.

In addition, we have become the second oil company in Santiago de Chile's airport, reaching 21.5% of market share.

In the mining segment, in 2017 we closed a long term agreement for the supply of diesel and gasoline (1.000 m3 per month) and we implemented an operation "in house" in Cerro Moro mining project. This operation includes the administration, maintenance and operation of the fuel plant. Besides, we closed an agreement with another mining company for 2 years for the supply of diesel and gasoline (1.600 m3/month).

In the asphalt segment, during 2017 we reached asphalt sales record of 313 ktn, double the previous year, reaching a market share of 45% (approximately 11 points of market share higher compared to 2016).

# d) Lubricants and Specialties Division

In our industrial complex located in the city of La Plata, lubricants, asphalts, paraffin and Blue 32 are produced. In 2017, the necessary investments were made to ensure the supply of market demands, highlighting the start-up of the Blue 32 plant and the expansion of production capacity of modified asphalts according to the latest trends in the road construction industry. Blue 32 is the commercial name of a new product used in vehicles that comply with the emission standard EURO 5 (serves to reduce emissions of gases into the environment).

During 2017, our sales of lubricants increased by 2.4% with respect to 2016. Sales to the domestic market grew by 2%, and sales to the external market increased by 5%.

Exports are made to two large groups. On the one hand, we sale to our wholly-owned companies in the main markets of Brazil and Chile, where the volume sold decreased by 39% in Brazil with respect 2016 due to the increase in local production and increased 3% in Chile with respect to the previous year. On the other hand, we export to our network of distributors located in Bolivia, Uruguay, Paraguay and Ecuador, where the volume of sales were 18% higher than 2016.

YPF's strategy is to continue its leadership in the development of lubricants to meet the latest generation OEMs (original equipment manufacturers) requirements for protection and performance needs in both passenger and heavy duty vehicles, maintaining the leadership in a high-profitability market in high-end lubricants. Our market share as of December 31, 2017 was 39.5% (an increase of 1.4% compared to 2016) according to information provided by the Ministry of Energy. The critical factors of competitiveness are the usage and referral agreements from the main OEMs (Ford, Volkswagen, General Motors, Porsche and Scania) and reaching the customer with the best network and service coverage.

The sales of our passenger car motor oil (PCMO) line (Elaion is the most important brand for the automotive segment) reached 14.1 Km3 in 2017, an increase of 0.8% compared to 2016. With respect to our heavy duty motor oil (HDMO) line (Extravida), 2017 sales decreased by 1.8%.compared to the previous year.

In order to meet the technological update required by new vehicles that comply with the Euro 5 standard (with SCR technology) of mandatory use in the country for all new vehicles, and complemented by the launch of Infinia Diesel and XV500 Extravida, we launched our Nitrous Oxides Reducing Agent (ARNox).

Our quality controls ensure that the product reaches the customer in optimal conditions and complies with the strict standards determined by ISO 22241 for this product. Since 1995, Lubricants and Specialties has been awarded with ISO 9001: 2008, ISO 14001: 2004, OSHAS 18.001: 2007 ISO / TS 16949-Third certifications.

#### e) LPG Division

Through our LPG Division, we sell LPG to the foreign market, the domestic wholesale market and to distributors that supply the domestic retail market. The LPG Division does not directly supply the retail market. It is supplied by YPF Gas S.A., which is our affiliate.

During 2017, we sold approximately 35% of our LPG production to YPF Gas S.A. for the domestic market.

We are the largest LPG producer in Argentina, with sales in 2017 reaching approximately 580 mtn, compared with 574 mtn in 2016. Of this, approximately 402 mtn were sold in the domestic market, compared to 410 mtn in 2016. Our main clients in the domestic market are companies that sell LPG in cylinders or bulk packing to end-consumers, also providing LPG to households in some regions. Additionally, exports in 2017 reached approximately 176 mtn, compared to 164 mtn in 2016. The main destinations were Chile, Paraguay and Bolivia. Transportation of LPG to overseas customers is carried out by truck, pipeline and barges.

Total sales of LPG, excluding LPG used as petrochemical feedstock, were Ps. 3,512 million and Ps. 2,096 million in 2017 and 2016, respectively.

The LPG Division obtains LPG from natural gas processing plants and from our refineries and petrochemical plants. We produced 541 mtn of LPG in 2017, not including LPG destined for petrochemical usage, and purchased LPG from third parties, as detailed in the table below:

|  | Production and<br>Purchases |
|--|-----------------------------|
|  | (mtn) 2017                  |
| LPG from Natural Gas Processing Plants(1)    |                             |
| General Cerri                                | 0.06                        |
| El Portón                                    | 109.1                       |
| San Sebastián                                | 19.2                        |
| Loma Negra                                   | 23.5                        |
| Estación Fernandez Oro                       | 11.1                        |
| Total Upstream                               | 162.9                       |
| LPG from Refineries and Petrochemical Plants |                             |
| La Plata refinery                            | 242.8                       |
| Luján de Cuyo refinery                       | 102.4                       |
| CIE  | 34.0                        |
| Total refineries and petrochemical plants(2) | <u>379.2</u>                |
| LPG purchased from joint ventures(3)         | 8.0                         |
| LPG purchased from unrelated parties         | 42.4                        |
| Total  | 592.5                       |
|  |                             |

- (1) The San Sebastian plant is a joint venture in which we own a 30% interest; El Portón is 100% owned by us; General Cerri belongs to a third party with which we have a processing agreement.
- (2) This production does not include LPG used as petrochemical feedstock (olefins derivatives, polybutenes and maleic).
- (3) Purchased from Refinor. We also have a 50% interest in Refinor, which produced 179.4 mtn of LPG in 2017.

Regarding to sales prices, the butane local market is regulated by the government, where the local prices have been unmodified since April 2015 until 2017. In April (resolution 56-E / 2017) and December 2017 (resolution 287-E / 2017) the government updated Butano's maximum reference prices for the local market recognizing an improvement in sales prices. In the case of propane, although the market is also regulated by the government, local prices published by the Ministry of Energy are referred to export parity.

#### Chemicals Division

Petrochemicals are produced at our petrochemical facilities in Ensenada and Plaza Huincul. Additionally, we also own a 50% interest in Profertil, a company that has a petrochemical complex in Bahía Blanca, as discussed below.

Petrochemical production operations in the *Complejo Industrial Ensenada* ("CIE") are closely integrated to the refining activities at the La Plata refinery, allowing a flexible supply of feedstock, the efficient use of by-products, such as hydrogen, and the supply of aromatics to increase gasoline octane levels.

The main petrochemical products and production capacities per year are as follows:

|                                       | Capacity (tons per year)                |
|---------------------------------------|---|
| CIE                                   | ( , , , , , , , , , , , , , , , , , , , |
| BTX (Benzene, Toluene, Mixed Xylenes) | 526,000                                 |
| Paraxylene                            | 38,000                                  |
| Orthoxylene                           | 25,000                                  |
| Cyclohexane                           | 95,000                                  |
| Solvents                              | 66,100                                  |
| MTBE                                  | 60,000                                  |
| Butene I                              | 25,000                                  |
| Oxoalcohols                           | 35,000                                  |
| TAME                                  | 105,000                                 |
| LAB                                   | 52,000                                  |
| LAS                                   | 32,000                                  |
| PIB                                   | 26,000                                  |
| Maleic Anhydride                      | 17,500                                  |
| Plaza Huincul                         |   |
| Methanol                              | 411,000                                 |

Natural gas, the raw material for methanol, is supplied by our Upstream business segment. The use of natural gas as a raw material allows us to monetize reserves, demonstrating the integration between the Chemical and the Upstream divisions.

In 2017 we successfully installed a new gas flare in our methanol plant in the Plaza Huincul refinery and a maleic anhydride pastillator in the CIE.

Additionally, in accordance with our midterm commercial strategy of stablishing YPF as one of the main players of the Southern Cone's petrochemical industry, in 2017 we managed to sell over 87,000 tons of our solvents and specialties product lines to the Southern Cone region, 18% higher than 2016 and the highest sales to that destination in the last five years.

Raw materials for petrochemical production in the CIE, including virgin naphtha, propane, butane and kerosene, are supplied mainly by the La Plata refinery.

In 2017, 2016 and 2015, 84%, 80% and 72%, respectively, of our petrochemicals sales (including propylene), were made in the domestic market, while we exported to Mercosur countries, the rest of Latin America, Europe and the United States.

We also participate in the fertilizer business, directly and through Profertil, a 50%-owned subsidiary. Profertil is a joint venture with Agrium, a worldwide leader in fertilizers, which initiated operations in 2001. Profertil has a production facility in Bahía Blanca which produces 1.3 million tons of urea and 750,000 tons of ammonia per year. In addition, Profertil markets other nutrients and special blends of prepared land to optimize soil performance.

The CIE was certified under ISO 9001 in 1996 and recertified in 2013 (2008 version). The La Plata petrochemical plant was certified under ISO 14001 in 2001 and recertified in 2014 (2008 version). The plant was also certified under OHSAS 18001 in 2005 and recertified in 2014. Since 2008, the plant verified the inventory of CO2 emissions under ISO 14064: 1 and, in 2011, inventories of CH4 and N2O emissions were verified as well. The CIE laboratory was certified under ISO 17025, in 2005 and recertified in 2013.

The CIE has recently attained ISO 50001 certification (2011 version) in November 2015, covering the following processes: production of complex aromatics, olefins, maleic, polybutenes and the energy generation facilities that operate within the La Plata petrochemical complex.

The methanol plant was certified under ISO 9001 in December 2001 and recently recertified with ISO 9001 (2015 version) in July 2016. The methanol plant was also certified under ISO 14001 in July 1998 together with the Plaza Huincul refinery, and recertified in July 2016 with ISO 14001:2015. In addition, the plant was also certified under OHSAS 18001 in December 2008, and the last date of recertification was August 2014.

The certification of our petrochemical business covers the following processes:

- refining process of crude oil and production of gas and liquid fuels, base stocks for lubricants and paraffin, petroleum coke (green coke) and petrochemical products in the units of refining, conversion, lubricants, aromatics, olefins PIB / Maleic and LAB / LAS, methanol production and storage.
- management and development of our petrochemical business, planning and economic and commercial control, marketing and post-sale service of petrochemical products.

### Logistic Division

### Crude oil and products transportation and storage

We have available for our use a network of five major pipelines, two of which are wholly-owned by us. The crude oil transportation network includes nearly 2,700 km of crude oil pipelines with approximately 640,000 barrels of aggregate daily transportation capacity of refined products. We have total crude oil tankage of approximately 7 mmbbl and maintain terminal facilities at five Argentine ports.

Information with respect to YPF's interests in its network of crude oil pipelines is set forth in the table below:

| From                              | To                     | YPF Interest | Length (km) | Daily Capacity (boe/d) |
|-----------------------------------|------------------------|--------------|-------------|------------------------|
| Puesto Hernández                  | Luján de Cuyo refinery | 100%         | 528         | 93,509                 |
| Puerto Rosales                    | La Plata refinery      | 100%         | 585         | 326,541                |
| La Plata refinery                 | Dock Sud               | 100%         | 52          | 141,006                |
| Brandsen                          | Campana                | 30%          | 168         | 120,700                |
| Puesto Hernández/P. Huincul/Allen | Puerto Rosales         | 37%          | 888         | 232,000                |

We own two crude oil pipelines in Argentina. One connects Puesto Hernández to the Luján de Cuyo refinery (528 km), and the other connects Puerto Rosales to the La Plata refinery (585 km) and extends to Shell's refinery in Dock Sud at the Buenos Aires port (another 52 km). We also own a plant for the storage and distribution of crude oil in the northern province of Formosa with an operating capacity of 19,000 cm, and three tanks in the city of Berisso, in the province of Buenos Aires, with 90,000 cm of capacity. We own 37% of Oleoductos del Valle S.A., operator of an 888-km pipeline network, its main pipeline being a double 513 km pipeline that connects the Neuquina basin and Puerto Rosales.

We hold, through Oleoducto Transandino Argentina S.A. and Oleoducto Transandino Chile S.A., an interest of 36% and 18% respectively, in the 428-km transandean pipeline, which transported crude oil from Argentina to Concepción in Chile. This pipeline ceased operating on December 29, 2005, as a consequence of the interruption of oil exports resulting from decreased production in the north of the province of Neuquén. The book value of the assets related to this pipeline was reduced to their recovery value.

We also own 33.15% of Terminales Marítimas Patagónicas S.A., operator of two storage and port facilities: Caleta Córdova (province of Chubut), which has a capacity of 314,000 cm, and Caleta Olivia (province of Santa Cruz), which has a capacity of 246,000 cm. We also have a 30% interest in Oiltanking Ebytem S.A., operator of the maritime terminal of Puerto Rosales, which has a capacity of 480,000 cm, and of the crude oil pipeline that connects Brandsen (60,000 cm of storage capacity) to the Axion Energy Argentina S.R.L. (previously ESSO, a former subsidiary of ExxonMobil which was acquired by Bridas Corporation) refinery in Campana (168 km), in the province of Buenos Aires.

In Argentina, we also operate a network of multiple pipelines for the transportation of refined products with a total length of 1,801 km. We also own seventeen storage terminals for distribution of refined products and seven LPG storage terminals with an approximate aggregate capacity of 1,620,000 cm. Three of our storage and distribution terminals are annexed to the refineries of Luján de Cuyo, La Plata and Plaza Huincul. Ten of our storage and distribution terminals have maritime or river connections. We operate 53 airplane refueling facilities (40 of which are wholly-owned) with a capacity of 22,500 mcm, 123 manual fuel dispensers and 17 automatic fuel dispensers. These facilities provide a flexible countrywide distribution system and allow us to facilitate exports to foreign markets, to the extent allowed pursuant to government regulations. Products are delivered by an exclusive tanker truck fleet of approximately 2,400 units of which 28 are owned.

YPF currently blends ethanol in the Luján de Cuyo, Monte Cristo, San Lorenzo, La Plata, Junín, Plaza Huincul, Barranqueras, Concepción del Uruguay, Villa Mercedes and La Matanza storage plants.

In 1998, our logistics activities were certified under ISO 9001 (quality performance) and ISO 14001 (environmental performance), and recertified in 2012 under ISO 9001:2008 and ISO 14001:2004. In 2010, logistics activities were also certified under OHSAS 18001 (security performance) and recertified in 2013. In 2014, our trucking activities were certified under ISO 39001 (road traffic safety management system).

Our logistics activities were recertified in 2015 under ISO 9001 and ISO 14001, and recertified in 2016 under OHSAS 18001. Additionally, in 2016, our land transport and light vehicle logistics activities were certified under ISO 39001:2012. As of December 31, 2017, our logistics processes remain certified under ISO 9001, ISO 14001, OHSAS 18001, and ISO 39001 Standards.

## **Trading Division**

Our Trading Division sells refined products and crude oil to international customers and crude oil to domestic oil companies. Exports may include crude oil, unleaded gasoline, diesel, fuel oil, LPG, light naphtha, virgin naphtha, MTBE, green coke and decanted oil.

This division exports to different countries, principally to United States of America and Brazil, as well as to other countries. Sales to international customers for 2017 and 2016 were Ps. 4,982 million and Ps. 3,305 million, respectively. In 2017, refined products accounted for 49% of total sales, up from 37% in 2016. In 2017, 48% of total sales corresponded to marine fuels, down from 59% in 2016. In 2017 and 2016, sales volumes to customers outside Argentina consisted of 3.0 mmbbl and 2.4 mmbbl of refined products, respectively, and 2.3 mmbbl and 2.7 mmbbl of marine fuels, respectively.

For the domestic market, sales of crude oil totaled Ps. 995 million, or 1.2 mmbbl, in 2017 and Ps. 784 million, or 0.9 mmbbl, in 2016. Sales of marine fuels totaled Ps. 1,726 million, or 1.2 mmbbl, in 2017 and Ps. 1,652 million, or 1.3 mmbbl in 2016.

In addition, imports of low sulfur diesel, gasoline, AVGAS and JP1 in 2017 totaled 4.6 mmbbl, a decrease of 18% compared with 5.6 mmbbl in 2016. Imports of fertilizers, agrochemicals and paraffin totaled 0.16 million tons in 2017, a decrease of 16% compared with 0.20 million tons in 2016. China and Morocco were the principal origin of these imports.

In 2017, imports of crude oil totaled 1.4 mmbbl. All of them came from Nigeria.

### Gas and Power

During 2017, our Gas and Power activities included: (i) the commercialization and distribution of natural gas to third parties; (ii) the technical operation of LNG regasification in Bahía Blanca and Escobar terminals, through the contracting of two regasification vessels; and (iii) the generation of both conventional thermal electricity and renewable energy projects.

#### **Delivery commitments**

We are committed to providing fixed and determinable quantities of crude oil and natural gas in the near future under a variety of contractual arrangements.

With respect to crude oil, we sell substantially all of our Argentine production to our Refining and Marketing business segment to satisfy our refining requirements. As of December 31, 2017, we were not contractually committed to deliver material quantities of crude oil to third parties in the future.

As of December 31, 2017, we were contractually committed to deliver 13,511 mmcm (or 477 bcf) of natural gas in the future, (without considering interruptible export supply contracts) of which approximately 10,153 mmcm (or 359 bcf) will have to be delivered from 2018 through 2020. According to our estimates as of December 31, 2017, our contractual delivery commitments for the next three years could be met with our own production and, if necessary, with purchases from third parties. In addition, in regard with The Terms and Conditions (See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Natural gas"), during January 2018, we signed agreements with natural gas distribution companies compromising to deliver 4,755.9 mmcm (or 167.9 bcf) of natural gas in 2018.

However, since 2004 the Argentine government has established regulations for both the export and domestic natural gas markets which have affected Argentine producers' ability to export natural gas. Consequently, since 2004 we have been forced in many instances to partially or fully suspend natural gas export deliveries that are contemplated by our contracts with export customers.

For information regarding regulations that have been affecting our operations see "Item 4. Information on the Company—Regulatory Framework and Relationship with the Argentine Government—Market Regulation."

For information regarding claims araising from restrictions in the natural gas market see "Item 8. Financial Information—Legal Proceedings."

On November 29, 2017, natural gas producers (among them, YPF) and ENARSA, at the request of the MINEM, subscribed the "Terms and Conditions for the Provision of Natural Gas to Gas Distributors through Networks "(the" Terms and Conditions").

The Terms and Conditions set forth the basic policies to guarantee the adequate supply of natural gas to Distributors, and consequently to the residential and commercial final consumers, the continuity of the gradual and progressive reduction of subsidies. The Terms and Conditions were entered into within the framework of the normalization process of the natural gas market, which provides that the Terms and Conditions will be effective during the "transition period" to normalization which is currently scheduled to run through December 31, 2019.

Among other provisions, the Terms and Conditions recognize the right to transfer the cost of acquiring gas to the tariff paid by users and consumers and establish the volume that each producer and each basin must make available on a daily basis to the distributors (who in turn may express their lack of interest in receiving such amounts before a certain cut-off date set forth in the Terms and Conditions) during each month. In addition, the Terms and Conditions: (i) set forth penalties for any party's non-compliance with their obligation to take or deliver gas, (ii) set maximum gas prices in US dollars for each basin for the two-year period from the execution of the Terms and Conditions, which were significantly higher than those prevailing until this agreement, (iii) include payment guidelines for the purchases made by the distributors to the producers and (iv) they include guidelines for early termination in the event of certain breaches by the parties. Pursuant to the Terms and Conditions, during the transition period ENARSA assumed the obligation to supply the demand corresponding to areas where the subsidies of residential gas consumption set forth in section 75 of Law No. 25,565 (corresponding to the areas of lower price of residential gas charged to users and consumers) are applicable.

The Terms and Conditions constitute guidelines for all parties in the negotiation of their respective individual agreements; however, the terms and conditions are guidelines and not obligations of the parties who entered into the Terms and Conditions. Entering the Terms and Conditions allows YPF to have predictability over its demand since natural gas for residential consumers is no longer dispatched according to priorities established in Resolution 1410/2010, but following the proportions and maximum quantities set forth in the Terms and Conditions annexes, compelling distribution companies to acquire natural gas for peak demand in the spot market.

On December 29, 2017, MINEM N ° 508-E / 2017 Resolution was published. This establishes the procedure for the compensation of lower revenues than the Licensees of the Natural Gas Distribution Service for User Networks See "Item 4. Information on the Company—Regulatory Framework and Relationship with the Argentine Government—Natural Gas."

Natural gas supply contracts

The Argentine government has established regulations for both the international and domestic natural gas markets, which have affected the ability of producers in Argentina to export natural gas. Our principal supply contracts are briefly described below.

We were committed to supplying a daily quantity of 125 mmcf/d (or 3.5 mmcm/d) to the Methanex plant in Cabo Negro, Punta Arenas, in Chile (under three original agreements entered into on January 5, 1995, March 11, 1997 and November 13, 2001, which expire between 2017 and 2025). Pursuant to instructions from the Argentine government, deliveries have been interrupted since 2007. In connection with these contracts, the Company signed three new agreements with Methanex through which YPF eliminated all

contractual obligations and past and future potential claims related to the original agreements through 2018. The first agreement was signed in 2011, through which YPF committed to investments in E&P. The second one was signed in 2012, through which YPF committed to temporarily exporting gas to Chile and importing methanol as the final product ("Gas Tolling Agreement"), receiving the approval from the Argentine government. A new Gas Tolling Agreement was signed in December 2016, through which YPF committed to supplying a total volume of 4 bcf (115 mmcm) of gas to Methanex through April 2018. The new Gas Tolling Agreement was signed by YPF and Methanex and presented for approval of the Argentine government to temporarily export gas and import methanol. An addendum to the Gas Tolling Agreement was signed on December 4, 2017 by YPF and Methanex, pursuant to which YPF has the option to supply 1 mmcm/d until September 2018 or until reaching a total amount of 115 mmcm whatever comes first. Each cubic meter delivered, reduces proportionally the commitment of YPF to deliver natural gas according to the 1997 Agreement, from January 1 to December 31, 2019. The Gas Tolling Agreement as well as the addendum (both approved by MINEM through Resolution No. 502/2017) states that if the volumes of the addendum are completely delivered, the commitment stablished in 1997 Agreement, is considered fulfilled. However, no sanction could apply to YPF if the company decides not to fulfilled the volumes mentioned in the addendum.

We are currently engaged in a 15-year contract signed in 2003 with Gas Valpo, a natural gas distributor, to supply 35 mmcf/d (or 1 mmcm/d) through the Gas Andes pipeline linking Mendoza, Argentina to Santiago, Chile, which has a transportation capacity of 353 mmcf/d (or 10 mmcf/d) (designed capacity with compression plants). This contract has been modified to an interruptible contract.

We have a 21-year contract (entered into in 1999) to deliver 93 mmcf/d (or 2.63 mmcm/d) of natural gas to a Chilean distribution company (Innergy) that distributes natural gas to residential and industrial clients through a natural gas pipeline (with a capacity of 318 mmcf/d or 9 mmcm/d) connecting Loma La Lata in Neuquén, Argentina with Chile. The contract was modified to reduce its deliver or pay obligation, not to exceed an annual quantity of 20 mmcm with a daily basis of 7.1 mmcf/d (or 0.2 mmcm/d).

Because of certain regulations implemented by the Argentine government, we could not meet our export commitments and were forced to declare force majeure under our natural gas export sales agreements, although certain counterparties have rejected our position. See "—The Argentine natural gas market" and "Item 8. Financial Information—Legal Proceedings." As a result of actions taken by the Argentine government, through measures described in greater detail under "—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Natural gas," during recent years we have been forced to reduce the export volumes authorized to be provided under the relevant agreements and permits.

## The Argentine natural gas market

We estimate (based on preliminary reports of amounts delivered by gas transportation companies) that natural gas consumption in Argentina totaled approximately 1,775 bcf (or 50.26 bcm) in 2017. We estimate that the number of users connected to distribution systems throughout Argentina was approximately 8.7 million as of October 31, 2017.

In 2017, we sold approximately 35% of our natural gas to local residential distribution companies, approximately 1.5% to compressed natural gas end users, approximately 55.9% to industrial users (including our affiliates, Mega and Profertil) and power plants and 7.2% to YPF downstream operations. Sales were affected by increased consumption by residential consumers during winter months (June to August). During 2017, approximately 87.6% of our natural gas sales were produced in the Neuquina basin. In 2017, our domestic natural gas sales volumes were approximately equal to 2016.

During the past few years, the Argentine government has taken a number of steps aimed to satisfy domestic natural gas demand, including pricing, export regulations, higher export taxes and domestic market injection requirements. These regulations were applied to all Argentine producers, affecting natural gas production and exports from every producing basin. See "—Delivery commitments—Natural gas supply contracts." Argentine producers such as YPF complied with the Argentine government's directions to curtail exports in order to supply gas to the domestic market, whether such directions are issued pursuant to resolutions or otherwise. Resolutions adopted by the Argentine government provide penalties for non-compliance. Rule SSC No. 27/2004 issued by the Undersecretary of Fuels ("Rule 27"), for example, punishes the violation of any order issued thereunder by suspending or revoking the production concession. Resolutions No. 659 and No. 752 also provide that producers not complying with injection orders will have their concessions and export permits suspended or revoked and state that pipeline operators are prohibited from shipping any natural gas injected by a non-complying exporting producer.

The Argentine government began suspending natural gas export permits pursuant to Rule 27 in April 2004, and in June 2004 the Argentine government began issuing injection orders to us under Resolution No. 659. Thereafter, the volumes of natural gas required to be provided to the domestic market under the different mechanisms described above have continued to increase substantially. See additionally "Item 4. Information on the Company—Regulatory Framework and Relationship with the Argentine Government—Natural gas export administration and domestic supply priorities".

On January 8, 2017, Law No. 26,732, which establishes export duties on hydrocarbon exports, ceased to be in force. As a result, export duties are no longer imposed on natural gas exports.

See "Item 4. Information on the Company—Regulatory Framework and Relationship with the Argentine Government—Natural gas" for additional information on these and other related regulations.

## Argentine natural gas supplies

Most of our proved natural gas reserves in Argentina (approximately 79% as of December 31, 2017) are situated in the Neuquina basin, which is strategically located in relation to the principal market of Buenos Aires and is supported by sufficient pipeline capacity during most of the year. Accordingly, we believe that natural gas from this region has a competitive advantage compared to natural gas from other regions. The capacity of the natural gas pipelines in Argentina has proven in the past to be inadequate at times to meet peak-day winter demand, and there is no meaningful storage capacity in Argentina. Since privatization, local pipeline companies have added capacity, improving their ability to satisfy peak-day winter demand, but no assurances can be given that this additional capacity will be sufficient to meet demand.

In order to bridge the gap between supply and demand, especially with respect to peak-day winter demand, the Argentine government has entered into gas import agreements.

YPF has provided regasification services to ENARSA under certain agreements since May 2008. As of the date of this annual report, both parties are engaged in renegotiations towards an extension of the agreement, which expires in October 2018

Since the beginning of its operations, this regasification vessel has converted 21.85 bcm (or 771,6 bcf) of LNG into natural gas, which has been injected into a pipeline which feeds the Argentine national network. Most of this volume was supplied during the peak winter demand period. In 2017, natural gas injected into the network amounted to approximately 2.21 bcm (or 78.2 bcf).

YPF is the operator of UTE Escobar (a joint venture formed by YPF and ENARSA), which operates an LNG Regasification Terminal ("LNG Escobar") located in the km 74.5 of the Paraná River. The LNG Escobar terminal has a floating storage and regasification unit permanently moored at a new port facilities, for which UTE Escobar has executed agreements with Excelerate Energy to provide and operate a 151,000 cm (or 533,252 cf) regasification vessel moored at the LNG Escobar terminal with the capacity to supply up to 20 mmcm/d (or 700 mmscf/d) of natural gas.

Since the beginning of its operations, this regasification vessel has converted 16.50 bcm (or 582.6 bcf) of LNG into natural gas, which has been injected into a pipeline which feeds the Argentine national network. Most of this volume was supplied during the peak winter demand period. In 2017, natural gas injected into the network amounted to approximately 2.23 bcm (or 78.7 bcf).

## Natural gas transportation and storage capacity

Natural gas is delivered by us through our own gathering systems to the five trunk lines operated by Transportadora de Gas del Norte S.A and Transportadora de Gas del Sur S.A. from each of the major basins. The capacity of the natural gas transportation pipelines in Argentina is mainly used by distribution companies. A major portion of the available capacity of the transportation pipelines is booked by firm customers, mainly during the winter, leaving capacity available for interruptible customers to varying extents throughout the rest of the year.

We have utilized natural underground structures located close to consuming markets as underground natural gas storage facilities, with the objective of storing limited volumes of natural gas during periods of low demand and selling such natural gas during periods of high demand. Our principal gas storage facility, "Diadema," is located in the Patagonia region, near Comodoro Rivadavia city. The injection of natural gas into the reservoir started in January 2001.

#### Other investments and activities

NGLs

We participated in the development of our affiliate Mega to increase its ability to separate liquid petroleum products from natural gas. Through the fractionation of gas liquids, Mega increased production at the Loma La Lata gas field by approximately 5.0 mmcm/d (or 176.5 mmcf/d) in 2001 with our assistance.

We own 38% of Mega, while Petrobras and Dow Chemical have stakes of 34% and 28%, respectively.

### Mega operates:

- A separation plant, which is located in the Loma La Lata field, in the province of Neuquén.
- An NGL fractionation plant, which produces ethane, propane, butane and natural gasoline and is located in the city of Bahía Blanca in the province of Buenos Aires.
- A pipeline that links both plants and that transports NGLs.
- Transportation, storage and port facilities in close proximity to the fractionation plant.

Mega's maximum annual production capacity is 1.62 million tons of natural gasoline, LPG and ethane. YPF is Mega's only supplier of natural gas. The production of the fractionation plant is used mainly in the petrochemical operations of PBBPolisur S.A. ("PBB"), owned by Dow Chemical Company, and is also exported by tanker to Petrobras' facilities in Brazil.

Pursuant to Decree No. 2067/08 and Resolutions No. 1982/2011 and 1991/2011 of ENARGAS, since December 1, 2011, Mega had been required to pay, on a monthly basis, a fee of Ps. 0.405 per cubic meter of natural gas it purchases. This requirement has a significant impact on the operations of Mega and has been challenged in the Argentine federal courts. On October 27, 2015, the Argentine Supreme Court ("CSJN") ruled on the legal proceedings filed by Mega covering the period up to the issuance of Law No. 26,784 (November 13, 2012). It ruled that Decree 2067/08 was unconstitutional and did not apply to Mega.

In addition, on February 25, 2013, Mega filed another action requesting that the federal courts declare the unconstitutionality of Articles 53 and 54 of Law No. 26,784, which included within the provisions of Law No. 26,095 the fee created by Decree No. 2067/08 and ENARGAS regulations, which, as of the date hereof, has not been ruled on by the first instance judge.

Finally, on April 1, 2016, MINEM issued Resolution No. 28, which provided for the suspension of the application of the fee created by Decree No. 2067/08 and related ENARGAS regulations effective as of the date of issuance.

Electricity market—generation

# The Argentine Electricity Market

Argentina's energy demand in 2017 was almost similar to its energy demand in 2016, according to Compañía Administradora del Mercado Mayorista Eléctrico S.A. ("CAMMESA"). During 2017, domestic consumption decreased 2.14% and exports decreased more than 79%.

In order to satisfy this energy demand, Argentina's overall power generation in 2017 was similar to its power generation in 2016, according to CAMMESA. In 2017, 64,5% of Argentina's power generation came from thermal power plants, 28.9% from hydroelectric power plants, 4.2% from nuclear power plants, 1.9% from renewable energy sources and 0.5% from spot imports from Uruguay, Brazil, Paraguay and Chile (733.8 Gwh). Those spot imports were used to satisfy peak demand hours without capacity reserves.

Peak capacity demand reached its maximum in February 2017 (25,628 Mw), but maintaining1,614 Mw of capacity reserve for security of the electrical system.

Thermal power plants consumed 1,396,122 cm of diesel oil, a decrease of 41.4% compared to 2016, 1.286 million tons of fuel oil, a 51.5% decrease compared to 2016, and 17.08 billion cm of natural gas, an 9.8% increase compared to 2016.

The average electricity price was Ps. 1157.1/MWh, a 9.7% increase compared to 2016, while the annual average marginal cost of production was Ps. 1,473/MWh, also a 28.8% decrease compared to 2016 due to an improvement in the efficiency of power plants and to a lower consumption of liquid fuels.

In 2017, Resolution No. 19/2017 of the Secretariat of Electric Energy replaced Resolution 95/13 and defined a new remuneration method for available power and generated energy, allowed the power generation plants to increase the profitability and reliability of the generation of energy. This resolution established remuneration based on the available power by type of technology (gas turbine, steam turbine, combined cycles, hydroelectric) and remuneration for energy generated and operated. Likewise, additional remuneration was established as incentive to efficiency. The payment of these concepts is done in cash and denominated in dollars.

In Resolution SEE 287—E / 2017 of May 10, 2017, the Ministry of Energy instructed CAMMESA to call interested parties to offer new thermal generation of technology: a) combined cycle or b) cogeneration, with compromise to be available to meet the demand in the wholesale electric market, contribute to the reduction of costs and to the increase of the reliability in the Argentine Electrical System.

## YPF in Power Generation

On August 1, 2013, as a result of the spinoff of the assets of PlusPetrol Energy S.A., YPF Energía Eléctrica S.A ("YPF EE"), was created to continue the power generation operations and businesses of Central Térmica Tucumán and Central Térmica San Miguel de Tucumán.

During 2017, YPF EE participated in the following power generation plants with an aggregate net installed capacity of 1,367 MW:

- a 100% interest in Central Térmica Tucumán (447 MW combined cycle) through YPF EE, in which we have a 100% interest;
- a 100% interest in Central Térmica San Miguel de Tucumán (382 MW combined cycle) through YPF EE, in which we have 100% interest; and
- a 100% interest in Loma Campana Este (14 MW motogenerators) through YPF EE, in which we have 100% interest;
- a 100% interest in Loma Campana I (105 MW gas turbine) through YPF EE, in which we have 100% interest;
- a 66,67% interest in Loma Campana II (107 MW gas turbine) through YGEN, in which we have 66,67% interest; and
- a 40% interest in Central Dock Sud (797.5 MW combined cycle and 72 MW gas turbines), directly and through Inversora Dock Sud S.A., in which we have a 42.86% interest.

Additionally, YPF EE owns assets that are part of Filo Morado Partnership, which has an installed capacity of 63 MW. However the relevant facilities have not been in operation since November 2008.

In addition to YPF EE, YPF also owns and operates power plants supplied with natural gas produced by itself, which produce power to supply upstream and downstream activities:

- Los Perales power plant (74 MW), which is located in the Los Perales natural gas field;
- Chihuido de la Sierra Negra Power Plant (40 MW); and
- Plaza Huincul Power Plant (40 MW).

In 2017, YPF EE generated 5,270 GWh with its two combined cycle plants. Central Térmica Tucuman's production was 2,498 GWh, and Central Térmica San Miguel de Tucumán's production was 2,772 Gwh. Additionally, Central Dock Sud generated 4,944 GWh. The energy produced by YPF EE and Central Dock Sud (10,214 GWh in total) represented 7.45% of Argentina's electricity generation in 2017.

Energy produced by both combined cycle plants in Tucumán was 5% lower in 2017 compared to 2016, because of major overhauls on units TUCUTV01 and TUCUTG02 at Central Térmica Tucumán in September 2017 and October 2017.

Energy produced by Central Dock Sud in 2017 decreased by 1.62% for annual borscopy inspection on units DSUDTG10 and DSUDTG09.

On November 7, 2017, YPF EE reached the commercial operating date of an important new thermal power generation plant, Central Térmica Loma Campana (105 MW gas turbine), which is located in Añelo, Neuquén. This additional generation plant was designed with the objective of supplying YPF's internal energy demand all over the country.

Within the framework of Secretary of Electrical Energy (S.E.E.) Resolution No. 21/2016, YPF EE, together with a subsidiary of General Electric, decided to engage in two projects for the development and operation of two power plants.

One project consists of a new 107 MW thermal power plant located at Loma Campana in Neuquén province, Argentina. The project has succeeded in obtaining a purchase price agreement at the second round of the power capacity auction established through S.E.E. Resolution No. 21/2016 and the reference terms issued by CAMMESA. The commercial operating date of this power plant was on November 30, 2017.

The second project consists of a new 267 MW thermal power plant located at El Bracho in Tucumán province, Argentina. The project has succeeded in obtaining a purchase price agreement at the first round of the power capacity auction established through S.E.E. Resolution No. 21/2016 and the reference terms issued by CAMMESA. The project reached the commercial operating date on the January 27, 2018.

Both projects involved an aggregate investment of U.S.\$307,9 million, and the total shareholders' contribution was U.S.\$88,4 million (approximately U.S.\$58,9 million payable by YPF EE), with the remainder of the investment amount, U.S.\$ 219,5 million financed by financial institutions.

As a consequence of Law No. 27,191 related to renewable energy, YPF EE started in 2016 the construction of its renewable generation project, Manantiales Behr Wind Farm, near Comodoro Rivadavia in the Chubut province, in order to supply the percentage of YPF total demand with clean generation that will be required by law in 2018. This project is expected to be finished by 2018 with the generation of 99 MW.

In addition, and in the context of the Law No. 27,191, the Ministry of Energy and Mining launched in August, 2017 the Plan RenovAr 2.0, an auction for 1,200 MW for the construction of renewable energy generation plants, in which YPF EE was awarded with the construction of the Cañadón Leon Wind Farm, a project of another 100 MW of clean generation, in the Santa Cruz province. Under the terms of the auction, this project will allow YPF EE to have another power purchase agreement with CAMMESA. This project is expected to be finished by January 2020.

As far as efficient energy generation is concerned, YPF EE won the award of two projects at the second round of the cycle closure and cogeneration plants auction established through S.E.E. Resolution No. 287/2017. One project consists of a new 72 MW cogeneration plant located in the Buenos Aires province. The other implies the closure of the open cycle of the El Bracho thermal power plant in Tucumán (198 MW). Besides, in January, 2018 YPF EE bought the cogeneration plant in La Plata to Central Puerto S.A (128 MW).

With all these projects in its portfolio, among others, YPF EE pursues to be one of the strongest competitors in the electrical generation market in Argentina. For this purpose, YPF EE established negotiations with GE Energy Financial Services during 2017 in order to redistribute its share capital, trusting that the entrance of the strategic partner will hasten the growth of the company in the country.

On December 14, 2017, the Board of Directors of the Company approved the terms of a memorandum of understanding signed with GE Energy Financial Services, Inc. ("GE EFS") which established the framework conditions under which the parties would agree to the capitalization of YPF EE. This Agreement, the framework conditions of which were approved by the Board of Directors of the Company, established that GEEFS intended to contribute capital through a vehicle company and subscribe for shares of YPF EE in order to have a shareholding of 25% of its capital stock.

On February 6, 2018, the conditions of the definitive and binding agreement entered into by YPF with EFS Global Energy B.V. ("GE") and GE Capital Global Energy Investments B.V., companies indirectly controlled by GE EFS, which establishes the conditions for the capitalization of YPF EE (the "Share Subscription Agreement"). The Share Subscription Agreement establishes that GE, subject to compliance with certain preceding conditions, will subscribe for shares of YPF EE in order to have a shareholding of 24.99% of its capital stock and jointly control this company with YPF.

The contribution will be US\$ 310 million, composed as follows:

- Subscription price of US \$ 275 million:
  - US \$135 million as of the closing date of the transaction; and
  - US \$140 million 12 months after the closing date of the transaction.
- Contingent price of up to the maximum sum of US \$ 35 million subject to the evolution of the prices of Resolution 19/17 (33.33% as of 24 months from the closing date of the transaction and 16.67% each subsequent year).

On March 20, 2018, GE EFS Power Investments B.V. ("GE"), a subsidiary of EFS Global Energy B.V. (both corporations indirectly controlled by GE Energy Financial Services, Inc.), subscribed for shares of YPF Energía Eléctrica S.A. ("YPF EE") in an amount equal to 24.99% of YPF EE's capital stock through a cash contribution of US\$ 275,000,000, plus a contingent payment for up to US\$35,000,000. This cash contribution will allow YPF EE a more accelerated development of its business plan. As of the date of the subscription of YPF EE shares by GE, GE and YPF S.A. have joint control of YPF EE.

Additionally, YPF continues negotiating with a possible third partner for the purposes of granting an option to subscribe an additional 24.5% of YPF EE's capital stock, on similar terms as agreed with GE.

See Note 3 to the Audited Consolidated Financial Statements for additional information.

#### Natural gas distribution

We currently hold a 70% stake in Metrogas S.A. ("Metrogas"), a natural gas distribution company in the capital region and southern suburbs of Buenos Aires, and one of the main distributors in Argentina. During 2017, Metrogas distributed approximately 20.4 mmcm (or 719.7 mmcf) of natural gas per day to 2.3 million customers in comparison to approximately 19.3 mmcm (or 681.0 mmcf) of natural gas per day to 2.4 million customers in 2016. During May 2013, we, through our subsidiary YPF Inversora Energética S.A. ("YPF Inversora Energética"), gained 100% ownership of Gas Argentino S.A. ("GASA"), the controlling company of Metrogas, by acquiring shares representing the remaining 54.7% interest in GASA not already owned by us. In 2016, GASA and YPF Inversora Energética were both merged into us and dissolved without liquidation.

Additionally, on December 28, 2016, YPF has received from Metrogas a copy of the note received by it from ENARGAS, requesting it to adjust Metrogas' equity structure in line with the term provided for in Emergency Law No. 25,561 and in compliance with Section 34 of Law 24,076. In this regard, it should be noted that YPF indirectly acquired 70% of Metrogas equity, which transaction was approved by ENARGAS Resolution No. I/2,566 dated April 19, 2013; and, following the merger with YPF Inversora Energética S.A. and Gas Argentino S.A., is the holder of 70% of Metrogas shares.

On March 30, 2017, YPF filed an appeal for reconsideration requesting to overrule the ENARGAS Note and render a new decision setting a reasonable timeframe consistent with the current reality of the gas market to comply with the provisions set forth article 34 of Law 24,076.

On June 15, 2017, YPF submitted to ENARGAS a tentative schedule for the process of adapting its equity interests in Metrogas, which was expanded in detail on July 3, 2017. As of the date of this annual report, ENARGAS has not issued any decision regarding the appeal or the submitted tentative schedule.

Such presentation does not imply withdrawal of the aforementioned appeal.

On April 5, 2018, the Company was notified that the ENARGAS rejected the motion for reconsideration submitted by YPF on March 30, 2017. As of the date of this annual report, we are discussing the following legal steps as a result of the previously mentioned rejection.

Metrogas tariff issues

The Emergency Law published in the Official Gazette on January 7, 2002, modified the legal framework in force for license contracts of public services.

The main provisions of Emergency Law that have an impact on the License duly granted to MetroGAS by the National Government and that modified express provisions of the Gas Law were the following: "pesification" of tariffs that were fixed in convertible dollars at the exchange rate specified in the Convertibility Law (Law No. 23,928), the prohibition of tariff adjustments based on any foreign index, thus not allowing the application of the international index specified in the Regulatory Framework (US Producer Price Index-PPI) and the renegotiation of the License granted to the Company in 1992.

Moreover, the Emergency Law established the beginning of a renegotiation process of public utility services agreements granted by the PEN without detriment to the requirements that utility services companies must go on complying with all their obligations.

The Emergency Law, which was originally to be due in December 2003, was extended several times until December 31, 2017. The terms for renegotiating licenses and public services concessions were also extended. See "Item 4. Information on the Company—Regulatory Framework and Relationship with the Argentine Government— Public Emergency".

In the framework of the renegotiation process, the Company signed a series of agreements with different entities representing the National Government.

For the agreements signed in 2017, see "Item 4. Information on the Company—Regulatory Framework and Relationship with the Argentine Government—Natural Gas—Tariffs".

### Seasonality

For a description of the seasonality of our business, see "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Seasonality."

#### **Research and Development**

At the end of 2013, YPF created YPF Tecnología S.A. ("Y-TEC"), a highly specialized company focusing on research and development ("R&D") activities. YPF holds an interest stake of 51% and CONICET, a state-owned research and development organization, holds an equity interest of 49%.

All lines of R&D carried out by Y-TEC are strategically aligned with the needs of YPF. The Board of Directors of Y-TEC consists of three directors appointed by YPF and two directors appointed by CONICET; additionally, the Chairman and the General Manager of Y-TEC are appointed by YPF.

For the operations of Y-TEC, five hectares from the National University of La Plata ("UNLP") were acquired, and a 13,000 m2 building consisting of 47 labs and 12 experimental plants was recently built. The staff and the equipment moved into the new building in June 2016. More than 300 professionals work in the new building, to create innovative solutions for the energy sector.

The main goals of Y-TEC are: to generate high-impact technological solutions, provide high quality technical and laboratory support services and lead the fast implementation in the industry of existing innovative technologies (quick wins).

Y-TEC explores opportunities throughout the actual and future energy sector. This is a broad and diversified strategy approach that cover core areas such as Unconventional Resources, Mature Fields and Petrochemical, as well as New Energies, Future Mobility and Environmental Sustainability.

The new R&D portfolio consists of 66 projects, 35 short-term high impact quick wins and more than 100 technical assistance and specialized services.

In 2017, U.S.\$30.3 million was allocated to R&D activities, and U.S.\$4.56 million (YPF's working interest) was invested in new equipment. In 2016, U.S.\$27.7 million was allocated to R&D activities, and U.S.\$12.23 million (YPF's working interest) was invested in new laboratory building and equipment. In 2015, U.S.\$29.7 million was allocated to R&D activities, and U.S.\$22.7 million (YPF's working interest) was invested in a new laboratory building and equipment.

Y-TEC believes in the value of liaising with technological partners to reinforce regional leadership, adopting the open innovation concept. This concept allows us to reduce technological risk, shorten the time to have the product on the market and minimize costs.

Since 2016, we have opened more than twenty "Innovation Spaces." These are areas promoted by Y-TEC to complement scientific capacities in public and private institutions and allow the development of technological products of high impact for the national energy industry. Knowledge, experience and state-of-the-art equipment are brought together by Y-TEC and CONICET.

In exploration and production of unconventional resources, R&D efforts are focused on the design, development and application of very specific technologies. Our most important challenges include the design and development of simulation and modeling tools; measuring and monitoring solutions; proppants and smart proppants; fluids, smart fluids, additives and chemical products for optimizing drilling, completion and production operations.

To optimize production from mature fields, we focused on the development of enhanced oil recovery technologies and the development of new processes and materials to reduce the operational costs of our facilities, to increase their run life and integrity.

Regarding refining and marketing of petroleum products, we applied our technological knowledge to optimize refinery operations and improve product quality, with a strong focus on the achievement of energy efficiency and environmental improvements. In the petrochemical business, R&D activities are mainly focused on the development of new products with higher added value, such as special solvents, fertilizers and several agricultural products.

Renewable energy is a strategic R&D area. Energy storage based on li-ion technologies, solar energy (photovoltaics and thermal), hydrogen production, bioenergy and energy efficiency are among the greater challenges.

Supporting the process of transformation initiated by YPF and in line with the advancement of digital technologies, we created in Y-TEC first Center of Excellence in Analytics (COE) fully dedicated to run data science projects across all YPF businesses.

The COE combines, under one single department data scientists, process modeling experts and IT professionals to provide integrated solutions to O&G industry. With this initiative, YPF is set at the forefront of other companies in the country by enhancing the use of the data to improve performance, protect assets and discover new businesses. For 2018, the main goals of the COE are: to lead the company cultural revolution, by making data analytics accessible to all levels of the organization; to promote a vision of "one team" overseeing synergies and the integration of different data science projects and multiply value, by prioritizing projects which can give the highest return on investment.

# Competition

In our Upstream business, we encounter competition from major international oil companies and other domestic oil companies in acquiring exploration permits and production concessions. Our Upstream business may also encounter competition from oil and gas companies created and owned by certain Argentine provinces, including La Pampa, Neuquén, Santa Cruz and Chubut. See "—Legal and Regulatory Framework and Relationship with the Argentine Government—Overview" and "—Legal and Regulatory Framework and Relationship with the Argentine Government—Law No. 26,197." However, changes introduced in the Hydrocarbons Law through Law No. 27,007 (2014) limit the ability of provincial companies to possess future exclusive rights over permits and concessions, which supports competition in the Argentine oil and gas industry. See "—Legal and Regulatory Framework and Relationship with the Argentine Government—Law No. 27,007, amending the Hydrocarbons Law." Moreover, during the last several years we have made a comprehensive move to secure, either by renewing, extending and converting through mechanisms provided in the Law, the majority of such permits and concessions in Argentina considered valuable in the long term. In our Downstream businesses, we face competition from domestic and international oil companies. In our export markets, we compete with numerous oil and trading companies.

We operate in a dynamic market in the Argentine downstream industry and the crude oil and natural gas production industry. Crude oil and most refined products prices are subject to international supply and demand and, in certain cases, to Argentine regulations.

In January 2017 the government adopted a policy of convergence between the domestic oil price and the international benchmark and since October 2017 has suspended the price-setting system for domestically-consumed fuel. Since then, the hydrocarbons market in Argentina had become a liberalized market and, thus, fluctuate. This decision formally ended the transition to international oil price parity and, consequently, it is expected that, from 2018 onwards, that petroleum companies in Argentina will establish their own pricing policies. See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Limitations on local pricing in Argentina may adversely affect our results of operations" and "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—We are exposed to the effects of fluctuations in the prices of oil, gas and oil products."

We continuously assess the external environment and our competitive position in order to adjust our business strategies and plans to create and sustain competive advantage.

#### **Environmental Matters**

### **YPF-Argentine operations**

YPF is committed to operate in balance with its environment. In this sense, it carries forward its mission to produce and provide energy focus on environmental care, trying to minimize the impact, looking enhance the positive effects associated with its work and prioritizing the protection of workers, the environment and the community in general.

The approach is based on the Policy of Safety, Protection of the Environment and Preservation of Health, on a strong corporate culture of security and protection, and it is deployed through a management system focused on occupational risks, the mitigation of industrial risks and integration of the principles of process safety to control the risks and the impacts. This management system and its application is certified according to standards OHSAS 18001 (Safety) and ISO 14001 (Environment) in the major industrial centers of the company.

Our operations are subject to a wide range of laws and regulations relating to the general impact of industrial operations on the environment, including air emissions and waste water, the disposal or remediation of soil or water contaminated with hazardous or toxic waste, fuel specifications to address air emissions and the effect of the environment on health and safety. We have made and will continue to make expenditures to comply with these laws and regulations. In Argentina, local, provincial and national authorities are moving towards more stringent enforcement of applicable laws. In addition, since 1997, Argentina has been implementing regulations that require our operations to meet stricter environmental standards that are comparable in many respects to those in effect in the United States and in countries within the European Community. These regulations establish the general framework for environmental protection requirements, including the establishment of fines and criminal penalties for their violation. We have undertaken measures to achieve compliance with these standards and are undertaking various abatement and remediation projects, the more significant of which are discussed below. We cannot predict what environmental legislation or regulation will be enacted in the future or how existing or future laws will be administered or enforced. Compliance with more stringent laws or regulations, as well as more vigorous enforcement policies of regulatory agencies, could require additional expenditures in the future by us, including the installation and operation of systems and equipment for remedial measures, and could affect our operations generally. In addition, violations of these laws and regulations may result in the imposition of administrative or criminal fines or penalties and may lead to personal injury claims or other liabilities.

We continued making investments in order to comply with new Argentine fuel specifications, pursuant to Resolution No. 1283/06 (amended by Resolution No. 478/2009) of the Argentine Secretariat of Energy (currently as Argentine Ministry of Energy and Mines) (which replaces Resolution No. 398/03) relating to, among other things, the purity of diesels. In the La Plata refinery, a new ultra-low sulfur diesel desulfurization plant was started up during 2012. In Luján de Cuyo refinery, new HDS III (diesel desulfurization) and HTN II (gasoline desulfurization) plants were started up in 2013. Additionally, we are increasing the tankage capacity of several of our terminals in order to optimize fuel distribution logistics. First stage projects related to biofuels, such as the addition of bioethanol to gasoline and FAME to diesel, were accomplished by the end of 2009 and were operational by the beginning of 2010. During 2010 and 2011, additional bioethanol facilities at several terminals were installed and became ready to operate. Also, during this period, further investments were made in several terminals in order to allow the increased addition of FAME to diesel and to improve the related biofuel logistics. A new facility for FAME blending was started up in 2013 in the Montecristo terminal. In 2014, a 3,000 cm FAME tank at Terminal Dock Sud ("TDS") a 3,000 cm FAME tank at TVM and two 200 cm ethanol tanks at Concepción del Uruguay were built. A new 3,000 cm FAME tank was also completed in the San Lorenzo terminal.

As in previous years, we continued with the initiatives relating to remedial investigations, feasibility studies and pollution abatement projects, which are designed to address potentially contaminated sites and air emissions. In addition, we have implemented an environmental management system to assist our efforts to collect and analyze environmental data in our upstream and downstream operations.

Also, as part of our commitment to satisfying domestic demand for fuels and meeting high environmental standards, during 2013 we started up a new Continuous Catalyst Regeneration ("CCR") unit. The plant uses the latest worldwide technology to perform chemical processes and improvements in productivity, safety and environmental standards. Additionally, the plant produces aromatics that can be used as octane enhancers for gasoline and automotive applications, as well as increases hydrogen production to feed the fuel hydrogenation processes to increase fuel quality and reduce sulfur content, further reducing the environmental impact of internal combustion engines.

On September 2016, we started up a new coke unit at the La Plata refinery, replacing the one that was severely damaged in the incident that occurred on April 2, 2013. The new unit design is expected to optimize energy efficiency and minimize particulate matter emissions. In addition to the projects mentioned above, we have begun to implement a broad range of environmental projects in the domestic Exploration and Production, Refining & Marketing and Chemicals segments, such as increasing the capacity of biological treatment in the La Plata refinery, a new flare in the Luján de Cuyo refinery, wastewater treatment and fire protection facilities, new flare in CIPH, improvement of fireproofing in existing facilities and implementation of bottom loading systems in terminals.

We and several other industrial companies operating in the La Plata area have entered into a community emergency response agreement with three municipalities and local hospitals, firefighters and other health and safety service providers to implement an emergency response program. This program is intended to prevent damages and losses resulting from accidents and emergencies, including environmental emergencies. Similar projects and agreements were developed at other refineries and harbor terminals as well. During 2016, we implement a similar program in the Luján de Cuyo area.

In 1991, we entered into an agreement with certain other oil and gas companies to implement a plan to reduce and assess environmental damage resulting from oil spills in Argentine surface waters to reduce the environmental impact of potential oil spills offshore. This agreement involves consultation on technological matters and mutual assistance in the event of any oil spills in rivers or at sea due to accidents involving tankers or offshore exploration and production.

During 1997 and 1998, each of our refineries (La Plata, Luján de Cuyo, and Plaza Huincul) were certified under the ISO (International Organization for Standardization) 9001 (quality performance) and ISO 14001 (environmental performance). All of them are also certified under the OHSAS 18001 (occupational health and safety performance) standard. In addition, since 2008, the La Plata and Luján de Cuyo complexes have been verified in accordance with ISO 14064 for the inventories of industrial greenhouse gases. The refineries maintain their systems under continuous improvement and revision by accredited organizations.

With respect to climate change, YPF has:

- committed to active promotion of identification and pursuit of opportunities to reduce greenhouse gas emissions in our operations;
- a Company target has been set to reduce the intensity of CO<sub>2</sub> emissions in future periods;
- established a new internal corporate commitment on climate change and energy efficiency which was developed in June 2015. This document sets the framework for the company to work on reducing greenhouse gas emissions, contributing to mitigation activities while promoting sustainable development and preserving natural resources. In October 2017, it was renewed together with the Company's Sustainable Policy;
- intensified the execution of internal projects to obtain credits under the relevant clean development mechanisms through the efficient use of resources, contributing to the transfer of technology and to the sustainable development of Argentina;
- obtained the approval of the United Nations in December 2010 for an industrial project developed by YPF in Argentina defined as a Clean Development Mechanism ("CDM") project, the first of its kind in the world. The project in the La Plata refinery reduces the emissions of greenhouse gases from fossil fuels used for process heating by replacing these fuels with recovered waste gases that were previously burned in flares. The project increases energy efficiency by reducing the demand for fuel oil and natural gas, allowing an estimated annual emission reduction of approximately 200,000 tons of CO2. On September 7, 2012, 89,930 Certified Emission Reductions (CERs) were issued by the United Nations after a peer review of the reported reduction in emissions. During 2017, La Plata project reduced CO<sub>2</sub> emissions by approximately 119,200 tons;
- obtained the approval of the United Nations in December 2011 for an industrial project developed by YPF in Argentina defined as a CDM at the Luján de Cuyo refinery. During 2017, Luján de Cuyo project reduced CO2 emissions by approximately 24,700 tons;
- developed a methodology which was approved by the United Nations in 2007 under the name of AM0055
  "Baseline and Monitoring Methodology for the recovery and utilization of waste gas in refinery facilities." Six
  CDM projects are being developed around the world (Argentina, China, Kuwait and Egypt) applying this
  methodology developed by YPF;

- undertook third-party greenhouse gas emission inventory verification for refining and chemical operations in accordance with the ISO 14064 Standard. The inventory at CIE has been verified since 2008. In July 2017, the inventory verification process for greenhouse gases in the La Plata complex and the Luján de Cuyo refinery was completed. During 2016, we began to implement third-party greenhouse gas emission inventory verification in the Plaza Huincul refinery, achieving its verification in 2017. Based on our estimations regarding the contribution that forestry projects located in the province of Neuquén had with respect to climate change we found that these projects constitute approximately 6,500 hectares of trees forested under a long-term work program. Using the afforestation methodologies and tools available at the United Nations Framework Convention on Climate Change ("UNFCCC") Clean Development Mechanism web site, it was possible to arrive to a conservative estimated amount of approximately 760,000 tons of CO2 equivalents that were captured by the afforestation project activities from 1984 (when the first afforestation activity occurred) through 2013;
- We continue working on the commitment to minimize gas sent to flares and gas vented, giving compliance to the requirements established in National Resolutions 236/93 and 143/98 issued by the former Energy Secretariat of the Nation (SEN) and all those Applicable provincial regulations. In this sense, there is a new initiative, implemented in Mendoza: the virtual gas pipeline, that implies the liquefaction and transportation of the natural gas associated from remote wells to an electric power plant in order to reduce flaring.
- strengthened the relationship established with the Argentinean Environmental Authority (*Ministerio de Ambiente y Desarrollo Sustentable de la Nación*), in particular with its Climate Change Unit (CCU—*Dirección de Cambio Climático*) in order to collaborate with the development of the Third National Communication on Climate Change to the UNFCCC and during 2017 in workshops organized by the CCU for developing the National Climate Change Plans related to the Nationally Determined Contributions (NDCs) committed by the country under the signed Paris Agreement;
- signed a framework agreement with the Argentinean Environmental Authority for a mutual collaboration on environmental issues, particularly relating to climate change; and
- executed a pilot project on adaptation activities in a particular site of the company, using an adaptation tool that required the identification of climate risks, research on past, current and future climate trends and the identification of current taken and needed adaptation activities. In 2017, we implemented the same tool in another facility and co-organized in partnership with ARPEL (Asociación latinoamericana de empresas de Petróleo) a workshop on Climate Change vulnerability and adaptation.

In relation with water management activities, the "Local Water Tool" has been implemented on two sites for the identification of water risks and practices taken of the proper management of water and effluents during 2016, continuing the implementation in 2017 in another two sites. Furthermore, during the past years a baseline study on water management has been performed for the different facilities of the company, which allowed us to establish the points of water intake and water disposal (effluent) with corresponding volumes. Focusing on the development and research, the company created YPF Tecnología S.A. (see "Item 4. Information on the Company—Research and Development") where environmental activities are being undertaken in different fields. In particular, during 2016 we started performing activities on strengthening the biological restoration of sites which were continued during 2017. These activities were supported by local universities as well.

Our estimated capital expenditures are based on currently available information and on current laws. Any future information or future changes in laws or technology could cause a revision of such estimates. Changes in management's business plans or in Argentine laws and regulations may cause expenditures to become material to our financial position, and may affect results of operations in any given year.

#### Waste Management

Since 2012, we have been working on initiatives in our Upstream business unit in order to systematically reduce the stock of soil with hydrocarbons. This is being performed with the commitment, leadership and responsibility of the entire Company achieving a reduction of 65% of the stock in our repositories from 2012 to 2017. Some of the activities that allow us to achieve this target were related to actions to the providers, mainly with the development of technical specifications for the contractual arrangements and effective technical supervision of their activities, optimizing the biotreatment times.

Furthermore, each business unit developed Waste Management Plans in line with the Upstream Waste Management Procedure and the Corporate Norm. Together with these plans the Oil spill cleaning procedure was also developed which is focused on the minimization of waste during remediation activities.

#### Management of biodiversity and ecosystem services

In 2017 a revision on our corporate Biodiversity Management Standard was done with the participation of representatives of each Business Unit. This revision was performed as part of the update of the document.

The management of biodiversity mainly focuses on instances where operations are being performed in ecological sensitive areas. These activities are being documented in the Biodiversity Management Plans. Currently, our Upstream business unit has two of these plans, one for our operations in the Llancanelo Ramsar site in the Mendoza province and another in the Auca Mahuida site in the Neuquen province.

The activities related to biodiversity management in many cases involve changes in operational procedures, such as multiple location development, the camouflage of drilling equipment and even actions that require the adaptation of the operation sites in order to promote the allocation of particular species.

As operations continue to adapt, biodiversity monitoring activities are also being performed under a complex process due to the frequent natural variations that affects the wild populations, ecosystems and ecological processes in the medium and long term. This is done in order to gather information related to the local ecosystem and is focused on its protection and, when necessary, its restoration. This information is also important for the proper and sustainable use of natural resources before operations start.

Furthermore, as previously mentioned, in 2017 we continued the activities started in 2016 on strengthening the biological treatment of certain sites, particularly in the Santa Cruz province.

## Environmental activities led by YPF in areas of unconventional exploitation of crude oil and natural gas

Organically rich shale gas and oil accumulations are drawing increasing attention worldwide as sources of significant natural gas and oil reserves.

Since 2008, YPF has led various exploration and development projects related to unconventional resources in Argentina, the most important being in the Vaca Muerta formation within Neuquina basin.

The Vaca Muerta formation is found between 2,500 and 4,000 meters of depth, more than 2,000 meters below the water table, which is usually located at depths of 300-500 meters. See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Our domestic operations are subject to extensive regulation" and "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Oil and gas activities are subject to significant economic, environmental and operational risks."

Hydraulic stimulation, a long time proven technology, allows these resources to be extracted in an efficient and environmentally-friendly way. Hydraulic stimulation consists of injecting high pressure fluids and sand into the wellbore to crack the rock and enable the trapped hydrocarbons in the formation to flow to the surface like in any conventional well.

Generally, this technique uses water and sand (99.5% of the water can be recycled) and additives (0.5%). These additives are the same as those used in products for household and commercial applications, such as sodium chloride (used in table salt), borate salts (used in cosmetics), potassium carbonate (used in detergents), guar gum (used in ice cream) and isopropyl alcohol (used in deodorants).

The water used for the development of these reservoirs is acquired from bodies of running water and it represents only a small percentage of the total flow, which involves much lower volumes than those used for agricultural and human consumption in the province of Neuquén.

From the beginning of unconventional operations, YPF has considered the environmental protection as one of the values of its health, safety and environment policy.

In accordance with law Disposition No. 112/2011 of the Environmental Subsecretary of Neuquén, the project has an Environmental Baseline Study ("EBS"). The EBS includes the current description and environmental characterization of the concession areas and specifically environmental components that may be affected significantly by the projects and activities.

YPF developed a water management framework, which focuses on three key areas of water use: water resources (sustainability factors, measures that consider the needs of other local water users, and the net environmental effect); water use and efficiency (controls of replacing water use, reducing water consumption, and the reuse and recycling to consider the net environmental effect); and wastewater management (consider similar sustainability factors and the net environmental effect as outlined for water resources).

In addition, YPF commissioned the following studies: (i) a hydrogeological study of confined and semi-confined aquifers of Neuquén and Rayoso Groups and hydrogeological study of the unconfined aquifer of the alluvial plain of the Neuquén River in the Loma Campana area and (ii) a similar study in the Narambuena area, which was conducted in 2016.

Following the hydrogeological studies that took place in 2015 and 2016, during 2017 YPF focused its studies on gathering hydrogeological information by electric profiles and water samples in order to perform a regional hydrogeological study for all the convencional and non-conventional areas in 2018. This hydrogeological study will cover not only the traditional hydrogeological aspects but also the assessment on the quality of the water for irrigation and potable water. In addition, the aim of this study is to identify the depth of the aquifer that should be protected.

### Our commitment to sustainability

The oil and gas industry is undergoing a time of profound changes that require the harmonization of the growing energy demand with new challenges in terms of costs and profitability, diversification of the energy matrix and an increasing concern about climate change.

In this context, YPF has started a transformation process to become an integral energy company and the leader for sustainable energy development in Argentina.

Guided by the company's corporate values, policies and code of conduct, our vision and strategy frame our understanding of and our response to sustainability issues. In this sense we have revamped our commitment to sustainability in order to lead the energy transition, through a responsible and transparent business based on innovation, new technologies and the best economic, environmental and social practices. And creating shared value for our owners, customers, people, suppliers, partners, society and our country, at the same time.

We know that energy transition cannot happen overnight. This is why, while oil and gas will continue to form the basis of our portfolio for the next years, we are committed to strengthening energy efficiency, reducing specific emissions and developing more sustainable energy alternatives, including the promotion of natural gas production and renewable energy as cleaner alternatives to oil. By providing strong R&D and project investment in this area, the company expects to increase its power-generation capacity by diversifying energy sources, including increased uses of natural gas, thermal, solar and wind power.

In 2017, we designed and approved our corporate sustainability policy and our commitment to climate change and we structured the corporate sustainability department.

We also renewed our commitment to the UN Global Compact and its Ten Principles on Human Rights, Labor Rights, the Environment and the Fight against Corruption, and keep participating as a Board member of the Argentine Network.

We carried on a process to explore the role that the company should play to contribute towards the 2030 Global Agenda for Sustainable Development, particularly in the framework of the country endorsement. Some initiatives in line with these Sustainable Development Goals are already under way and this process will continue for the next few years.

We have defined and developed the contents of this Report by taking into account those internal and external groups, because we believe that the only way to create value for our stakeholders is by understanding their concerns and expectations while keeping an ongoing dialogue with them. Their opinions and suggestions were collected in several dialogue instances, through different corporate communication channels, and by analyzing public opinion surveys, and reputation and brand positioning research, among others. The materiality assessment undertaken to shape the content of this annual sustainability report serves as both a retrospective and forward looking review of our priorities. This assessment re-emphasised the following stakeholder concerns:

| MATERIAL TOPICS   |                                |                                       |  |  |
|---|--------------------------------|---------------------------------------|--|--|
| ECONOMIC  | ENVIRONMENTAL AND<br>SAFETY    | SOCIAL                                |  |  |
| Profitable, competitive and responsible business                                | Climate change                 | Human rights                          |  |  |
| Comprehensive company in the energy, petrochemical, and related services sector | Occupational health and safety | Diversity                             |  |  |
| Value chain   | Environmental management       | Local economic and social development |  |  |
| Innovation and technology   | Renewable energies             | Talent development                    |  |  |
|   |                                | Quality-employment creation           |  |  |

### Property, Plant and Equipment

Most of our property, which comprises investments in assets which allow us to explore or exploit crude oil and natural gas reserves, as well as refineries, storage, manufacturing and transportation facilities and service stations, is located in Argentina. See "—Downstream—Refining division" and "—Downstream—Logistics Division." As of December 31, 2017, 100% of our proved reserves were located in Argentina.

Our petroleum exploration and production rights are in general based on sovereign grants of concession. Upon the expiration of the concession, our exploration and production assets associated with the particular property subject to the relevant concession revert to the government. See "—Exploration and Production Overview—Main properties." In addition, as of December 31, 2017, we leased 84 service stations to third parties and also had activities with service stations that are owned by third parties and operated by them under a supply contract with us for the distribution of our products.

#### Insurance

The scope and coverage of the insurance policies and indemnification obligations discussed below are subject to change, and such policies are subject to cancellation in certain circumstances. In addition, the indemnification provisions of certain of our drilling, maintenance and other service contracts may be subject to differing interpretations, and enforcement of those provisions may be limited by public policy and other considerations. We may also be subject to potential liabilities for which we are not insured or in excess of our insurance coverage, including liabilities discussed in "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—We may not have sufficient insurance to cover all the operating hazards that we are subject to," "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—The oil and gas industry is subject to particular economic and operational risks" and "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—We may incur significant costs and liabilities related to environmental, health and safety matters."

# Argentine Operations

We insure our operations against risks inherent in the oil and gas industry, including loss of or damage to property and our equipment, control-of-well incidents, loss of production or profits incidents, removal of debris, sudden and accidental pollution, damage and clean up and third-party claims, including personal injury and loss of life, among other business risks. Our insurance policies are typically renewable annually and generally contain policy limits, exclusions and deductibles.

Our insurance policy covering our Argentine operations provides third party liability coverage up to U.S.\$400 million per incident, with a deductible of U.S.\$2 million, in each and every loss. Certain types of incidents, such as intentional pollution and gradual and progressive pollution are excluded from the policy's coverage. The policy's coverage extends to control-of-well incidents, defined as an unintended flow of drilling fluid, oil, gas or water from the well that cannot be contained by equipment on site, by increasing the weight of drilling fluid or by diverting the fluids safely into production. Our policy provides coverage for third-party liability claims relating to pollution from a control-of-well event ranging from U.S.\$75 million for certain onshore losses and a maximum combined single limit of U.S.\$250 million for offshore losses.

Our insurance policy also covers physical loss or damage in respect of, but not limited to, onshore and offshore property of any kind and description (whether upstream or downstream), up to U.S.\$2 billion per incident combined for downstream and upstream operations, with varying deductibles of between U.S.\$1 million and U.S.\$5 million, including loss of production or profits with deductibles of 90 days for downstream operations and 60 days with a minimum deductible of U.S.\$20 million for upstream operations.

Argentine regulations require us to purchase from specialized insurance companies (*Aseguradoras de Riesgos de Trabajo*) insurance covering the risk of personal injury and loss of life of our employees. Our insurance policies cover medical expenses, lost wages and loss of life, in the amounts set forth in the applicable regulations. These regulatory requirements also apply to all of our contractors.

We have adopted a position in agreements entered into with contractors that provide drilling services, well services or other services to our exploration and production operations ("E&P Services Agreements"), whereby contractors are generally responsible for indemnifying us to varying degrees for certain damages caused by their personnel and property above the drilling surface. Similarly, we are generally responsible under our drilling contracts to indemnify our contractors for any damages caused by our personnel and property above the drilling surface.

In connection with losses or liabilities resulting from damages caused below the surface, we have agreed with some contractors that YPF assumes responsibility for indemnifying our contractors provided that such damages below the surface have not been caused by the negligence of the contractor in which case the contractor shall be liable up to a limited amount agreed by the parties in the E&P Services Agreements. However, we have also agreed with a number of contractors that YPF shall be responsible and shall indemnify contractors for damages or liabilities caused below the surface, unless such damages or liabilities result from the gross negligence or willful misconduct of contractors, in which case contractor shall be liable in full or, in certain cases, up to a limited amount.

E&P Services Agreements usually establish that contractors are responsible for pollution or contamination including clean-up costs and third party damages caused above the surface by the spill of substances under their control, provided that the damage has been caused by the negligence or willful misconduct of the contractor. In the event of pollution or contamination produced below the surface, contractors shall also typically be liable for damages caused due to the contractor's negligence or willful misconduct. However, in this last case the damages are also usually limited to an amount agreed upon by the parties in the E&P Services Agreement.

We are also partners in several joint ventures and projects that are not operated by us. Contractual provisions, as well as our obligations arising from each agreement, can vary. In certain cases, insurance coverage is provided by the insurance policy entered into by the operator, while in others, our risks are covered by our insurance policy covering our Argentine operations. In addition, in certain cases we may contract insurance covering specific incidents or damages that are not provided for in the operator's insurance policy. We also retain the risk for liability not indemnified by the field or rig operator in excess of our insurance coverage. With respect to downstream servicing contracts, contractors are usually responsible for damages to their own personnel and caused by them to third parties and they typically indemnify us for damages to equipment. A mutual hold-harmless provision for indirect damages such as those resulting from loss of use or loss of profits is normally included.

# Legal and Regulatory Framework and Relationship with the Argentine Government

Overview

The Argentine oil and gas industry is regulated by Law No. 17,319, referred to as the "Hydrocarbons Law," which was enacted in 1967 and amended by Law No. 26,197 enacted in 2007 and Law No. 27,007 enacted in 2014, which established the general legal framework for the exploration and production of oil and gas, and Law No. 24,076, referred to as the "Natural Gas Law," enacted in 1992, which established the basis for deregulation of natural gas transportation and distribution industries. See "—Law No. 27,007, amending the Hydrocarbons Law."

The National Executive Office issues the regulations to complement these laws. The regulatory framework of the Hydrocarbons Law was established on the assumption that the reservoirs of hydrocarbons would be national properties and Yacimientos Petroliferos Fiscales Sociedad del Estado, our predecessor, would lead the oil and gas industry and operate under a different framework than private companies. In 1992, the "Privatization Law" privatized YPF and provided for transfer of hydrocarbon reservoirs from the Argentine government to the provinces, subject to the existing rights of the holders of exploration permits and production concessions.

The Privatization Law granted us 24 exploration permits covering approximately 132,735 km2 and 50 production concessions covering approximately 32,560 km2. Limits under the Hydrocarbons Law on the number of concessions for transportation that may be held by any entity, and the total area of exploration permits that may be granted to a single entity, were eliminated by Law No. 27,007. As a consequence of the transfer of ownership of certain hydrocarbons areas to the provinces, we participate in competitive bidding rounds organized since the year 2000 by several provincial governments for the award of contracts for the exploration of hydrocarbons.

In October 2004, the Argentine congress enacted Law No. 25,943, creating a new state-owned energy company, ENARSA. The corporate purpose of ENARSA is the exploration and exploitation of solid, liquid and gaseous hydrocarbons, the transport, storage, distribution, commercialization and industrialization of these products, as well as the transportation and distribution of natural gas, and the generation, transportation, distribution and sale of electricity. Moreover, Law No. 25,943 granted to ENARSA all exploration concessions in respect to offshore areas located beyond 12 nautical miles from the coast line up to the outer boundary of the continental shelf that were vacant at the time of the effectiveness of this law (i.e., November 3, 2004). Law No. 25,943 has been modified by Law No. 27,007, as described below, eliminating all permits and hydrocarbon production concessions where association agreements with ENARSA have not been signed and reverting them to the Argentine Secretariat of Energy (except for permits and concessions granted prior to Law No. 25,943). Additionally, Law No. 27,007 provides for a six month negotiating period to convert association agreements with ENARSA into permits or concessions. In September 2015, the National Executive Office and YPF began negotiating the conversion of association agreements executed with ENARSA. On December 29, 2017 YPF filed a note before the Ministry of Energy confirming its willingness to negotiate the conversion of association agreement related to the Area identified as "ENARSA 1". In the same note, YPF informed that it communicated its decision not to convert the association agreements related such Areas to the Operators of Areas "ENARSA 2" and "ENARSA 3". As of the date of this annual report, negotiations related to Area ENARSA 1 are ongoing.

In addition, in October 2006, Law No. 26,154 created a regime of tax incentives aimed at encouraging hydrocarbon exploration and which apply to new exploration permits awarded in respect of the offshore areas granted to ENARSA and those over which no rights have been granted to third parties under the Hydrocarbons Law, provided the provinces in which the hydrocarbon reservoirs are located adhere to this regime. Association with ENARSA is a precondition to qualifying for the benefits provided by the regime created by Law No. 26,154. The benefits include: early reimbursement of the value added tax for investments made and expenses incurred during the exploration period and for investments made within the production period; accelerated amortization of investments made in the exploration period and the accelerated recognition of expenses in connection with production over a period of three years rather than over the duration of production; and exemptions to the payment of import duties for capital assets not manufactured within Argentina. As of the date of this annual report, we have not used the tax incentives previously mentioned.

Ownership of hydrocarbons reserves was transferred to the provinces through the enactment of the following legal provisions that effectively amended the Hydrocarbons Law:

- In 1992, the Privatization Law approved the transfer of the ownership of hydrocarbons reserves to the provinces where they are located. However, this law provided that the transfer was conditioned on the enactment of a law amending the Hydrocarbons Law to contemplate the privatization of Yacimientos Petrolíferos Fiscales Sociedad del Estado.
- In October 1994, the Argentine National Constitution was amended and pursuant to Article 124 thereof, provinces were granted the primary control of natural resources within their territories.
- In August 2003, Executive Decree No. 546/03 transferred to the provinces the right to grant exploration permits, hydrocarbons exploitation and transportation concessions in certain locations designated as "transfer areas," as well as in other areas designated by the competent provincial authorities.
- In January 2007, Law No. 26,197 acknowledged the provinces' ownership of the hydrocarbon reservoirs in accordance with Article 124 of the National Constitution (including reservoirs to which concessions were granted prior to 1994) and granted provinces the right to administer such reservoirs.

### The Expropriation Law

On May 3, 2012, the Expropriation Law (Law No. 26,741) was passed by the Argentine congress and, on May 7, 2012, it was published in the Official Gazette of the Republic of Argentina. The Expropriation Law declared achieving self-sufficiency in the supply of hydrocarbons, as well as in the exploitation, industrialization, transportation and sale of hydrocarbons, a national public interest and a priority for Argentina. In addition, its stated goal is to guarantee socially equitable economic development, the creation of jobs, the increase of the competitiveness of various economic sectors and the equitable and sustainable growth of the Argentine provinces and regions.

Article 3 of the Expropriation Law provides that the principles of the hydrocarbon policy of the Republic of Argentina are the following:

- (a) Promote the use of hydrocarbons and their derivatives to promote development, and as a mechanism to increase the competitiveness of the various economic sectors and that of the provinces and regions of Argentina;
- (b) Convert hydrocarbon resources to proved reserves and their exploitation and the restoration of reserves;
- (c) Integrate public and private capital, both national and international, into strategic alliances dedicated to the exploration and exploitation of conventional and unconventional hydrocarbons;
- (d) Maximize the investments and the resources employed for the achievement of self-sufficiency in hydrocarbons in the short, medium and long term;
- (e) Incorporate new technologies and categories of management that contribute to the improvement of hydrocarbon exploration and exploitation activities and the advancement of technological development in the Republic of Argentina in this regard;
- (f) Promote the industrialization and sale of hydrocarbons with a high added-value;
- (g) Protect the interests of consumers with respect to the price, quality and availability of hydrocarbon derivatives; and
- (h) Export hydrocarbons produced in excess of local demand, in order to improve the trade balance, ensuring a rational exploitation of the resources and the sustainability of its exploitation for use by future generations.

According to Article 2 of the Expropriation Law, the National Executive Office will be responsible for setting forth this policy and shall introduce the measures necessary to accomplish the purpose of the Expropriation Law with the participation of the Argentine provinces and public and private capital, both national and international.

### Creation of Federal Council of Hydrocarbons

Article 4 of the Expropriation Law provides for the creation of a Federal Council of Hydrocarbons which shall include the participation of (a) the Ministry of Economy, the Ministry of Federal Planning, the Ministry of Labor and the Ministry of Industry, through their respective representatives; and (b) the provinces of Argentina and the City of Buenos Aires, through the representatives that each may appoint. According to Article 5 of the Expropriation Law, the responsibilities of the Federal Council of Hydrocarbons will be the following: (a) promote the coordinated action of the national and provincial governments, with the purpose of ensuring the fulfillment of the objectives of the Expropriation Law; and (b) adopt decisions regarding all questions related to the accomplishment of the objectives of the Expropriation Law and the establishment of the hydrocarbons policy of the Republic of Argentina that the National Executive Office may submit for consideration.

## Expropriation of shares held by Repsol YPF

For purposes of ensuring the fulfillment of its objectives, the Expropriation Law provided for the expropriation of 51% of the share capital of YPF represented by an identical stake of Class D shares owned, directly or indirectly, by Repsol YPF S.A. and its controlled or controlling entities. According to the Expropriation Law, the shares subject to expropriation, which have been declared of public interest and were transferred to the Republic of Argentina, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. In addition, the Expropriation Law provided for the expropriation of 51% of the share capital of the company Repsol YPF GAS S.A. represented by 60% of the Class A shares of such company owned, directly or indirectly, by Repsol Butano S.A. and its controlled or controlling entities.

As of the date of this annual report, the transfer of the shares subject to expropriation between the National Executive Office and the provinces that compose the National Organization of Hydrocarbon Producing States is still pending. According to Article 8 of the Expropriation Law, the distribution of the shares among the provinces that accept their transfer must be conducted in an equitable manner, considering their respective levels of hydrocarbon production and proved reserves.

To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. In addition, in accordance with Article 9 of the Expropriation Law, each of the Argentine provinces to which shares subject to expropriation are allocated must enter into a shareholder's agreement with the federal government that will provide for the unified exercise of its rights as a shareholder.

Any future transfer of the shares subject to expropriation is prohibited without the permission of the Argentine congress by a vote of two-thirds of its members.

In accordance with Article 9 of the Expropriation Law, the appointment of YPF Directors representing the expropriated shares shall be made proportionately considering the holdings of the Argentine Republic and provincial governments, and one Director shall represent the employees of YPF.

In accordance with Article 16 of the Expropriation Law, the federal government and the provinces must exercise their rights pursuant to the following principles: (a) the strategic contribution of YPF to the achievement of the objectives set forth in the Expropriation Law; (b) the administration of YPF pursuant to the industry's best practices and corporate governance, safeguarding shareholders' interests and generating value on their behalf; and (c) the professional management of YPF.

See "—Law No. 26,932" for descriptions of the agreement between Repsol and the Argentine Republic relating to compensation for the expropriation of 51% of the share capital of YPF owned, directly or indirectly, by Repsol, and the arrangement between Repsol and YPF for the withdrawal of certain claims and actions relating to such expropriation.

## Legal nature of the Company

YPF is and will continue to operate as a publicly traded corporation pursuant to Chapter II, Section V of Law No. 19,550 and its corresponding regulations, and neither is nor will not be subject to any legislation or regulation applicable to the management or control of companies or entities owned by the federal government or provincial governments.

In accordance with Article 17 of the Expropriation Law, YPF will resort to internal and external sources of funding, strategic alliances, joint ventures, transitory business unions, and cooperation partnerships, whether public, private or mixed companies, domestic and foreign.

You can find a copy of an English translation of the Expropriation Law in the report on Form 6-K furnished by the Company to the SEC on May 9, 2012.

Law No. 26,932

On February 25, 2014, the Republic of Argentina and Repsol reached an agreement (the "Repsol Agreement") in relation to compensation for the expropriation of 200,589,525 of YPF's Class "D" shares pursuant to the Expropriation Law under the Repsol Agreement. As a result, the Republic of Argentina is definitively the owner of 51% of capital stock of each of YPF and YPF GAS S.A.

Law No. 26,197

Law No. 26,197, which amended the Hydrocarbons Law, transferred to the provinces and to the Autonomous City of Buenos Aires the ownership over all hydrocarbon reservoirs located within their territories and in the adjacent seas up to 12 nautical miles from the coast. Law No. 26,197 also provides that the hydrocarbon reservoirs located beyond 12 nautical miles from the coast to the outer limit of the continental shelf shall remain within the ownership of the federal government.

Pursuant to Law No. 26,197, the Argentine congress shall continue to enact laws and regulations to develop oil and gas resources existing within the Argentine territory (including its sea), but the governments of the provinces where the hydrocarbon reservoirs are located shall be responsible for the enforcement of these laws and regulations, the administration of the hydrocarbon fields and shall act as granting authorities for the exploration permits and production concessions. However, the administrative powers granted to the provinces shall be exercised within the framework of the Hydrocarbons Law and the regulations that complement this law.

Consequently, even though Law No. 26,197 established that the provinces shall be responsible for administering the hydrocarbon fields, the Argentine congress retained its power to issue rules and regulations regarding the oil and gas legal framework. Additionally, the Argentine Republic retained the power to determine the national energy policy.

It is expressly stated that the transfer will not affect the rights and obligations of exploration permit and production concession holders, or the basis for the calculation of royalties, which shall be calculated in accordance with the concession title and paid to the province where the reservoirs are located.

Law No. 26,197 provides that the Argentine Republic shall retain the authority to grant transportation concessions for: (i) transportation concessions located within two or more provinces within the territory and (ii) transportation concessions directly connected to export pipelines for export purposes. Consequently, transportation concessions which are located within the territory of only one province and which are not connected to export facilities shall be transferred to the provinces. Finally, Law No. 26,197 grants the following powers to the provinces: (i) the exercise, in a complete and independent manner, of all activities related to the supervision and control of the exploration permits and production concessions transferred by Law No. 26,197; (ii) the enforcement of all applicable legal and/or contractual obligations regarding investments, rational production and information and surface fee and royalties payment; (iii) the extension of legal and/or contractual terms; (iv) the application of sanctions provided in the Hydrocarbons Law; and (v) all the other faculties related to the granting power of the Hydrocarbons Law.

### Decree No. 1277/2012

Decree No. 1277/12 derogated the main provisions relating to free availability of hydrocarbons which were specifically contained in section 5 subsection d) and sections 13, 14 and 15 of Decree No. 1055/89, sections 1, 6 and 9 of Decree No. 1212/89 and sections 3 and 5 of Decree No. 1589/89. Decree No. 1277/12 enacted the "Hydrocarbons Sovereignty Regime Rules," regulating the Expropriation Law.

This regulation created a commission, the Commission for Planning and Strategic Coordination of the National Plan of Hydrocarbons Investments (the "Commission"). This Commission was entrusted with annually making the National Plan for Hydrocarbons Investments.

Decree No. 1277/12 required every company that performs activities of exploration, exploitation, refining, transport and commercialization of hydrocarbons to supply the Commission with all required technical information. The Commission was also responsible for a National Hydrocarbons Investments Registry for all companies performing the activities of exploration, exploitation, refining, transport and commercialization. All these companies were required to file an annual plan of investments before the Commission.

With respect to the refining industry, Decree No. 1277/12 gave the Commission the power to regulate the minimum utilization rates for primary or secondary refining. It also had the ability to enact measures of promotion and coordination, aimed to guarantee the development of the local processing capacity according with the goals established by the National Plan of Hydrocarbons Investments.

With respect to commercialization, the Commission was entitled to publish reference prices of every component of the costs and sales prices of hydrocarbons and fuels, which should enable the recovery of production costs plus a reasonable profit margin. The Commission also had to periodically audit the reasonability of the informed costs and the respective sales prices, being entitled to adopt necessary measures to prevent or correct distortive practices that might affect the interests of consumers.

This Commission was dissolved by Decree No. 272/2015 on January 4, 2016, and its remaining functions were assumed by the Ministry of Energy and Mining . See "—Decree No. 272/2015" below.

### Decree No. 13/2015

On December 11, 2015, Decree No. 13/2015 was published in the Official Gazette of the Republic of Argentina, modifying the Ministries Law No. 22,520. Among other changes, it created the Ministry of Energy and Mining ("MINEM"), which absorbed the functions of the Secretaries of Energy and Mining and decentralized entities, from the former Ministry of Federal Planning, Public Investment and Services. The responsibilities of the MINEM include participating "in the management of the State's shareholdings in the corporations and companies operating in the area of its competence."

# Decree No. 272/2015

On January 4, 2016, Decree No. 272/2015 was published in the Official Gazette of the Republic of Argentina, which modified Decree No. 1277/12. Among other changes, it dissolved the Commission, derogated certain responsibilities of the Commission and stated that the tasks previously assigned to the Commission will be performed by the Ministry of Energy and Mining ("MINEM").

Furthermore, the decree established that the rights derived from the shares owned by the Republic of Argentina in YPF and YPF GAS S.A., with the exception of the shares that belong to the Sustainability Guarantee of the Public Securities Regime Fund created by Decree No. 897/07, will be exercised by the MINEM, as of its publication date.

In addition, the decree established that the MINEM will conduct a comprehensive review and reorganization regarding the creation of records and information duties in the hydrocarbon industry, which remains in force as long as it is not derogated by the dispositions of the decree or addressed by the re-organization plan to be determined by the MINEM.

Decree No. 2/2017

On January 3, 2017, Decree No. 2/2017 was published in the Official Gazette of the Republic of Argentina, modifying the Ministries Law No. 22,520. Among other changes, it split the Ministry of Economy and Public Finance, creating the Ministry of Economy and the Ministry of Finance and separating their respective powers and responsibilities.

Law No. 27,275, Decree No. 79/2016 and Regulatory Decree No. 206/2017—Access to Public Information

On November 10, 2015, the Argentine Supreme Court ordered us to furnish information regarding an agreement we entered into with Chevron, based on the requirements of Decree No. 1172/03, which regulates access to information considered public. The agreement aims to develop hydrocarbon resources in Argentina. The information was delivered to the court on February 23, 2016. We believe that public disclosure of confidential information could put us at a competitive disadvantage in relation to our contracting parties and potential partners. For this reason, and given the business, industrial, technical, economic and financial value as well as the nature of the information requested, we pursued all avenues to preserve its confidentiality. We have stated we intend to comply with the requirements of aforementioned Decree No. 1172/03 while preserving our right to keep certain industrial, commercial, financial and technical matters confidential as provided by the decree. Notwithstanding the foregoing, on March 14, 2016, the court ordered us to deliver the requested agreement within five business days without an opportunity to keep certain information confidential as requested by us and in accordance with the exemptions contemplated by Decree No.1172/03. On March 16, 2016, the Company appealed this decision.

On July 14, 2016, the Federal Administrative Court – Room I (*Cámara Contencioso Administrativo Federal – Sala I*) upheld the ruling of the Court of First Instance, stipulating that the Company must comply with the order to deliver the required documentation in relation to its agreement with Chevron within five business days.

On August 11, 2016, the Company filed a Federal Extraordinary Appeal contesting the decision of the Federal Administrative Court.

On September 22, 2016, the Company reported that it was served with notice on September 15, 2016 of the decision handed down by Panel I of the Federal Administrative Court of Appeals hearing Disputed Administrative Matters (*Cámara Contencioso Administrativo Federal*), which rejected the Federal Extraordinary Appeal filed by the Company from such Panel's docket that ordered the Company to deliver the Project Investment Agreement ("PIA") executed with Chevron on July 16, 2013.

The Company submitted a full copy of the PIA in compliance with the decision of the Federal Administrative Court – Room I.

In both cases, the Company noted that the PIA was entered into under Law No. 19,550 and the confidentiality of the terms thereof was intended to safeguard geological, commercial and financial information, which was of strategic value to both parties to the PIA.

Delivery of the PIA does not imply the Company's waiver of rights in the event that any other confidential information and/or documents of the Company are required to be disclosed in the future.

On September 29, 2016, Law No. 27,275 was published in the Official Gazette of the Republic of Argentina, guaranteeing a right of access to public information. This right includes the ability to freely seek, access, request, receive, copy, analyze, process, use and distribute information in possession of the bound parties as defined under the law. State-owned companies, companies with majority state-owned capital, mixed-economy companies and all other business organizations where the National State has a majority interest in capital or in the formation of corporate decisions are deemed bound parties, except for companies authorized to make public offerings of their securities. Law No. 27,275 has come into effect one year after its publication in the Official Gazette.

On January 31, 2017, Decree No. 79/2017 was published in the Official Gazette of the Republic of Argentina, modifying the public information access right established under the "General Regulation of Access to Public Information for the National Executive Office." The decree established that exceptions to the definition of bound parties, as described in Law No. 27,275, will come into effect the day after their publication in the Official Gazette.

On March 28, 2017 Regulatory Decree No. 206/2017 was published in the Official Gazette of the Republic of Argentina and came into effect on September 29, 2017, which regulates certain aspects of Law No. 27,275, including further clarifications with respect to scope of the exceptions to the obligation of the bound parties to furnish certain information.

Law No. 27,007, amending the Hydrocarbons Law

On October 31, 2014, Law No. 27,007 amending the Hydrocarbons Law was published in the Official Gazette of the Republic of Argentina. The Hydrocarbons Law applies in certain aspects of some of YPF's existing concessions, as well as future concessions. The most relevant modifications in that law are detailed below.

- With respect to exploration permits, it distinguishes between those with conventional and unconventional objectives, and those in which exploration is undertaken in the territorial sea and continental shelf. Law No. 27,007 modifies the basic time periods governing such activities, from three to two periods and limiting the two basic periods to (i) three years each for exploration with conventional objectives and (ii) four years each for exploration with unconventional objectives and (iii) four years each for exploration in the territorial sea or on the continental shelf. In each of these cases, the extension period of up to five years (already established in the Hydrocarbons Law) is maintained, although it is subject to the permit holder having complied with its investment and other obligations. At the end of the first basic period and so long as the permit holder has complied with its obligations under the permit, the permit holder may continue to hold the entire area. After the second basic period ends, the permit holder may surrender the entire area or, if the holder decides to trigger the extension period, 50% of the remaining area.
- In relation to concessions, Law No. 27,007 provides for three types of concessions: conventional production, unconventional production and production in the territorial sea or on the continental shelf. Each of these concessions will last 25, 35 and 30 years, respectively. In addition, permit holders or production concessionaires may request unconventional production concessions on the basis of the development of a pilot plan. So long as the concessionaires (i) have complied with their obligations, (ii) are producing hydrocarbons in the areas under consideration and (iii) present an investment plan for the development of such areas as requested by the competent authorities up to a year prior to the termination of each term of the concession, they may request extension periods of ten years each.
- The amounts to be paid with respect to annual surface fee pursuant to Sections 57 and 58 of the Hydrocarbons Law for the periods of exploration and production have been increased with the goal of incentivizing exploration and development of these areas. Additionally, beginning with the second basic exploration period, these may be reduced partially in light of investments actually carried out in the relevant areas. Restrictions on the number of exploration permits and/or production concessions that an individual or legal entity may hold were eliminated.
- The Hydrocarbons Law established a 35-year term for those concessions granted for the transportation of oil, gas and petroleum products that holders of production concessions are entitled to receive. Law No. 27,007 modified the awarded term for hydrocarbon transportation concessions to be synchronized with the production concession periods.
- In connection with exploration and production offerings, tenders may be made by Argentine and foreign companies, with the goal of obtaining the highest number of tenders possible. In addition, the bidding documents must be prepared by the competent authorities on the basis of the model bidding document which will be drafted jointly by the competent authorities of the provinces and the Argentine Secretariat of Energy. This model bidding document must be prepared within 180 days of the effective date of Law No. 27,007. Tenders will be awarded to offerors who present the most relevant offer, in particular, the one proposing the highest amount of investments or exploratory activity.
- Royalties have been set at a maximum of 12% on the results of liquid hydrocarbons or natural gas production. Royalties may be reduced, taking into account the productivity of the area and the type of production. In cases of extension periods, an additional royalty of 3% will be added for each extension, up to a maximum of 18%. In addition, in case of such extensions, the competent authority may include the payment of an extension bond, which maximum amount shall equal the result of multiplying the remaining proved reserves at the end of the concession period to be extended by 2% of the average basin price, for the two-year period prior to the moment when the extension is granted, applicable to the hydrocarbons at issue.
- Law No. 27,007 also provides that the Argentine Republic and the provinces may not establish, in the future, new areas reserved in favor of state-owned entities or companies with state participation. Further, with respect to existing reserved areas that do not have association agreements with third parties as of the date of this new law, associative schemes may be carried out so long as, during the development phase, the participation of state-owned entities or companies with state participation is proportional to the effective investments promised and carried out by them.
- Law No. 27,007 additionally incorporates into the Investment Promotion Regime for the Exploration of Hydrocarbons (Decree No. 929/2013) projects, as authorized by the MINEM, that imply direct investments in foreign currency greater than U.S.\$250 million to be invested during the first three years of the project. Also, it modifies the percentages of hydrocarbons that, beginning with the third year, will be subject to the benefits of the regime. For conventional and unconventional production concessions, as well as offshore concessions at depths less than or equal to 90 meters, the percentage shall be 20%; for offshore concessions at depths greater than 90 meters, the percentage shall be 60%.

- Within the framework of the Investment Promotion Regime for the Exploration of Hydrocarbons, Law No. 27,007 provides for contributions by companies to the provinces where the projects take place, which amount to 2.5% of the initial investment amount of the project, to be directed to "Corporate Social Responsibility" contributions. In addition, an amount to be determined by the Commission in light of the extent of the project must be contributed by the Argentine Republic to finance infrastructure.
- Law No. 27,007 establishes that capital goods and inputs that are essential to the execution of the investment plans of companies registered in the National Registry of Hydrocarbon Investments shall pay import duties as indicated in Decree 927/13 (reduced rates). This list may be extended to other strategic products.
- According to Law No. 27,007, the federal government and the provinces shall attempt to establish uniform environmental legislation and the adoption of uniform fiscal treatment in this sector. The competent authorities, including the Argentine Secretariat of Energy and the MINEM, will promote unification of procedures and registries.
- All national offshore permits and offshore hydrocarbon production concessions that had no association agreements with ENARSA as of the date of the new law reverted and were transferred to the Argentine Secretariat of Energy. Permits and concessions granted prior to Law No. 25,943 shall be exempted from this provision. The National Executive Office may negotiate, for 180 days following the enactment of the new law, the conversion of association agreements signed with ENARSA to permits or production concessions. In September 2015, the National Executive Office and YPF began negotiating the conversion of association agreements executed with ENARSA. On December 29, 2017 YPF filed a note before the Ministry of Energy confirming its willingness to negotiate the conversion of association agreement related to the Area identified as "ENARSA 1". In the same note, YPF informed that it communicated its decision not to convert the association agreements related such Areas to the Operators of Areas "ENARSA 2" and "ENARSA 3". As of the date of this annual report, negotiations related to Area ENARSA 1 are ongoing.

### Resolution No. 14/2015

On February 4, 2015, Resolution No. 14/2015 was published in the Official Gazette, that created the Crude Oil Production Stimulus Program (*Programa de Estímulo a la Producción de Petróleo Crudo*) (the "Program"), which was in force from January 1, 2015 through December 31, 2015. This Program provided for a payment in Argentine pesos to beneficiary companies, in an amount of up to U.S.\$3.00 per barrel when such company's quarterly production of crude oil was equal to or greater than the base production level under the Program, in addition to the compliance with certain other requirements related to the level of activity of the Company as set for Resolution No. 33/2015. The base production level under the Program was the total production of crude oil of the beneficiary company for the fourth quarter of 2014. Those beneficiary companies that had satisfied the demand of all of the domestic refineries operating within Argentina may direct a portion of their production to the international market and receive an additional payment of U.S.\$2.00 or U.S.\$3.00 per barrel of crude oil exported, depending on the volume exported.

The payments would be made in Argentine pesos using the Reference Exchange Rate of BCRA Communication "A" 3500 of the last business day prior to the presentation of the information of the corresponding quarter to the Commission. See "Item 5. Operating and Financial Review and Prospects—Results of Operations—Revenues."

#### MINEM Resolution No. 21/2016

On March 11, 2016, MINEM Resolution No. 21/2016 was published in the Official Gazette, which established an export stimulus program of crude oil surplus, after satisfying domestic demand for crude oil Escalante from the San Jorge Gulf basin. The stimulus was paid for each shipment to the extent that the average price of Brent oil did not exceed U.S.\$47.50 per barrel two days after the shipment, and was valid until December 31, 2016. The compensation paid by the Argentine government amounted to U.S.\$7.50 per barrel as long as the criteria was met.

#### Decree No. 442/2016 - Province of Chubut

On April 11, 2016, Decree No. 442/2016 was published in the Official Gazette of the province of Chubut, which established an export stimulus program of crude oil surplus, after satisfying domestic demand. The stimulus was paid for each shipment to the extent that the average price of Brent oil did not exceed U.S.\$47.20 per barrel two days after the shipment, and was valid until December 31, 2016. The compensation paid by the province of Chubut amounted to U.S.\$2.50 per barrel as long as the criteria was met.

#### MINEM Decree No. 192/2017

On March 21, 2017, Decree No. 192/2017 was published in the Official Gazette of the Republic of Argentina, which created the "Oil and its Byproducts Import Operations Registry" (the "Registry"), which authority of application is MINEM (through the Secretariat of Hydrocarbon Resources). The Registry involves import operations of: (i) crude oil and (ii) certain other specific byproducts listed in section 2 of the decree. By means of this regulation, any company that wishes to perform such import operations is obligated to register such operation in the Registry and obtain authorization from the MINEM before the import takes place. The registration of the operation with the MINEM will be filed in accordance with a specific proceeding that the MINEM will establish for such purpose.

According to this decree, the MINEM will also set the methodology applicable to issue import authorizations, which will be based in the following criteria: (a) lack of crude oil with the same characteristics offered in the domestic market; (b) lack of additional treatment capacity in domestic refineries with domestic crude oil; and (c) lack of byproducts listed in section 2 of the decree offered in the domestic market. This regime excepts any import by CAMMESA in order to supply power plants with the main purpose of technical supply to the "Inter-connection Argentinean System" (*Sistema Argentino de Interconexión* or "SADI").

Decree No. 192/2017 was in force until December 31, 2017, according to Decree No. 962/2017 (published in the Official Gazette of the Republic of Argentina on November 27, 2017).

#### Public Emergency

On January 6, 2002, the Argentine congress enacted the Public Emergency Law, which represented a profound change in the economic model effective as of that date, and rescinded the Convertibility Law No. 23,928, which had been in effect since 1991 and had pegged the peso to the dollar on a one-to-one basis. In addition, the Public Emergency Law granted to the National Executive Office the authority to enact all necessary regulations in order to overcome the economic crisis that Argentina was then facing. The situation of emergency declared by Law No. 25,561 has been partially extended until December 31, 2019 by Law No. 27,345; specifically with respect to social emergency as established by Law 27,200 (but not with respect to economic emergency which expired on December 31, 2017). The National Executive Office is authorized to execute the powers delegated by Law No. 25,561 until such date.

After the enactment of the Public Emergency Law, several other laws and regulations have been enacted to overcome the economic crisis, including (1) the conversion into pesos of deposit, obligations and tariffs of public services, among others, and (2) the imposition of customs duties on the export of hydrocarbons with instructions to the National Executive Office to set the applicable rate thereof. The application of these duties and the instruction to the National Executive Office has been extended until January 2017 by Law No. 26,732. On January 8, 2017, export duties upon hydrocarbon exports established by Law No. 26,732 ceased to be enforceable. See "—Taxation."

### Exploration and Production

The Hydrocarbons Law establishes the basic legal framework for the regulation of oil and gas exploration and production in Argentina. The Hydrocarbons Law empowers the National Executive Office to establish a national policy for development of Argentina's hydrocarbon reserves, with the principal purpose of satisfying domestic demand.

Pursuant to the Hydrocarbons Law, exploration and production of oil and gas is carried out through exploration permits, production concessions, exploitation contracts or partnership agreements. The Hydrocarbons Law also permits surface reconnaissance of territory not covered by exploration permits or production concessions upon authorization of the Argentine Secretariat of Energy and/or competent provincial authorities, as established by Law No. 26,197, and with permission of the private property owner. Information obtained as a result of surface reconnaissance must be provided to the Argentine MINEM and/or competent provincial authorities, which may not disclose this information for two years without permission of the party who conducted the reconnaissance, except in connection with the grant of exploration permits or production concessions.

Under the Hydrocarbons Law, the federal and/or competent provincial authorities may grant exploration permits after submission of competitive bids. Permits were granted to third parties in connection with the deregulation and demonopolization process and permits covering areas in which our predecessor company, Yacimientos Petrolíferos Fiscales Sociedad del Estado, was operating at the date of the Privatization Law were granted to us by such law. In 1991, the National Executive Office established a program under the Hydrocarbons Law (known as Plan Argentina) pursuant to which exploration permits were auctioned. The holder of an exploration permit has the exclusive right to perform the operations necessary or appropriate for the exploration of oil and gas

within the area specified by the permit. Under the Hydrocarbons Law, each exploration permit may cover only unproved areas not to exceed 10,000 km2 (15,000 km2 offshore), and may have a term of up to 14 years (17 years for offshore exploration). The 14-year term is divided into three basic terms and one extension term. The first basic term is up to four years, the second basic term is up to three years, the third basic term is up to two years and the extension term is up to five years. At the expiration of each of the first two basic terms, the acreage covered by the permit is reduced, at a minimum, to 50% of the remaining acreage covered by the permit, with the permit holder deciding which portion of the acreage to keep. At the expiration of the three basic terms, the permit holder is required to surrender all of the remaining acreage to the Argentine government, unless the holder requests an extension term, in which case such grant is limited to 50% of the remaining acreage. Under Law No. 27,007, which applies to exploration permits issued on or after October 31, 2014, each exploration permit may have a term of up to 11 years for conventional objectives and 13 years for unconventional objectives and offshore exploration. The terms are divided into two basic terms and one extension term. The first and second basic terms are up to three years for conventional objectives and up to four years for unconventional objectives and offshore exploration, and the extension term is up to five years, so long as the permit holder has complied with its investments and other obligations. At the expiration of the first basic term, the permit holder will have the right to continue exploring the entire area for the second basic term so long as it has complied with all its obligations under the permit. At the expiration of the second basic term, the permit holder is required to surrender all of the remaining acreage, unless the holder requests an extension term, in which case such grant is limited to 50% of the remaining acreage.

If the holder of an exploration permit discovers commercially exploitable quantities of oil or gas, the holder has the right to obtain an exclusive concession for the production and development of this oil and gas. The Hydrocarbons Law, as modified by Law No. 27,007, provides that new conventional oil and gas production concessions shall remain in effect for 25 years from the date of the award of the production concession, new unconventional oil and gas production concessions shall remain in effect for 35 years from that date, and new offshore oil and gas production concessions shall remain in effect for 30 years from that date, in addition to any remaining exploration term at the date of such award. The Hydrocarbons Law, as modified by Law No. 27,007, further provides for the concession term to be extended for periods of up to ten additional years each, subject to terms and conditions approved by the grantor at the time of the extension. Such conditions may include the payment of an extension bond with a maximum amount equal to the result of multiplying the remaining proved reserves at the end of the concession period by 2% of the average basin price, for the period two years prior to the date the extension is granted, applicable to the hydrocarbons at issue. Under Law No. 26,197, the authority to extend the terms of current and new permits and concessions has been vested in the governments of the provinces in which the relevant block is located (and the Argentine government in respect of offshore blocks beyond 12 nautical miles). In order to be entitled to the extension, a concessionaire, such as us, must have complied with all of its obligations under the Hydrocarbons Law, including, without limitation, evidence of payment of taxes and royalties and compliance with environmental, investment and development obligations, must be producing hydrocarbons in the area at issue and must present an investment plan to develop the concession. A production concession also confers on the holder the right to conduct all activities necessary or appropriate for the production of oil and gas, provided that such activities do not interfere with the activities of other holders of exploration permits and production concessions. A production concession entitles the holder to obtain a transportation concession for the oil and gas produced. See "—Transportation of Liquid Hydrocarbons."

Exploration permits and production concessions require holders to carry out all necessary work to find or extract hydrocarbons, using appropriate techniques, and to make specified investments. In addition, holders are required to:

- · avoid damage to oil fields and waste of hydrocarbons;
- adopt adequate measures to avoid accidents and damage to agricultural activities, fishing industry, communications networks and the water table; and
- comply with all applicable federal, provincial and municipal laws and regulations.

According to the Hydrocarbons Law, holders of production concessions, including us, are also required to pay royalties to the province where production occurs. As modified by Law No. 27,007, royalty rates are set at a maximum of 12% (though 3% will be added for each extension up to a maximum of 18%). They are payable on the value at the wellhead (equal to the price upon delivery of the product, less transportation, treatment costs and other deductions) of crude oil production and natural gas volumes sold. These royalty rates may be reduced taking into account productivity and the type of production at issue. Notwithstanding the foregoing, in concessions extended prior to the effectiveness of Law No. 27,007, October 31, 2014, the previous conditions remain in force. In some cases, an additional 3% royalty has been added. See "—Main Properties—Argentine Exploration Permits and Exploitation

Concessions." In the extension of our concessions in Santa Cruz, we agreed to a 10% royalty (instead of 12%) for unconventional hydrocarbons. The value is calculated based upon the volume and the sale price of the crude oil and gas produced, less the costs of transportation and storage. In addition, pursuant to S.E. Resolution No. 435/04 issued by the Argentine Secretariat of Energy, if a concession holder allots crude oil production for further industrialization processes at its plants, the concession holder is required to agree with the provincial authorities or the Argentine Secretariat of Energy, as applicable, on the reference price to be used for purposes of calculating royalties.

As a result of Resolution No. 394/07 of the Ministry of Economy, among other things, which increased duties on exports of certain hydrocarbons, Argentine companies began to negotiate the price for crude oil in the domestic market, which would in turn be used as the basis for the calculation of royalties. In January 2013, the Ministry of Economy issued Resolution No. 1/13, modifying exhibit I of Resolution No. 394/07 of the Ministry of Economy, thus setting a new reference price for crude oil (U.S.\$70 per barrel) and certain products. In October 2014, the Ministry of Economy issued Resolution No. 803/2014, incorporating exhibit III to Resolution No. 394/07 of the Ministry of Economy, thus modifying the applicable percentages of duties of exports for certain products below certain prices.

However, on December 29, 2014, Resolution No. 1077/2014 repealed Resolution No. 394/07, as amended, and set forth a new withholding program based on the international price of crude oil (the "International Price"). The International Price was calculated based on the Brent value for the applicable month less U.S.\$8 per barrel. The new program established a 1% general nominal withholding applicable to all products covered by the resolution, including crude oil, diesel, gasoline and lubricants as well as other petroleum products, to the extent that the International Price was below U.S.\$71 per barrel. The resolution further provides an increasing variable withholding rate for crude oil exports to the extent the International Price exceeds U.S.\$71 per barrel. As a result, the maximum a producer may charge was approximately U.S.\$70 per barrel exported, depending on the quality of crude sold. The resolution also sets forth increasing withholding rates for exports of diesel, gasoline, lubricants and other petroleum when the International Price exceeds U.S.\$71 per barrel at rates that allow the producer to receive a portion of the elevated price.

On January 8, 2017, export duties on hydrocarbon exports established by Law No. 26,732 ceased to be enforceable.

In addition to the above, the Public Emergency Law, which created the export withholdings, established that export withholdings were not to be deducted from the export price for purposes of calculating the 12% royalties. The royalty expense incurred in Argentina is accounted for as a production cost (as explained in "—Exploration and Production—Oil and gas production, production prices and production costs"). According to the Hydrocarbons Law, any oil and gas produced by the holder of an exploration permit prior to the grant of a production concession is subject to the payment of a 15% royalty.

Furthermore, pursuant to Sections 57 and 58 of the Hydrocarbons Law, holders of exploration permits and production concessions must pay an annual surface fee that is based on acreage of each block and that varies depending on the phase of the operation, such as exploration or production, and in the case of the former, depending on the relevant period of the exploration permit. These amounts were updated by Law No. 27,007 and may be partially adjusted as from the second basic exploration period in light of investments actually carried out. Exploration permits and production or transportation concessions may be terminated upon any of the following events:

- failure to pay annual surface taxes within three months of the due date;
- failure to pay royalties within three months of the due date;
- substantial and unjustifiable failure to comply with specified production, conservation, investment, work or other obligations;
- repeated failure to provide information to, or facilitate inspection by, authorities or to utilize adequate technology in operations;
- in the case of exploration permits, failure to apply for a production concession within 30 days of determining the existence of commercially exploitable quantities of hydrocarbons;
- · bankruptcy of the permit or concession holder;
- · death or end of legal existence of the permit or concession holder; or

• failure to transport hydrocarbons for third parties on a non-discriminatory basis or repeated violation of the authorized tariffs for such transportation.

The Hydrocarbons Law further provides that a cure period, of a duration to be determined by the Argentine Secretariat of Energy and/or the competent provincial authorities, must be provided to the defaulting concessionaire prior to the termination.

When a production concession expires or terminates, all oil and gas wells, operating and maintenance equipment and facilities automatically revert to the province where the reservoir is located or to the Argentine Republic in the case of reservoirs under federal jurisdiction (for instance, located on the continental shelf or beyond 12 nautical miles offshore), without compensation to the holder of the concession.

Most of our production concession expirations have been extended from their original expiration dates. See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Argentine oil and gas production concessions and exploration permits are subject to certain conditions and may be cancelled or not renewed." The granting of an extension is an unregulated process and normally involves lengthy negotiations between the applicant and the relevant government. Although the Hydrocarbons Law, as modified, provides that applications must be submitted at least one year prior to the concession expiration date, it is industry practice to commence the process far earlier, typically as soon as the technical and economic feasibility of new investment projects beyond the concession term become apparent.

On March 16, 2006, the Argentine Secretariat of Energy issued S.E. Resolution No. 324/06 requiring that holders of exploration permits and hydrocarbon concessions must file with such agency details of their proved reserves existing in each of their areas, certified by an external reserves auditor, each year. Holders of hydrocarbon concessions that export hydrocarbons are obliged to certify their oil and gas proved reserves. The aforementioned certification only has the meaning established by S.E. Resolution No. 324/06, according to which it is not to be interpreted as a certification of oil and gas reserves under the SEC rules. See "—Exploration and Production Overview—Oil and Gas Reserves." On November 7, 2016, MINEM issued Resolution No. 69/2016, which included technical modifications to S.E. Resolution No. 324/06 by amending some of its technical annexes regulating the reserves information required to be provided. It also established sanctions for hydrocarbon producers in the case of irregularities in the reserves reports filed, including admonishment, suspension or cancellation of the Hydrocarbons Producers Registry, depending on the magnitude of the irregularity.

In March 2007, the Argentine Secretariat of Energy issued Resolution No. 407/07 that approved new regulations concerning the Oil and Gas Exploration and Production Companies Registry. According to Resolution No. 407/07, YPF, as a holder of production concessions and exploration permits, is banned from hiring or in any way benefiting from any company or entity which is developing or has developed oil and gas exploration activities within the Argentine continental platform without an authorization from the relevant Argentine authorities.

In connection with the extension of concessions, see "-Exploration and Production Overview-Main properties."

## Security Zones Legislation

Argentine law restricts the ability of non-Argentine companies to own real estate, oil concessions or mineral rights located within, or with respect to areas defined as, security zones (principally border areas).

Additionally, prior approval of the Argentine government is required:

- · for non-Argentine shareholders to acquire control of us; or
- if and when the majority of our shares belong to non-Argentine shareholders, as was the case when we were controlled by Repsol for any additional acquisition of real estate, mineral rights, oil or other Argentine government concessions located within, or with respect to, security zones.

# Natural Gas Transportation and Distribution

The gas transmission system is currently divided into two systems principally on a geographical basis (the northern and the southern trunk pipeline systems), designed to give both systems access to gas sources and to the main centers of demand in and around Buenos Aires. These systems are operated by two transportation companies. In addition, the distribution system is divided into nine regional distribution companies, including two distribution companies serving the greater Buenos Aires area.

The regulatory structure for the natural gas industry creates an open-access system, under which gas producers, such as us, will have open access to future available capacity on transmission and distribution systems on a non-discriminatory basis.

Cross-border gas pipelines were built to interconnect Argentina, Chile, Brazil and Uruguay, and producers such as us had been exporting natural gas to the Chilean and Brazilian markets, to the extent permitted by the Argentine government. During the last several years the Argentine authorities have adopted a number of measures restricting exports of natural gas from Argentina, including issuing domestic supply instruction pursuant to Regulation No. 27/04 and Resolutions No. 265/04, 659/04 and 752/05 (which require exporters to supply natural gas to the Argentine domestic market), issuing express instructions to suspend exports, suspending processing of natural gas and adopting restrictions on natural gas exports imposed through transportation companies and/or emergency committees created to address crisis situations. However, since 2017 the Argentine authorities have adopted a number of measures aiming at allowing companies to resume natural gas exports. See "—Market Regulation—Natural gas export administration and domestic supply priorities."

# Transportation of Liquid Hydrocarbons

The Hydrocarbons Law permits the National Executive Office to award 35-year concessions for the transportation of oil, gas and petroleum products following submission of competitive bids. Pursuant to Law No. 26,197, the relevant provincial governments have the same powers. Holders of production concessions are entitled to receive a transportation concession for the oil, gas and petroleum products that they produce. The term of a transportation concession may be extended for an additional ten-year term upon application to the National Executive Office.

Law No. 27,007, which applies to concessions issued on or after October 2014 other than those already governed by previous laws, for the transportation of liquid hydrocarbons, permits the National Executive Office to award concessions for the transportation of oil, gas and petroleum products for terms equivalent to those granted for production concessions linked to those transport concessions, following submission of competitive bids. The term of a transportation concession may be extended for additional terms equivalent to those of the associated production concession. The holder of a transportation concession has the right to:

- · transport oil, gas and petroleum products; and
- construct and operate oil, gas and products pipelines, storage facilities, pump stations, compressor plants, roads, railways and other facilities and equipment necessary for the efficient operation of a pipeline system.

The holder of a transportation concession is obligated to transport hydrocarbons for third parties on a non-discriminatory basis for a fee. This obligation, however, applies to producers of oil or gas only to the extent that the concession holder has surplus capacity available and is expressly subordinated to the transportation requirements of the holder of the concession. Transportation tariffs are subject to approval by the Argentine Secretariat of Energy for oil and petroleum pipelines and by ENARGAS for gas pipelines. Upon expiration of a transportation concession, the pipelines and related facilities automatically revert to the Argentine government without payment to the holder. The Privatization Law granted us a 35-year transportation concession with respect to the pipelines operated by Yacimientos Petrolíferos Fiscales Sociedad del Estado at the time. Gas pipelines and distribution systems sold in connection with the privatization of Gas del Estado are subject to a different regime as described above.

Additionally, pursuant to Law No. 26,197, all transportation concessions located entirely within a province's jurisdiction and not directly connected to any export pipeline are to be transferred to such province. The National Executive Office retains the power to regulate and enforce all transportation concessions located within two or more provinces and all transportation concessions directly connected to export pipelines.

### Refining

Crude oil refining activities conducted by oil producers or others are subject to prior registration of oil companies in the registry maintained by the Argentine Secretariat of Energy and compliance with safety and environmental regulations, as well as to provincial environmental legislation and municipal health and safety inspections.

In January 2008, the Argentine Secretariat of Domestic Commerce issued Resolution No. 14/2008, whereby the refining companies were instructed to optimize their production in order to obtain maximum volumes according to their capacity.

Executive Decree No. 2014/08 of November 25, 2008, created the "Refining Plus" program to encourage the production of diesel and gasoline. The Argentine Secretariat of Energy, by S.E. Resolution No. 1312/08 of December 1, 2008, approved the regulations of the program. Pursuant to this program, refining companies that undertook the construction of a new refinery or the expansion of their refining and/or conversion capacity, and whose plans were approved by the Argentine Secretariat of Energy, were entitled to receive export duty credits to be applied to exports of products within the scope of Resolution No. 394/07 and Resolution No. 127/08 (Annex) issued by the Ministry of Economy. In February 2012, by Notes No. 707/12 and 800/12 (the "Notes") of the Argentine Secretariat of Energy, YPF was notified that the benefits granted under the "Refining Plus" program had been temporarily suspended. The effects of the suspension extend to benefits accrued and not yet redeemed by YPF at the time of the issuance of the Notes. The reasons alleged for such suspension were that the "Refining Plus" program had been created in a context where domestic prices were lower than prevailing prices and that the objectives sought by the program had already been achieved. On March 16, 2012. YPF filed an administrative complaint against the temporary suspension As of the date of this annual report, YPF has partially collected the compensation expected according to the Program.

## **Market Regulation**

Overview

Under the Hydrocarbons Law and the Oil Deregulation Decrees, holders of production concessions, such as us, have the right to produce and own the oil and gas they extract and are allowed to sell such production in the domestic or export markets, in each case subject to the conditions described below.

The Hydrocarbons Law authorizes the National Executive Office to regulate the Argentine oil and gas markets and prohibits the export of crude oil during any period in which the National Executive Office finds domestic production to be insufficient to satisfy domestic demand. If the National Executive Office restricts the export of crude oil and petroleum products or the sale of natural gas, the Oil Deregulation Decrees provide that producers, refiners and exporters shall receive a price for the crude oil and petroleum products, not lower than that of imported crude oil and petroleum products of similar quality.

Furthermore, the Oil Deregulation Decrees required the National Executive Office to give twelve months' notice of any future export restrictions. Notwithstanding the above provisions, certain subsequently-enacted resolutions (S.E. Resolution No. 1679/04, S.E. Resolution No. 532/04 and Ministry of Economy Resolution No. 394/07) have modified the aforementioned price mechanism, resulting, in certain cases, in prices to producers that are below the levels described above.

In addition, in May 2012, the Expropriation Law was passed by the Argentine congress and became effective. See "—The Expropriation Law" and "—Decree No. 1277/2012" and "—Decree No. 272/2015."

On July 15, 2013, Decree No. 929/2013 was published in the Official Gazette, which provides for the creation of an Investment Promotion Regime for the Exploitation of Hydrocarbons (the "Promotion Regime"), both for conventional and unconventional hydrocarbons to be applied across the Argentine territory. Applications to be included in this Promotion Regime may be filed by subjects duly registered with the National Registry of Hydrocarbon Investments who are holders of exploration permits and/or exploitation concessions and/or third parties associated with those holders and who submit an Investment Project for Hydrocarbon Exploitation (the "Investment Project") to the Commission created by Decree No. 1,277/12, entailing a direct investment in foreign currency of at least U.S.\$1 billion, calculated at the time of submission of the Investment Project, and to be invested in the first five years of the Investment Project. Beneficiaries of this Promotion Regime shall enjoy the following benefits, among others; i) they shall be entitled, under the terms of the Hydrocarbons Law, from the fifth anniversary of the start-up of their respective Investment Project, to freely export 20% of the production of liquid and gaseous hydrocarbons produced under such Investment Projects, at a 0% export tax rate, if applicable; ii) they shall freely dispose of 100% of the proceeds derived from the export of the hydrocarbons mentioned in i) above, provided the approved Investment Project would have generated an inflow of foreign currency into Argentina's financial market equal to at least U.S.\$1 billion, following the requirements mentioned above; iii) if hydrocarbon production in Argentina is not enough to cover domestic supply needs in accordance with section 6 of the Hydrocarbons Law, beneficiaries of the Promotion Regime, from the fifth anniversary of the start-up of their respective Investment Projects, shall be entitled to obtain, in relation to the aforementioned exportable rate of liquid and gaseous hydrocarbons produced in the Investment Projects, a price not lower than the reference export price calculated without deducting any export duties that would have been applicable. Law No. 27,007, as described above, has incorporated into this regime projects submitted to the Commission entailing a direct investment in foreign currency of at least U.S.\$250 million, calculated at the time of submission of the Investment Project, and to be invested in the first three years of the Investment Project. Further, Law No. 27,007 modifies the percentages of hydrocarbons to be benefitted under this regime to 20% of the production of conventional, unconventional and offshore concessions at depths less than or equal to 90 meters and 60% of the production of offshore concessions at depths greater than 90 meters. See "Law No. 27,007, amending the Hydrocarbons Law" and "—Decree No. 272/2015."

Additionally, the decree discussed above created a new type of concession for the "Exploitation of Unconventional Hydrocarbons," which has been incorporated into the Hydrocarbons Law by Law No. 27,007, consisting of the extraction of liquid and/or gaseous hydrocarbons through unconventional stimulation techniques applied to reservoirs located in geological formations of schist and slates (shale gas or shale oil), tight sands (tight oil and tight gas), coal layers (coal bed methane) and, in general, from any reservoir that presents low-permeability rock as its main feature. The Decree provides that holders of exploration permits and/or exploitation concessions that are beneficiaries of the Promotion Regime shall be entitled to apply for a "Concession for Unconventional Hydrocarbons Exploitation." Likewise, holders of a Concession for Unconventional Hydrocarbons Exploitation who are also holders of an adjacent and pre-existing concession may request the unification of both areas into a single unconventional exploitation concession, provided the geological continuity of such areas is duly proven.

As noted above, Law No. 27,007 provides for contributions by companies to the provinces where the projects take place, which amount to 2.5% of the initial investment amount of the project, to be directed to "Corporate Social Responsibility" contributions. In addition, an amount to be determined by the Commission in light of the extent of the project, to finance infrastructure, have to be contributed by the Argentine Republic. Finally, Law No. 27,007 establishes that capital goods and inputs that are essential to the execution of the investment plans of companies registered in the National Registry of Hydrocarbon Investments shall pay import duties indicated in Decree No. 927/13 (reduced rates). This list may be extended to other strategic products.

#### Production of crude oil and reserves

Executive Decree No. 2014/08 of November 25, 2008, created the "Petroleum Plus" program to encourage the production of crude oil and the increase of reserves through new investments in exploration and development. The Argentine Secretariat of Energy, through S.E. Resolution No. 1312/08 of December 1, 2008, approved the regulations of the program. The program entitled production companies which increased their production and reserves within the scope of the program, and whose plans were approved by the Argentine Secretariat of Energy, to receive export duty credits to be applied to exports of products within the scope of Resolution No. 394/07 and Resolution No. 127/08 (Annex) issued by the Ministry of Economy. In February 2012, YPF was notified by the Argentine Secretariat of Energy that the benefits granted under the "Petroleum Plus" program had been temporarily suspended. The effects of the suspension extend to benefits accrued and not yet redeemed by YPF at the time of the issuance of the notice. The reasons stated for the suspension were that the "Petroleum Plus" program had already been achieved. On March 16, 2012, YPF filed and administrative complaint against the temporary suspension. Executive Decree No. 1330/2015 of July 13, 2015 provided for the termination of the "Petroleum Plus" program, establishing compensation in BONAR 2024 Argentine public bonds. As of the date of this report, YPF has not been compensated for the benefits accrued and not yet redeemed by YPF.

## Refined products

In April 2002, the Argentine government and the main oil companies in Argentina, including us, reached an agreement on a subsidy provided by the Argentine government to public bus transportation companies. The Agreement on Stability of Supply of Diesel was approved by Executive Decree No. 652/02 and assured the transportation companies their necessary supply of diesel at a fixed price of Ps. 0.75 per liter from April 22, 2002 to July 31, 2002. Additionally, it established that the oil companies are to be compensated for the difference between this fixed price and the market price through export duty credits. Subsequent agreements entered into between the Argentine government and the main oil companies in Argentina extended the subsidy scheme until December 2009, while the aforementioned fixed price was revised from time to time.

In March 2009, Executive Decree No. 1390/09 empowered the Chief of Staff to sign annual agreements extending the diesel subsidy to transportation companies for the fiscal year 2009 and until the end of the public emergency declared by the Public Emergency Law and its amendments, and instructed such official to incorporate the necessary modifications in order to extend the possibility to compensate with export duty credits on all hydrocarbon products currently exported, or with cash. As of the date of this annual report, execution of the annual agreements for the fiscal years 2010 and 2011 is pending. Nevertheless, the subsidy scheme has continued to be in place on the basis of the monthly communications issued by the Argentine Secretariat of Transport notifying oil companies of the volumes to be delivered to each beneficiary of the scheme at the fixed price, and the Argentine government has continued to compensate oil companies for deliveries of diesel made under the scheme.

The Argentine Secretariat of Energy has issued a series of resolutions in order to provide the market with information about liquid fuel prices and volumes. For example, S.E. Resolution No. 1,102/04 created the Registry of Liquid Fuels Supply Points, Self-Consumption, Storage, Distributors and Bulk Sellers of Fuels and Hydrocarbons, and of Compressed Natural Gas; S.E. Resolution No. 1,104/04 created a bulk sales price information module as an integral part of the federal fuel information system, as well as a mechanism for communication of volumes sold. S.E. Resolution No. 1,834/05 compels service stations and/or supply point operators and/or self-consumption of liquid fuels and hydrocarbons who have requested supply, and have not been supplied, to communicate such situation to the Argentine Secretariat of Energy. S.E. Resolution No. 1,879/05 established that refining companies registered by the Argentine Secretariat of Energy, who are parties to contracts that create any degree of exclusivity between the refining company and the fuel seller, shall assure continuous, reliable, regular and non-discriminatory supply to its counterparties, giving the right to the seller to obtain the product from a different source, and thereupon, charging any applicable cost overruns to the refining company.

Disposition S.S.C. No. 157/06 of the Undersecretariat of Fuels provides that fuel sellers who are parties to contracts that create any degree of exclusivity between the refining company and the fuel seller, and which for any reason are seeking to terminate such contract, shall report the termination in advance with the Undersecretariat of Fuels in order to inform the Argentine Secretariat of Domestic Commerce of the situation. In that case, the Argentine Secretariat of Domestic Commerce is to: (i) issue a statement regarding the validity of the termination of the contract and (ii) use all necessary means to allow the fuel seller terminating the contract to execute another agreement with a refining company and/or fuel broker in order to guarantee its fuel supply. The Disposition has not been imposed by the authorities in cases involving YPF.

S.E. Resolution No. 1679/04 reinstalled the registry of diesel and crude oil export transactions created by Executive Decree No. 645/02, and mandated that producers, sellers, refining companies and any other market agent that wishes to export diesel or crude oil to register such transaction and to demonstrate that domestic demand has been satisfied and that they have offered the product to be exported to the domestic market. In addition, S.E. Resolution No. 1338/06 added other petroleum products to the registration regime created by Executive Decree No. 645/02, including gasoline, fuel oil and its derivatives, aviation fuel, coke coal, asphalts, certain petrochemicals and certain lubricants. Resolution No. 715/07 of the Argentine Secretariat of Energy empowered the National Refining and Marketing Direction to determine the amounts of diesel to be imported by each company, in specific periods of the year, to compensate exports of products included under the regime of Resolution No. 1679/04; the fulfillment of this obligation to import diesel is necessary to obtain authorization to export the products included under Decree No. 645/02 (crude, fuel oil, diesel, coke coal and gasoline, among others). In addition, Resolution No. 25/06 of the Argentine Secretariat of Domestic Commerce, issued within the framework of Law No. 20,680, imposes on each Argentine refining company the obligation to supply all reasonable diesel demand, by supplying certain minimum volumes (established pursuant to the resolution) to their usual customers, mainly service station operators and distributors. YPF has duly fulfilled its obligation under this Resolution and has not received any type of sanction from the authorities in this regard.

On August 17, 2010, the Argentine Secretariat of Domestic Commerce issued Resolution No. 295/10, imposing that the trade price of liquid fuels should be rolled back to those prices prevailing on July 31, 2010. This resolution has been successfully challenged by another company and a preliminary injunction was granted suspending the effectiveness of such Resolution. This Resolution was later on repealed by Resolution No. 543/10 of the Argentine Secretariat of Domestic Commerce.

On February 2, 2011, the Argentine Secretariat of Domestic Commerce issued Resolution No. 13/11 stating that the retail price of liquid fuels had to be rolled back to those prices prevailing on January 28, 2011. This resolution also required refineries and oil companies to continue to supply amounts of fuel to the domestic market consistent with amounts supplied the prior year, as adjusted for the positive correlation between the increase in the demand of fuel and gross domestic product. On March 29, 2011, however, the Argentine Secretariat of Domestic Commerce issued Resolution No. 46/11, which repealed Resolution No. 13/11, alleging that market conditions had changed since its issuance.

On April 10, 2013, Resolution No. 35/2013 of the Argentine Secretariat of Domestic Commerce, determined a price cap for fuel at all service stations for period of six months, which shall not exceed the highest outstanding price as of April 9, 2013 in each of the regions identified of the Annex of the Resolution.

The above resolutions affecting domestic prices expired on November 24, 2013 and are no longer in effect.

In addition, in May 2012, the Expropriation Law was enacted by the Argentine congress and became effective. See "—The Expropriation Law" and "—Decree No. 1277/2012."

On December 30, 2013, the Commission approved, through Resolution No. 99/2013, the general rules for the grant of quotes of liquid fuels volumes allowed to be imported by locally registered companies, including, among others, oil companies registered in the relevant registries of the Secretariat of Energy. These rules regulate the requirements, grant of volumes to be imported and other conditions to be complied with by the companies that wish to import liquid fuels free of the tax on liquid fuels (imposed by Law No. 23,966) and the tax on diesel (imposed by Law No. 26,098), jointly with other fuels up to a maximum aggregate amount of 7 mmcm.

The Secretariat of Hydrocarbon Resources from MINEM approved Resolution No. 5/2016 on May 31, 2016, replacing Annex II of Resolution No. 1283/2006, which previously established specifications for Argentina's two grades of gasoline, naphtha grades 2 and 3. The resolution's new Annex includes modifications to the content of lead, manganese, oxygen and ethanol and, most significantly, sulfur, and requires oil and gas companies to implement a plan to lower sulfur limits to 50mg/kg for grade 2 gasoline, 10mg/kg for grade 3 gasoline, and to 350mg/kg for diesel between 2019 and 2022. Oil and gas companies must file with the Secretariat of Hydrocarbon Resources a detailed timeline of the program of investments for the next four years, to reach the goals provided in Annex I. From June 1, 2016, the sulfur limit for fuel oil will be 7,000 mg/kg. Local refineries producing fuel oil that does not fulfill the above mentioned specifications must present to the Secretariat of Hydrocarbon Resources a remediation plan that includes steps and actions to fulfill the maximum limit of sulfur within 24 months. Based on the above, YPF has undertaken several studies in respect of investment configurations and estimations, under the advice of main technological experts in the field in order to adapt its industrial networking units according to the parameters required by the regulation. In October 2016, YPF submitted to the MINEM the following information: a) an investment plan towards 2019 containing detailed information about projects and terms necessary to fulfill the new quality specification of products required by Resolution No. 5/2016; and b) an evaluation of the necessary terms in order to develop the configuration of studies, as discussed in the previous sentence. Once those studies, together with their economic impact, are completed, YPF will obtain internal approval from its Board of Directors and then submit to the MINEM its investment program towards 2022 to fulfill additional quality requirements established by Resolution No. 5/2016.

# Agricultural Commodity Export Tax Changes

By Executive Decree No. 133/2015, published in the Official Gazette on December 17, 2015, the Argentine government reduced the export tax on soybeans and soybean byproducts by 5% to 30% and eliminated the export taxes on all other commodities. Agricultural commodities with a new 0% export tax include meat products, grains, fruits, and vegetables, among other products. In addition, through Executive Decree No. 1343/2016, published in the Official Gazette on December 30, 2016, the Argentine government established that, beginning January 2018, the soybean export tax will be reduced by 0.5 % each month until December 2019. By the end of 2019, the soybean export tax will be 18%, down from its current level of 30%.

Finally, by Joint Resolutions Nos. 4/2015 and 7/2015 of the Ministries of Agroindustry, Treasury and Public Finance and Production published in the Official Gazette on December 29, 2015, the export permits known as "ROEs" were eliminated and replaced by the registration of a Sworn Affidavit of Exports Sales, known as a "DJVE."

# Automatic and Non-Automatic Import Licenses

On December 23, 2015, the Ministry of Production published Resolution No. 5/2015, in the Official Gazette, which reinstated the automatic and non-automatic import licenses ("LAI" and "LNA," respectively). In 2013, the former Ministry of Economy and Public Finance eliminated the LNA, stating that it existed alongside the Anticipated Import Affidavit (*Declaración Jurada Anticipada de Importación*) requirement implemented in February 2012, which was recently repealed by AFIP Resolution No. 3823.

Resolution No. 5/2015 also established that importers of products included in the Mercosur Tariff Code must obtain an LAI prior to the entrance of the product into Argentina.

Certain products which are listed in Annexes II to XVII of Resolution No. 5/2015 will be subject to an LNA. The LNA will be applicable to a wide variety of products, including, but not limited to, textile, footwear, toys, domestic appliances, motorbikes, and automobile parts.

In order to obtain the LNA, importers must submit certain information from the importer itself (name, tax identification number) and the product (FOB value, type and quantity, commercial brand, model, country of origin and of shipping, etc.) through the Import Monitoring System (*Sistema Integral de Monitoreo de Importaciones*) ("SIMI") created by AFIP Resolution No. 3823. After submitting this information, importers will have ten business days to complete certain additional information required by Resolution No. 5/2015. If the ten-day term expires, the SIMI declaration will be automatically cancelled.

Regarding the LNA, Resolution No. 5/2015 establishes that, at any stage of the process, importers may be required to submit additional information or documents of the product subject to the LNA and request verification of technical agencies, as applicable.

Import licenses will be valid for 90 calendar days, once approved by the SIMI.

The following imports are exempt from the import regime established by Resolution No. 5/2015:

- Donation regime.
- Sample regime.
- Diplomatic exemption regime.
- Import of products with duties and tax exemption.
- Import of products from Special Custom Zone (Tierra del Fuego, Antártida and Islas del Atlántico Sur).
- Import of products by the General Secretary of Executive Branch (Secretaria General de la Presidencia de la Nación).
- Courier and mail delivery, only for importer private use or consumption.

Resolution No. 5/2015 became effective on December 24, 2015, and the Secretariat of Trade is the application authority.

#### Decree Nº 629/2017

Decree N° 629/2017—published in August 10, 2017 in the official Gazzette of the Republic of Argentina- introduces a "Regime for the Import of Used Good for the Oil & Gas Industry" (the "Régime"), that admits definitive import of used goods not older than 10 years since fabrication.

The Regime establishes an import rate ranging between 0% and 14% for goods included in the duty positions included in the annexes to the Decree.

Both companies registered under the Registry of Oil Companies and companies providing services directly to the oil and gas industry may apply for the benefit.

The Regime will be in force from August 11, 2017 until June 30, 2019.

## Natural gas

In January 2004, Executive Decree No. 180/04 (i) created the Electronic Gas Market ("MEG") for the trade of daily spot sales of gas and a secondary market of transportation and distribution services, and (ii) established information obligations for buyers and sellers of natural gas in relation to their respective commercial operations, required as a condition to be authorized to inject into and transport through the transportation system any volume of natural gas (further regulated by Resolution No. 1,146/04 issued on November 9, 2004 and Resolution No. 882/05 issued by the Argentine Secretariat of Energy). According to Executive Decree No. 180/04, all daily spot sales of natural gas must be traded within the MEG.

In January 2004, Executive Decree No. 181/04 authorized the Argentine Secretariat of Energy to negotiate with natural gas producers a pricing mechanism for natural gas supplied to industries and electric generation companies. Domestic market prices at the retail market level were excluded from these negotiations.

On June 14, 2007, Resolution No. 599/07 of the Argentine Secretariat of Energy approved a proposed agreement with natural gas producers regarding the supply of natural gas to the domestic market during the period 2007 through 2011 ("Agreement 2007-2011"). We executed Agreement 2007-2011 taking into account that producers that did not enter into Agreement 2007-2011 would be required to satisfy domestic demand before those who entered into Agreement 2007-2011. The purpose of Agreement 2007-2011 was to guarantee the supply of the domestic market demand at the levels registered in 2006, plus the growth in demand by residential and small commercial customers. However, we expressly stated that the execution of Agreement 2007-2011 did not entail any recognition by us of the validity of the terms and conditions of the various resolutions of the Argentine Secretariat of Energy establishing programs for the curtailment or re-routing of exports to satisfy domestic demand. We challenged Resolution No. 599/07 and stated that we signed Agreement 2007-2011 taking into account the potential consequences of not doing so.

The Argentine Secretariat of Energy created, through Resolution No. 24/08 issued on March 13, 2008, a program named "Gas Plus" to encourage natural gas production resulting from discoveries, new fields and tight gas, among other factors. The natural gas produced under the Gas Plus program is not subject to Agreement 2007-2011 and the price conditions established under such agreement.

The Argentine Secretariat of Energy, through Resolution No. 1031/08 issued on September 12, 2008, modified Resolution No. 24/08, establishing the specific conditions petitioners must meet in order to qualify for the Gas Plus program. Certain of such conditions were modified by Resolution No. 695/09 of the Argentine Secretariat of Energy, which demands compliance with commitments already assumed.

The Argentine Secretariat of Energy, through Resolution No. 1070/08 issued on October 1, 2008, ratified the complementary agreement entered into between Argentine natural gas producers and the Argentine Secretariat of Energy on September 19, 2008 (the "Complementary Agreement"), which (i) modified gas prices at the wellhead and segmented the residential sector in terms of natural gas demand, and (ii) established the requirement that natural gas producers contribute to the fiduciary fund created by Law No. 26,020. The Complementary Agreement also contains certain requirements concerning the provision of LPG to the domestic market. See "—Liquefied petroleum gas." Through Resolution No. 1417/08, the Secretariat of Energy determined the basin prices for the residential segment applicable to the producers that signed the Complementary Agreement. On January 13, 2010, the natural gas producers signed an addendum to the Complementary Agreement which extended the commitment to contribute to the fiduciary funds created by Law No. 26,020 until December 31, 2010. On January 25, 2011, the natural gas producers signed a second addendum to the Complementary Agreement which extended such commitment until December 31, 2011.

On March 19, 2012, the Official Gazette published S.E. Resolution No. 55/2012 of the Secretariat of Energy, which extended the Complementary Agreement for 2012 and established the following with respect to non-signing parties: (i) the natural gas price increase established by the Complementary Agreement will not be applicable to natural gas injected into the gas system by non-signing parties; (ii) natural gas injected by non-signing parties will be consumed first in the order of priority by residential users, which has the lowest tariffs; and (iii) non-signing parties must fulfill all of the commitments undertaken by natural gas producers under Agreement 2007-2011, which was extended by Resolution S.E. No. 172. On March 23, 2012, S.E. Resolution No. 55/2012 was supplemented by ENARGAS Resolution No. 2087/2012, which sets forth, among others, the procedure that distribution companies should follow to secure amounts to be deposited with the fiduciary fund created by Law No. 26,020. Additionally, according to this resolution, producers that have not signed the 2012 extension of the Complementary Agreement are not allowed to charge the wellhead price increases for gas set forth in S.E. Resolutions No. 1070/2008 and 1417/2008 to consumers directly supplied by distribution companies. Thus, such non-signing producers have to invoice the lower prices which were in effect prior to the adoption of these resolutions for the gas supplied to the distribution companies.

Thereafter, on April 19, 2012, December 18, 2012 and December 19, 2013, YPF signed the 2012, 2013 and 2014 extensions of the Complementary Agreement, respectively. The dispatch mechanism for natural gas was regulated further by Resolution No. 1410, as explained below.

Executive Decree No. 2067/08 of December 3, 2008, created a fiduciary fund to finance natural gas imports destined for injection into the national pipeline system, when required to satisfy the internal demand. The fiduciary fund is funded through the following mechanisms: (i) various tariff charges which are paid by users of regular transport and distribution services, gas consumers that receive gas directly from producers and companies that process natural gas; (ii) special credit programs that may be arranged with domestic or international organizations; and (iii) specific contributions assessed by the Argentine Secretariat of Energy on participants in the natural gas industry. This decree has been subject to different judicial claims and judges throughout the country have issued precautionary measures suspending its effects. On November 8, 2009, ENARGAS published Resolution No. 1982/11, which supplements Decree No. 2067/08. This Resolution adjusts the tariff charges established by Executive Decree No. 2067/08 to be paid by users in the residential segment and gas processing and electric power companies, among others, starting December 1, 2011. On November 24, 2011, ENARGAS issued Resolution No. 1991/11, which extends the type of users that will be required to pay tariff charges. YPF has challenged these resolutions. On April 13, 2012, a precautionary measure was granted regarding the processing plant El Porton, suspending the effects of these resolutions with respect to such plant.

Through Resolution No. 28/2016, published on April 1, 2016, MINEM declared that all acts which determined the imposition of the tariff charge ceased to be effective and instructed ENARGAS to adopt measures to cease invoicing the tariff charge.

On November 5, 2012 the Official Gazette published Law No. 26,784 which approves the National Administration Budget for 2013. Article 54 of the Law established that the tariff charges and the fiduciary fund established by Executive Decree No. 2067/08 and all its supplementary acts shall be ruled by Law No. 26,095.

On July 17, 2009, the Ministry of Federal Planning and certain natural gas producers (including YPF) signed an agreement which sets forth: (i) natural gas prices at the wellhead for the electric power generators segment from July to December 2009, and (ii) amounts to be received by natural gas producers for volumes sold to the residential segment from August 2009 onwards. These amounts are adjusted on a monthly basis so that they represent 50% of the amount collected by the fiduciary fund to finance natural gas imports.

On October 4, 2010, the Official Gazette published ENARGAS Resolution No. 1410/10, which set forth new rules for natural gas dispatch applicable to all participants in the gas industry and imposing the following new and more severe priority demand gas restrictions on producers:

- Distributors remain able to solicit all the gas necessary to cover the priority demand despite such gas volumes' exceeding those that the Argentine Secretariat of Energy would have allocated by virtue of Agreement 2007-2011 ratified by the Resolution No. 599/07. See "—Exploration and Production Overview—Delivery commitments."
- Producers are obligated to confirm all the natural gas requested by distributors in respect of the priority demand. The producers' portion of such volumes follows the allocation criterion established by the Resolution No. 599/07. We cannot predict the amount of the estimated domestic demand that a producer may be required to satisfy, regardless of whether such producer signed Agreement 2007-2011.
- Once the priority demand has been satisfied, the remaining demands are fulfilled, with exports last in order of priority.
- In the event a producer is unable to meet the requested demand, transporters are responsible for redirecting gas until a distributor's gas demand is met. The gas deficiency is either (i) deducted from the producer suffering the deficiency if it is able to meet the demands of its other clients in the same basin or (ii) recuperated from the remainder of the gas producers in the event the deficient producer is not able to serve any of its clients in the same basin.

As a result, this regime imposes a jointly liable supply obligation on all producers in the event any producer experiences a gas supply deficiency. We have challenged the validity of the aforementioned regulation. On December 9, 2015, ENARGAS denied our administrative appeal.

Rules established by ENARGAS Resolution No. 1410/10 were amended by MINEM Resolution No. 89/2016, dated June 1, 2016, which: required ENARGAS to develop a procedure to amend and supplement ENARGAS Resolutions No. 716/1998 and 1410/2010 and establish daily operating conditions of the Transportation and Distribution Systems, establishes the volumes that distributors may request in order to satisfy priority demand and, if there has been a contract with a producer to fulfill such request, reduces the contracted volume requirement in accordance with the framework provided by Resolution No. 1,410/2010. Pursuant to this resolution, ENARGAS Resolution I/3833 was issued on June 5, 2016, which establishes the "Supplementary Procedure for Gas Requests, Confirmations and Control."

On December 17, 2010 certain natural gas producers (including YPF) signed an agreement which set forth the percentage of regasified LNG assigned to each natural gas producer for 2011. Amounts produced under this agreement were counted towards such producers' commitments to supply natural gas to distributors under Resolution No. 599/07. As of the date of this annual report, similar agreements have not been entered into for years subsequent to 2011.

In addition, on June 1, 2016, MINEM published Resolution No. 89/2016, which:

- Requires ENARGAS to develop a procedure to amend and supplement ENARGAS Resolutions No. 716/1998 and 1410/2010 and establish daily operating conditions of the Transportation and Distribution Systems.
- Establishes the volumes that distributors may request in order to satisfy priority demand and, if there has been a contract with a producer to fulfill such request, reduces the contracted volume requirement in accordance with the framework provided by Resolution No. 1,410/2010.

Pursuant to this resolution, on June 5, 2016 ENARGAS Resolution No. I/3833 was issued, which establishes the "Supplementary Procedure for Gas Requests, Confirmations and Control."

The purpose of the Procedure is to establish the transition mechanism and application criteria for the administration of the natural gas dispatch to preserve the operation of the transportation and distribution systems giving priority to the consumption of the Priority Demand in cases of supply crisis and / or emergencies which may put at risk the normal provision of the natural gas public service or which may affect the provision of another public service.

The new Procedure establishes that each day the Distribution Service Providers will request in the programming computer systems of the Transport Companies for the operational day n + 1, with first priority, the natural gas necessary to supply the Priority Demand, based on their consumption estimate and in accordance with the contracted transport capacity and its supply agreements.

The confirmation of natural gas in the TSEP for Priority Demand will have priority over other segments. The confirmation of gas for segments other than the Priority Demand will maintain the confirmation priority established by the Producer in the respective contracts with direct consumers (or Marketers), which will be informed to Transportation and Distribution Service Providers.

The transportation nomination of each Distribution Service Provider will give priority to the supply of their Priority Demand over any other user of that Provider.

The Providers of the Transportation and Distribution Service that verify that the transportation capacity is not sufficient to supply the Priority Demand must summon the Emergency Committee, chaired by the president of ENERGAS, who will procure the means to allocate the volumes in the emergency situation.

On June 6, 2017 ENARGAS Resolution No 4.502/17 was issued which approved the Procedure for the administration of the office in the Emergency Executive Committee ("EEC"), modifying the procedure for the delivery request and gas confirmations which were approved by ENARGAS Resolution No. 3,833/16 and provided for measures and criteria to be adopted in a supply crisis of the Priority Demand for Natural Gas declared by the Transportation Companies, Distribution Companies or the ENARGAS.

Among such measures, it was provided that the EEC or (if the EEC disagrees to it) the ENARGAS, will define the way in which the Priority Demand will be supplied considering the quantities of natural gas available in each basin for each producer and discounting the amounts contracted to supply the Priority Demand.

Under the energy sector normalization process, the MINEM called on natural gas producers (including YPF) and ENARSA to establish the basic conditions of those supply agreements to be executed to the distribution of Natural Gas through Networks as of January 1, 2018. The MINEM stated in the notice of call that before the end of the extension period established in Law 27,200 regarding the public emergency that began in 2002, Law No. 24,076 regained effectiveness as it sets forth that the price of natural gas supply agreements will be that determined by the supply and demand free interaction.

In this sense, on November 29, 2017, natural gas producers (among them, YPF) and ENARSA, at the request of the MINEM, subscribed the "Terms and Conditions for the Provision of Natural Gas to Gas Distributors through Networks "(the" Terms and Conditions").

The Terms and Conditions establish the basic guidelines to assure the adequate supply of natural gas to the Distributors, and consequently to residential and commercial final consumers. Moreover, they establish the continuity of the gradual and progressive path of reduction of subsidies, all within the framework of the process of normalization of the natural gas market, which occurs within the period of validity of such Terms and Conditions until December 31, 2019 considered as the "transition period" until the normalization indicated above.

The guidelines established in the Terms and Conditions include, among others, the recognition of the right to transfer to the gas tariff the cost of gas acquisition paid by users and consumers; establishes the available volumes that each producer and each basin must make available daily to the distributors for each month, who may express their lack of interest before a certain date set forth in the Terms and Conditions; establishes penalties for non-compliance for any of the parties regarding their obligation to deliver or take gas; establishes gas prices for each basin for the next two years, in US dollars, the parties being able to set prices lower than those established under the applicable free negotiations; establishes payment guidelines for the purchases made by the Distributors to producers; ENARSA assumes the obligation to supply the demand corresponding to areas reached by the subsidies of residential gas consumption contemplated in article 75 of Law 25,565 (corresponding to the areas of lower price of residential gas charged to users and consumers), during the period of Transition.

The Terms and Conditions constitute the terms and conditions to consider in the negotiations of their respective individual agreements, without this being construed as an obligation. Additionally, the Terms and Conditions establish guidelines for early termination in the event of non-compliance by the parties. YPF fulfilled its commitment to sign supply agreements, according to the terms and conditions established in the Agreement.

On August 27, 2012, the Official Gazette published S.E. Resolution No. 1445/2012 of the Secretariat of Energy, according to considerations set by Decree No. 1,277/2012, which modified gas prices at the wellhead for compressed natural gas (CNG) which represents an increase of approximately 369% of the prices realized by the Company for such segment product.

On February 14, 2013, Resolution No. 1/2013 of the Commission was published in the Official Gazette. This resolution creates the "Natural Gas Additional Injection Stimulus Program." Under this regulation, gas producing companies were invited to file with the Commission before June 30, 2013 projects to increase natural gas injection, in order to receive a compensation up to U.S.\$7.50 per mmBtu for all additional natural gas injected. These projects shall comply with minimum requirements established in Resolution No. 1/2013, and will be subject to consideration approval by the Commission, including a maximum term of five years, renewable at the request of the beneficiary, upon decision of the Commission. If the beneficiary company in a given month does not reach the committed production increase it will have to make up for such volumes not produced. In addition, the Commission may withdraw a previously approved proposal to increase the total injection of natural gas if some of the following events occur: (i) any omission, inaccuracy or distortion of information provided by a company participating in a project or during its execution; (ii) breach of the obligations set forth in Decree No. 1,277/2012 and its regulations or supplementary acts; (iii) breach by a company of its obligations under the program after notice of not less than 15 business days; (iv) if the import price is equal to or lower than the price of the additional natural gas injected for at least 180 days or (v) if the value of a company's supply contracts or invoices used in the monthly calculation corresponding to each month covered by the program had weighted average price decreases or unjustified amounts. On May 23, 2013, the Commission approved the project submitted by YPF. A similar program was created under Resolution No. 60/2013 of the Commission, as amended by Resolution No. 83/2013 of the Commission for gas producers that failed to file their natural gas additional injection program filings before the expiration date established by Resolution No. 1/2013 of the Commission. The compensation to be received under this new program varies from U.S.\$4.00 per mmBtu to U.S.\$7.50 per mmBtu, depending on the production curve reached by the applicable company. Addionally, a third stimulus program entered into effect under Commission Resolution No. 185/2015 for companies without any prior gas production in Argentina at the time of issuance of the resolution. Similar to the Gas Plan, companies with an approved program under this new resolution will receive compensation for the difference between the price obtained in the market for the sale of all their gas production and U.S.\$7.50 per mmBtu. The gas production subject to such compensation only applies to the production from areas acquired by companies with approved programs under either Resolution No. 1/2013 or Resolution No. 60/2013, as long as such production was computed under these programs as "increased injection" as opposed to "base injection."

On May 18, 2016, MINEM Resolution No. 74/2016 created the "Natural Gas New Projects Stimulus Program" in order to incentivize natural gas production for companies submitting new natural gas projects that are not beneficiaries of the "Natural Gas Additional Injection Stimulus Program" or the "Natural Gas Injection Stimulus for Companies with Reduced Injection" created by Resolutions No. 1/2013 and 60/2013, respectively, of the former Commission. The submission of new projects, which must be approved by the Secretariat of Hydrocarbon Resources, may obtain a stimulus price of U.S.\$7.50/mmBtu.

The "Natural Gas New Projects Program" will be effective from the date of the publication of the resolution in the Argentine Official Gazette (May 18, 2016) until December 31, 2018. The requirements to be considered a new natural gas project are as follows: it must (i) come from an exploitation concession granted as a result of a discovery reported after the effective date of Resolution No. 1/2013 of the former Commission; (ii) come from an exploitation concession of areas classified as "Tight Gas" or "Shale Gas"; or (iii) belong to companies without natural gas injection registers which acquire an interest in areas belonging to companies registered in the "Natural Gas Additional Injection Stimulus Program" or the "Natural Gas Injection Stimulus for Companies with Reduced Injection" created by Resolutions No. 1/2013 and 60/2013, respectively, of the former Commission, but for which total injection coming from the areas in question, including the acquired areas, would have been zero during the period in which the selling company would have calculated its base injection.

On May 20, 2016, Decree No. 704/2016 was published, whereby the pending debt which were in Peso terms for the natural gas stimulus programs debt was cancelled in Argentine National Bonds nominated in US dollars and at an interest rate of 8% per annum maturing in 2020 ("BONAR 2020 US\$").

Accordingly, On July 13, 2016, the Group received, under the Natural Gas Additional Injection Stimulus Program, BONAR 2020 US\$, with a face value of US\$ 630 million.

In addition, on September 21, 2016, under the Supply of Propane Gas for Undiluted Propane Gas Distribution Networks Agreement, the Group received BONAR 2020 US\$, with a face value of US\$ 12 million.

#### MINEM Resolution No. 97/2018

On April 3, 2018, the Ministry of Energy and Mining published Resolution N° 97/2018 in the Official Gazette that approves the procedure for cancelation of the pending compensations under the "Natural Gas Additional Injection Stimulus Program", the "Natural Gas Injection Stimulus Program for Companies with Reduced Injection" and the "Natural Gas New Projects Program" corresponding to 2017 natural gas injections (the "Procedure").

Gas producing companies are invited to join the Procedure by filing a Form during 20 business days following the publication in the Official Gazette of the Resolution.

In order to determine the amount of the compensation, the Secretariat of Hydrocarbon Resources shall issue a "Resolution of Compensation", calculated as follows:

- 1. 85%: the amount in USD calculated using the exchange rate at the time of injection of the natural gas.
- 2. 15%: the amounts in USD calculated using the exchange rate between the time of injection and the time of payment due or the exchange rate as of the date of the Resolution, as per corresponds.

The compensation shall be monthly paid in 30 equal and consecutive payments as from January 2019 using the exchange rate "Comunicacion A 3500 Mayorista" corresponding to each payment of each month.

Gas producing companies joining the Procedure shall waive all claims, legal actions and measures as well as accept the terms and conditions of payment compensations under the Procedure during the maximum period of 20 working days since the publication of the Resolution in the Official Gazette of the Republic of Argentina. As of the date of this annual report we are analyzing the necessary steps to comply with said Resolution.

### MINEM Resolution No. 46/2017

On March 6, 2017, the MINEM Resolution No. 46-E/2017 was published in the Official Gazette, which approved the "Investment in Natural Gas Production from Non-Conventional Reservoirs Stimulus Program." The program was established in order to stimulate the investments in natural gas from non-conventional reservoirs in the Neuquina basin and will be in effect until December 31, 2021.

Resolution No. 46/2017 establishes compensation for the volume of non-conventional gas production from concessions located in the Neuquina basin included in the program. To be included in the program, the concessions must have a specific investment plan approved by the province's application authority and the Secretariat of Hydrocarbon Resources.

The compensation will be determined by deducting from the effective sales price obtained from sales to the internal market, including conventional and non-conventional natural gas, the minimum sales prices established by Resolution No. 46/2017 each year, multiplied by the volumes of production of non-conventional gas. The minimum prices established by Resolution No. 46/2017 are U.S.\$7.50 per mmBtu for 2018, U.S.\$7.00 per mmBtu for 2019, U.S.\$6.50 per mmBtu for 2020 and U.S.\$6.00 per mmBtu for 2021.

Compensation from the program shall be paid, for each concession included in the program, 88% to the companies and 12% to the province corresponding to each concession included in the program.

On November 2, 2017, Resolution MINEM 419-E/2017 was published and its Annex replaces the similar Annex of Resolution 46-E/2017. The new resolution modifies the previous one in the following aspects:

- a) It defines that the Initial Production to be computed will be the "monthly mean Non-Conventional Gas production assessed for the period between July 2016 and June 2017". Also, it states that the Production Included, to the effect of the compensation, shall be i) for the concessions with Initial Production lower than 500,000 m3/day, the total monthly production of Non-Conventional Gas coming from such Included Concession, to which the requesting company is entitled, and ii) for the concessions with Initial Production higher than 500,000 m3/day, the total monthly production of Non-Conventional Gas coming from such Included Concession, to which the requesting party is entitled, discounting the Initial Production.
- b) It modifies the definition of Effective Price, previously defined as "the average price weighted by volume of total natural gas sales of each company in the domestic market", to "the average price weighted by volume of total natural gas sales in the Argentine Republic that will be published by the Secretariat of Hydrocarbon Resources", regulating the guidelines to be followed for such calculation.
- c) A requirement to qualify for the Program is included, that is, that the investment plan submitted for each concession reaches a yearly mean production, in any consecutive period of twelve months before December 31, 2019, equal to or higher than 500,000 m3/day, and the obligation to reimburse the amounts of the compensation received (updated to reflect interest) corresponding to the concessions that do not reach the above mentioned production level, with the possibility that the Secretariat of Hydrocarbon Resources may require filing a surety bond to guarantee the eventual reimbursement of the compensations received by the participating companies, and retaining the power to suspend payments if such bond is not submitted.

On November 17, 2017, Resolution MINEM 447-E/2017 which extends the Stimulus Program to the non-conventional gas production from the Austral Basin was published. The only difference with respect to the Program applicable to the Neuquina Basin is that this resolution allows the Hydrocarbon Secretary to determine special technical conditions (such as initial production flow) that the production must meet in order to be considered "non conventional gas" and thus be suitable for the program.

**Tariffs** 

On April 4, 2014, Resolution S.E. No. 226/2014 of the Argentine Secretariat of Energy was published in the Official Gazette. Under this resolution, the Secretariat of Energy set new prices for residential, commercial consumers and compressed natural gas consumers. Residential and commercial consumers that achieve certain consumption savings compared to prior years will be: (i) excluded from the price increase or (ii) subject to a lower price increase. Industrial users and power generation plants are excluded from the price increase. Consumers served by distributor Camuzzi Gas del Sur S.A., which is not an affiliate of YPF, or its sub-distributors, are excluded.

On November 17, 2014, Resolution No. 231/2014 of the Commission was published in the Official Gazette. Under this resolution, the price of compressed natural gas in service stations will be raised by the same percentage as the weighted average price within Argentina, excluding taxes, of "super" quality gasoline over 93 octane or of any product that replaces it in the future as provided for under the resolution.

After public hearings with respect to the tariff review were held on September 16, 17 and 18, 2016, MINEM issued Resolution No. 212/2016 on October 7, 2016 that set forth new TSEP (Transport System Entering Point) prices for natural gas and new natural gas tariff schedules for users who purchase gas from distributors.

Resolution No. 212/2016 instructs the Secretariat of Hydrocarbons to, until TSEP gas prices are established by the free interaction of supply and demand, submit to the MINEM for its approval a proposal of natural gas TSEP prices corresponding to each half-year period, starting April 1 and October 1 of each year, based on the values contemplated in the subsidy reduction scheme, adjusting the target price for each half-year period, as per the market conditions at the time of elaboration of the proposed prices. Such a proposal shall be submitted 30 days in advance at the beginning of each half-year period, and shall be submitted with a report containing the basis of the adjustments or modifications proposed.

Resolution No. 212/2016 also instructs ENARGAS to provide for any such measures as required so that the final amount, including taxes of bills issued by distributors of utility gas through networks across the country, that users are required to pay based on consumptions after the effective date of the TSEP gas prices established in this resolution, does not exceed maximum amounts equivalent to the percentages below, considered as incremental percentages over the total amount, including taxes, of the bill issued to the same user for the same billing period in the previous year:

- Users R1-R23: 300%;
- Users R31-R33: 350%;

- Users R34: 400%; and
- Users SGP: 500%.

It further sets forth that the increase limits established above on the final invoiced amounts shall apply, provided that the total amount of the bill exceeds the amount of Ps. 250.

On such same date, ENARGAS published Resolutions No. 4044/2016, 4045/2016, 4046/2016, 4047/2016, 4048/2016, 4049/2016, 4050/2016, 4051/2016, 4052/2016, 4053/2016 and 4054/2016, whereby it approved the tariff schedules for the users in the following license areas: Metrogas S.A., Gasnea S.A., Gas Natural Ban S.A., Camuzzi Gas Del Sur S.A., Camuzzi Gas Pampeana S.A., Distribuidora de Gas Cuyana S.A., Distribuidora de Gas del Centro S.A., Gasnor S.A., Litoral Gas S.A., Transportadora de Gas del Norte S.A. and Transportadora de Gas del Sur S.A.

On February 16, 2017, MINEM published Resolution No. 29-E/2017, through which it called a public hearing to be held on March 10, 2017 to consider new natural gas prices at TSEP that would be determined to apply to the half-year period commencing in April 2017. The hearing took place, and the final report by the Secretariat of Hydrocarbon Resources was issued to the MINEM; See "—New gas prices at the TSEP and Metrogas transition tariff schemes."

# **Tariff renegotiation**

Transitional Agreement 2017

On March 30, 2017, Metrogas executed a Transitional Agreement with the MINEM and the Ministry of Finance providing for the temporary adjustment of prices and tariffs for the Natural Gas Distribution Public Service, the specific impact of the amounts provided therein until the subscription of the Memorandum of Agreement for Comprehensive Contractual Renegotiation and the entry into force of the definitive tariff schemes resulting from the Comprehensive Tariff Review (the "CRT"). The 2017 Transitional Agreement is supplementary to the 2008 Transitional Agreement and amends the 2017 Transitional Agreement and the 2016 Transitional Agreement previously executed.

The 2017 Transitional Agreement, which is not subject to ratification by the PEN establishes a transitional tariff regime as of April 1, 2017, consisting of the readjustment of tariffs based on the guidelines necessary to maintain the continuity of the service for the purpose of allowing Metrogas to meet its operating and maintenance, administration and marketing expenses, those expenses corresponding to the execution of the mandatory investment plan determined by the ENARGAS and to comply with the respective payment obligations, maintaining its chain of payments for the purpose of ensuring the continuity of the regular provision of the public service under their charge until the entry into force of the tariff regime resulting from the Memorandum of Agreement for a Contractual Renegotiation.

Likewise, the 2017 Transitional Agreement provides for the transfer of the impact of changes in tax regulations pending resolution, except for the, and incorporates a Mandatory Investment Plan to which Metrogas is committed.

Lastly, Metrogas will not be authorized to distribute dividends without previously proving to ENARGAS the full compliance with the Mandatory Investment Plan.

On March 30, 2017, the MINEM instructed the ENARGAS, through Resolution No. 74—E/2017, to put into effect the tariff schemes resulting from the CRT process.

In this regard, it set forth that for the gradual and progressive implementation of this measure, the ENARGAS should apply on a progressive basis, the rate increases resulting from the CRT as follows: 30% of the increase, from April 1, 2017, 40% of the increase, as of December 1, 2017, and the remaining 30%, as of April 1, 2018.

Moreover, and for cases in which the corresponding Memorandum of Agreement for a Contractual Renegotiation had not entered into force, it instructed the ENARGAS to apply to the Licensees (including Metrogas) a transitory tariff adjustment because of the CRT.

On March 31, 2017, ENARGAS Resolution No. 4,356/2017 was published in the Official Gazette through which the tariff schemes resulting from the Metrogas CRT, effective as of April 1, 2017 and the temporary tariff schemes applicable to Metrogas users were approved. Through differentiated tariffs, ENARGAS Resolution No. 4,356 / 2017 determined tariff schemes for residential users who recorded savings in their consumption equal to or greater than 15% with respect to the same period of 2015, as well as those that would apply to the beneficiaries of the "Social Tariff" (Resolutions No. 28/2016 of the MINEM and ENARGAS No. I-2,905/2014 and No. 3,784/2016) and the Entidades de Bien Público (Public Welfare Entities) (Law No. 27,218).

The tariff schemes corresponding to beneficiaries of the "Social Tariff" were rectified by ENARGAS Resolution No. 4,369 2017. The billing resulting from the application of the new transitory tariff shames must respect the limits established in Article 10 of MINEM Resolution No. 212/2016, and therefore the criteria of ENARGAS Resolution No. I-4,044/2016 are maintained.

Likewise, ENARGAS Resolution No. 4,356/2017 overruled ENARGAS Resolutions No. I-2,407/12 and No. I-3,249/15 that enabled the collection of a fixed amount per invoice under the operation of the Fund for Gas Distribution Consolidation and Expansion Works ("FOCEGAS").

In addition, ENARGAS Resolution No. 4,356/2017 approved: (i) the technical economic studies of the Company's CTR, (ii) the non-automatic Semi-Annual Adjustment Methodology to become effective jointly with the License Readjustment Memorandum of Agreement and (iii) the Metrogas Investment Plan for the next five-year term.

On October 24, 2017, and through ENARGAS Resolution No. 74/2017, a public hearing was called for November 15, 2017 in order to consider the transitory tariff adjustment effective as of December 1, 2017, corresponding to Metrogas.

On December 1, 2017, the Official Gazette published: (i) ENARGAS Resolution No. 131/2017 that ordered (a) to declare the validity of the Public Hearing called by ENARGAS Resolution No. 74/2017, (b) approve Metrogas temporary tariff scheme applicable as of December 1, 2017; and (c) approve new values for the Rates and Charges received by Metrogas for Additional Services; and (ii) ENARGAS Resolution N° 132/2017 that provides for a bonus to be implemented by Metrogas in favor of certain users who (a) record savings in their consumption; or (b) are beneficiaries of the Social Tariff.

On January 31, 2018, ENARGAS Resolution No. 249/2018 was published in the Official Gazette, which called for a public hearing to be held on February 22, 2018 to consider (i) the application of the Semi-Annual Tariff Adjustment Methodology, if applicable, for the adjustment of Metrogas tariffs; (ii) the application of the transfer to tariffs of the price of the purchased gas; and (iii) methodological alternatives for a more predictable billing of residential users' consumption.

Memorandum of Understanding for the Natural Gas Distribution License Contract (also known as "Memorandum of Understanding for the Comprehensive Contractual Renegotiation")

On March 30, 2017, and within the framework of the renegotiation process of the public service contracts established by the Emergency Law, its extensions and Decrees No. 367/2016 and N° 2/2017, Metrogas subscribed with the MINEM and with the Ministry of Finance, a Memorandum of Agreement for the Adaptation of the Natural Gas Distribution License Agreement (which contains the terms of the comprehensive renegotiation and conditions for the adjustment of the License Agreement. The Memorandum of Agreement is based on the 2008 Transitional Agreement, the 2014 Transitional Agreement, the 2016 Transitional Agreement and the 2017 Transitional Agreement.

The provisions contained in the Memorandum of Agreement, once it has entered into full force and effect after being ratified by the PEN, will be applied during the contractual period ranging from January 6, 2002 and the termination of the License Agreement.

A series of guidelines to be contemplated by the CRT process are established in the terms provided for therein.

The Metrogas tariff scheme resulting from the Integral Tariff Review according to the indicated guidelines will be applicable once all the procedures provided for the entry into force of the Memorandum of Agreement has been fulfilled. The CTR will become in full force and effect not later than December 31, 2017. In the event that ENARGAS provides for the phased and progressive application of the tariff increase resulting from the Comprehensive Tariff Review, the application of the last step may not exceed April 1, 2018.

As a condition prior to ratification, the Memorandum of Agreement for the Comprehensive Contractual Renegotiation provides for the suspension and withdrawal of all claims, appeals and complaints filed, pending or in the process of being executed, whether administrative, arbitral or judicial, in the Argentine Republic or abroad, which are founded or linked to the facts or provided measures, with respect to the License Agreement, as of the Emergency Law and/or in the annulment of the PPI Index (Producer Price Index of the United States of America). Moreover, the Memorandum of Agreement must be ratified by the Shareholders' Meeting of Metrogas, so that the PEN issues the Decree ratifying the terms of the Memorandum of Agreement. On April 27, 2017, the Shareholders' Meeting of Metrogas ratified the Memorandum of Agreement for the Adaptation of the Natural Gas Distribution License Agreement.

Finally, the Memorandum of Agreement provides for the Company's commitment to make, during the effective term of the License, plus its potential ten-year extension and within the area of its License, additional sustainable investments equivalent to the amount of the award rendered in the arbitration proceedings in re: "BG Group Plc. vs. The Argentine Republic (UNC 54 KGA)" with the proportional abatement percentage that would have been established in the payment agreement and excluding the amounts

corresponding to the default interest on the payment of the award. The amount and the plan for additional investments will be determined by ENARGAS at the proposal of the Company and they will not be included in the rate base.

The Memorandum of Agreement is subject to the controls established by the Emergency Law in order for the PEN to issue the ratification Decree. On March 28, 2018 Decree No. 252/2018 was published in the Official Gazette by which the PEN ratified the Memorandum of Agreement. Also, Resolution ENARGAS No. 300/2018 was published on that day, with the new tariffs scheme applicable as from April 1, 2018.

### Temporary economic assistance

MINEM Resolution No. 312—E/2016 was published in the Official Gazette, on December 30, 2016, which ordered a new temporary economic assistance to the Licensees of the Natural Gas Distribution Service through Networks for the period April-September 2016, for the purpose of funding the mandatory investments established (with respect to Metrogas) in ENARGAS Resolutions No. 3,726/2016 and No. 4,044/2016, and the payment to gas producers; all of which is on account of the CTR.

Under the terms of the Resolution, the transfer of the amounts assigned to Metrogas of 759 was applicable as long as, at the discretion of the ENARGAS, the financial situation of Metrogas that gave rise to the assistance was maintained taking into account the availability of funds to meet its investment obligations and payments to gas producers.

For the release of the funds corresponding to the temporary financial assistance, Metrogas had to file a sworn statement with the ENARGAS, in the terms of ENARGAS Note No. 106/2017, on the allocation to be given to the amounts required. In accordance with the ENARGAS criteria, if the sworn statements meet the requirements of MINEM Resolution No. 312—E/2016, they would be sent to the MINEM Hydrocarbons Secretariat in order to arrange for the transfer of the assistance. Likewise, the Resolution set forth that the Licensees could not distribute dividends under the terms of Resolution No. 31/2016 of the MINEM.

On March 31, 2017, Metrogas received the amount of 759 corresponding to MINEM Resolution No. 312—E/2016.

### New gas prices at the TSEP and Metrogas transition tariff schemes

Through Resolution No. 74—E/2017, the MINEM determined the new natural gas prices at the TSEP applicable from April 1, 2017 to the categories of users indicated therein. Moreover, it determined the new prices at the TSEP, subsidized for natural gas Residential users who register a saving in their consumption equal or superior to fifteen percent (15%) with respect to the same period in 2015. These new prices in the TSEP have been contemplated in ENARGAS Resolution No. 4,356/2017.

MINEM Resolution No. 474-E/2017 determined the new Gas prices at the TSEP as of December 1, 2017. In addition, a 10% discount is established on the Gas price for all categories of Residential users who register a saving in their consumption equal to or greater than 20% with respect to the same period in 2015, and it establishes that the bonus corresponding to the Social Tariff beneficiaries will be equivalent to: i) 100% of the Natural Gas price on the consumption block base determined by Resolution; and ii) 75% of the price of Natural Gas on a surplus consumption block of equal volume to that determined in paragraph i). Consumptions over and above the block indicated in paragraph ii) will be paid by 100%. It also establishes that the billing resulting from the application of the new tariff schedules must respect the limits established in Article 10 of Resolution No. 212 dated October 6, 2016 of the MINEM. These new prices in the TSEP have been contemplated in the ENARGAS Resolution No. 131/2017, which approved the Metrogas temporary tariff scheme, applicable as of December 1, 2017.

Procedure for the compensation of the lower revenues that the Distributors receive from their users for benefits and / or bonuses and for higher costs of unaccounted gas.

MINEM Resolution No. 508-E/2017, published on December 29, 2017, established the procedure for the compensation of the lower revenues that the Licensees of the Natural Gas Distribution Service through Networks receive from their users, as a product of: (i) the application of benefits and/or discounts to users arising from the regulations in force in the tariff area of the distribution service of natural gas through networks, and (ii) the higher UNG costs compared to those established for its recognition in the rates, applicable as of January 1, 2018.

#### Note from the ENARGAS on deferred collection to residential users

On August 25, 2017, the ENARGAS issued some Notes instructing the Licensees of the Gas Distribution Service ("Distributors"), by virtue of the presentation received from the MINEM, and in relation to the invoices to be issued from August 25, 2017 and until October 31, 2017 for residential users, to contemplate a fifty percent (50%) payment deferral of the total amount of the settlement corresponding to the billing period, without any interest. According to this instruction, the amounts subject to deferral must be included in the first invoice issued after October 31, 2017 in accordance with the guidelines related to the issuance of Public Service Settlement receipts for bimonthly invoicing with monthly payment obligations currently in force, i.e., in two equal and consecutive monthly installments. Such deferral is not applicable to residential users who are beneficiaries of the Social Tariff.

The Notes sent by the ENARGAS also contemplate that, if there is a financial impact on the Distributors' income by virtue of such deferral, such impact will be timely evaluated and assumed by the Argentine Government through the corresponding budgetary management.

On September 20, 2017, YPF submitted a note to the MINEM (with a copy to ENARGAS), requesting the intervention of the MINEM so that it adopts the necessary measures to prevent the instruction given by the ENARGAS from being misinterpreted by some Distributors to place on the Producers, such as YPF, the financial impact that such a measure could cause, through the unilateral postponement of the payment obligations by the Distributors. As of the date hereof, the note submitted by YPF is yet to be answered.

As a result of the changes introduced through MINEM Resolution No. 474—E/2017 and ENARGAS Resolutions No. 131/2017 and No. 132/2017, and the guidelines established in the Terms and Conditions MINEM, Resolution No. 508-E / 2017 was published on December 29, 2017, which establishes the procedure for the compensation of the lower revenues that the Licensees of the Natural Gas Distribution Service through Networks receive from their users, as a result of: (i) the application of benefits and / or discounts to users resulting from the regulations in force regarding the tariffs applicable to the natural gas distribution service through networks; and (ii) the higher costs of the Unaccounted Natural Gas ("UNG") with respect to those established for its recognition in the tariffs.

In accordance with the compensation procedure, the Distribution Licensees must inform to the ENARGAS within the terms established therein and based on the annualized monthly consumption and as a sworn statement, the amounts required to compensate the aforementioned differences. The same information regime is adopted in relation to UNG.

Thus, in order to calculate compensations for the amount that they do not receive for the discounts in billing as well as for the UNG differences, compensation is established resulting from the difference between the purchase price to the natural gas producer and the sale to its customers.

## Benchmark prices for the butane commercialization chain

On April 5, 2017, the Secretariat of Hydrocarbon Resources published Resolution No. 56-E/2017 in the Official Gazette, establishing new maximum benchmark prices for the different segments of the butane commercialization chain to be bottled in 10, 12 and 15 kg bottles under the Household Program (Decree No. 470/2015 and former Energy Secretariat Resolution No. 49/2015), and modifying the benchmark prices established in former Energy Secretariat Resolution No. 70/2015. The new maximum benchmark prices for the Company are Ps. 2,568/TN for butane and Ps. 2,410/TN for propane. For fractionators such as YPF GAS S.A., the prices established by Resolution No. 56-E/2017 are Ps. 63.89 for 10 kg bottles, Ps. 76.67 for 12 kg bottles and Ps. 95.84 for 15 kg bottles.

On June 7, 2017, the Secretariat of Hydrocarbon Resources published Resolution No. 75/2017 in the Official Gazette, which modifies the regulations applicable to the Household Program (former Energy Secretariat Resolution No. 49/2015) and provides that the adjustment of benchmark prices applicable to the different segments of the butane commercialization chain to be bottled in 10 and 12 kg bottles will not be implemented automatically in quarterly periods. Instead, those adjustments will be made at the discretion of the Secretariat of Hydrocarbon Resources in its capacity as enforcement authority of the Household Program. In addition, the resolution establishes that the adjustment of benchmark prices for LPG producers and fractionators on account of the Comprehensive Tariff Review established by the Household Program in its regulations will take place only after the prior analysis of cost variations and their incidence, and taking into account regional, distribution and logistical factors.

MINEM Resolution No. 287-E/2017, published on December 1, 2017, established new maximum benchmark prices and compensations for butane and propane producers effective from December 1, 2017, and introduced amendments to the Annex to the Regulation of the Bottle-to-Bottle Program approved by Resolution No. 49/2015, among which, it is prohibited to charge the distributors for any additional service whatever its denomination, if in doing so the maximum benchmark prices and the maximum allowed deviations are exceeded.

Natural gas export administration and domestic supply priorities

In March 2004, the Argentine Secretariat of Energy issued S.E. Resolution No. 265/04 adopting measures intended to ensure the adequate supply of natural gas to the domestic market and regulate its consequences on electricity wholesale prices. Among the measures adopted were:

- the suspension of all exports of surplus natural gas;
- the suspension of automatic approvals of requests to export natural gas;
- the suspension of all applications for new authorizations to export natural gas, filed or to be filed before the Argentine Secretariat of Energy; and
- the authorization to the Undersecretariat of Fuels to create a rationalization plan of gas exports and transportation capacity.

In March 2004, the Undersecretariat of Fuels, pursuant to the authority given to it under S.E. Resolution No. 265/04, issued S.S.C. Regulation No. 27/04 establishing a rationalization plan of gas exports and transportation capacity. Among other things, S.S.C. Regulation No. 27/04 established a limit on natural gas export authorizations, which, absent an express authorization by the Undersecretariat of Fuels, may not be executed for volumes exceeding exports registered during 2003.

In June 2004, the Argentine Secretariat of Energy issued S.E. Resolution No. 659/04, which established a new program to assure natural gas supply to the domestic market (which substitutes for the program created by S.S.C. Regulation No. 27/04). Under S.E. Resolution No. 659/04 (amended by S.E. Resolution No. 1,681/04), natural gas exports may be restricted due to shortages of natural gas in the domestic market, because exporting producers may be required to supply additional volumes of natural gas to the domestic market beyond those that they are contractually committed to supply. The export of natural gas under current export permits is conditioned on the fulfillment of additional supply requirements imposed on exporting producers by governmental authorities.

This program was further amended and supplemented by S.E. Resolution No. 752/05 issued by the Argentine Secretariat of Energy in May 2005, which further reduced the ability of producers to export natural gas, and created a mechanism under which the Argentine Secretariat of Energy may require exporting producers to supply additional volumes to domestic consumers during a seasonal period ("Permanent Additional Supply"), which volumes of natural gas are also not committed by the exporting producers. Based on the provisions of Rule No. 27/04, S.E. Resolution No. 659/04 and S.E. Resolution No. 752/05, the Argentine Secretariat of Energy and/or the Undersecretariat of Fuels have instructed us to redirect natural gas export volumes to the internal market, thereby affecting natural gas export commitments. We have challenged the validity of the aforementioned regulations and resolutions, and have invoked the occurrence of a force majeure event under the corresponding natural gas export purchase and sale agreements. The counterparties to such agreements have rejected our position. See "Item 8. Financial Information—Legal Proceedings."

S.E. Resolution No. 752/05 also establishes (i) a special market, open and anonymous, for compressed natural gas stations to purchase natural gas under regulated commercial conditions, with the demand being ensured by the Argentine Secretariat of Energy through Permanent Additional Supply required of exporting producers, and (ii) a mechanism of standardized irrevocable offers for electric power generators and industrial and commercial consumers to obtain supply of natural gas, with the demand being ensured by the Argentine Secretariat of Energy through the issuance of the Permanent Additional Supply mentioned above.

Pursuant to the standardized irrevocable offers procedure mentioned above, which operates at the MEG, any direct consumer may bid for a term gas purchase at the export average gas price, net of withholdings by basin. The volume necessary to satisfy the standardized irrevocable offers which have not been satisfied will be required as a Permanent Additional Supply only until the end of the seasonal period during which the unsatisfied requests should be made (October–April or May–September). Such Permanent Additional Supply will be requested from the producers that export gas and that inject the natural gas from the basins that are able to supply those unsatisfied irrevocable offers. S.E. Resolution No. 1886/06, published on January 4, 2007, extended the term of effectiveness of this mechanism of standardized irrevocable offers until 2016, and empowered the Undersecretariat of Fuels to suspend its effectiveness subject to the satisfaction of internal demand of natural gas achieved by means of regulations, agreements or due to the discovery of reserves.

By means of S.E. Resolution No. 1329/06, later supplemented by S.S.C. Note No. 1011/07, the Argentine Secretariat of Energy required producers to give first priority in their injections of natural gas into the gas pipelines to certain preferential consumers and obligated transportation companies to guarantee these priorities through the allocation of transportation capacity. In general, these regulations subordinate all exports of natural gas to the prior delivery of natural gas volumes that are sufficient to satisfy domestic market demand.

Also, beginning during the severe Argentine winter in 2007 and continuing thereafter, we and most gas producers, as well as the transportation companies in Argentina, received instructions from the government to decrease exports, except for certain volumes addressed to satisfy Chilean residential consumption and other specific consumption.

National Decree No. 893/2016, dated July 25, 2016, determined that MINEM would be empowered to regulate the award of export permits for the following purposes: i) to deliver assistance with natural gas emergency situations of foreign countries, and ii) to replace natural local transport restrictions by means of utilizing foreign transportation infrastructure to ease transportation of natural gas within the Argentine market and allow for an increase in local production.

On January 8, 2017, export duties on hydrocarbon exports established by Law No. 26,732 ceased to be enforceable. Thereafter, there will be no export duties on natural gas exports.

On January 13, 2017, MINEM published Resolution No. 8/2017 regulated National Decree No. 893/2016, establishing an especial procedure to grant natural gas export permits subject to import commitments. Solicitors for both types of permits will have to commit to import the volumes of natural gas exported and to indemnify the Argentine government for breaching such obligation, including the payment of 150% of the import costs incurred by the Argentine government to replace the outstanding natural gas. Permits would be extended for a maximum period of two years and are subject to possible termination in the event that public interest makes it convenient for local market supply in accordance with MINEM's criteria.

On November 27, 2017, MINEM published Decree No. 962/2017 in the Official Gazette, which, among other aspects, modifies Article 3 of the Regulatory Decree of the gas law, establishing the following principles for export authorizations: 1) export authorizations will be issued by the MINEM once the applications have been evaluated; 2) the export agreements that imply the construction of new facilities and/or new connections to the gas pipelines, or the use of any of the existing systems, or other transportation alternatives, will be approved by the MINEM with the intervention of ENARGAS; 3) the authorizations issued by the MINEM may provide for the export of gas surplus to the amounts established therein, provided they are subject to interruption when there are internal supply problems.

In this case, it will not be necessary to obtain the approval of each surplus export transaction in the authorization, only to submit to ENARGAS, for informative purposes only, the respective contract evidencing the existence of a condition relating to the possibility of interruption should arise and the absence of compensation in case of such interruption. The modifications introduced by Decree No. 962/2017 do not modify the regime of temporary export permits subject to export commitments provided for in Decree No. 893/2016.

### Liquefied petroleum gas

Law No. 26,020, enacted on March 9, 2005, sets forth the regulatory framework for the industry and commercialization of LPG. This law regulates the activities of production, bottling, transportation, storage, distribution, and commercialization of LPG in Argentina and declares such activities to be of public interest. Among other things, the law:

- creates the registry of LPG bottlers, obliging LPG bottlers to register the bottles of their property;
- protects the trademarks of LPG bottlers;
- creates a reference price system, pursuant to which the Argentine Secretariat of Energy shall periodically publish reference prices for LPG sold in bottles of 45 kilograms or less;
- requires the Argentine Secretariat of Energy to comply with the following tasks: (i) create LPG transfer mechanisms, in order to guarantee access to the product to all the agents of the supply chain; (ii) establish mechanisms for the stabilization of LPG prices charged to local LPG bottlers; and (iii) together with the CNDC, analyze the composition of the LPG market and its behavior, in order to establish limitations on market concentration in each phase, or limitations to the vertical integration throughout the chain of the LPG industry (such limitations apply to affiliates, subsidiaries and controlled companies);

- grants open access to LPG storage facilities; and
- creates a fiduciary fund to finance bottled LPG consumption for low-income communities in Argentina and the extension of the natural gas distribution network to new areas, where technically possible and economically feasible. The fiduciary fund is funded through the following mechanisms: (i) penalties established by Law No. 26,020, (ii) assignments from the General State Budget, (iii) funds from special credit programs that may be arranged with national or international institutions, and (iv) funds that may be assessed by the Argentine Secretariat of Energy on participants in the LPG industry.

The Argentine Secretariat of Energy established, through several subsequent resolutions, reference prices applicable to sales of LPG bottles of less than 45 kilograms, and to sales of bulk LPG exclusively to LPG bottlers. Also, the Argentine Secretariat of Energy approved the method for calculating the LPG export parity, to be updated monthly by the Undersecretariat of Fuels. In 2007, the Argentine Secretariat of Energy increased the LPG volumes to be sold to bottlers at the reference prices set forth in the unconventional above mentioned resolutions.

Disposition No. 168/05 of the Undersecretariat of Fuels requires companies intending to export LPG to first obtain an authorization from the Argentine Secretariat of Energy. Companies seeking to export LPG must first demonstrate that the local demand is satisfied or that an offer to sell LPG to local demand has been made and rejected.

On September 19, 2008, the Secretariat of Energy and Argentine LPG producers entered into the Complementary Agreement which, among other objectives, seeks to stabilize the price of LPG in the domestic market. The Complementary Agreement applies only to LPG sold to bottlers that declare their intention to bottle such LPG in LPG bottles of 10, 12 or 15 kilograms. The Complementary Agreement requires LPG producers to supply LPG bottlers with a prescribed volume and accept the price per ton set forth in the Complementary Agreement. The Complementary Agreement was then extended in the following years until 2015 with certain modifications in quantities and prices to be provided every year.

On April 7, 2015, Resolution No. 73 of the Argentine Secretariat of Energy terminated the fiduciary agreement to which YPF was a party as a natural gas producer, contributing funds for the payment of compensation for LPG producers and bottlers. As a result, natural gas producers that were parties to the Complementary Agreement are no longer required to contribute funds. At the same time, a new program for the provision of bottled LPG at reference prices was established by Decree No. 470/2015 dated March 31, 2015. This decree established that LPG producers and bottlers provide LPG at reference prices in the domestic market, gradually increasing the volumes provided in 2014.

This new program for the provision of bottled LPG has been modified by different succeeding resolutions which modified the reference prices and the methodology for reference price future updates, among other changes. These resolutions are: Hydrocarbon Secretary Resolution No. 56-E/2017, No. 75/2017 and MINEM Resolution No. 287-E/2017.

# **Electricity**

By means of Decree No.134/2015, published in December 2015, the Executive Branch declared the National Electric System Emergency through December 31, 2017. This decree instructs the Minister of Energy to develop and propose measures and to ensure adequate power supplies.

The following regulations were issued by the Ministry of Energy and its Secretariat of Electric Power ("SEE") as measures to the National Electric System Emergency among others: MINEM No.6/2016; SEE No.21/2016; SEE No.22/2016; SEE No.19/2017 and SEE No.256/2017.

Through Resolution No. 06/2016, published in January 2016, MINEM established new seasonal reference prices of power and energy in the MEM from February 1, 2016 to April 30, 2016. The resolution also establishes a stimulus plan, with reference prices for residential consumers that reduce their consumption over the same month in 2015, and a social tariff.

Though Resolution SEE No. 21/2016, dated February 2016, the Secretariat of Electric Power called for a public bid for the installation of new thermic power generation and associated electric energy production that may confirm availability for summer 2016/2017, winter 2017 and summer 2017/2018.

Through Resolution No. 41/2016, published in January 2016, which modifies Resolution No. 06/2016, MINEM established new seasonal reference prices of power and energy in the MEM from May 1, 2016 to October 31, 2016. It also confirms the applicability of the stimulus plan and social tariff until October 31, 2016.

Through Resolution No. 20/2017, published in January 2017, MINEM established, among other things, new seasonal reference prices of power and energy in the MEM from February 1, 2017 to April 30, 2017.

National Decree No. 531/2016, dated March 31, 2016, regulates Law No. 27,191 (regarding the national incentive for the use of renewable sources to generate electricity) and, among other things, establishes that "big consumers" shall contract for or co-generate renewable energy to comply with the obligation to consume 8% of its electricity from renewable sources, by December 2017. If such requirement is not met, the "big consumers" will be punished with a fine equal to the variable cost of producing the unmet electricity by a thermos-electrical power plant with imported gasoil fuel.

Argentine Secretariat of Electric Power Resolution No. 22/2016, dated March 30, 2016, modified Resolution No.482/2015, adjusting the remuneration components for power generators that adhered to Resolutions No. 95/2013, 529/2014 and 482/2015, retroactively to February 2016.

MINEM Resolution No. 41/2016, dated April 13, 2016, establishes new prices on the natural gas at TSEP for each basin which would then be acquired for electric generation purposes and therefore commercialized within the MEM or generally destined to the satisfy the electricity distribution services.

SEE Resolution No.420/2016, published on November 2016, called for projects which may contribute to the electric market cost reduction and the increase in the Argentine electric system reliance.

Through Resolution No. 19/2017, published in January 2017, MINEM, through its Secretariat of Electric Power established a new set of prices for installed electricity generation facilities for any new contracts regarding guaranteed energy offers. Prices have been dollarized and represent an increase with respect to those in force in 2016. Resolution No. 19/2017 also determined a stimulus mechanism towards operative efficiency.

Through Resolution No. 256/2017, published in April 2017, MINEM established, among other things, new seasonal reference prices of power and energy in the MEM from May 1, 2017 until October 31, 2017.

Through Resolution SEE No. 287/2017, dated May 2017, within the framework of Resolution No. 420/2016 the Electric Power Secretariat established a public bid for projects willing to sell electricity produced by co-generation or close cycle projects.

Through Resolution No.1091/2017, published in November 2017, MINEM established, among other things, new seasonal reference prices of power and energy in the MEM from November 1, 2017 to April 30, 2018. It also establishes the Social Tariff Subsidy and the Stimulus Plan discounts for the period running from December 1, 2017 through April 30, 2018.

Electricity Secretary Resolution 926-E/2017, dated October 17, 2017 authorized CAMMESA the signature of purchase power agreements for YPF Energía Eléctrica S.A. co-generation project in La Plata, Buenos Aires Province and YGEN Eléctrica S.R.L. close cycle project in El Bracho, Province of Tucumán, awarded in Resolution No. 287 public bid framework.

## Argentine Environmental Regulations

The enactment of Articles 41 and 43 in the National Constitution, as amended in 1994, as well as new federal, provincial and municipal legislation, has strengthened the legal framework dealing with damage to the environment. Legislative and government agencies have become more vigilant in enforcing the laws and regulations regarding the environment, increasing sanctions for environmental violations.

Under the amended Articles 41 and 43 of the National Constitution, all Argentine inhabitants have both the right to an undamaged environment and a duty to protect it. The primary obligation of any person held liable for environmental damage is to rectify such damage according to and within the scope of applicable law. The federal government sets forth the minimum standards for the protection of the environment and the provinces and municipalities establish specific standards and implementing regulations.

Federal, provincial and municipal laws and regulations relating to environmental quality in Argentina affect our operations. These laws and regulations set standards for certain aspects of environmental quality, provide for penalties and other liabilities for the violation of such standards, and establish remedial obligations in certain circumstances.

In general, we are subject to the requirements of the following federal environmental regulations (including the regulations issued thereunder):

- National Constitution (Articles 41 and 43);
- Law No. 25,675 on National Environmental Policy;
- Law No. 25,612 on Integrated Management of Industrial and Service Industry Waste;
- Law No. 24,051 on Hazardous Waste;
- Law No. 20,284 on Clean Air;
- Law No. 25,688 on Environmental Management of Waters;
- Law No. 25,670 on the Management and Elimination of Polychlorinated Biphenyls;
- · Criminal Code; and
- the Argentine Civil and Comercial Code, which sets forth the general rules of tort law.

These laws address environmental issues, including limits on the discharge of waste associated with oil and gas operations, investigation and cleanup of hazardous substances, workplace safety and health, natural resource damages claims and toxic tort liabilities. Furthermore, these laws typically require compliance with associated regulations and permits and provide for the imposition of penalties in case of non-compliance.

In addition, we are subject to various other provincial and municipal regulations, including those relating to gas venting, oil spills and well abandonment, among other matters.

By Resolution No. 404/94, the Argentine Secretariat of Energy amended Resolution No. 419/93, and created the Registry of Independent Professionals and Safety Auditing Companies (*Registro de Profesionales Independientes y Empresas Auditoras de Seguridad*), which may act with respect to areas of hydrocarbons storage, oil refineries, gas stations, fuel commercialization plants and plants for fractionation of LPG in containers or cylinders. The Resolution provides that external audits of oil refineries, gas stations and all fuel storage plants must be carried out by professionals registered in the Registry. Domestic fuel manufacturing companies and companies that sell fuels are prohibited from supplying these products to any station failing to comply with its obligations. Penalties for failure to perform the audits and remedial or safety tasks include the disqualification of plants or gas stations. In addition, a set of obligations was established regarding underground fuel storage systems, including a mechanism for instant notification in cases of loss or suspicion of loss from the storage facilities.

On July 19, 2001, the Secretariat of Environmental Policy of the province of Buenos Aires issued Resolution No. 1037/01 ordering us to clean up certain areas adjacent to the La Plata refinery. The resolution was appealed through an administrative procedure which has not yet been resolved. Nevertheless, we have commenced certain actions in order to identify potential technical solutions for the treatment of the historical contamination, while reserving that the remediation must be made by the parties responsible for the environmental damage. Under current law, the Argentine government has the obligation to indemnify us against any liability and hold us harmless for events and claims arising prior to January 1, 1991, according to the Privatization Law.

During 2005, the Argentine Secretariat of Energy, by means of Resolution No. 785/05, created the National Program of Hydrocarbons Warehousing Aerial Tank Loss Control, a measure aimed at reducing and correcting environmental pollution caused by hydrocarbons warehousing-aerial tanks.

The description of the material Argentine environmental regulations is only a summary and does not purport to be a comprehensive description of the Argentine environmental regulatory framework. The summary is based upon Argentine regulations related to environmental issues as in effect on the date of this annual report, and such regulations are subject to change.

#### **Taxation**

Holders of exploration permits and production concessions are subject to federal, provincial and municipal taxes and regular customs duties on imports. The Hydrocarbons Law grants such holders a legal guarantee against new taxes and certain tax increases at the provincial and municipal levels, except in the case of a general increase in taxes.

Pursuant to Sections 57 and 58 of the Hydrocarbons Law, holders of exploration permits and production concessions must pay an annual surface fee that is based on acreage of each block and which varies depending on the phase of the operation, i.e., exploration or production, and in the case of the former, depending on the relevant period of the exploration permit. On October 17, 2007, the Official Gazette published Executive Decree No. 1,454/07, which significantly increased the amount of exploration and production surface fees expressed in Argentine pesos that are payable to the different jurisdictions where the hydrocarbon fields are located. Law No. 27,007 published in the Official Gazette on October 31, 2014 updated amounts that must be paid pursuant to Sections 57 and 58 of the Hydrocarbons Law. See "—Exploration and Production."

In addition, "net profit" (as defined in the Hydrocarbons Law) of holders of permits, or concessions accruing from activity as such holders, might be subject to the application of a special 55% income tax. This tax has never been applied. Each permit or concession granted to an entity other than us has provided that the holder thereof is subject instead to the general Argentine tax regime, and a decree of the National Executive Office provides that we are also subject to the general Argentine tax regime.

Following the introduction of market prices for downstream petroleum products in connection with the deregulation of the petroleum industry, Law No. 23,966 established a volume-based tax on transfers of certain types of fuel, replacing the prior regime, which was based on the regulated price. Law No. 25,745 modified, effective as of August 2003, the mechanism for calculating the tax, replacing the old fixed-value per liter according to the type of fuel for a percentage to apply to the sales price, maintaining the old fixed value as the minimum tax. Through Laws No. 26,028 and 26,181, new taxes on diesel and gasolines sales have been established.

See additionaly Note 30.1 to the Audited Consolidated Financial Statements.

### Reduction in tax rates for fuels

On December 30, 2014, Decree No. 2579/2014 set forth a reduction in fuel taxes established by Laws No. 23,966 and 26,181 with respect to diesel and unleaded gasoline products. The reductions took effect on January 1, 2015.

On December 29, 2017, Law No. 27,430 introducing modifications to the fuel tax was published in the Official Gazette as follow (Laws No. 26,028 and 26,181 were repealed):

- 1. A new tax was created (the so called "CO2 Tax"). This new tax essentially applies to Fuel Oil, coke and coal, as well as the same fuels taxed by Law 23,966.
- 2. Starting in March 2018, the fuel tax and CO2 Tax will be calculated as a fixed amount per liter instead of as a percentage of the sales price.

### **Export taxes**

Export duties on hydrocarbons were established in 2002 by Law No. 25,561 of Public Emergency, for a term of five years. The regime varied during in different periods until it ceased after the second extension expired on January 7, 2017. As a result, export duties on hydrocarbons are no longer applied.

We cannot give any assurances as to future levels of export taxes.

# Repatriation of Foreign Currency

Decree No. 893/2017, published on November 1, 2017, completely revoked the different types of requirements and restrictions which were imposed from time to time in Argentina, with respect to the repatriation of foreign currency proceeds derived from exports.

Particularly concerning the uspstream oil industry, Executive Decree No. 1,589/89, had allowed us and other companies engaged in oil and gas production activities in Argentina to freely sell and dispose of the hydrocarbons we produce. Additionally, under Decree No. 1,589/89, we and other oil producers were entitled to keep up to 70% of foreign currency proceeds received from crude oil and gas export sales outside of Argentina, but were required, at that time, to repatriate the remaining 30% through the exchange markets of Argentina.

After that, Decree No. 1722/2011 of October 26, 2011 had required all oil and gas companies (including YPF to repatriate 100% of their foreign currency export receivables. Although such mandatory requirement imposed by Decree No. 1722/2011 remained in force and effect until late 2017, its practical application had been substantially relaxed during 2016 and 2017, specially buy the Resolution No. 47-E/2017 7 (issued by the Argentine Secretariat of Commerce) which for the repatriation of foreign currency export receivables had significantly extended, from 30 calendar days as of December 2015, up to 10 years on December 2017.

However, as a result of Decree No., 893/2017 described in the first paragraph, complemented by the Argentine Central Bank's Communication "A" 6244, there are currently no requirements regarding mandatory repatriation of foreign currency export receivables.

#### ITEM 4A. Unresolved Staff Comments.

YPF does not have any unresolved Staff comments.

## ITEM 5. Operating and Financial Review and Prospects

The following discussion should be read in conjunction with our Audited Consolidated Financial Statements included in this annual report.

#### Overview

We are Argentina's leading energy company, operating a fully integrated oil and gas chain with leading market positions across the domestic upstream and downstream segments. See "Item 4. Information on the Company—History and Development of YPF—Overview."

#### **Presentation of Financial Information**

Our Audited Consolidated Financial Statements are prepared in accordance with IFRS as issued by the IASB. Our Audited Consolidated Financial Statements are fully compliant with IFRS. See Note 2.a to the Audited Consolidated Financial Statements for additional information.

The financial data contained in this annual report as of December 31, 2017, 2016 and 2015 and for the years ended December 31, 2017, 2016 and 2015 has been derived from our Audited Consolidated Financial Statements included in this annual report, which were approved at the Board of Directors' meeting and authorized to be issued on March 2, 2018. These consolidated financial statements, which comprise those presented before the CNV on March 2, 2018, and an update of Note 34 – "Subsequent events" and the inclusion of Note 35 – "Supplemental information on oil and gas producing activities (unaudited)", have been approved by Management on April 23, 2018.

Additionally, certain oil and gas disclosures are included in Note 35 to the Audited Consolidated Financial Statements included in this annual report under the heading "Supplemental information on oil and gas producing activities (unaudited)."

# **Segment Reporting**

In connection with our segment reporting, see Note 5 to our Audited Consolidated Financial Statements and "Item 4. Information on the Company—Business Organization."

Sales between business segments are made at internal transfer prices established by us, which generally seek to approximate market prices.

## **Summarized Statement of Comprehensive Income**

|   | For the Year Ended December 31, |           |           |
|---|---------------------------------|-----------|-----------|
|   | 2017                            | 2016      | 2015      |
|   | (in millions of pesos)          |           |           |
| Revenues  | 252,813                         | 210,100   | 156,136   |
| Cost  | (211,812)                       | (177,304) | (119,537) |
| Gross profit  | 41,001                          | 32,796    | 36,599    |
| Administrative expenses   | (8,736)                         | (7,126)   | (5,586)   |
| Selling expenses  | (17,954)                        | (15,212)  | (11,099)  |
| Exploration expenses  | (2,456)                         | (3,155)   | (2,473)   |
| Recovery / (Impairment) of property, plant and equipment and intangible |                                 |           |           |
| assets  | 5,032                           | (34,943)  | (2,535)   |
| Other net operating results   | (814)                           | 3,394     | 1,682     |
| Operating profit (loss)   | 16,073                          | (24,246)  | 16,588    |
| Income from equity interest in associates and joint ventures            | 1,428                           | 588       | 318       |
| Net financial results   | (8,798)                         | (6,146)   | 12,157    |
| Net profit / (loss) before income tax                                   | 8,703                           | (29,804)  | 29,063    |
| Income tax  | 3,969                           | 1,425     | (24,637)  |
| Net profit / (loss) for the year  | 12,672                          | (28,379)  | 4,426     |
| Total other comprehensive income for the year                           | 21,917                          | 27,414    | 43,758    |
| Total comprehensive income / (loss) for the year                        | 34,589                          | (965)     | 48,184    |

# **Factors Affecting Our Operations**

Our operations are affected by a number of factors, including:

- the volume of crude oil, oil byproducts and natural gas we produce and sell;
- regulation of domestic pricing, mainly related to gas;
- export administration by the Argentine government and domestic supply requirements;
- international and domestic prices of crude oil and oil products;
- our capital expenditures and financing availability;
- cost increases;
- domestic market demand for hydrocarbon products;
- operational risks, labor strikes and other forms of public protest in Argentina;
- taxes, including export taxes;
- · regulation of capital flows;
- the Argentine peso/U.S. dollar exchange rate;
- the revocation of our concessions in case of noncompliance with certain provisions as set by laws and agreements with provinces in Argentina;
- dependence on the infrastructure and logistics network used to deliver our products;
- · laws and regulations affecting our operations, such us import regulations; and
- interest rates.

Our operating profit in 2017 was Ps. 16,073 million, compared to a loss of Ps. 24,246 million in 2016. This increase was attributable to the factors explained in "-Principal Income Statement Line Items-Operating profit (loss)".

Our business is inherently volatile due to the influence of external factors, such as internal demand, market prices, availability of financial resources for our business plan and its corresponding costs and government regulations. Consequently, our past financial condition, results of operations and the trends indicated by such results and financial condition may not be indicative of the financial conditions, results of operations or trends in future periods. We will continue to focus on increasing productivity and efficiency in 2018. We believe that we need to create a more efficient industry that is sustainable in a lower crude oil price environment. Therefore, we estimate that we will not see production growth this year (estimated to be around 2% - 3% lower than 2017 on a boe basis). We expect to increase our capital expenditures during 2018 compared to 2017, reaching approximately U.S.\$4 billion, mainly in our Upstream operations, considering the startup of new non-conventional projects. In addition, we expect a decrease of capital expenditures in our Gas and Power segment (mainly in conection with projects that will be executed by our former controlled company YPF Energía Eléctrica (See "Item 4—Information of the Company—Gas and Power—YPF in Power Generation.") which are not going to be consolidated any more since 2018.

Most of our shale oil production comes from the Loma Campana area through our joint venture with Chevron, which was the first and largest farm-out. As we gathered more experience, drilling activity migrated to horizontal wells, obtaining wells with a promising relation between expected EURs and well costs. As we pushed forward several initiatives to improve efficiency and significantly reduce well costs, we have been reducing the cost per fracture reaching at the end of 2017 an average cost of approximately U.S.\$1.4 thousand for lateral foot (approximately 54% lower than the average cost in 2015). Our strategy is to continue to invest and de-risk, but at a slower pace than some years ago.

Since October 2017, Crude oil prices in Argentina have been based on import parity and export parity references, , taking into account that domestic prices and costs had previously been decoupled from international prices. We expect to implement fuel price increases following international oil prices, Argentine peso and biofuel pricing evolution. We expect to preserve refining margins and do not expect refining margins to decrease going forward. Nevertheless, we cannot assure we will have the chance to implement those increases, principally considering the relevant conditions that affect the domestic market such as domestic demand and growth, among others.

See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions".

Notwithstanding the foregoing, there can be no assurance that our production, costs, prices or our estimates of future cash flows from operations, among other items, could not be affected by factors beyond our control and, as such, differ from our estimates. See "Item 3. Key Information—Risk Factors."

#### Macroeconomic conditions

Substantially all of our revenues are derived from our operations in Argentina and are therefore subject to prevailing macroeconomic conditions in Argentina. Changes in economic, political and regulatory conditions in Argentina and measures taken by the Argentine government have had and are expected to continue to have a significant impact on us.

The Argentine economy has experienced significant volatility in past decades, characterized by periods of low or negative growth and high variable levels of inflation. Inflation reached its peak in the late 1980s and early 1990s. Due to inflationary pressures prior to the 1990s, the Argentine currency devalued repeatedly and macroeconomic instability led to broad fluctuations in the real exchange rate of the Argentine currency relative to the U.S. dollar. To address these pressures, past Argentine governments implemented various plans and utilized a number of exchange rate systems.

In the fourth quarter of 1998, adverse international financial conditions caused the Argentine economy to enter into a recession and GDP to decrease between 1999 and 2001. By the end of 2001, Argentina suffered a profound deterioration in social and economic conditions, accompanied by high political and economic instability. The restrictions on the withdrawal of bank deposits, the imposition of exchange controls, the suspension of the payment of Argentina's public debt and the abrogation of the peso's one-to-one peg to the dollar (with the consequent devaluation of the peso against the dollar) caused a decline in economic activity. Real GDP declined by 10.9% in 2002, annual inflation rose to 41%, the exchange rate continued to be highly volatile, and the unemployment rate rose to more than 20%. The political and economic instability not only curtailed commercial and financial activities in Argentina but also severely restricted the country's access to international financing.

Strong economic growth in the world's developed economies, favorable raw material prices from 2003 through the first half of 2008 and the implementation of new macroeconomic policies paved the way for Argentina's economic recovery. Real GDP grew at an average cumulative rate of 8.5% between 2003 and 2008. As a result of the crisis in the global economy, Argentina's real GDP growth rate decelerated in 2009 to 0.9%, but recovered in 2010 and 2011 growing by approximately 9% each year.

After the growth in 2010 and 2011, several factors led to a decrease in growth of the Argentine economy in 2012 and 2013. The growth of the global economy was not as strong as expected following the easing of U.S. economic crisis that started in 2007, and financial volatility continued at high levels. The decline in the price of Brent crude to below U.S.\$50 per barrel, among other things, presented a complicated international scenario that creates uncertainty about the future performance, including potential downside risks, of developed and emerging economies, including Argentina.

Mauricio Macri was elected president of Argentina, and his administration took office on December 10, 2015. The new administration has been facing and continues to face challenges in respect of Argentina's economy, such as reducing the rate of inflation, the devaluation of the Argentine peso, improving the competitiveness of the local industries and normalizing or adjusting prices of certain goods and services, such as electricity and natural gas for certain residential consumers of Argentina. Some of the measures necessary to meet these objectives were and continue to be potentially unpopular and could generate political and social opposition or unrest. As a result, it is difficult to predict the impact of these measures on the Argentine economy as a whole and the energy sector in particular, including revisions and reforms to pricing mechanisms for oil and gas and elimination of energy subsidies, as well as other policy changes that may affect the energy sector. This includes decisions that the new administration has already taken, such as the elimination of exchange restrictions, the partial adjustment of gas and electricity prices, the liberalization of prices for oil and its main fuel products, or future measures it may take to address inflation or changes to the exchange rate. Uncertainty regarding the measures to be taken on the economy could further lead to price volatility of Argentine companies, including in particular companies like ours in the energy sector, given the high level of regulation. In addition, there can be no assurance that current government programs and policies that apply to the oil and gas sector will continue to be in place in the future. See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business-Limitations on local pricing in Argentina may adversely affect our results of operations" and "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business— We are exposed to the effects of fluctuations in the prices of oil, gas and oil products."

According to the IMF's estimates, global economic growth reached 3.1% in 2015, although the rate of growth or, in some cases, contraction, varied significantly from region to region. On March 27, 2014, the Argentine government announced a new method of calculating GDP by reference to 2004 as the base year (as opposed to 1993, which was the base reference year under the prior method of calculating GDP). However, on January 7, 2016 through Decree No. 55/2016, the new leadership of INDEC issued a report declaring a "national statistical emergency." INDEC stated that since 2006 its administration has been irregular and due to that they revised the published data from 2005 to 2015. As a result of this revision, the GDP growth rate for 2013 and 2014 was revised from 2.9% to 2.4% and from 0.5% to a decline rate of 2.5%, respectively. As of the date of this annual report, Argentina's provisional GDP growth rate for 2015, the preliminary GDP growth rate for 2016 and the preliminary GDP growth rate for 2017 published by INDEC were positive 2.6%, negative 2.3% and positive 2.9%, respectively.

The official exchange rate of the Argentine peso to the U.S. dollar as of December 31, 2016 was Ps. 15.85 per U.S.\$1.00, a devaluation of approximately 21.9% compared to Ps. 13.01 per U.S.\$1.00 as of December 31, 2015. In addition, as of December 31, 2017, the peso fell to Ps. 18.77 per U.S.\$1.00, a devaluation of approximately 18.4% compared to the rate as of the end of 2016.

Argentina has confronted and continues to confront inflationary pressures. According to inflation data published by INDEC, from 2008 to 2013, the Argentine consumer price index ("CPI") increased 7.2%, 7.7%, 10.9%, 9.5%, 10.8% and 10.9%, respectively, and the wholesale price index increased 8.8%, 10.3%, 14.5%, 12.7%, 13.1% and 14.7%, respectively. In 2014, the Argentine government established a new consumer price index known as the IPCNU that more broadly reflects consumer prices by considering price information from the 24 provinces of the country, divided into six regions. According to INDEC, the IPCNU increased 23.9% in 2014. In 2015, the new administration of INDEC published an alternative CPI that showed an increase of 26.9%. In 2016, the alternative CPI, from January to April, increased 4.1%, 4.0%, 3.3% and 6.5%, respectively, and from May to December, a new CPI was published that showed increases of 4,2%, 3.1%, 2.0%, 0.2%, 1.1%, 2.4%, 1,6% and 1.2% respectively. In 2017, the CPI increased 24.8%. In January, February and March 2018, the CPI increased 1.8%, 2.4% and 2.3%, respectively.

The wholesale price index increased 28.3%, 34.5% and 18.8% in 2014, 2016 and 2017 (provisional), respectively. In January, February and March 2018, the provisional wholesale price index increased 4.6%, 4.8% and 1.9%, respectively. Before the new administration took office, certain private sector analysts believed that inflation was significantly higher than the rate published by INDEC.

See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—Our business is largely dependent upon economic conditions in Argentina."

During 2017, Argentina's provisional trade balance was a deficit of approximately U.S.\$ 8.5 billion according to preliminary estimates from INDEC, with total exports of approximately U.S.\$ 58.4 billion during 2017, representing a 0.9% increase compared to the same period in 2016. Total imports were approximately U.S.\$ 66.9 billion, representing an increase of 19.7% compared to the same period in 2016.

The drop occurred some years ago in the international price of Brent crude has affected and will likely continue to affect the oil industry's expected activities worldwide, particularly with respect to expected investments in the industry. In 2015, this decline resulted in an approximately U.S.\$7 reduction to the domestic price per barrel compared to the price in effect on December 31, 2014. This change stemmed from negotiations between producers and refiners to reduce the domestic price of Medanito and Escalante crude during January 2015 to U.S.\$77 and U.S.\$63 per barrel, respectively. These prices stood at U.S.\$75 and U.S.\$61, respectively, as of November 30, 2015.

In 2016, following the continuous drop in the average international price of Brent crude, a new reduction of approximately 10% in the domestic crude oil price per barrel compared to the price in effect on December 31, 2015 was agreed upon. This change stemmed from negotiations between producers, refiners and MINEM, whereby it was agreed to reduce the domestic price of Medanito crude and Escalante crude since January 2016 until July 2016 to U.S.\$67.50 and U.S.\$54.90 per barrel, respectively. In addition, in August 2016 a new agreement between producers, refiners and MINEM provided for a new gradual reduction in the domestic crude oil price per barrel by 2% per month in August, September and October for a 6% aggregate drop before November 2016.

In 2017, continuing with the gradual reduction of crude oil prices in the domestic market, an agreement among producers (the "Transitional Agreement"), refiners and MINEM was reached to attain price parity with international markets during the course of 2017 and sustain domestic production and labor sources. This agreement establishes decreasing prices for domestic crude oil during 2017, with the aim of reaching the price of Brent crude in the international market as of the effective date of the agreement. As a starting point, a reference price of U.S.\$59.40 and U.S.\$48.30 was set for Medanito and Escalante crude, respectively, for January 2017, with a gradual reduction to U.S.\$55.00 and U.S.\$47.00, respectively, in July 2017 and maintaining those prices until December 2017, provided that the price of Brent crude oil and the exchange rate of the Argentine peso to the U.S. dollar remains within certain parameters. It was also agreed that imports of crude oil and petroleum products as a complement to domestic production of these hydrocarbons will be

subject to the shortage of both products in the domestic market, for which MINEM will promote the creation of a registry of imports of crude oil and derivatives to ensure the full utilization of domestic production within the constraints of production and processing of each producer and/or refiner.

The Transitional Agreement provided that if, at any time, the international average price of a barrel of Brent crude oil exceeded the reference value for local crude oil of Medanito type by less than one U.S. dollar per barrel for a period greater than 10 consecutive days, the commitments assumed by the parties to the agreement would be suspended, effective as of the immediately succeeding calendar month.

Additionally, the Transitional Agreement establishes mechanisms to adjust fuel prices, on a quarterly basis, in the domestic market in 2017 to reflect the impact of changes in crude oil prices, biofuels and changes to the exchange rate, in accordance with the formula established in the agreement. In the past, domestic fuel prices had been adjusted but not in line with international market prices for petroleum products mainly due to the market conditions affecting the Argentine market.

On September 26, 2017, MINEM informed that the conditions for the suspension of the Transitional Agreement had been achieved on September 13, 2017, and consequently the terms of the Transitional Agreement (other than the requirements relating to the import of crude oil and derivatives) were suspended, effective as of October 1, 2017. During November and December of 2017, the average price of the Brent crude oil continued to run higher than the reference value for local crude oil of Medanito. Consequently, the Transitional Agreement remained suspended and finally, as of December 31, 2017, the Transitional Agreement was officially discontinued.

After the finalization of the 2017 Transitional Agreement, according to Argentina's Ministry of Energy and Mining, hydrocarbons market in Argentina has become a completely liberalized market and oil and fuel prices must be set by the market conditions and fluctuate. This decision formally ends the transition to international oil price parity and consequently, it is expected that from 2018 onwards, petroleum companies in Argentina will -establish -their own pricing policy.

In general terms, the pricing policy of fuels depends on several factors such as crude oil prices, international refining spreads, processing and distribution costs, biofuel prices, exchange currencies, local demand and supply, stocks, local taxation, and domestic margins for our products, among others.

As a result of these new market conditions, since October of 2017 YPF has been negotiating the prices of crude purchases with producer companies based on import parity and export parity references, and the fuel prices based on the factors discussed above. We expect to continue negotiating crude oil prices based on market condition and continue to apply the market-based fuel pricing strategy, in the future. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—Limitations on local pricing in Argentina may adversely affect our results of operations."

Energy consumption in Argentina has increased significantly since 2003. Continued growth in demand has led to fuel shortages and power outages, prompting the Argentine government to take additional measures to assure domestic supply. As a result of this increasing demand, declines in the production of certain products and companies in our industry, and actions taken by the Argentine regulatory authorities to prioritize domestic supply the volumes of hydrocarbon product exports, especially natural gas, have declined steadily during this period. At the same time, in recent years, Argentina has increased its imports of natural gas and refined products.

On December 17, 2015, as a result of Decree No. 134/2015, the new government declared an emergency of the national electricity system until December 31, 2017 and instructed the Ministry of Energy and Mining to develop and propose measures that would ensure power supply under adequate technical conditions. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Electricity," "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—Our business is largely dependent upon economic conditions in Argentina."

The table below shows Argentina's total sales, production, exports and imports of crude oil, diesel and gasoline products for the periods indicated.

|                            | Year         | Year Ended December 31, |           |  |  |
|----------------------------|--------------|-------------------------|-----------|--|--|
|                            | 2017         | 2016                    | 2015      |  |  |
| Crude Oil in Argentina     |              |                         |           |  |  |
| Production (mmbbl)         | 167.02       | 178.96                  | 186.63    |  |  |
| Exports (mmbbl)            | 9.91         | 16.48                   | 13.27     |  |  |
| Imports (mmbbl)            | 7.90         | 5.79                    | 1.84      |  |  |
| Diesel Fuel in Argentina   |              |                         |           |  |  |
| Sales (mcm) (1)            | 14,192.94    | 14,324.35               | 14,290.54 |  |  |
| Production (mmbbl)         | 11,858.23    | 11,945.86               | 12,181.12 |  |  |
| Exports (mcm)              | 4.86         | 5.87                    | 1.84      |  |  |
| Imports (mcm)              | 2,131.90     | 2,186.30                | 1,933.69  |  |  |
| Gasoline in Argentina      |              |                         |           |  |  |
| Sales (mcm) <sup>(1)</sup> | 9,465.37     | 8,848.96                | 8,720.81  |  |  |
| Production (mmbbl)         | 8,763.76     | 8,431.55                | 8,320.07  |  |  |
| Exports (mcm)              | <del>-</del> | _                       | _         |  |  |
| Imports (mcm)              | 415.67       | 246.52                  | 15.00     |  |  |

(1) Includes domestic market sales.

Source: Argentine Secretariat of Energy

# Policy and regulatory developments in Argentina, including the Expropriation Law

The Argentine oil and gas industry has been subject to certain governmental policies and regulations that have resulted in: (i) domestic prices that do not keep pace with those prevailing in international markets (which usually resulted in lower local prices compared to prevailing international market prices before the recent decrease in international oil prices); (ii) export and import regulations; (iii) domestic supply requirements that oblige us from time to time to divert supplies from the export or industrial markets in order to meet domestic consumer demand; (iv) increasingly higher export duties on the volumes of hydrocarbons allowed to be exported, before the recent decrease in international oil prices and before Law No. 26,732 ceased to be in force, which established export duties; (v) increasingly higher investment and costs expenditure requirements in order to satisfy domestic demand and (vi) increasingly higher taxes, although certain taxes have recently declined as a result of the incentives set by the Argentine government in response to the decrease in international oil prices to promote domestic activity. These governmental pricing and tax policies have been implemented in an effort to satisfy increasing domestic market demand and, in recent years, to incentivize domestic activity as a result of recent decreases in international oil prices allowing domestic prices to stay above those prevailing in international market for certain periods. Since December 2015, the new government has taken measures to improve general economic and business conditions in Argentina, such as the elimination of exchange restrictions, the partial adjustment of gas and electricity prices and the elimination or reduction of export taxes for certain products. See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions." As discussed in "Item 3. Key Information—Risk Factors" and elsewhere in this annual report, actions by the Argentine government have had and will continue to have a significant effect on Argentine companies, including us.

Notwithstanding the foregoing, after the termination of the 2017 Transitional Agreement, according to Argentina's Ministry of Energy and Mining, the hydrocarbons market in Argentina had become a liberalized market and oil and fuel prices must be set by the market conditions and, thus, fluctuate. As mentioned before, this decision formally ended the transition to international oil price parity.

For information regarding policy and regulatory developments relating to the oil and gas industry in Argentina see "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government."

The Expropriation Law declared achieving self-sufficiency in the supply of hydrocarbons, as well as in the exploitation, industrialization, transportation and sale of hydrocarbons, a national public interest and a priority for Argentina. In addition, its stated goal is to guarantee socially equitable economic development, the creation of jobs, the increase of the competitiveness of various economic sectors and the equitable and sustainable growth of the Argentine provinces and regions. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—The Expropriation Law." Upon the passage of the Expropriation Law, the Argentine government gained control over the Company. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—The Argentine Republic owns 51% of the shares of the Company."

### **Declining export volumes**

The exported volumes of many of our hydrocarbon products have declined significantly in recent years, driven mainly by increasing domestic demand and export administration, as well as by declines in production.

The table below presents, for the periods indicated, the exported volumes of certain of our principal hydrocarbon products.

|                               | Year Ended December 31, |              |      |  |
|-------------------------------|-------------------------|--------------|------|--|
|                               | 2017                    | 2016         | 2015 |  |
| Product                       |                         | (units sold) |      |  |
| Natural gas (mmcm)            | _                       | _            | 2    |  |
| Gasoline and diesel (mcm)     | 213                     | 125          | 90   |  |
| Fuel oil (mtn) <sup>(1)</sup> | 282                     | 375          | 462  |  |
| Petrochemicals (mtn)          | 206                     | 202          | 301  |  |

(1) Includes bunker oil sales of 282 mtn, 375 mtn and 462 mtn in 2017, 2016 and 2015, respectively.

Due to the decreased export product volumes indicated above, the portion of our revenues accounted for by exports decreased steadily in recent years. Exports accounted for 8.7%, 7.8% and 7.9% of our consolidated revenues in 2017, 2016 and 2015, respectively. Export duties are accounted for as tax expenses in our Audited Consolidated Financial Statements.

The Argentine government currently requires companies intending to export crude oil and diesel to obtain prior authorization from the Argentine Ministry of Energy and Mining by demonstrating that local demand for those products has been satisfied. The same criteria is applied to exports of LPG upon Law 26,020, dated 2005.

### Seasonality

Historically, our results have been subject to seasonal fluctuations during the year, particularly as a result of greater natural gas sales during the winter. After the 2002 devaluation and as a consequence of the natural gas price freeze imposed by the Argentine government until recent years, the use of this fuel has diversified, generating an increase in its long-term demand throughout the year. However, with the recent adjustments in gas prices (See "Item 4. Information on the Company—Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Natural Gas."), which also affect de residential market where demand has demonstrated some sensitivity to gas price, we could be subject to seasonal fluctuations in our sales volumes, which could have negative impact on our level of natural gas production and sales. See "Item 3. Key Information—Risk Factors—Risks Relating to Our Business—Oil and gas activities are subject to significant economic, environmental and operational risks."

# **Critical Accounting Policies**

Our accounting policies are described in Note 2.a and b. to the Audited Consolidated Financial Statements. IFRS requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses and disclosures of contingent assets and liabilities in our financial statements. Actual results could differ from those estimates. We consider the following policies or matters to be most critical in understanding the judgments that are involved in preparing our Audited Consolidated Financial Statements and the uncertainties that could impact our results of operations, financial condition and cash flows:

- Functional and reporting currency. See Note 2.b.1 to the Audited Consolidated Financial Statements.
- Impairment of long-lived assets. See Notes 2.b.8 and 2.b.9 to the Audited Consolidated Financial Statements. Furthermore, for additional information regarding assumptions used for our impairment calculation as of December 31, 2017, see Note 2.c to the Audited Consolidated Financial Statements.
- Depreciation of oil and gas producing properties. See Note 2.b.6 to the Audited Consolidated Financial Statements.

- Asset retirement obligations. See Note 2.b.6 to the Audited Consolidated Financial Statements.
- Environmental liabilities, litigation and other contingencies. See Notes 2.c, 14.a and b., 27 and 28.b to the Audited Consolidated Financial Statements.
- Income tax and deferred tax. See Note 15 to the Audited Consolidated Financial Statements.

In connection with the disclosure of the impact that recently issued accounting standards will have on financial statements in future periods, see Note 2.b.25 to the Audited Consolidated Financial Statements as of December 31, 2017.

In addition, for information regarding our estimates of oil and gas reserves, see "Item 4. Information on the Company—Exploration and Production—Oil and Gas reserves."

During 2017, YPF recorded a recovery of Ps. 5,032 million on a prior impairment for property, plant and equipment. As discussed in Note 2.c to the Audited Consolidated Financial Statements as of December 31, 2017, the recoverable amount of property, plant and equipment and intangible assets analysis is performed on the year-end date or whenever there is evidence of impairment of the recoverable value. See Note 2.c – "Provision for impairment of property, plant and equipment and intangible assets" to the Audited Consolidated Financial Statements.

It is difficult to predict with reasonable certainty the amount of expected future impairment losses given the many factors impacting the asset base and the cash flows used in the prescribed ceiling test calculation. These factors include, but are not limited to, future prices, operating costs and negotiated savings, foreign exchange rates, capital expenditures timing and negotiated savings, production and its impact on depletion and cost base, upward or downward reserve revisions, reserve additions, and tax attributes. According to the foregoing, and in connection with impairment of long-lived assets according to our estimation as of December 31, 2017, if the average of the oil prices used for impairment tests as of December 31, 2017 were reduced by U.S.\$5 each year, holding all other factors constant, our ceiling test limitation related to the net book value of our proved oil properties would be reduced by approximately U.S.\$1.5 billion. This hypothetical calculation was prepared assuming all other factors remain constant to isolate the impact of commodity prices on our ceiling test limitation. Consequently, as noted above, actual cash flows may be materially affected by other factors. There are numerous uncertainties inherent in the estimation present value of future cash flow, so this hypothetical calculation should not be construed as indicative of our development plans or future results. For more information on recent declines in the international Brent crude oil prices, domestic crude oil prices and domestic gasoline prices, see "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions." For information regarding our domestic oil prices and reserves sensitivity analysis, See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—Our oil and natural gas reserves are estimates."

## **Principal Income Statement Line Items**

The following is a brief description of the principal line items of our income statement.

#### Revenues

Revenues include primarily our consolidated sales of crude oil and natural gas and refined fuel and chemical products net of the payment of applicable fuel transfer taxes and turnover taxes. Customs duties on exports are accounted as selling expenses in our consolidated results of operations. Royalty payments required to be made to a third party, whether payable in cash or in kind, which are a financial obligation, or are substantially equivalent to a production or similar tax, are accounted for as a cost of production and are not deducted from revenues. See "Item 4. Information on the Company—Exploration and Production—Oil and gas production, production prices and production costs" and Note 19 to the Audited Consolidated Financial Statements.

### Costs

The following table presents, for each of the years indicated, a breakdown of our consolidated cost by category:

|                                       | For the ye | For the year ended December 31, |        |  |  |
|---------------------------------------|------------|---------------------------------|--------|--|--|
|                                       | 2017       | 2016                            | 2015   |  |  |
|                                       | (in        | (in millions of pesos)          |        |  |  |
| Inventories at beginning of year      | 21,820     | 19,258                          | 13,001 |  |  |
| Purchases for the year                | 66,075     | 48,760                          | 33,886 |  |  |
| Production costs (1)                  | 147,423    | 127,075                         | 85,550 |  |  |
| Translation effect                    | 3,877      | 4,031                           | 6,358  |  |  |
| Reclassifications and other movements | (92)       | _                               | _      |  |  |

| Inventories at end of year | (27,291) | (21,820) | (19,258) |
|----------------------------|----------|----------|----------|
| Costs                      | 211,812  | 177,304  | 119,537  |

(1) The table below presents, for each of the years indicated, a breakdown of our consolidated production costs by category:

|   | For the year ended December 31, |                 |        |  |
|---|---------------------------------|-----------------|--------|--|
|   | 2017 2016                       |                 |        |  |
|   | (in n                           | nillions of pes | os)    |  |
| Salaries and social security taxes                  | 12,548                          | 10,228          | 7,566  |  |
| Fees and compensation for services                  | 1,159                           | 1,037           | 775    |  |
| Other personnel expenses                            | 3,493                           | 2,773           | 2,303  |  |
| Taxes, charges and contributions                    | 2,215                           | 1,861           | 1,144  |  |
| Royalties, easements and canons                     | 17,630                          | 17,114          | 11,932 |  |
| Insurance   | 840                             | 1,037           | 831    |  |
| Rental of real estate and equipment                 | 5,710                           | 5,097           | 3,360  |  |
| Depreciation of properties, plant and equipment     | 51,607                          | 43,077          | 25,706 |  |
| Amortization of intangible assets                   | 688                             | 499             | 185    |  |
| Industrial inputs, consumable material and supplies | 5,813                           | 5,732           | 3,801  |  |
| Operational services and other service contracts    | 12,033                          | 10,494          | 6,261  |  |
| Preservation, repair and maintenance                | 20,204                          | 16,710          | 14,231 |  |
| Transportation, products and charges                | 8,724                           | 6,952           | 4,796  |  |
| Fuel, gas, energy and miscellaneous                 | 4,759                           | 4,464           | 2,659  |  |
| Total   | 147,423                         | 127,075         | 85,550 |  |

Our cost accounted for 83.78, 84.4% and 76.6% of our consolidated revenues in 2017, 2016 and 2015, respectively. Our cost of sales increased by 19.5% from 2016 to 2017 due to the factors explained in "-Principal Income Statement Line Items-Cost".

# Other net operating results

Other operating results, net principally include provisions for pending lawsuits and other claims, provisions for environmental remediation and provisions for defined benefit pension plans and other post-retirement benefits. See "-Other net operating results".

#### Financial income (expense), net

Financial income (expense), net consists of the net of gains and losses on interest paid and interest earned and foreign currency exchange differences.

### Income Tax

The effective income tax rates for the periods discussed in this annual report differ from the statutory tax rate (35%) mainly because: the registration of the deferred income tax as a result of the effect of applying the current tax rate (35%) on the difference generated between the tax basis of fixed and intangible assets (for which any asset remeasurement from the original value in pesos is not acceptable under income tax law) and their book value under IFRS, measured in its functional currency and converted into pesos, as described in Note 2.b.1 to our Audited Consolidated Financial Statements. See Note 15 to the Audited Consolidated Financial Statements for a more detailed description of the difference between statutory income tax rate and effective income tax rate. For information regarding the Law No. 27,430 and 27,432 introducing modifications to the Income Tax, see "Item 10. Additional Information."

# **Results of Operations**

# Consolidated results of operations for the years ended December 31, 2017, 2016 and 2015

The following table sets forth certain financial information as a percentage of revenues for the years indicated.

|  | Year Ended December 31, |        |        |  |
|--|-------------------------|--------|--------|--|
|  | 2017 2016               |        | 2015   |  |
|  | (percer                 | enues) |        |  |
| Revenues   | 100.0                   | 100.0  | 100.0  |  |
| Cost   | (83.8)                  | (84.4) | (76.6) |  |
| Gross profit   | 16.2                    | 15.6   | 23.4   |  |
| Administrative expenses  | (3.5)                   | (3.4)  | (3.6)  |  |
| Selling expenses   | (7.1)                   | (7.2)  | (7.1)  |  |
| Recovery / (Impairment) of property, plant and equipment and intangible assets | 2.0                     | (16.6) | (1.6)  |  |
| Other net operating results  | 0.3                     | 1.6    | 1.1    |  |
| Exploration expenses   | (1.0)                   | (1.5)  | (1.6)  |  |
| Operating profit (loss)  | 6.4                     | (11.5) | 10.6   |  |

The tables below present, for the years indicated, volume and price data with respect to our sales of our principal products in the domestic and export markets, respectively. Due to the decreased export product volumes, the portion of our revenues accounted for by exports decreased steadily in recent years. Exports accounted for 8.7%, 7.8% and 7.9% of our consolidated revenues in 2017, 2016 and 2015, respectively.

## **Domestic Market**

|                |             |  | Year Ended De | ecember 31,                                      |             |  |           |  |      |   |
|----------------|-------------|--|---------------|--|-------------|--|-----------|--|------|---|
|                | 2017 2016   |  | 2017 2016     |  | 2017 2016   |  | 2017 2016 |  | 2015 | 5 |
| Product        | Units sold  | Average Price per unit <sup>(1)</sup> (in pesos) | Units sold    | Average Price per unit <sup>(1)</sup> (in pesos) | Units sold  | Average Price per unit <sup>(1)</sup> (in pesos) |           |  |      |   |
| Natural gas    | 14,208 mmcm | 2,997 /mcm                                       | 13,816 mmcm   | 2,636 /mcm                                       | 14,009 mmcm | 1,571 /mcm                                       |           |  |      |   |
| Diesel         | 7,751 mcm   | 10,539 /cm                                       | 7,803 mcm     | 9,096 /cm  | 8,134 mcm   | 6,970 /cm  |           |  |      |   |
| Gasoline       | 5,158 mcm   | 11,483 /cm                                       | 4,828 mcm     | 9,580 /cm  | 4,894 mcm   | 7,141 /cm  |           |  |      |   |
| Fuel oil       | 620 mtn     | 6,646 /ton                                       | 1,226 mtn     | 7,869 /ton                                       | 1,387 mtn   | 5,095 /ton                                       |           |  |      |   |
| Petrochemicals | 597 mtn     | 9,258 /ton                                       | 629 mtn       | 6,465 /ton                                       | 587 mtn     | 5,620 /ton                                       |           |  |      |   |

<sup>(1)</sup> Average prices shown are net of applicable domestic fuel transfer taxes payable by consumers.

# **Export Markets**

|                    |            |   |            | December 31,                                |            |   |
|--------------------|------------|---|------------|---|------------|---|
|                    | 2017       |   | 2          | 2016  | 2          | 015   |
| Product            | Units sold | Average<br>Price per<br>unit <sup>(1)</sup> | Units sold | Average<br>Price per<br>unit <sup>(1)</sup> | Units sold | Average<br>Price per<br>unit <sup>(1)</sup> |
|                    | <u></u>    | (in pesos)                                  | <u></u> ,  | (in pesos)                                  |            | (in pesos)                                  |
| Gasoline           | 82 mcm     | 10,577 /cm                                  | 54 mcm     | 10,061 /cm                                  | 50 mcm     | 7,843 /cm                                   |
| Diesel             | 131 mcm    | 7,667 /cm                                   | 71 mcm     | 6,721 /cm                                   | 40 mcm     | 1,000 /cm                                   |
| Fuel oil           | 282 mtn    | 5,663 /ton                                  | 375 mtn    | 3,864 /ton                                  | 462 mtn    | 2,972 /ton                                  |
| Petrochemicals (2) | 206 mtn    | 14,134 /ton                                 | 202 mtn    | 11,638 /ton                                 | 301 mtn    | 5,694 /ton                                  |

- (1) Average prices shown are gross of applicable export withholding taxes payable by us.
- (2) Includes exports of refined paraffinic.

#### Revenues

Revenues in 2017 were Ps. 252,813 million, representing a 20.3% increase compared to Ps. 210,100 million in 2016. Among the main factors contributing to the increase were:

- Diesel revenues increased by Ps. 10,713 million, or 15.1%, as a result of an increase in the average price for diesel mix of 15.9%, partially offset by a decrease in sales volumes of 0.7%, despite an 27.5% increase in sales volumes of Infinia diesel, a premium diesel;
- Gasoline revenues increased by Ps. 12,976 million, or 28.1%, primarily as a result of an increase in the average price for gasoline mix of 19.9%, and an increase in sales volumes of 6.8%, reflecting additionally an increase of 20.0% in sales volumes of Infinia gasoline;
- Fuel oil revenues in the Argentine domestic market decreased by Ps. 5,531 million, or 57.3%, primarily as a result of a decrease in the average price of 15.5% and a decrease in sales volumes of 49.5%;
- Natural gas revenues increased by Ps. 6,171 million, or 16.9%, primarily as a result of an increase of 14.1% in the average sale price in Argentine peso terms, which includes not only higher prices from third parties but also the Gas Plan, which increased the average prices obtained by YPF as a result of increasing YPF's natural gas production, and also a result of an increase in sales volumes of 1.1%. Additionally, in the first quarter of 2017, we invoiced Ps. 603 million corresponding to 242 million m3 opportunely injected and pending nomination, which were assigned to the commercial segment of CNG, and resulted in an increase of 2.8% in sales volumes;
- Natural gas revenues to the retail segment (residential and small general service category) increased by Ps. 3,783 million, or 57.8%, primarily due to our subsidiary Metrogas which registered an increase in the average price of approximately 70.1% partially offset by a decrease in sales volumes of 13.1%;
- The remaining sales in the domestic market increased by Ps. 8,875 million, or 37.1%, primarily due to the increase of asphalts sales by 154.2%, the increase of LPG sales by 48.9%, petrochemical products by 35.9% and aerokerosene by 37.3%, in all of these cases mainly due to the higher prices of these products, with the exception of asphalts, which also registered an increase of 103.5% in sales volumes;
- Export revenues increased by Ps. 5,727 million, or 35.0%, primarily due to increases in exports of petrochemical products of 23.8%, and LPG of 57.7%, in both cases due to an increase in average prices in Argentine peso terms, as well as increases in exports of flour and soy oils of 24.0%, aerokerosene of 53.9%, and virgin naphtha of 110.3%, all due to an increase in average prices in Argentine peso terms and in sales volumes.

Revenues in 2016 were Ps. 210,100 million, representing a 34.6% increase compared to Ps. 156,136 million in 2015. Among the main factors contributing to the increase were:

• Diesel revenues increased by Ps. 14,303 million, or 25.2%, as a result of an increase in the average price for diesel mix of 30.5%, partially offset by a decrease in sales volumes of 4.1%, despite an 8.3% increase in sales volumes of Infinia diesel, a premium diesel;

- Gasoline revenues increased by Ps. 11,298 million, or 32.3%, primarily as a result of an increase in the average price for gasoline mix of 34.1%, partially offset by a decrease in sales volumes of 1.3%, despite an 1.1% increase in sales volumes of Infinia gasoline;
- Fuel oil revenues in the Argentine domestic market increased by Ps. 2,583 million, or 36.6%, primarily as a result of an increase in the average price of 54.5%, partially offset by a decrease in sales volumes of 11.6%;
- Natural gas revenues increased by Ps. 14,409 million, or 65.5%, primarily as a result of an increase of 67.8% in the average sale price in Argentine peso terms (or a 5.8% increase in U.S. dollar terms), which includes not only higher prices from third parties but also the Gas Plan, which increased the average prices obtained by YPF as a result of increasing YPF's natural gas production, partially offset by a decrease in sales volumes of 1.4%;
- Natural gas revenues to the retail segment (residential and small general service category) increased by Ps. 2,866 million, or 78.0%, primarily due to an increase in the average price of approximately 60.1% and an increase in sales volumes of 11.2%;
- Export revenues increased by Ps. 4,054 million, or 33.0%, primarily due to increases in exports of flour, grains and oils of 38.8%, aerokerosene of 29.0%, and petrochemicals of 37.2%, all due to an increase in average prices in Argentine peso terms, partially offset by decreases in sales volumes; and
- Partially compensating for the effect of the above mentioned increments, in 2015, the Company recorded Ps. 1,988 million of revenue corresponding to the Crude Oil Production Stimulus Program (*Programa de Estímulo a la Producción de Petróleo Crudo*) set forth under Resolution No. 14/2015 of the Hydrocarbon Commission. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Resolution No. 14/2015." This program was discontinued in 2016.

#### Cost

Cost in 2017 was Ps. 211,812 million, representing a 19.5% increase compared to Ps. 177,304 million in 2016, including increases in production costs and purchases of 16.0% and 35.5%, respectively. Among the main factors contributing to this increase were:

- Property, plant and equipment depreciation costs increased by Ps. 8,530 million, or 19.8%, primarily as a result of (i) overall increases in Argentine peso terms of the value of fixed assets, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company, and (ii) the increase in the depreciation rate due to the decrease in net reserves of crude oil as a consequence of a reduction in the selling price in the domestic market, offset by the net decrease in these assets as a result of the impairment charge recorded in the third quarter of 2016, which is explained below, and the lower production recorded in 2017;
- Total lifting costs increased by Ps. 5,380 million, or 14.4%, considering an increase of the unit indicator in Argentine peso terms of 19.4%, in line with the general increase of prices in the economy, offset by lower production;
- Refining costs increased by Ps. 1,762 million, or 20.6%. This increase was driven by higher charges for consumption of materials, spare parts, electricity and other supplies and fuels, considering an increase of the unit indicator in Argentine peso terms of 21.1%;
- Higher charges for environmental contingencies for Ps. 738 million, or 110.9%, linked to the activity developed by the Downstream and Upstream business areas;
- Net increase in royalties and other charges associated with production by Ps. 319 million, or 1.9%, with an increase of Ps 1,045 million related to natural gas production, due to the higher wellhead value of this product, partially offset by a decrease of Ps. 726 million related to crude oil production, due to the lower production.
- Transportation costs increased by Ps. 1,772 million, or 25.5%, mainly due to increases in rates in 2017;
- Purchases of crude oil from third parties increased by Ps. 6,259 million, or 45.9%, primarily as a result of an increase in purchased volumes of approximately 49.1%, due to lower production, partially offset by a decrease in average prices charged by third parties in Argentine peso terms of approximately 2.2%, mainly related to the price agreement between producers and refiners. See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions.";
- Purchases of biofuels increased by Ps. 4,807 million, or 36.4%, primarily as a result of an increase in the average prices of FAME and ethanol biofuel of approximately 22.2% and 20.0%, respectively, and an increase in purchased volumes of FAME and ethanol biofuel of 8.7% and 17.3%, respectively;

- Purchases of natural gas from other producers for resale in the distribution segment to retail customers (residential and small businesses and industries) increased by Ps. 1,069 million, or 20.6%, primarily as a result of an increase in the purchase price of approximately 22.7%, partially offset by a decrease in purchased volumes of 1.7%;
- Grain purchases in the agricultural sales segment through the form of barter, which were recorded as purchases for accounting purposes, increased by Ps. 1,141 million, or 27.5%. This increase is due to an increase in the average price of approximately 4.2%, and an increase in volumes of 22.3%; and
- Imports of fuels increased by Ps. 1,023 million, or 18.2%, primarily as a result of an increase in purchased Infinia gasoline of 200.1%, jet fuel of 21.7%, gas oil of 2.8%. In all cases, purchase prices increased and in terms of imported volumes, there was an increase in Infinia gasoline volumes and a decrease in the other two mentioned products. Increased purchases mentioned above were partially offset by a positive stock variation of Ps. 1,686 million in 2017, primarily due to a recomposition in crude oil stocks and a revaluation of refined products, while in 2016, this amount was negative for Ps. 1,469 million, primarily due to a decrease in crude oil stocks observed in that year.

Cost of sales in 2016 was Ps. 177,304 million, representing a 48.3% increase compared to Ps. 119,537 million in 2015, including increases in production costs and purchases of 48.5% and 43.9%, respectively. Among the main factors contributing to this increase were:

- Property, plant and equipment depreciation costs increased by Ps. 17,371 million, or 67.6%, primarily as a result of (i) increased investments in assets and (ii) overall increases in Argentine peso terms of the value of fixed assets, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company;
- Total lifting costs increased by Ps. 8,405 million, or 29.1%, considering an increase of the unit indicator in Argentine peso terms of 28.2%;
- Refining costs increased by Ps. 2,530 million, or 42.0%. This increase was driven by higher charges for consumption of materials, spare parts, electricity and other supplies and fuels, considering an increase of the unit indicator in Argentine peso terms of 44.2%;
- Royalty payments increased by Ps. 5,163 million, or 45.7%, primarily as a result of increases of (i) Ps. 3,179 million related to crude oil production and (ii) Ps. 1,984 million related to natural gas production, due to the higher wellhead values of these products;
- Transportation costs increased by Ps. 2,156 million, or 45.0%, mainly due to increases in rates in 2016;
- Purchases of crude oil from third parties increased by Ps. 2,228 million, or 19.5%, primarily as a result of an increase in average prices charged by third parties in Argentine peso terms of approximately 35%, which was mainly related to the devaluation of the Argentine peso, in comparison, there was a 13.4% decrease in average prices charged by third parties in U.S. dollar terms, partially offset by a decrease in purchased volumes of approximately 11.4%;
- Purchases of biofuels increased by Ps. 5,454 million, or 70.5%, primarily as a result of an increase in the average prices of FAME and ethanol biofuel of approximately 76.3% and 45.6%, respectively, and an increase in purchased volumes of FAME and ethanol biofuel of 1.4% and 11% (due to an increase in the cut rate of naphthas), respectively;
- Purchases of natural gas from other producers for resale in the distribution segment to retail customers (residential and small businesses and industries) increased by Ps. 2,274 million, or 78.2%, primarily as a result of an increase in the purchase price of approximately 70.0% and an increase in purchased volumes of 4.8%; and
- Grain purchases in the agricultural sales segment through the form of barter, which were recorded as purchases for accounting purposes, increased by Ps. 1,526 million, or 58.1%. This increase is due to an increase in the average price of approximately 91.1%, partially offset by a decrease in volumes of 17.3%.

# All of this was partially offset by the following:

• Imports of fuels decreased by Ps. 621 million, or 10.0%, primarily as a result of a decrease in purchased volumes of gas oil of 38.5%, partially offset by an increase in imported volumes of gasoline and jet fuel of 15.7% and an increase in average prices of fuels of 23.9%; and

• Additionally, insurance payments related to the losses suffered from an incident at our La Plata refinery in April 2013 were Ps. 615 million in 2015, which did not recur in 2016. This had a negative impact on cost of sales for 2016 compared to the same period in 2015. In addition, with respect to the incident that affected the facilities of our oil treatment plant in Cerro Divisadero in Mendoza in March 2014, an insurance payment amount of Ps. 1,165 million was recorded in 2015, of which Ps. 794 million was recorded as a lower cost for purchases and Ps. 371 million as other operating income, which did not recur in 2016.

# Administrative expenses

Administrative expenses in 2017 were Ps. 8,736 million, representing a 22.6% increase compared to Ps. 7,126 million in 2016, primarily as a result of increases in personnel costs and IT service contracts, licenses, and institutional advertising.

Administrative expenses in 2016 were Ps. 7,126 million, representing a 27.6% increase compared to Ps. 5,586 million in 2015, primarily as a result of increases in personnel costs and IT service contracts.

# Selling expenses

Selling expenses in 2017 were Ps. 17,954 million, representing an 18.0% increase compared to Ps. 15,212 million in 2016, primarily as a result of higher charges for product transportation, mainly related to increased transport volumes due to higher sales, and to increased rates for the transportation of fuels in the domestic market, as well as increases in personnel costs, charges related to bank credits and debits taxes and export taxes, primarily flours and oils, partially offset by a decrease in doubtful accounts in the segment of natural gas distributors and customers of our subsidiary Metrogas.

Selling expenses in 2016 were Ps. 15,212 million, representing a 37.1% increase compared to Ps. 11,099 million in 2015, primarily as a result of higher charges for product transportation, mainly related to increased rates for the transportation of fuels in the domestic market, as well as increases in personnel costs, charges related to depreciation of property, plant and equipment, advertising and promotional activities, and in the provision for doubtful accounts, which was negatively affected by recoveries in the provision for doubtful accounts in the natural gas distribution segment in 2015.

# **Exploration expenses**

Exploration expenses in 2017 were Ps. 2,456 million, representing a 22.2% decrease compared to Ps. 3,155 million in exploration expenses in 2016, primarily as a result of a Ps. 650 million decrease in negative results from unproductive exploratory drilling in 2017 compared to 2016.

Exploration expenses in 2016 were Ps. 3,155 million, representing a 27.6% increase compared to Ps. 2,473 million in exploration expenses in 2015, primarily as a result of a Ps. 625 million increase in negative results from unproductive exploratory drilling in 2016 compared to 2015. Additionally, expenditures for the development of geological and geophysical studies did not vary significantly in 2016 compared with 2015. However, total investments in exploration decreased Ps.1,375 million, or 49.7%, compared to 2015.

# Recovery / (Impairment) of property, plant and equipment and intangible assets

In 2017, the Company recorded a partial reversal of the impairment for property, plant and equipment registered in 2016 of Ps. 5.032 million, mainly due to multiple factors such as the variation in production and associated investments considered in the cash flow: the effect of variations in operating and abandonment costs, the variation in the discount rate and, to a lesser extent, the variation in oil prices, also considering the book value of the assets as of December 31, 2017 compared to the end of the previous year, based on the depreciation charge versus the increase for new investments made, among others. For a further description, see additionally "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Critical Accounting Policies." and Note 2.c to the Consolidated Financial Statements as of December 31, 2017.

In 2016, the Company recorded an impairment for property, plant and equipment of Ps. 34,943 million, mainly due to an estimated reduction in the price of oil marketed in the Argentine domestic market, together with the estimated evolution of costs based on both macroeconomic variables and the operational behavior of the Company's assets. For a more detailed description, see "Item 5. Operating and Financial Review and Prospects—Critical Accounting Policies" and Note 2.c to the Audited Consolidated Financial Statements as of December 31, 2017.

# Other net operating results

Other net operating results, in 2017 were a loss of Ps. 814 million, compared to the gain of Ps. 3,394 million in 2016. In 2016, other net operating results mainly included a net income of Ps. 1,528 million attributable to the deconsolidation of the Maxus Entities (see Note 27 to the Consolidated Financial Statements as of December 31, 2017) and an income of Ps. 1,407 million related to the PIAM under the concession agreement with the Company's partner to participate in the extension of the concession of this area and the temporary economic assistance accrued by our subsidiary Metrogas.

Other net operating results, in 2016 were a gain of Ps. 3,394 million, or 101.8%, compared to the gain of Ps. 1,682 million in 2015. In 2016, other net operating results mainly includes a net income of Ps.1,528 million attributable to the deconsolidation of the Maxus Entities (see Note 27 to the Consolidated Financial Statements as of December 31, 2016) and an income of Ps. 1,407 million related to the PIAM under the concession agreement with the Company's partner to participate in the extension of the concession of this area. The remaining variation mainly corresponds to a Ps. 199 million decrease in construction incentives received by our subsidiary A-Evangelista S.A and a Ps. 48 million increase in the temporary economic assistance accrued by our subsidiary Metrogas.

# Operating Income / (loss)

Operating profit in 2017 was Ps. 16,073 million due to the factors discussed above, compared to a loss of Ps. 24,246 million in 2016.

Operating loss in 2016 was Ps. 24,246 million due to the factors discussed above, representing a 246.2% decrease compared to a gain of Ps. 16,588 million in 2015.

### Financial results, net

In 2017, financial results, net, was a loss of Ps. 8,798 million, representing a 43.2% increase negative results compared to the loss of Ps. 6,146 million in 2016. The Company recorded lower positive foreign exchange differences on net monetary liabilities in pesos of Ps. 2,661 due to lower devaluation of the Argentine peso against the U.S. dollar in 2017 compared to the same period in 2016. The Company recorded higher interest expenses of Ps. 276, as a result of higher average indebtedness in 2017 compared to the same period in 2016, almost totally offset by lower interest rates on debt in Argentine peso. Additionally, better results were obtained due to an increase of Ps. 382 million from the measurement of the fair value of investments in financial assets.

In 2016, financial results, net, was a loss of Ps. 6,146 million, representing a 150.6% decrease compared to income of Ps. 12,157 million in 2015. The Company recorded lower positive foreign exchange differences on net monetary liabilities in pesos of Ps. 8,603 due to lower devaluation of the Argentine peso against the U.S. dollar in 2016 compared to the same period in 2015. The Company recorded higher interest expenses and other financial expenses of Ps. 9,700, as a result of higher average indebtedness and higher interest rates in 2016 compared to the same period in 2015. The average net debt in 2016 was Ps. 116,976 million, while the average net debt in 2015 was Ps. 64,956 million. The average amount of net debt was calculated as the linear average of current and non-current loans at the beginning and end of the corresponding period, net of the linear average of cash and cash equivalents at the beginning and end of the corresponding period.

# Income tax

Income tax in 2017 was a gain of Ps. 3,969 million, representing a 178.5% increase compared to a gain of Ps. 1,425 million in 2016. This increase was mainly due to the higher positive deferred tax charge of Ps. 2,415 million. In 2017, the effect of the deferred tax liability reduction corresponding to the decrease in the tax rate was recorded from the recently approved tax reform (See "Item 10. Additional Information-Taxation), while in 2016 the deferred asset effect was recorded related to the impairment for property, plant and equipment discussed above.

Income tax in 2016 was a gain of Ps. 1,425 million, representing a 105.8% decrease compared to a loss of Ps. 24,637 million in 2015. This decrease was mainly due to lower deferred tax of Ps. 27,313 million, partially offset by an increase of Ps. 1,251 in current income tax. The lower deferred tax charge is due to the recognition of the deferred tax assets of Ps. 12,230 related to the impairment for property, plant and equipment discussed above and the lower difference generated by the revaluation of the book value of the Company's property, plant and equipment in U.S. dollars, which is the functional currency of the Company, with respect to the tax values of property, plant and equipment held in historical Argentine pesos to be deducted from tax as they are depreciated and the lower devaluation of the Argentine peso in 2016.

# Net profit / (loss) for the year

Net profit / (loss) in 2017 was a gain of Ps. 12,672 million, compared to a loss of Ps. 28,379 million in 2016. Other comprehensive income in 2017 was Ps. 21,917 million, representing a 20.1% decrease compared to Ps. 27,414 million in 2016. This decrease was mainly attributable to lower appreciation of property, plant and equipment.

As a result of the foregoing, total comprehensive income in 2017 was a gain of Ps. 34,589 million, compared to a loss of Ps. 965 million in 2016.

Net profit / (loss) in 2016 was a loss of Ps. 28,379 million, representing a 741.2% decrease compared to a net income of Ps. 4,426 million in 2015.

Other comprehensive income in 2016 was Ps. 27,414 million, representing a 37.4% decrease compared to Ps. 43,758 million in 2015. This decrease was mainly attributable to lower appreciation of property, plant and equipment.

As a result of the foregoing, total comprehensive income in 2016 was a loss of Ps. 965 million, representing a 102.0% increase compared to a gain of Ps. 48,184 million in 2015.

## Consolidated results of operations by business segment for the years ended December 31, 2017, 2016 and 2015

In 2016, our activities related to power generation and natural gas distribution was separated from the Downstream activities. See "Item 4. Information on the Company—Business Organization."

See the table of revenues and operating income for each of our business segments for the years ended December 31, 2017, 2016 and 2015 in "Item 4. Information on the Company—Business Organization."

**Upstream** 

Revenues from the Upstream business segment in 2017 were Ps. 116,694 million, representing a 2.2% increase compared to Ps. 114,143 million in 2016.

Operating income in 2017 for the Upstream business segment was a gain of Ps. 3,877 million, compared to a loss of Ps. 26,845 million in 2016.

This increase in operating income was principally due to the following factors:

- The intersegment oil price measured in U.S. dollars decreased 8.2%, while increasing 3.0% in Argentine peso terms. Oil production in 2017 reached 227,500 barrels per day, representing a 7.0% decrease compared to 2016. The natural decline of the mature fields, together with the effects of the heavy rain and snow storms during the second quarter of 2017, that affected mainly the province of Chubut, and to a lesser extent the province of Santa Cruz, are the reasons leading to this decrease in crude production. This contributed to the decrease of 1.05 mmcm of crude oil, or 7.5%, transferred from the Upstream business segment to the Downstream business segment and a decrease of approximately 204 mcm of crude oil, or 47.6%, in sales to third parties; and
- Natural gas production in respect of our operations in Argentina in 2017 reached 44.1 mmcm per day, representing a 1.1% decrease compared to 2016. In the fourth quarter of 2016, certain volumes of natural gas were injected that were pending of nomination and were only billed in the first quarter of 2017. Sales volumes increased 1.1% in 2017 compared to 2016. The Upstream business segment records the average price obtained by YPF in such sales, net of sales and marketing fees. The Upstream segment also includes revenues from the Gas Plan, which increases the average prices obtained by YPF as a result of increasing YPF's natural gas production. The average natural gas revenue recorded by the Company in 2017, including revenues from the Gas Plan, was U.S.\$4.92 per million BTU, a 3.7% increase compared to U.S.\$4.74 per million BTU in 2016.
- Total operating costs in respect of our operations in Argentina in 2017 were Ps. 115,380 million (excluding exploration costs), representing a 11.0% increase compared to Ps. 103,965 million in 2016. Among the main factors contributing to the increase were:
- Property, plant and equipment depreciation costs increased by Ps. 7,188 million, or 18.9%, primarily as a result of overall increases in Argentine peso terms of the value of fixed assets, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company, compensated by the net decrease of assets as a result of the impairment charge recorded in 2016, described above and by the lower production recorded in the year;
- Total lifting costs increased by Ps. 5,380 million, or 14.4%, considering an increase of the unit indicator in Argentine peso terms of 19.4%, in line with the general increase of prices in the economy, offset by lower production;
- Net increase in royalties and other charges associated with production by Ps. 319 million, or 1.9%, with an increase of Ps 1,045 million related to natural gas production, due to the higher wellhead value of this product, partially offset by a decrease of Ps. 726 million related to crude oil production, due to the lower production;
- Decrease in provisions for stand-by equipment by Ps. 523 million, or 14%, and:
- In 2017, a positive stock variation was recorded for Ps.195, compared to a negative stock variation recorded in 2016 for Ps. 1,330 million, due to a reduction in the volumes in stock in 2016.

Exploration expenses in 2017 were Ps. 2,456 million, representing a 22.2% decrease compared to Ps. 3,155 million in exploration expenses in 2016, primarily as a result of a Ps. 650 million decrease in negative results from unproductive exploratory drilling in 2017 compared to 2016.

In 2016, the Company recorded an impairment for property, plant and equipment of Ps. 34,943 million, mainly due to an estimated reduction in the price of oil marketed in the domestic market, together with the estimated evolution of costs based on both macroeconomic variables and the operational behavior of the Company's assets. For a more detailed description, see Note 2.c to the Consolidated Financial Statements as of December 31, 2016.

In 2017, the Company recognized a partial reversal of the impairment charge mentioned in the previous paragraph for Ps. 5,032 million, which is generated by the combination of multiple factors, such as the variation in production and associated investments considered in the flow, the effect of variations in operating and abandonment costs, the variation in the rate of discount and, to a lesser extent, the variation in oil prices, taking into account also the book value of the assets as of December 31, 2017 compared to the previous year, based on the accounting depreciation charge versus the increase for new investments made, among others. See additionally "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Critical Accounting Policies." and Note 2.c to the Consolidated Financial Statements as of December 31, 2017

In 2016, other net operating results included income of Ps. 1,407 million related to the PIAM under the concession agreement with the Company's partner to participate in the extension of the concession of this area.

Revenues from the Upstream business segment in 2016 were Ps. 114,143 million, representing a 42.2% increase compared to Ps. 80,287 million in 2015.

Operating income in 2016 for the Upstream business segment was a loss of Ps. 26,845 million, including an impairment for property, plant and equipment of Ps. 34,943 million in 2016, compared to a gain of Ps. 7,535 million in 2015, including an impairment for property, plant and equipment and intangible assets of Ps. 2,535 million in 2015.

This decrease in operating income was principally due to the following factors:

- The intersegment oil price measured in U.S. dollars decreased 13.1%, while increasing 38.8% in Argentine peso terms. Oil production in 2016 reached 244,700 barrels per day, representing a 2.0% decrease compared to 2015. This contributed to the increase of 82 mcm of crude oil, or 0.6%, transferred from the Upstream business segment to the Downstream business segment and a decrease of approximately 40 mcm of crude oil, or 8.4%, in sales to third parties; and
- Natural gas production in respect of our operations in Argentina in 2016 reached 44.6 mmcm per day, representing a 0.9% increase compared to 2015. With the exception of the YSUR production, all natural gas produced, net of internal consumption, is assigned to the Gas and Power segment for sale to third parties (in the case of YSUR, the Gas and Power segment is solely responsible for the commercialization of the gas produced by YSUR). Sales volumes decreased 1.4% in 2016 compared to 2015. The Upstream business segment records the average price obtained by YPF in such sales, net of sales and marketing fees. The Upstream segment also includes revenues from the Gas Plan, which increases the average prices obtained by YPF as a result of increasing YPF and YSUR's natural gas production. The average natural gas revenue recorded by the Company in 2016, including revenues from the Gas Plan, was U.S.\$4.76 per million BTU, a 5.8% increase compared to U.S.\$4.50 per million BTU in 2015.

All of this was more than offset by the following:

- In 2015, the Company recorded Ps. 1,988 million corresponding to the Crude Oil Production Stimulus Program (*Programa de Estímulo a la Producción de Petróleo Crudo*) set forth by Resolution No. 14/2015 of the Hydrocarbon Commission. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation —Resolution No. 14/2015." This program was discontinued as of 2016.
- Total operating costs in respect of our operations in Argentina in 2016 were Ps. 103,965 million (excluding exploration costs), representing a 51.9% increase compared to Ps. 68,421 million in 2015. Among the main factors contributing to the increase were:
  - Property, plant and equipment depreciation costs increased by Ps. 15,050 million, or 65.2%, primarily as a result of
     (i) increased investments in property, plant and equipment and (ii) overall increases in Argentine peso terms of the
     value of fixed assets, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the
     functional currency of the Company;

- Total lifting costs increased by Ps. 8,405 million, or 29.1%, considering an increase of the unit indicator in Argentine peso terms of 28.2%;
- Royalty payments increased by Ps. 5,163 million, or 45.7%, primarily as a result of increases of (i) Ps. 3,179 million related to crude oil production and (ii) Ps. 1,984 million related to natural gas production; and
- Transportation costs increased by Ps.641 million, or 40.2%, mainly due to increases in rates in 2016.

Exploration expenses in 2016 were Ps. 3,155 million, representing a 27.6% increase compared to Ps. 2,473 million in exploration expenses in 2015, primarily as a result of a Ps. 625 million increase in negative results from unproductive exploratory drilling in 2016 compared to 2015. Additionally, expenditures for the development of geological and geophysical studies did not vary significantly in 2016 compared with 2015. However, total investments in exploration decreased Ps.1,375 million, or 49.7%, compared to 2015.

In 2016, the Company recorded an impairment for property, plant and equipment of Ps. 34,943 million, mainly due to an estimated reduction in the price of oil marketed in the domestic market, together with the estimated evolution of costs based on both macroeconomic variables and the operational behavior of the Company's assets. For a more detailed description, see Note 2.c to the Consolidated Financial Statements as of December 31, 2016.

In 2015, the Company recognized an impairment of property, plant and equipment and intangible assets for Ps. 2,535 million, mainly due to a reduction in the price of domestically traded oil in the short term and a reduction in expected medium and long-term international prices. This loss impacted the assets of fields in Argentina with reserves and oil production in the amount of Ps. 2,361 million and the assets of fields with crude oil production in the United States for Ps.174 million.

In 2016, other net operating results includes income of Ps. 1,407 million related to the PIAM under the concession agreement with the Company's partner to participate in the extension of the concession of this area.

With respect to the incident that affected the facilities of our oil treatment plant in Cerro Divisadero in Mendoza in March 2014, an insurance payment amount of Ps. 1,165 million was recorded in 2015, which did not recur in 2016, and of which Ps. 794 million was recorded as a lower cost for purchases and Ps. 371 million as other operating income.

# Downstream

Revenues from the Downstream segment in 2017 were Ps. 196,309 million, representing a 20.1% increase compared to Ps. 163,463 million in 2016.

Operating income for the Downstream business segment in 2017 was Ps. 15,813 million, representing a 411.3% increase compared to Ps. 3,093 million in 2016. This increase in operating income is primarly due to the following factors:

- The average volume of oil processed per day in YPF's refineries was about 293,000 barrels of oil per day, without significant changes with respect to 2016. With these similar processing levels we obtained a similar production overall, with an increase of diesel by 0.5%, gasoline by 2.0% and a decrease of fuel oil by 35,8% and with increased production of jet fuel, petrochemical gasoline, asphalts, coal oil and lubricant bases;
- Diesel revenues increased by Ps. 10,713 million, or 15.1%, as a result of an increase in the average price for diesel mix of 15.9%, partially offset by a decrease in sales volumes of 0.7%, despite an 27.5% increase in sales volumes of Infinia diesel, a premium diesel;
- Gasoline revenues increased by Ps. 12,976 million, or 28.1%, primarily as a result of an increase in the average price for gasoline mix of 19.9%, and an increase in sales volumes of 6.8%, reflecting additionally an increase of 20.0% in sales volumes of Infinia gasoline;
- Fuel oil revenues in the Argentine domestic market decreased by Ps. 5,531 million, or 57.3%, primarily as a result of a decrease in the average price of 15.5% and a decrease in sales volumes of 49.5%;
- The remaining sales in the domestic market increased by Ps. 8,848 million, or 43.4%, primarily as a result of increased sales of Asphalts by 154.2%, of LPG by 48.9%, petrochemical products by 35.9% and aerokerosene by 37.3%, in all these cases mainly due to the higher prices of these products, with the exception of asphalts, which also registered an increase of 103.5% in sales volumes;

- Export revenues obtained by the Downstream segment increased by Ps. 5,840 million, or 36.0%, primarily due to increases in exports of petrochemical products of 23.8%, and LPG of 57.7%, in both cases due to an increase in average prices in Argentine peso terms, as well as increases in exports of flour and soy oils of 24.0%, aerokerosene of 53.9%, and virgin naphtha of 110.3%, all due to an increase in average prices in Argentine peso terms and in sales volumes.
- Purchases of crude oil increased by Ps. 2,688 million, or 3.0%, primarily as a result of an increase in oil prices of approximately 2.3% in Argentine peso terms as a result of the devaluation of the Argentine peso against the U.S. dollar. Crude oil transferred volumes from the Upstream business segment decreased by 7.5% (approximately 1.05 mmcm), while crude oil purchased volumes from third parties increased approximately 49.1% (approximately 1.16 mmcm);
- Purchases of biofuels increased by Ps. 4,807 million, or 36.4%, primarily as a result of an increase in the average prices of FAME and ethanol biofuel of approximately 22.2% and 20.0%, respectively, and an increase in purchased volumes of FAME and ethanol biofuel of 8.7% and 17.3%, respectively;
- Imports of fuels increased by Ps. 1,023 million, or 18.2%, primarily as a result of an increase in import prices of gas oil of 34.3% and jet fuel of 35.0%, and of an increase in volumes of 83.7% and purchase prices of 63.4% of Premium gasoline. All of this was partially offset by a decrease in imported volumes of gas oil of 23.5% and in imported volumes of jet fuel of 9.8%.
- Grain purchases in the agricultural sales segment through the form of barter, which were recorded as purchases for accounting purposes, increased by Ps. 1,141 million, or 27.5%. This increase was due to an increase in the average price of approximately 4.2%, and an increase in volumes of 22.3%.
- In 2017, a positive stock variation was recorded by Ps. 3.667, representing an increase of Ps. 3,173 million compared to 2016, mainly as a result of a higher valuation of the stocks, and to a lesser extent, by an accumulation of stock, especially of crude oil, due to the higher purchases made in the year 2017;
- Higher charges for environmental contingencies of approximately Ps. 594 million, or 328.9%, linked to the activity developed by the Downstream business segment;
- Property, plant and equipment depreciation increased by Ps. 1,247 million, or 27.4%, primarily as a result of (i) increased investments in assets (in particular, the launch of the new Coke unit at the La Plata refinery in the fourth quarter of 2016) and (ii) an overall increase in property, plant and equipment values in Argentine pesos, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company;
- Selling expenses increased by Ps. 2,707 million, or 18.6%, primarily as a result of increases in transport expenses, mainly related to increased transport volumes, due to higher sales, and to increased rates for the transportation of fuels in the domestic market, as well as increases in personnel costs, charges related to bank credits and debits taxes and export taxes, primarily flours and oils;
- Production costs related to refining costs increased by Ps. 1,762 million, or 20.6%. This increase was driven by higher charges for consumption of materials, spare parts, electricity and other supplies and fuels As a result of this, and considering that the level of processing in refineries was 0.2% lower, the cost of unit refining increased by 21.1% in 2017 compared to 2016. In turn, transportation costs related to production (naval and pipelines) increased by Ps. 985 million, or 23.8%.
- In the other net operating results for this segment, we recorded an increase in the provision for lawsuits and contingencies of approximately Ps. 528 million compared to the previous year.

Revenues from the Downstream business segment in 2016 were Ps. 163,463 million, representing a 30.0% increase compared to Ps. 125,766 million in 2015.

Operating income for the Downstream business segment in 2016 was Ps. 3,093 million, representing a 55.5% decrease compared to Ps. 6,948 million in 2015. This decrease in operating income is primarily due to the following factors:

• The average volume of oil processed per day in YPF's refineries decreased 1.8% to 293,500 barrels of oil per day, with decreased production of diesel by 1.3%, gasoline by 1.0% and fuel oil by 16.0% and with increased production of LPG by 8.8% and petrochemical gasoline by 5.6%;

- Diesel revenues increased by Ps. 14,303 million, or 25.2%, as a result of an increase in the average price for diesel mix of approximately 30.5%, partially offset by a decrease in sales volumes of approximately 4.1%, despite an 8.3% increase in sales volumes of Infinia diesel, a premium diesel;
- Gasoline revenues increased by Ps. 11,298 million, or 32.3%, primarily as a result of an increase in the average price for gasoline mix of approximately 34.1%, partially offset by a decrease in sales volumes of approximately 1.3%, despite a 1.1% increase in sales volumes of Infinia gasoline;
- Fuel oil revenues in the Argentine domestic market increased by Ps. 2,583 million, or 36.6%, primarily as a result of an increase in the average price of approximately 54.5%, partially offset by a decrease in sales volumes of approximately 11.6%;
- Export revenues obtained by the Downstream segment increased by Ps. 3,979 million, or 32.5%, primarily due to increases in exports of flour, grains and oils of 38.8%, aerokerosene of 29.0%, and petrochemicals of 37.2%, all due to an increase in average prices in Argentine peso terms, partially offset by decreases in sales volumes; and
- Imports of fuels decreased by Ps. 621 million, or 10.0%, primarily as a result of a decrease in purchased volumes of gas oil of 38.5%, partially offset by an increase in imported volumes of gasoline and jet fuel of 15.7% and an increase in average prices of fuels of 23.9%.

## All of this was more than offset by the following:

- Purchases of crude oil increased by Ps. 23,744 million, or 36.1%, primarily as a result of an increase in oil prices of approximately 38.0% in Argentine peso terms as a result of the devaluation of the Argentine peso against the U.S. dollar, partially offset by a decrease in purchased volumes. Crude oil transferred volumes from the Upstream business segment increased by 0.6% (approximately 82 mcm), and crude oil purchased volumes from third parties decreased approximately 11.4% (approximately 304 mcm);
- Purchases of biofuels increased by Ps. 5,454 million, or 70.5%, primarily as a result of an increase in the average prices of FAME and ethanol biofuel of approximately 76.3% and 45.6%, respectively, and an increase in purchased volumes of FAME and ethanol biofuel of 1.4% and 11% (due to an increase in the cut rate of naphthas), respectively;
- Grain purchases in the agricultural sales segment through the form of barter, which were recorded as purchases for accounting purposes, increased by Ps. 1,526 million, or 58.1%. This increase is due to an increase in the average price of approximately 91.1%, partially offset by a decrease in volumes of 17.3%;
- Property, plant and equipment depreciation increased by Ps. 2,504 million, or 100.5%, primarily as a result of (i) increased investments in assets (in particular, the launch of the new Coke unit at the La Plata refinery) and (ii) an overall increase in property, plant and equipment values in Argentine pesos, which was related to the devaluation of the Argentine peso against the U.S. dollar, which is the functional currency of the Company;
- Selling expenses increased by Ps. 3,820 million, or 35.6%, primarily as a result of (i) increases in transport expenses, mainly related to increased fuel prices in the Argentine domestic market and (ii) the increase in the depreciation of assets linked to commercial use and of advertising and promotional activities; and the provision for contingencies increased in 2015 by Ps. 650 million in connection with a ruling against YPF regarding a claim filed by the Union of Consumers and Users (*Unión de Usuarios y Consumidores*) for claims alleging that excess fees were charged to LPG consumers during the period 1993 to 1997:
- Production costs related to refining costs increased by Ps. 2,530 million, or 42.0%. This increase was driven by higher charges for consumption of materials, spare parts, electricity and other supplies and fuels As a consequence of this, and considering also that the level of processing in refineries was 1.8% lower, the cost of unit refining increased by 44.2% in 2016 compared to 2015. In turn, transportation costs related to production (naval and pipelines) increased by Ps. 1,182 million, or 40.0%.

#### Gas and Power

In 2016, the Company began to report separately its Gas and Power business segment, as explained in "Item 4. Information on the Company—Business Organization," which includes the transportation, distribution and commercialization of natural gas to third parties, natural gas liquid (NGL), regasification services and electricity generation.

Revenues from the Gas and Power business segment in 2017 were Ps. 60,880 million, representing a 108.0% increase compared to Ps. 29,276 million in 2016, mainly due to the fact that the Stimulus Plan for Surplus Natural Gas Injection in this business segment began to be accrued in 2017

The operating income for the Gas and Power business segment in 2017 was a gain of Ps. 3,259 million, representing a 62.3% increase compared to a gain of Ps. 2,008 million in 2016. This increase was mainly due to the gradual recomposition of rates obtained by our subsidiary company Metrogas S.A., which recorded an operating income of Ps. 1,427 million in 2017, c compared to an operating profit of Ps. 310 million in 2016. There were also better operating results from our subsidiary company YPF Energía Eléctrica S.A. attributable to this segment.

The operating income for the Gas and Power business segment in 2016 was a gain of Ps. 2,008 million, representing a 34.0% increase compared to a gain of Ps. 1,498 million in 2015. This increase was mainly due to (i) the improved results in pesos obtained by LNG regasification services in Bahía Blanca and Escobar, which rates are set in U.S. dollars, (ii) the improved results obtained by our subsidiary YPF Energía Eléctrica S.A. and (iii) the Transitional Economic Assistance of Ps. 759 million accrued by our subsidiary Metrogas in 2016 in comparison with Ps. 711 million accrued in 2015.

#### Central Administration and Others

The operating loss for the Central Administration and Others in 2017 was a loss of Ps. 4,400 million, representing a 172.4% increase in loss compared to a loss of Ps. 1,615 million in 2016. In the second quarter of 2016, this segment included a net income of Ps.1,528 million attributable to the deconsolidation of the Maxus Entities (see Note 27 to the Audited Consolidated Financial Statements). The remaining variation is mainly related to increases in personnel costs, higher charges for computer licenses and lower results obtained by our subsidiary A-Evangelista SA, resulting in part from the lower incentives for construction by Ps. 234 million.

The operating loss for the Central Administration and Others in 2016 was a loss of Ps. 1,615 million, representing a 30.7% decrease in loss compared to a loss of Ps. 2,331 million in 2015. During 2016, this group of activities includes a net income of Ps.1,528 million attributable to the deconsolidation of the Maxus Entities (see Note 27 to the Audited Consolidated Financial Statements), offset by the increase in personnel costs, mainly due to higher wages, IT service contracts and depreciation of property, plant and equipment.

# **Liquidity and Capital Resources**

## Financial condition

Total loans outstanding as of December 31, 2017, 2016 and 2015 were Ps. 191,063 million, Ps. 154,345 million and Ps. 105,751 million, respectively, consisting of (i) current loans (including the current portion of non-current loans) of Ps. 39,336 million and non-current loans of Ps. 151,727 million as of December 31, 2017, (ii) current loans of Ps. 26,777 million (including the current portion of non-current loans) and non-current loans of Ps. 127,568 million as of December 31, 2016 and (iii) current loans of Ps. 27,817 million (including the current portion of non-current loans) and non-current loans of Ps. 77,934 million as of December 31, 2015. As of December 31, 2017, 2016 and 2015, 77%, 70%, and 73% of our loans were denominated in U.S. dollars, respectively.

In the past we have repurchased certain of our publicly-traded bonds in open market transactions on an arms-length basis. As of December 31, 2017, we had repurchased Ps. 309 million of our outstanding bonds. We may, from time to time, make additional purchases of, or effect other transactions relating to, our publicly-traded bonds if, in our own judgment, the market conditions are attractive.

The following tables set forth our consolidated cash flow information for the periods indicated.

|  | For the year ended December 31, |          |          |  |
|--|---------------------------------|----------|----------|--|
|  | 2017                            | 2015     |          |  |
|  | (in millions of pesos)          |          |          |  |
| Net cash flows from operating activities                 | 71,974                          | 49,183   | 41,404   |  |
| Net cash flows used in investing activities              | (55,242)                        | (66,174) | (64,049) |  |
| Net cash flows provided by financing activities          | (355)                           | 10,817   | 23,665   |  |
| Translation differences provided by cash and equivalents | 1,665                           | 1,692    | 4,609    |  |
| Reclassification of assets held for disposal             | (61)                            | —        |          |  |
| Deconsolidation of subsidiaries                          |                                 | (148)    |          |  |
| Net (increase) decrease in cash and equivalents          | 17,981                          | (4,630)  | 5,629    |  |
| Cash and cash equivalents at the beginning of period     | 10,757                          | 15,387   | 9,758    |  |
| Cash and cash equivalents at the end of period           | 28,738                          | 10,757   | 15,387   |  |

Net cash flows from operating activities were Ps. 71,974 million in 2017 compared to Ps. 49,183 million in 2016. This 46.3% increase was primarily attributable to better operating results, without considering impairment of property, plant and equipment and intangible assets, depreciation of property, plant and equipment and amortization of intangible assets, increased non-cash provisions, which did not involve expenditures, and lower income tax. On the other hand, there was a decrease in net working capital, mainly due to the higher accounts payable as a result of higher purchases and higher collections from the natural gas distribution companies. In addition, in 2016, we received pending payments under the Gas Plan until December 31, 2015, through the delivery of public debt instruments, specifically Argentine Bonds denominated in U.S. Dollars due 2020 ("BONAR 2020 USD") (see "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Natural gas"). The bonds were in portfolios as of December 31, 2016 and did not increase the operating cash of the Company. We believe that, given the high level of cash flow provided by operating activities, including our expectation of reducing accounts receivable from transactions with government entities (see "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—A significant percentage of our cash flow from operations is derived from counterparties that are governmental entities") and certain private clients, our working capital is reasonable for the current requirements of the Company.

Net cash flows from operating activities were Ps. 49,183 million in 2016 compared to Ps. 41,404 million in 2015. This 19% increase was primarily attributable to better operating results, without considering impairment of property, plant and equipment and intangible assets, depreciation of property, plant and equipment and intangible assets, increased non-cash provisions, which did not involve expenditures, and lower income tax. This was partially offset by an increase in working capital in 2016 related to the accrual of accounts receivable, including the Gas Plan. In addition, in 2016, we received pending payments under the Gas Plan until December 31, 2015, through the delivery of public debt instruments, specifically Argentine Bonds denominated in U.S. Dollars due 2020 ("BONAR 2020 USD") (see "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Market Regulation—Natural gas"). The bonds were in portfolios as of December 31, 2016 and did not increase the operating cash of the Company.

Cash flows used in investing activities were Ps. 55,242 million in 2017, compared to Ps. 66,174 million in 2016, representing a 16.5% decrease compared with 2016, as a result of a reduction in investments of property, plant and equipment and intangible assets in order to align said investments to the operational generation of funds, a greater liquidation of investments in financial assets, which came mainly from the collection of the Gas Plan through the receipt of public securities mentioned in the previous paragraph, and a decrease in financial loans granted. Cash flows used in investing activities were Ps. 66,174 million in 2016, compared to Ps. 64,049 million in 2015, representing a 3% increase compared with 2015, which related mainly to investments made by our Upstream business segment and investment in our refineries.

Net cash flows provided by financing activities in 2017 were Ps. (355) million, which came primarily from lower takeover, net cancellation of debt maturity and higher interest payment. Net cash flows provided by financing activities in 2016 were Ps. 10,817 million, which came primarily from the issuance of notes in the local market and international markets, net of repayments of principal and interest, including issuance of notes in the international debt capital markets for an aggregate principal amount of Ps, 13.3 billion, U.S.\$1.2 billion and of CHF 0.3 billion.In 2017, at the shareholders' ordinary and extraordinary general meeting held on April 28, 2017, a dividend of Ps. 716 million (Ps. 1.82 per share or ADS) was authorized and paid in December 2017. In 2016, at the shareholders' ordinary and extraordinary general meeting held on April 29, 2016, a dividend of Ps. 889 million (Ps. 2.26 per share or ADS) was authorized for payment in 2016. In 2015, at the shareholders' ordinary and extraordinary general meeting held on April 30, 2015, a dividend of Ps. 503 million (Ps. 1.28 per share or ADS) was authorized for payment in 2015.

A Global Medium-Term Notes Program was approved at a shareholders' meeting held on January 8, 2008 for an amount up to U.S.\$1.0 billion. On September 13, 2012 and on April 30, the shareholders' meeting approved the increase of the amount of the program, mentioned above, for an amount of U.S.\$2.0 billion each time, resulting in a maximum nominal amount in circulation at any time under the program of U.S.\$5.0 billion, or its equivalent in other currencies, and providing the use of the proceeds to cover all alternatives contemplated by Article 36 of Law No. 23,576 of Negotiable Obligations and Supplementary rules. On February 5, 2015, the shareholders' meeting resolved by a majority of computable votes to approve the increase of the amount of the Company's Global Medium-Term Notes Program of U.S.\$5.0 billion or its equivalent in other currencies by U.S.\$3.0 billion, resulting in the total maximum nominal amount outstanding under the program at any time becoming U.S.\$8.0 billion, or its equivalent in other currencies, or a lower amount as may be determined by the Board of Directors.

On April 29, 2016, the Ordinary and Extraordinary General Meeting of Shareholders approved the increase of the amount of the Company's Global Medium Term Note Program (*Programa Global de Emisión de Títulos de Deuda de Mediano Plazo de la Compañía*) by U.S.\$2.0 billion, to a total of U.S.\$10.0 billion, or its equivalent in other currencies to remain outstanding at any time under the program. In addition, the term of the Program was extended for five years starting from October 25, 2017 by our shareholders at a meeting held on April 28, 2017 and in a meeting of our Board of Directors held on June 7, 2017.

Under the Global Medium-Term Notes Program, the Company issued several series of notes in the local and international markets at different interest rates. All such securities are authorized to be traded on the Buenos Aires Stock Exchange (*Bolsa de Comercio de Buenos Aires*) and the Electronic Open Market (*Mercado Abierto Electrónico*) in Argentina. For additional information about the outstanding notes of YPF S.A. and our controlled companies as of December 31, 2017, see Notes 4 and 16 to the Audited Consolidated Financial Statements.

The following table sets forth our commitments for the periods indicated below with regard to the principal amount of our debt, as of December 31, 2017, plus accrued but unpaid interest as of that date:

|       | Expected Maturity Date |        |        |              |        |        |        |
|-------|------------------------|--------|--------|--------------|--------|--------|--------|
|       | Less                   |        |        |              |        | More   |        |
|       |                        | than 1 | 1 - 2  | 2 - 3        | 3 - 4  | 4 - 5  | than 5 |
|       | Total                  | year   | Years  | Years        | Years  | Years  | years  |
|       |                        |        | (in mi | llions of pe | sos)   |        |        |
| Loans | 191,063                | 39,336 | 11,411 | 19,051       | 25,776 | 13,929 | 81,560 |

For detailed information regarding our indebtedness, see Notes 4 and 16 to the Audited Consolidated Financial Statements.

## Contractual obligations

The following table sets forth information with regard to our commitments, expressed in U.S. dollars, under commercial contracts for the periods indicated below, as of December 31, 2017:

|                                |        | Less than 1 | 1 - 3        | 3 - 5                | More than 5 |
|--------------------------------|--------|-------------|--------------|----------------------|-------------|
| Contractual Obligations(1)     | Total  | year        | Years        | Years                | years       |
|                                |        | (in mil     | llions of U. | S.\$) <sup>(7)</sup> |             |
| Debt (2)                       | 15,720 | 2,878       | 3,242        | 3,051                | 6,549       |
| Operating lease obligations    | 551    | 295         | 212          | 18                   | 27          |
| Purchase obligations (3) (4)   | 2,928  | 1,350       | 945          | 285                  | 349         |
| Purchases of services          | 2,112  | 745         | 734          | 285                  | 349         |
| Purchases of goods             | 816    | 605         | 211          | _                    |             |
| Gas                            | 573    | 363         | 211          | _                    |             |
| Oil                            | 107    | 107         | _            | _                    |             |
| Gas Oil, Fuel Oil and Gasoline | 67     | 67          | _            | _                    | _           |
| Steam                          | 2      | 2           | _            | _                    |             |
| Others                         | 67     | 66          | 1            | _                    | _           |
| Other liabilities (5)(8)       | 8,052  | 3,372       | 1,041        | 675                  | 2,965       |
| Total (5)(6)                   | 27,252 | 7,894       | 5,440        | 4,028                | 9,890       |

- (1) The expected timing for payments of the obligations in the preceding table is estimated based on current information. Timing of payments and actual amounts paid may be different, depending on the time of receipt of goods or services, or changes to agreed-upon amounts for some obligations.
- (2) These projected amounts include interest due during all the periods presented. Interest on variable rate instruments is calculated using the rate as of December 31, 2017 for all periods. See additionally "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Covenants in our indebtedness."
- (3) Purchase obligations are obligations under contractual agreements to purchase goods or services, including capital projects. These obligations are enforceable and legally binding on YPF and specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum, or variable price provisions; and the approximate timing of the transaction. For obligations with cancellation provisions, the amounts included in the preceding table were limited to the non-cancellable portion of the agreement terms or the minimum cancellation fee. In addition, the table includes purchase commitments under commercial agreements that do not provide for a total fixed amount, which have been valued using our best estimates. Accordingly, our actual purchase obligations may differ from the estimated amounts shown in the table.
- (4) Some of our purchase orders represent authorizations to purchase rather than binding agreements. In that regard, we have entered into certain agreements for the purchase of products that specify minimum prices and quantities based on a percentage of the total available market or based on a percentage of our future purchasing requirements. Due to the uncertainty of the future market and our future purchasing requirements, as well as the non-binding nature of these agreements, obligations under these agreements have been excluded from the preceding table. Payments related to these obligations were not significant as of December 31, 2017.

- (5) Provisions for contingent liabilities under commercial contracts, which amounted to U.S.\$ 664 million as of December 31, 2017, are not included in the table above since we cannot, based on available evidence, reasonably estimate the settlement dates of such contingencies.
- (6) As a result of the extension of our concessions in certain exploration areas, we are committed to carrying out exploration activities and making certain investments and expenditures until the expiration of some of our concessions. The commitments for these investments and expenditures amounted to U.S.\$ 12.3 billion as of December 31, 2017. The table includes the portion of this amount for which contracts have been executed.
- (7) The table is presented in U.S.\$, which is the Company's functional currency.
- (8) Includes accounts payable, salaries and social security, taxes payable, provisions for pensions, provisions for environmental liabilities and provisions for hydrocarbon wells abandonment obligations as set forth in our audited consolidated financial statements included as of December 31, 2017.

We have additional commitments under guarantees. For a discussion of these additional commitments see "—Guarantees provided."

#### Covenants in our indebtedness

Our financial debt generally contains customary covenants. With respect to a significant portion of our financial debt totaling Ps. 191,063 million, including accrued interest (current and non-current debt) as of December 31, 2017, we have agreed, among other things and subject to certain exceptions, not to establish liens or charges on our assets. In addition, approximately 52 % of our debt outstanding as of December 31, 2017 were subject to financial covenants related to our leverage ratio and debt service coverage ratio.

Bank credit facilities together with capital market debt provide a material source of liquidity for the Company. Under the terms of our credit agreements and indentures, if we fail to comply with the covenants previously described or fail to remedy them during an established period of time, we will be in default; an event that would limit our capacity of borrowing under our credit facilities and would therefore materially limit our sources of liquidity.

In addition, upon an event of default, any creditor, including the holders of outstanding notes amounting to Ps. 165,154 million as of December 31, 2017, may declare due and immediately payable the principal and accrued interest on amounts owed to them, which could result in other accelerations due to cross default provisions. As of the date of this annual report, none of our debt is under any event of default that could trigger an acceleration provision. As of December 31, 2017, we were in compliance with all covenants in connection with our indebtedness.

# Guarantees provided

As of December 31, 2017, in relation to compliance with obligations of subsidiaries, YPF has issued bank guarantees for an approximate amount of US\$ 26 million and has assumed other commitments for an approximate value of US\$ 42 million.

Additionally, see Note 29.b to the Audited Consolidated Financial Statements for a description of the Chevron transaction and see Note 16 to the Audited Consolidated Financial Statements for a description of guaranteed financial debt.

#### Capital investments, expenditures and divestitures

Capital investments and expenditures

The table below sets forth our capital expenditures and investments by activity for each of the years ended 2017, 2016 and 2015.

|   | 2017                         |      | 2016                         |      | 2015                         |      |
|---|------------------------------|------|------------------------------|------|------------------------------|------|
|   | (in<br>millions of<br>pesos) | (%)  | (in<br>millions of<br>pesos) | (%)  | (in<br>millions of<br>pesos) | (%)  |
| Capital expenditures and investments <sup>(1)</sup> |                              |      |                              |      |                              |      |
| Upstream  | 45,380                       | 77   | 50,258                       | 79   | 50,927                       | 82   |
| Downstream  | 8,179                        | 14   | 9,839                        | 15   | 8,874                        | 14   |
| Gas and Power                                       | 3,867                        | 7    | 2,134                        | 3    | 469                          | 1    |
| Central Administration and Others                   | 1,639                        | 3    | 1,679                        | 3    | 1,939                        | 3    |
| Total   | 59,065                       | 100% | 63,910                       | 100% | 62,209                       | 100% |

(1) Includes acquisitions of properties, plant and equipment and exploration expenses, net of unproductive drilling expenses and well abandonment costs.

We make capital expenditures to achieve the goals of the Company's strategy described under "Item 4. Information on the Company—History and Development of YPF."

Capital divestitures

We have not made any significant divestitures in the past three years.

#### Quantitative and Qualitative Disclosures about Market Risk

For a description of our exposure to market risk, see "Item 11. Quantitative and Qualitative Disclosures about Market Risk."

# **Off-Balance Sheet Arrangements**

We do not have any material off-balance sheet agreements. Our off-balance sheet agreements are described in "—Liquidity and Capital Resources—Guarantees provided."

# Research and Development, Patents and Licenses, etc.

For a description of our research and development policies, see "Item 4. Information on the Company—Research and Development."

### ITEM 6. Directors, Senior Management and Employees

## Management of the Company

On May 3, 2012, the Argentine congress enacted the Expropriation Law. Among other matters, the Expropriation Law provided for the expropriation of 51% of the share capital of YPF represented by an identical stake of Class D shares owned, directly or indirectly, by Repsol and its controlled or controlling entities. The shares subject to expropriation, which have been declared of public interest, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed.

The Expropriation Law states that YPF shall continue as a publicly traded corporation and the management of the shares subject to expropriation shall be carried out according to the following principles: (i) strategic contribution of the Company to the aims established in the Expropriation Law; (ii) the management of the Company in accordance with the best industry and corporate governance practices, preserving the interests of the Company's shareholders and creating value for them; and (iii) the professional management of

the Company. The information provided below describes the composition and responsibilities of our Board of Directors and committees as of the date of this annual report.

#### **Board of Directors**

## Composition of our Board of Directors

Our business and affairs are managed by the Board of Directors in accordance with our by-laws and the Argentine General Corporations Law. Our by-laws provide for a Board of Directors composed of 11 to 21 members and up to an equal number of alternates. Alternates are those elected by the shareholders or the Supervisory Committee, when applicable, to replace directors who are absent from meetings or who are unable to exercise their duties, when and for whatever period appointed to do so by the Board of Directors. Alternates have the responsibilities, duties and powers of directors only if and to the extent they are called upon to attend board meetings and as long as they perform the duties of a director.

Directors shall hold office from one to three years, as determined by the shareholders' meetings. As of the Shareholders' Meeting held on April 28, 2017, our Board of Directors was composed of 15 directors and 11 alternates.

In accordance with our by-laws, the Argentine government, as the sole holder of Class A shares, is entitled to elect one director and one alternate.

Under the Argentine General Corporations Law, a majority of our directors must be residents of Argentina and all directors must establish a legal domicile in Argentina for service of notices in connection with their duties.

Our by-laws require the Board of Directors to meet at least once every quarter in person or by video conference, and a majority of directors is required to constitute a quorum. If a quorum is not met within one hour after the start time set for the meeting, the President or his substitute may invite alternates of the same class as that of the absent directors to join the meeting or call a meeting for another day. Resolutions must be adopted by a majority of the directors present (including those connected by video conference), and the President or his substitute is entitled to cast the deciding vote in the event of a tie.

The current members of our Board of Directors, in accordance with the resignations accepted by the Board of Directors at its meetings of February 15 and March 22 and the designation approved at its meeting held on April 5, 2018, is composed by 13 directors and 9 alternates. The year in which they were appointed and the year their term of appointment expires is as follows:

|   |   |     | Director | Term       |
|---|---|-----|----------|------------|
| <u>Name</u>                             | Position  | Age | Since    | Expiration |
| Miguel Ángel Gutiérrez                  | Chairman and Director                                 | 59  | 2017     | 2018       |
| Roberto Luis Monti                      | Director  | 79  | 2017     | 2018       |
| Norberto Alfredo Bruno                  | Director  | 58  | 2017     | 2018       |
| Néstor José Di Pierro                   | Director  | 62  | 2017     | 2018       |
| Ignacio Perincioli                      | Director  | 42  | 2018     | 2018       |
| Gabriel Alejandro Fidel                 | Director  | 55  | 2017     | 2018       |
| Juan Carlos Abud                        | Director  | 58  | 2017     | 2018       |
| Carlos Alberto Felices                  | Director  | 72  | 2017     | 2018       |
| Daniel Gustavo Montamat                 | Director  | 63  | 2017     | 2018       |
| Fabián Jorge Rodríguez Simón            | Director  | 59  | 2017     | 2018       |
| Inés María Leopoldo                     | Director  | 60  | 2017     | 2018       |
| Luis Augusto Domenech                   | Director  | 65  | 2017     | 2018       |
| Emilio José Apud (1)                    | Director  | 72  | 2017     | 2018       |
| Gerardo Damián Canseco (2)              | Alternate Director                                    | 52  | 2017     | 2018       |
| Luis Gustavo Villegas                   | Alternate Director                                    | 45  | 2017     | 2018       |
| Lucio Mario Tamburo                     | Alternate Director                                    | 57  | 2017     | 2018       |
| Miguel Lisandro Nieri                   | Alternate Director                                    | 45  | 2017     | 2018       |
| Daniel Cristian González Casartelli (2) | Alternate Director and CFO                            | 48  | 2017     | 2018       |
| Carlos Alberto Alfonsi (2)              | Alternate Director and Operations and Transformations |     |          |            |
|   | ExecutiveVice President                               | 57  | 2017     | 2018       |

|                               |                                 |     | Director | Term       |
|-------------------------------|---------------------------------|-----|----------|------------|
| Name                          | Position                        | Age | Since    | Expiration |
| Fernando Pablo Giliberti (2)  | Alternate Director and Supply   |     |          |            |
|                               | Chain Vice President            | 51  | 2017     | 2018       |
| Santiago Martínez Tanoira (2) | Alternate Director and          |     |          |            |
|                               | Downstream Executive Vice       |     |          |            |
|                               | President                       | 45  | 2017     | 2018       |
| Marcos Miguel Browne (2)      | Alternate Director and Gas and  |     |          |            |
|                               | Energy Executive Vice President | 48  | 2017     | 2018       |

- (1) Represents our Class A shares.
- (2) As of April 19, 2018, the individual owns less than one percent of our Class D shares.

The General Ordinary and Extraordinary Shareholders' meeting held on April 29, 2016 approved, by a majority of computable votes, the modification of Article 17, subsections i) and xiii); Article 18, subsections a), b), c), d) and e); and Article 19, subsections iii), iv) and v) of the Company's By-laws, which separated the functions of the Chairman and the Chief Executive Officer (CEO).

The Chairman of the Board of Directors, who, according to our by-laws, must be a Class D director, was elected by the Board of Directors at the meeting held on April 28, 2017. All other officers serve at the discretion of the Board of Directors and may be terminated at any time without notice.

On February, 15, 2018, the Board of Directors accepted Mr. Octavio Frigerio's resignation as Director of Class D shares, for strictly personal reasons.

On February, 15, 2018, the Board of Directors accepted Mr. Fernando Dasso's resignation as Alternate Director of Class D shares, for strictly personal reasons.

On February, 15, 2018, the Board of Directors accepted Mr. Alejandro Rodrigo Monteiro resignation as Alternate Director of Class D shares, for strictly personal reasons.

On March, 22, 2018, the Board of Directors accepted Mr. Juan Franco Donnini's resignation as Director of Class D Shares, for strictly personal reasons.

On March, 22, 2018, the Board of Directors accepted Mr. Daniel Alberto Kokogian's resignation as Director of Class D Shares, for strictly personal reasons.

On April 5, 2018 the members of the Supervisory Committee for the Class D shares designated Mr. Ignacio Perincioli as Director for Class D shares, to replace Mr. Juan Franco Donnini with tenure until the election of new directors at the next Shareholder's Meeting.

Outside business interests and experience of the members of our Board of Directors

Miguel Ángel Gutiérrez

Mr. Gutiérrez is a founding partner of The Rohatyn Group and leads its private investments, real estate, infrastructure and renewable energy activities. From 1980 to 2001, he held various positions at J.P. Morgan, including Managing Director in charge of Global Emerging Markets and member of the Management Committee for Global Markets. In addition, he served as Chairman of the Board of Directors of Autopistas de Oeste S.A. and Chairman and CEO of Grupo Telefónica de Argentina S.A. He was also a member of the Consultative Council of CIPPEC and of the International Advisory Board of the IAE Business School. Currently, he is a member of the Economic and Social Council of the Universidad Torcuato Di Tella, and of the Council of the Fundación Cruzada Argentina. He has been a member of the Board of Directors of YPF since December 2015 and Chairman of the Board of Directors since April 2016.

### Roberto Luis Monti

Mr. Monti earned undergraduate and master's degrees in electrical engineering from the Universidad de Buenos Aires and a master's degree in business administration from the American Management Association in New York. He has broad experience in the national and international energy industry. From 1995 to 1997, he was Chairman and CEO of Maxus Energy Corporation. From 1997 to 1999 he held various positions at YPF, including CEO during 1997 and Chairman and CEO from 1998 to 1999. From 1999 to 2000, he was Executive Vice-President of Exploration and Production of Repsol YPF in Argentina. He was also a member of the Board of Directors of Petrobras Argentina S.A. until July 26, 2016. He is a member of the Board of Directors of Tenaris S.A. He has been a member of the Board of Directors of YPF since April 2016.

#### Norberto Alfredo Bruno

Mr. Bruno earned a degree in business administration from Universidad Argentina de la Empresa and completed postgraduate studies in strategic management at the Institute of Strategic Management, Organization and Business Management and the Instituto Argentino de Economía Energética, as well as in energy economics at the Massachusetts Institute of Technology. From 1983 to 1998, he held various positions at YPF, including International Development Manager. From 1998 to 2000, he was CEO of YPF Perú. From October 2001 to December 2013, he was CEO of Empresa de Energía Río Negro S.A. Thereafter, he served as a business consultant and advisor. Since December 2015, Mr. Bruno has served as Minister of Economy and Infrastructure of the Province of Neuquén. He has been a member of the Board of Directors of YPF since April 2016.

## Néstor José Di Pierro

Mr. Di Pierro was a Deputy in the Legislature of the Province of Chubut from 1991 to 1995, Secretary of Social Welfare for the Municipality of Comodoro Rivadavia in the Province of Chubut from 1995 to 1999, Councilman in the Deliberative Council of Comodoro Rivadavia from 1999 to 2001, Comptroller of Petrominera Chubut S.E from 2003 to 2009, President of Correo Oficial de Argentina S.A. from 2009 to 2011, and Mayor of the Municipality of Comodoro Rivadavia from 2011 to December 2015. He has been a member of the Board of Directors of YPF since December 2015.

# Ignacio Perincioli

Mr. Perincioli holds a degree in business administration and is a Certified Public Accountant from the Universidad de Buenos Aires. He has also completed a Project Management specialization of the Asociación Argentina de Evaluadores (ASAE) and a specialization in the management of small and medium sized enterprises in the Universidad de Buenos Aires. He served in the Department of Control of External Indebtedness of the Auditor General's Office, in the Secretariat for Coordination and Management Control and in the Provincial Road Program within the Ministry of Federal Planning, Public Investment and Services of the Argentine Government. He also worked in the Finance and Management Department of Opinion Austral S.A. Between July 2014 and December 2015 he was a member of the Board of Directors of YPF S.A. From December 2015 through March 2018 he was the President of Fomento Minero de Santa Cruz S.E., Director and Vice-President of Cerro Vanguardia S.A., and a member of the Supervisory Committee in Patagonia Gold S.A. Currently he is the Minister of Economy, Finance and Infrastructure of the Province of Santa Cruz. He is a member of the Board of Directors of YPF since April 5, 2018.

### Gabriel Alejandro Fidel

Mr. Fidel obtained an administration and political science degrees from the Universidad Nacional de Cuyo and has a master's degree in Public Affairs with specialization in economic policy from University of Texas, Austin. He was awarded a Fulbright Scholarship and of UN-CEPAL (Chile). He has held various positions throughout his career, including Under Secretary of Tourism, Ministry of Government, and Ministry of Economy, all of them of the Province of Mendoza. Currently, he is a member of the Mercosur Parliament and a part-time professor of Economics at the Universidad Nacional de Cuyo. He was designated a member of the Board of Directors of YPF on March 29, 2017.

# Juan Carlos Abud

Mr. Abud graduated as public accountant from the Universidad Nacional de Jujuy. He obtained an MBA from the Universidad Nacional de Jujuy and completed the Advanced Management Program at Instituto Centroamericano de Administración de Empresas. He has held various offices throughout his extensive career. He was a representative in the Jujuy Province Legislature (1997 through 2001 and 2001 through 2005); President of the Public Policies Institute (2005 through 2007); President of the San Salvador de Jujuy City Council, where he served two terms of office (between 2007 and 2011); and Treasury Secretary of the San Salvador de Jujuy Municipality (2011 through 2015). Mr. Abud has been Minister of Economic Development and Production of the Province of Jujuy since December 2015. He has been a member of YPF's Board of Directors since April 2017.

#### Carlos Alberto Felices

Mr. Felices earned a business administration degree from the Universidad de Buenos Aires and completed postgraduate studies in the United States. He has held various positions at Pfizer Inc., including Treasurer in Argentina, CFO in Brazil and Director of Administration for Latin America in the United States. From 1993 to 2002, he worked for YPF eventually serving as CFO. He was CEO of Telecom Argentina S.A. until 2007 and Chairman of the Board of Directors of Telecom Argentina S.A. from 2007 until April 2008. He has been a member of the Board of Directors of YPF, President of the Audit Committee and the Audit Committee Financial Expert since December 2015.

## Daniel Gustavo Montamat

Mr. Montamat holds a law degree, a degree in Economics and is a Certified Public Accountant. He earned a master's degree in economics from Michigan State University in the United States, a doctoral degree in economics from the Universidad Católica de Córdoba and a doctoral degree in law and social sciences from the Universidad Nacional de Córdoba. He has held various positions, including Director of Gas del Estado, Director and President of YPF and Secretary of Energy of Argentina. In 1991, he founded Montamat & Asociados in the Autonomous City of Buenos Aires where he serves as Executive Director. Currently, he is a consultant for the World Bank and the Inter-American Development Bank and a postgraduate professor for the Energy Regulation Study Centre (CEARE) at Universidad de Buenos Aires. He has been a member of the Board of Directors of YPF and the Audit Committee since December 2015.

# Fabián Jorge Rodríguez Simón

Mr. Rodríguez Simón earned a law degree from the Universidad de Buenos Aires and completed a PIL at Harvard Law School. He has held various positions, including Advisor to the Mayor of the Autonomous City of Buenos Aires, Chief of Staff for the Ministry of Environment and Public Space of the Autonomous City of Buenos Aires from 2007 to 2009 and President of the Commission Act 1840 "Zero Waste." He was a founding partner of Llerena & Abogados and served as Director of its Executive Committee. He was a member of the Governing Council of the Instituto de Empresa (Madrid) between 2006 and 2014. He is President of the Fundación Pericles, member of the Council of the Council of Fundación Pensar. Currently, he is a senior partner of AlfaLegalGroup. Since October 2015 he is a member of the Mercosur Parliament. He has been a member of the Board of Directors of YPF since December 2015.

# Inés María Leopoldo

Mrs. Leopoldo graduated as an electronic engineer from the Universidad Tecnológica Nacional and earned a master's degree in business administration from the Universidadde Buenos Aires. Additionally, she completed diverse Senior Management Programs at IESE Business School, the INSEAD and Columbia Business School and a Corporate Governance Program at IC-A in Spain. She has broad experience in the IT, telecommunications and internet industries and has held various positions at Telecom, La Nación newspaper and Telefónica. She is senior member of the IEEE (Institute of Electronic and Electrical Engineers). Currently, Mrs. Leopoldo is partner at Neo Labels SL—an advertising agency in Spain. She has been a member of the Board of Directors of YPF and the Audit Committee since April 2016.

# Luis Augusto Domenech

Mr. Domenech earned a degree in business administration from the Universidad de Buenos Aires and completed the Senior Management Program at IAE Business School and the Executive Education Program at the Business School at the University of Michigan in the United States. From 1993 to 2004, he held several positions at Metrogas S.A., including CFO from 1993 to 2002 and CEO from 2002 to 2004. From 2004 to 2013, he was President and CEO of Companhia do Gas do Sao Paulo (COMGAS) in Brazil. He has been a member of the Board of Directors of YPF and the Audit Committee since April 2016.

### Emilio José Apud

Mr. Apud earned an industrial engineering degree and completed postgraduate degrees in energy economics and management control of large projects at the Engineering School of the Universidad de Buenos Aires. He earned a postgraduate degree in Regional Economic Analysis at the Institute for Economic and Social Development at Torcuato Di Tella Institute and a postgraduate specialization in energy conservation at Dupont W.L. in the United States. He has held various positions, including Director of CAMMESA and Secretary of Energy and Mining of Argentina in 2001. From 1983 to 1989, he founded and served as Vice President of IAE and the Energy Institute G. Mosconi. He has owned Apud & Associates, a consulting firm in energy and the environment, since 2005. Currently, he serves as partner and director of AMPAR, a Paraguayan consulting firm and of Ecoriental, an Uruguayan consulting firm. In addition, he serves as Chairman of BAE S.A., a builder and developer, as Counselor at the Fundación Libertad y Progreso and as member of Fundación Pensar. He has been a member of our Board of Directors since 2015.

## Gerardo Damián Canseco

Mr. Canseco earned a law degree and specializes in Trade Union Law. Since 1984, he has been an employee of YPF. He has held several other positions, including Government Secretary for the Municipality of San Lorenzo in the Province of Santa Fe from 2007 to 2011, Undersecretary of Labor for the Labor and Social Security Ministry from 2011 to 2014, and President of the Centro de Estudios Laborales y Sociales of Rosario from 2014 to 2016. He has been an alternate member of the Board of Directors of YPF since April 2016.

# Luis Gustavo Villegas

Mr. Villegas has served in several positions within the oil industry since 1990. Currently, he serves as Undersecretary for the Union of Senior Staff and Professionals in the Southern Patagonian Oil and Gas Private Sector and as a Senior Staff Member of the Oil Tankers Mutual Commission. He has been an alternate member of the Board of Directors of YPF since December 2015.

#### Lucio Mario Tamburo

Mr. Tamburo earned a civil engineering degree from the Universidad Nacional del Sur Bahía Blanca. He has held various positions, including Inspection Assistant for the Provincial Roads Direction in the Province of Río Negro and as Sanitation Consultant for the National Undersecretary of Water Resources. He was the Engineering and Construction Manager and Service and Maintenance Chief of Bahía Blanca at Azurix Buenos Aires S.A. He also served as Administrator of the National Entity of Water Works of Sanitation (ENOHSA) until December 2015. He has been an alternate member of the Board of Directors of YPF since December 2015.

# Miguel Lisandro Nieri

Mr. Nieri earned a degree in economics from the National Universidad Nacionalde Cuyo and holds a master's degree in finance and management control from the ADEN Business School, University of San Francisco. He has held various positions throughout his career, including Advisor of the Ministry of Finance of the Province of Mendoza from January 2000 to November 2003, Subdirector of Finance of the Provincial Fund for the Transformation and Growth of Mendoza from July 2004 to February 2007, member of the Board of Directors of Mendoza Fiduciaria S.A. from June 2006 to April 2007, business manager of Puente Hnos. Sociedad de Bolsa in Cuyo from March 2008 to June 2009, and Administrator of Financing for the Development of Mendoza Agency from December 2015 to March 2017. Currently, he is Minister of Finance of the Province of Mendoza since March 2017 and alternate member of the Board of Directors of YPF since March 2017.

### Daniel Cristian González Casartelli

Mr. Gonzalez earned a degree in business administration from the Pontifica Universidad Católica de Argentina. He worked for the investment bank Merrill Lynch & Co. in Buenos Aires and New York for 14 years and held the positions of Head of Mergers and Acquisitions for Latin America and President for the Southern Cone (Argentina, Chile, Peru and Uruguay), among others. While at Merrill Lynch, Mr. Gonzalez played a leading role in several of the most important investment banking transactions in the region and was an active member of the firm's global fairness opinion committee. He remained as a consultant to Bank of America Merrill Lynch after his departure from the bank. Additionally, he has held the position of Head of Financial Planning and Investor Relations in Transportadora de Gas del Sur SA. Currently, he is a member of the Board of Directors of Adecoagro S.A. He was an alternate member of our Board of Directors from April 2014 to June 2014, a member of our Board of Directors from June 2014 to April 2016. He was CEO on an interim basis from April 29, 2016 until June 30, 2016 and was our Chief Financial Officer from July 2012 until April, 2018. He is an alternate member of our Board of Directors since April 2016, and he is our CEO since April, 2018.

# Carlos Alberto Alfonsi

Mr. Alfonsi earned a degree in chemistry from the Universidad Tecnológica de Mendoza, a degree in IMD Managing Corporate Resources from the University of Lausanne and has studied at the Massachusetts Institute of Technology. Since 1987, he has held various positions at YPF, including Operations Manager, Director of La Plata Refinery, Operation Planning Director, Director of Commerce and Transportation for Latin America, Director of Refinery and Marketing in Perú, Country Manager for Perú and R&M for Perú, Chile, Ecuador and Brazil. Mr. Alfonsi was our Downstream Executive Vice President from June 2010. He was an alternate member of the Board of Directors from March 2008 to June 2012 and a member of the Board of Directors from 2012 to 2016. Currently he is an alternate member of the Board of Directors of YPF since April 2016. Mr. Alfonsi is our Operations and Transformation Executive Vice President since August 2017.

#### Fernando Pablo Giliberti

Mr. Giliberti earned a certified public accountant degree from the Universidad Católica Argentina, a master's degree in business administration from the Universidad Argentina de la Empresa, a postgraduate diploma in Management and economics of Natural Gas, University of Oxford and a Master of Science in Management degree from Stanford University. He has held several positions at YPF, including Head of Accounting and Finance at our headquarters in Mendoza, South Division Business Support Manager, Asset Manager of the El Guadal-Lomas del Cuyo, Business Development Manager and Exploration and Production Business Development Director. In San Antonio, he was Vice President of Business Development and Vice President of the Latin America Division of Pride International. He later served as Vice President of Business Development at Pioneer Natural Resources of Argentina. In 2006, he founded Oper-Pro Services S.A. He was our Strategy and Business Development Vice President from June 2012 until December 2016. He was member of the Board of Directors of YPF from June 2012 to April 2013. He has been an alternate member of the Board of Directors of YPF since April 2014 and our Supply Chain Vice President since December 2016.

### Santiago Martínez Tanoira

Mr. Martínez Tanoira earned a degree in industrial engineering from the Instituto Tecnológico de Buenos Aires (ITBA), he holds a master's degree in Business Administration from Universidad Austral, he completed specialization courses at the University of Virginia Darden, Wharton School of the University of Pennsylvania and Harvard University in the United States. In 1998, he joined YPF and took on several roles within the Petrochemical Business Development area of the Petro-chemistry Division. He was in charge of Marketing and Business Development within the Industrial Products Business Unit and served as Planning Manager of YPF's Petrochemicals Division. Moreover, he held the position of Base Petrochemical and Intermediate Director at Repsol Química in Spain. Afterwards he was appointed Director of YPF Chemestry at YPF and a member of the board of directors of Profertil. Over the last four years, he served as Executive Manager of the Mendoza Region, in charge of the Upstream operations. Mr. Martinez Tanoira was our Upstream Executive Vice President from October 2016 until August 2017, and has been our Downstream Executive Vice President since August 2017.

# Marcos Miguel Browne

Mr. Browne earned a degree in industrial engineering from the Instituto Tecnológico de Buenos Aires (ITBA), obtained a master's degree in business administration from Henley Management College in the United Kingdom and a diploma in natural gas management and economics from the College of Petroleum Studies, University of Oxford United Kingdom. He further completed a specialization in the economics of petroleum and natural gas at the ITBA and a Management Development Program at IAE Business School. He has held several positions at YPF, including Head of Supply and Processing of Natural Gas from February 1994 to May 2000. He served as Head of the Gas and Liquid Gas Processing Business at TGS S.A. where he held various roles from June 2000 to March 2004. He is a founding partner of Endriven S.A. wherehe served as Director until March 2016. He also served as General Manager of Gas Meridional S.A., General Manager of C3Plus S.A. and President of Fuels Meridional S.A. Mr. Browne has been our Gas & Energy Executive Vice President since March 2016.

# Board practices

The information provided below describes the composition and responsibilities of our Board of Directors.

### **Board practices of our Board of Directors**

In accordance with the Argentine General Corporations Law, directors have an obligation to perform their duties with loyalty and with the diligence of a prudent business person. Directors are jointly and severally liable to us, our shareholders and to third parties for the improper performance of their duties, for violating the law or our by-laws or regulations, and for any damage caused by fraud, abuse of authority or gross negligence. Specific duties may be assigned to a director by the by-laws, applicable regulations, or by shareholder resolution. In such cases, a director's liability will be determined by reference to the performance of those specific duties so long as the director's appointment and assignment of duties was approved at a shareholders' meeting and is registered with the Superintendency of Corporations.

Only shareholders, through a shareholders' meeting, may authorize directors to engage in activities in competition with us. Transactions or contracts between directors and us in connection with our activities are permitted to the extent they are performed under fair market conditions. Transactions that do not comply with the above requirements may only be carried out with prior approval of the Board of Directors or, in the absence of a quorum at a Board of Directors meeting, the Supervisory Committee. In addition, these transactions must be subsequently approved by our shareholders at a general meeting. If our shareholders do not approve the relevant transaction, the directors and members of the Supervisory Committee who approved the transactions will be held jointly and severally liable for any damages caused to us.

Any director whose personal interests conflict with ours on any matter shall notify the Board of Directors and the Supervisory Committee and abstain from voting on the matter. Otherwise, such director may be held liable to us.

A director will not be liable if, notwithstanding his presence at the meeting at which a resolution is adopted or his knowledge of such resolution, a written record exists of his opposition to such resolution and he reports his opposition to the Supervisory Committee before any complaint against him is brought before the Board of Directors, the Supervisory Committee, the shareholders' meeting, the appropriate governmental agency or the courts. Any liability of a director to us terminates upon approval of the director's actions by the shareholders at a general meeting, provided that shareholders representing at least 5% of our capital stock do not object and provided further that such liability does not result from a violation of the law, our by-laws or other regulations.

## Board of Directors and Senior Management Roles in cybersecurity

The Board of Directors have analized risks, action plans and evolution of cyber security in the company.

Directors and Senior Management have also carried out workshops over certain cyber security issues and their possible impact on the Company operations.

Training for mid-range management, key holders and employees regarding several cyber security topics was also carried out. See "Item 3. Key Information—Risk Factors—Risks Relating to Our Business— We may be subject to information technology system failures, network disruptions, and breaches in data security and our business, financial position, results of operations, and cash flows could be negatively affected by such security threats and disruptions."

The Audit Committee of the Company's Board of Directors oversees the Company's risk mitigation strategies related to cybersecurity. The Risks and Sustainability Committee monitors the main risks that are specific to the Company and/or its activity, including cyber risks; and ensures that the Company implements the corresponding mitigation actions, among other functions.

# **Senior Management**

At its meeting on August 28, 2017, the Board of Directors of the Company approved the following changes:

- The resignation of the CEO, Mr. Ricardo Darré.
- The creation of the Operations and Transformation Vice Presidency and the appointment of Mr. Carlos Alfonsi to serve in this role.
- The designation of Mr. Pablo Bizzotto to serve as Upstream Executive Vice President.

- The designation of Mr. Santiago Martínez Tanoira to serve as Downstream Executive Vice President.
- The Communication and Institutional Relations Vice Presidency is converted to the Corporate Affairs, Communications and Marketing Vice Presidency, which will be led by Mr. Sebastián Mocorrea.
- The incorporation of the Business Development function within the functions of the CFO.
- The creation of the internal Executive Management Committee, composed of the Upstream, Downstream, Gas and Energy Executive Vice Presidencies, the CFO and the new Vice Presidencies of Corporate Affairs, Communications and Marketing and of Operations and Transformation.
- The other vice-presidencies that made up the Management Committee, will report as follows
  - The incorporation of the Business Development area within the functions of the CFO and that the Vice Presidence of Supply Chain, led by Mr. Fernando Giliberti; MASS, led by Mr. Gustavo Chaab; Human Resources, led at that time by Mr. Fernando Dasso and currently by Mr. José Manuel Aggio; and the CTO, Mr. Sergio Fernández Mena, will report to the new Vice Presidency of Operations and Transformation led by Mr. Carlos Alfonsi.
  - The Board of Directors also approved that the Legal Affairs Corporate Vice Presidency, led by Mr. Germán Fernández Lahore, will report to the Vice Presidency of Corporate Affairs, Communication and Marketing.
  - The Vice Presidency for Business Development by Sergio Giorgi will report to the CFO.

Afterwards, the Board, on its meeting held on April 5, 2018 approved the appointment of Mr. Daniel González as General Manager (CEO) of the Company.

Additionally, in the same meeting, the Board approved that the positions reporting to Mr. González, will now report to the CEO, as follows:

I. Controller, Mr. Diego Martín Pando; and

II. CFO, Mr. Luis Sas.

Furthermore, the Strategy and Business Development Vice Presidency, in charge of Mr. Sergio Giorgi, also reporting to the CEO, will have under its report the Investor's Relations Management, led by Mr. Diego Celaá.

As of the date of this annual report, the internal Executive Management Committee is composed of the CEO, the Upstream, Downstream, Gas and Energy Executive Vice Presidencies, and the new Vice Presidencies of Corporate Affairs, Communications and Marketing and of Operations and Transformation.

Our current senior management as of the date of this annual report consists of:

Name Daniel Cristian González Casartelli(1) Chief Executive Officer Controller and President of the Disclosure Committee Diego Martín Pando Luis Miguel Sas Chief Financial Officer Santiago Martínez Tanoira<sup>(1)</sup> Downstream Executive Vice President Pablo Bizzotto (1) Upstream Executive Vice President Carlos Alfonsi(1) Operations and Transformations Executive Vice President Marcos Browne (1) Gas and Energy Executive Vice President Sebastián Mocorrea<sup>(1)</sup> Corporate Affairs, Communication and Marketing Executive Vice President Sergio Fabián Giorgi (1) Strategy and Business Development Vice President

(1) As of April 19, 2018, the individual owns less than one percent of our Class D shares.

In addition to the members of our senior management for whose outside business interests and experiences were described above, we include the following:

#### Pablo Bizzotto

Mr. Bizzotto holds a petroleum engineering degree from Universidad Nacional del Comahue. He completed a Management Development Program at IAE and earned an MBA from the University of Barcelona. He started his career with Tecpetrol (Techint Group). He also worked at Panamerican Energy for thirteen years, where he served as Acambuco Unit Manager, in the North of Argentina, and Cerro Dragón General Manager, in Golfo San Jorge Basin. He then joined YPF, where he served as Executive Manager of the Unconventional Region between April 2014 and August 2017. Since August 2017, he has been our Upstream Executive Vice President.

#### Sebastián Mocorrea

Mr. Mocorrea earned a degree in law from the University of Buenos Aires and a degree in political science from the Pontifical Catholic University of Argentina. From 1996 to 1998, he served as Chairman of the Asociación de Televisión Argentina and as Vice President of Argentina's Information and Communications Chamber from 1998 to 2000. In 1997, he joined IBM as Director of Communications and External Relations of IBM South Latin-America—Argentina, Chile, Paraguay and Uruguay. In 2000, he became a Regional Director of IBM Latin America in the United States. He also served as Vice President of Public Affairs of IBM Europe in Brussels. In 2012, he founded Argencon, an institution that promotes the export of knowledge-based services. Currently, he serves as Board Adviser of Argencon and participates in the Council of the Americas and ACDE. From October 2012 to May 2016, Mr. Mocorrea was Vice-President of Public Affairs and Regulations, Latin America and Global Business Support of IBM Corporation. Mr. Mocorrea was our Communication and Institutional Relations Vice President from May 2016 until August 2017. He has been our Corporate Affairs, Communications and Marketing Executive Vice President since August 2017.

## Diego Martín Pando

Mr. Pando holds a Public Accountant degree from the Universidad Nacional de Rosario, a Master degree in Corporate Finance from Universidad CEMA and a Postgraduate degree in Business Administration from Universidad Austral de Rosario. He started his career joining the ex-brand "Arthur Andersen" company in which he performed in the audit and corporate finance area. In 2002 he joined the YPF group originally working in one of its subsidiaries, A-Evangelista S.A. Since 2005 he joined YPF S.A. where he held several positions. Currently, he is our Controller and President of the Disclosure Committee.

## Luis Miguel Sas

Mr. Sas holds a Public Accountant degree from the Universidad de Buenos Aires. He also holds an MBA—Master's Degree in Business and Administration from the IAE and an executive program from Columbia University. He has an extensive background in corporate finance, financial operations, capital markets and finance projects. He worked in management positions at Petrobras, Edesur and Pérez Companc. In addition, he participated in the privatization of Telecom, Edesur, TGS and Metrogas. He was a member of financial committees in various companies and responsible for conducting the "due diligence" for various companies. Since June 2018 he joined the Financial Vice Presidency at YPF. Currently, he is our CFO.

## Sergio Fabian Giorgi

Mr. Giorgi earned a degree in Civil Engineering from the University of Buenos Aires and a Postgraduate degree from the French Institute of Petroleum. He completed a General Management Program organized by Total Group, in partnership with HEC Paris and Saïd Business School from Oxford University. In 1994, he joined YPF as a drilling engineer. In 1996, he joined Total where he assumed different positions within the oil exploration and exploitation areas for Argentina, Scotland, Indonesia, Italy, Libya and France. In 2007, he managed Total's drilling and wells operations for Asia, North Africa, Middle East and Australia. In 2009, he was in charge for Development and Planning Studies group with focus in Africa. From 2011 to 2013, he was appointed Total's New E&P Business Project Director for Latin America. Thereafter, he joined Total Austral in Argentina as Unconventional Resources Director. Mr. Giorgi was appointed as our Business Development and Project Architecture Vice President in December 2016 and is our Strategy and Business Development Vice President since August 2017.

### The Audit Committee

The information provided below describes the composition and responsibilities of our Audit Committee.

Composition and responsibilities of our Audit Committee

The Stock Market Law, as defined in "Item 9. The Offer and Listing Argentine Securities Market," and Resolution No. 622/2013 of the Argentina National Securities Commission (*Comision Nacional de Valores*) ("the CNV") require Argentine public companies to appoint an Audit Committee (*comité de auditoría*) composed of at least three members of the Board of Directors. The by-laws must set forth the composition and regulations for the operation of the Audit Committee and a majority of its members must be independent directors. See "—Independence of the Members of our Board of Directors and Audit Committee."

The Board of Directors of the Company, at its meeting held on April, 28, 2017, appointed the current members of the Audit Committee, who as of the date of this filing are: Carlos Felices, as chairman, and Daniel Gustavo Montamat, Luis Augusto Domenech, Emilio José Apud and Inés María Leopoldo, as members. Additionally, Mr. Felices was determined by our Board of Directors to be an "Audit Committee Financial Expert" pursuant to the rules and regulations of the SEC.

Executive directors may not sit on the Audit Committee.

Our Audit Committee, among other things:

- periodically inspects the preparation of our financial and economic information;
- reviews and opines on the Board of Directors' proposals regarding the designation of the external auditors and the renewal, termination and conditions of their appointment;
- evaluates internal and external audit work, monitors our relationship with the external auditors, and assures their independence;
- provides appropriate disclosure regarding transactions where a conflict of interest exists among members of the corporate committees or controlling shareholders;
- opines on the reasonability of proposals brought forth by the Board of Directors on fees and stock option plans for directors and administrators;
- verifies compliance with applicable national or international regulations for matters related to behavior in the stock markets; and
- ensures that the internal Code of Ethics complies with normative demands and is adequate.

Activities of the Audit Committee

The Audit Committee, pursuant to its regulations, must meet as many times as needed and at least once every quarter. From April 2017 to April 23, 2018 the Audit Committee held 9 formal meetings, regardless of all the working meetings held.

The Audit Committee must support the Board of Directors in its oversight duties, periodically review economic and financial information relating to us, supervise the internal financial control systems and oversee the independence of external auditors.

Economic and financial information

Using the assessment of the CFO and the work performed by our external and internal auditors, the Audit Committee analyzes the consolidated annual and quarterly financial statements before they are submitted to the Board of Directors. The Audit Committee reviewed our consolidated financial statements as of and for the year ended December 31, 2017 included in our report on Form 6-K furnished to the SEC on March 5, 2018.

Oversight of the internal control system

The Audit Committee oversees the progress of our annual internal audit, which is aimed at identifying critical risks, to supervise internal financial control systems and ensure that they are sufficient, appropriate and efficient.

Throughout the year, the Audit Committee is kept informed by our internal audit department of the most relevant facts and recommendations arising out of its work and the status of the recommendations issued in prior years.

The Audit Committee supervised the alignment of our internal control system for financial reporting with the requirements established by Section 404 of the Sarbanes-Oxley Act. These regulations require that, along with the annual audit, a report must be presented by our management relating to the design, maintenance and periodic evaluation of the internal control system for financial reporting and be accompanied by a report from our external auditor. Several of our departments are involved in this activity, including the internal audit department.

#### Relations with the external auditors

The Audit Committee interacts closely with the external auditors, allowing them to make a detailed analysis of the relevant aspects of the audit of financial statements and to obtain detailed information on the planning and progress of the work.

The Audit Committee also evaluates the services provided by our external auditors, determines whether the conditions for independence of the external auditors, as required by applicable law, are met and monitors the performance of external auditors to ensure that it is satisfactory.

As of the date of this annual report, and pursuant to the evaluation process described in the above paragraph, the Audit Committee had no objections to the designation of Deloitte & Co. S.A. as our external auditors of the financial statements for the year ended December 31, 2017. In addition, the Audit Committee, at its meeting held on March 2, 2018, as a result of the evaluation process outlined in the preceding paragraph, had no objections to the designation of Deloitte & Co. S.A. as our external auditors for the year ended December 31, 2018, which will be voted on at the next general shareholders' meeting.

## Independence of the Members of our Board of Directors and Audit Committee

Pursuant to CNV regulations, a director is not considered independent when such director (i) owns at least a 15% equity interest in a company, or a lesser interest if the director has the right to appoint one or more directors of the company (hereinafter "Significant Participation"), or has a Significant Participation in another company that in turn has a Significant Participation in the company or a significant influence on the company ("significant influence" as defined by Argentine GAAP); (ii) is a member of the Board of Directors of, or depends on, or is otherwise related to shareholders who have a Significant Participation in the company or another company in which these shareholders have a direct or indirect Significant Participation or significant influence; (iii) is or has been in the previous three years an employee of the company; (iv) has a professional relationship with, or is a member of a company that maintains professional relationships with, or receives remuneration (other than that received in consideration of his performance as a director) from the company or any of its shareholders who has a direct or indirect Significant Participation in or significant influence; (v) directly or indirectly sells or provides goods or services to the company or to any of its shareholders who has a direct or indirect Significant Participation in or significant influence; (v) directly or indirectly sells or provides goods or services to the company for an amount exceeding his remuneration as a member of the Board of Directors or Audit Committee; or (vi) is the spouse or parent (up to second grade of affinity or up to fourth grade of consanguinity) of persons who, if they were members of the Board of Directors or Audit Committee, would not be independent, according to the above-listed rules.

As of the date of this annual report, Directors Miguel Ángel Gutiérrez, Roberto Luis Monti, Norberto Alfredo Bruno, Néstor José Di Pierro, Ignacio Perincioli, Gabriel Alejandro Fidel, Juan Carlos Abud, Carlos Alberto Felices, Daniel Gustavo Montamat, Fabián Jorge Rodriguez Simón, Inés María Leopoldo, Luis Augusto Domenech and Emilio José Apud, and Alternate Directors Luis Gustavo Villegas, Lucio Mario Tamburo and Miguel Lisandro Nieri qualified as independent members of our Board of Directors under the above-described criteria.

#### **Disclosure Committee**

## Composition and responsibilities of our Disclosure Committee

In February 2003, the Board of Directors created a Disclosure Committee to:

• monitor overall compliance with regulations and principles of conduct of voluntary application, especially in relation to listed companies and their corporate governance;

- direct, establish and maintain procedures for the preparation of accounting and financial information to be approved and filed by us or generally released to the markets;
- direct, establish and maintain internal control systems that are adequate and efficient in order to ensure that our financial statements included in annual and quarterly reports as well as any accounting and financial information to be approved and filed by us is accurate, reliable and clear;
- identify significant risks to our businesses and activities that may affect the accounting and financial information to be approved and filed by us;
- assume the activities that, according to U.S. laws and SEC regulations, are applicable to us and may be assumed by disclosure committees or other internal committees of a similar nature, especially those activities relating to the SEC regulations dated August 29, 2002 ("Certification of Disclosure in Companies' Quarterly and Prospectus"—SEC Release number 33-8124) and the existence and maintenance of adequate procedures and controls for the generation of the information to be included in our annual reports on Form 20-F and other information of a financial nature as required to be certified by our Chief Executive Officer and Chief Financial Officer;
- take on activities similar to those stipulated in SEC regulations for a disclosure committee with respect to the existence and maintenance of adequate procedures and controls for the preparation and content of the information to be included in the annual financial statements and any accounting or financial information to be filed with the CNV and other regulators of the stock markets where our stock is traded; and
- formulate proposals for an internal code of conduct with respect to stock markets that follow applicable rules and regulations
  or any other standards deemed appropriate.

In addition, the Disclosure Committee reviews and supervises our procedures for the preparation and filing of:

- official notices to the SEC, the Argentine stock market authorities and other regulators of the stock markets where our stock is traded;
- interim financial reports;
- press releases containing financial data on results, earnings, large acquisitions, divestitures or any other information relevant to shareholders;
- general communications to shareholders; and
- presentations to analysts, investors, rating agencies and lending institutions.

As of the date of this annual report, the Disclosure Committee is composed of the following individuals:

Name
Daniel Cristian González Casartelli
Diego Martín Pando
Luis Miguel Sas
Germán Fernández Lahore

Santiago Martínez Tanoira Pablo Bizzotto

Gustavo Chaab Carlos Alfonsi Marcos Browne Fernando Giliberti Sebastián Mocorrea

José Manuel Aggio

Position

Chief Executive Officer

Controller and President of the Disclosure

Chief Financial Officer

Legal Affairs Corporate Vice President and Secretary of the

Disclosure Committee

Downstream Executive Vice President Upstream Executive Vice President

Environment, Security and Health Vice President

Operations and Transformations Executive Vice President

Gas and Energy Executive Vice President

Supply Chain Vice President

Corporate Affairs, Communication and Marketing Executive

Vice President

Human Resources Vice President

Name
Sergio Fernandez
Javier Fevre
Carlos Colo
Sergio Fabián Giorgi

Chief Technical Officer
Internal Auditor
Reserves Auditor
Strategy and Business Development Vice President

In addition to the members of our senior management whose outside business interests and experiences were described above, we include the following:

Position

## Germán Fernández Lahore

Mr. Fernández Lahore earned a law degree from the Universidad de Buenos Aires and participated in the Academy for American and International Law. He further earned a master's degree in Natural Resources Law and Policy from University of Dundee, Scotland, United Kingdom as a Chevening scholar, a postgraduate degree in Tax Law from Universidad Austral, and completed the Management Development Program at IAE Business School. He is a member of the Academic Council of the Argentine Journal of Energy, Hydrocarbons and Mining Law (*Revista Argentina de Derecho de la Energía, Hidrocarburos y Minería*). His areas of expertise include Oil, Natural Gas and Mining Law and Natural Resources Taxation and Financing. Prior to joining YPF, he served as an attorney at Estudio Beccar Varela, as foreign associate at Haynes and Boone, LLP in Dallas, Texas. He joined our company our Oil Affairs Management in February 2002 and served as our Upstream Legal Affairs Manager. Mr. Fernandez Lahore has been our Legal Affairs Corporate Vice President since December 2015.

#### Gustavo Chaab

Mr. Chaab earned a degree in industrial engineering from the Universidad Nacional de Cuyo, a postgraduate degree in energy and energetic planning from the IDEE/Fundación Bariloche, a master's degree in International Business from the National Ponts et Chausses Ecole and completed the Advanced Study Program from the Massachusetts Institute of Technology. In 1994, he joined YPF at the Luján de Cuyo Refinery and took on several roles including Chief of Administration and Sales Area of this Refinery in 1999, Downstream Operative Planning Manager in 2004, Lubricants Business Manager in 2008, and Planning and Technical Development Manager for Refinement, Logistic and Chemistry in 2008. From 2011 to March 2017, he served as Manager of the Industrial Complex in La Plata. Mr. Chaab has been our Environment, Security and Health Vice President since March 2017.

## José Manuel Aggio

Mr. José Manuel Aggio earned a law degree from the Universidad deBuenos Aires and completed the Executive Education Program at IAE Business School. He started his professional career at the Pérez Companc Group, where he held several management positions. During 25 years he held various positions in the HR area in Aguas Argentinas, Prudential Financial, Barrick Gold Corporation (Argentina and Chile), San Miguel AGICIyF, el Tejar and Danone. His most recent function was HR Director for the Southern Cone at Danone. He has been our Human Resources Vice President since February 2018.

### Sergio Fernández

Mr. Fernández is an Electronics Engineer graduated from the Universidad Nacional del Tucumán. He also holds an MBA from Universidad Torcuato di Tella. He has over 20 years of experience leading the IT areas at Cargill. In 2003, he was in charge of setting up the shared services area for the Latin American infrastructure which required an organizational redesign to reduce costs and gain efficiencies. He became part of the Global IT Executive Committee, participating in key definitions of the organization. His last position, which reported to the CEO of that company, was Global IT Head, Food Ingredients and Bio Industrial Enterprise. He was also responsible for leading and developing the current Global IT strategy, holding at the same time the position as IT Head for Latin America.

## Javier Fevre

Mr. Fèvre earned a certified public accountant degree from the Argentine University of Business. He has held several positions throughout his career, including Auditor for the General Auditor Office, Advisor to the Deputy General Syndic at the Argentine Office of the General Comptroller, Assistant Internal Auditor at the Ministry of Foreign Affairs, International Trade and Worship and General Coordinator of Internal Audit at Aerolineas Argentinas S.A. He has been our Internal Auditor since September 2012.

#### Carlos Colo

Mr. Carlos Agustín Colo holds a degree in Geological Sciences from Universidad Nacional de la Patagonia San Juan Bosco. In 1979 he joined YPF where he developed his career in the Upstream Sector. He started as Exploration geologist and then he served in different positions related to exploration and production. He held various positions within the Company as General Manager in Colombia, Director of the Las Heras Economic Unit, Director of the E&P Technical Management, Exploration Director and Executive Manager of Exploration and Development. He has been our Reserve Auditor since June 2017.

## Compliance with New York Stock Exchange Listing Standards on Corporate Governance

In accordance with the NYSE corporate governance rules, effective as of July 31, 2005, all members of the Audit Committee are required to be independent. Independence is determined in accordance with highly detailed rules promulgated by the NYSE and SEC. Each of the members of our Audit Committee was determined to be independent in accordance with the applicable NYSE and SEC rules.

Significant differences between our corporate governance practices and those required by NYSE listing standards

Non-U.S. NYSE-listed companies may, in general, follow their home country corporate governance practices in lieu of most of the NYSE corporate governance requirements. The NYSE rules, however, require that non-U.S. companies disclose any significant ways in which their specific corporate governance practices differ from those of U.S. companies under the NYSE listing standards.

The following is a summary of the significant differences between our corporate governance practices and those applicable to U.S. companies under the NYSE listing standards.

## Independence of the directors on the Board of Directors

In accordance with the NYSE corporate governance rules, a majority of the board of directors of U.S. companies listed on the NYSE must be composed of independent directors, whose independence is determined in accordance with highly detailed rules promulgated by the NYSE. The relevant Argentine rules for determining director independence are described under "—Independence of the Members of our Board of Directors and Audit Committee" above.

#### Compensation and nomination committees

In accordance with the NYSE corporate governance rules, all U.S. companies listed on the NYSE must have a compensation committee and a nomination committee and all members of such committees must be independent in accordance with highly detailed rules promulgated by the NYSE. Under Argentine law, these committees are not mandatory, but are recommended by the CNV under CNV's General Resolution No. 622/13. The Company follows the CNV's recommendation and has a Compensation and Nomination Committee established by the Board of Directors under the option provided in Article 17 clause (xii) of the Company's by-laws, which currently is composed of Directors Daniel Gustavo Montamat, Roberto Luis Monti, Carlos Alberto Felices and Fabián Jorge Rodríguez Simón . As a result of the foregoing, all the members of the Compensation and Nomination Committee are independent.

## Shareholder approval of equity compensation plans

The NYSE rules require that, with limited exemptions, all equity compensation plans be subject to a shareholder vote. Under Argentine law, the approval of equity compensation plans is within the authority of the Board of Directors.

### Separate meetings for non-management directors

In accordance with the NYSE corporate governance rules, independent directors must meet periodically outside of the presence of its executive directors. Under Argentine law, this practice is not required and as such, the independent directors on our Board of Directors do not meet outside of the presence of the other directors, except for the meetings of the Audit Committee, which is comprised of independent directors.

## Compensation of members of our Board of Directors and Supervisory Committee

Argentine law provides that the aggregate annual compensation paid to the members of the Board of Directors (including those directors acting in an executive capacity) and the Supervisory Committee with respect to a fiscal year may not exceed 5% of net income for such year if YPF is not paying dividends in respect of such net income, which percentage is increased up to 25% of net

income based on the amount of dividends, if any, are paid. The compensation of the Chairman and other directors acting in an executive capacity, together with the compensation of all other directors and members of the Supervisory Committee, requires the ratification of an ordinary general shareholders' meeting as provided by Argentine law. When the exercise of special commissions or technical administrative functions by one or more directors and the reduced or lack of profits exceed the limits, such remunerations may only be paid in excess if expressly agreed by the shareholders' meeting, for which the matter should be included on the agenda. For the year ended December 31, 2017, the aggregate compensation accrued by the members of the Board of Directors and YPF's executive officers for services in all capacities was Ps. 373.3 million, excluding social security payments made by the Company as required by law, but including Ps. 43.8 million in the form of equity compensation plans, pensions, retirement or similar benefits that YPF provides to its Board of Directors and executive officers and Ps. 4.2 million in compensation paid to the members of the Supervisory Committee. During 2017, YPF's performance-based compensation programs included a performance bonus program for approximately 6,400 non-unionized YPF employees and 9,000 unionized YPF employees. This bonus program is intended to motivate and reward individuals for the annual achievement of business objectives. The program compensated participants in cash based on a measurable and specific set of objectives established by YPF's Management by Objectives Program and individual performance results.

In 2017, our shareholders' meeting, as proposed by our Board of Directors, approved the creation of a voluntary reserve of Ps. 100 million for the fulfillment our long-term incentive plan which contemplates compensation in shares for certain employees. To that end, the Company purchased its own shares in accordance with Section 64 et seq. of Law No. 26,831. For additional information see Note 2.b.10.iii to our Audited Consolidated Financial Statements. The share-based benefit plan: (i) encourages key personnel to align their performance with the objectives of the Company's strategic plan, (ii) generates a clear and direct link between the creation of shareholder value and compensation of key personnel, rewarding them for achieving long-term results reflected in share price and (iii) assists in the retention of key personnel in the organization.

YPF's directors do not have any service contracts with YPF involving the payment of compensation other than those previously mentioned for the performance of their duties with the Company. None of the members of our Board of Directors are party to any service contract with us or any our subsidiaries providing for benefits upon termination of their term in office.

## **Supervisory Committee**

The Supervisory Committee is responsible for overseeing compliance by the management and the Board of Directors with Argentine General Corporations Law, the by-laws and regulations (if any), and shareholders' resolutions. The functions of the Supervisory Committee include, among others, attending all meetings of the Board of Directors, preparing a report of the financial statements for our shareholders, attending shareholders' meetings and providing information upon request to holders of at least 2% of our capital stock.

The by-laws provide for a Supervisory Committee composed of three to five members and three to five alternate members that are elected for one-year terms. The Class A shares are entitled to elect one member and one alternate member of the Supervisory Committee so long as one share of such class remains outstanding. The holders of Class D shares may elect up to four members and up to four alternates. Under the by-laws, meetings of the Supervisory Committee may be called by any member. The meetings require the presence of all members and a majority vote of the members in order to make a decision. The members and alternate members of the Supervisory Committee are not members of our Board of Directors. The role of our Supervisory Committee is distinct from that of the Audit Committee. See "—The Audit Committee." In 2017, the aggregate compensation paid to the members of the Supervisory Committee was Ps. 4.2 million.

The current members of the Supervisory Committee, the year in which they were appointed and the year their current term expires is as follows:

|  | Class of Shares |     | Member | Term    |
|--|-----------------|-----|--------|---------|
| Name                                   | Represented     | Age | Since  | Expires |
| Alejandro Fabián Díaz                  | A               | 53  | 2017   | 2018(*) |
| María Dolores Pujol                    | D               | 36  | 2017   | 2018(*) |
| Raquel Inés Orozco                     | D               | 62  | 2017   | 2018(*) |
| Guillermo Stok (alternate member)      | A               | 62  | 2017   | 2018(*) |
| Carlos Manuel Vidal (alternate member) | D               | 69  | 2017   | 2018(*) |
| María Rosa Eckard (alternate member)   | D               | 67  | 2017   | 2018(*) |

(\*) Members of our Supervisory Committee are appointed each fiscal year. Our shareholders, in the Ordinary and Extraordinary General Shareholders' meeting held on April 28, 2017 appointed the members of our Supervisory Committee for fiscal year 2017.

### Alejandro Fabián Díaz

Mr. Díaz earned a certified public accountant degree from the Universidad de Buenos Aires and completed postgraduate studies in social responsibility, social accounting and business management. Since 2000, he has held several roles for the Argentine National Office of the Comptroller General, including Auditing Supervisor, Certified Accountant, member of the Supervisory Committee of first-tier businesses and Manager of Business Audits. He has been a member of the Organization for Economic Cooperation and Development since 2014 and a member of the Latin American Network on Corporate Governance of State-Owned Enterprises since 2010. He has been developing his role as a teacher at universities and postgraduate institutions. He has also been a speaker at several conferences and has written books and articles related to his specialty.

### María Dolores Pujol

Ms. Pujol earned a law degree from Universidad Católica Argentina. She obtained a postgraduate degree in Economic Administrative Law. She completed a Compliance Program for Specialists at IAE Business School and an Executive Program in Prevention of Money Laundering, Money Laundering from Drug Trafficking and Financing of Organized Crime at University of CEMA. She has worked at the General Auditor's Office of the Autonomous City of Buenos Aires and at the Administrative and Tax Litigation Court No. 19 of the Autonomous City of Buenos Aires. Between 2013 and 2015, she worked in various areas of the Government of the Autonomous City of Buenos Aires, as Legal and Technical Secretary and Chief of the Cabinet of Ministers. She currently serves as Executive Director at the Lottery of the Autonomous City of Buenos Aires.

## Raquel Inés Orozco

Ms. Orozco earned a law degree from the Universidad de Buenos Aires. Currently, she is a member of the Supervisory Committees of Central Térmica Guemes S.A., Ubatec S.A., Inder S.E. (e.I), Foncap S.A., LT10 Radio Universidad del Litoral S.A. and YPF Gas S.A.

#### Guillermo Stok

Mr. Stok earned a certified public accountant degree and business administration degree from the Pontificia Universidad Católica de Argentina and completed postgraduate studies in public sector economics, the management of sustainable economic development and social economics. He was appointed by the World Bank (PNDU) to advise the Finance Secretary at the Buenos Aires City Government. In 2001, he was designated General Manager of the National Administration of Social Security (ANSES). Currently, he works for the Argentine National Office of the Comptroller General as an Assistant Manager supervising majority state-owned enterprises.

#### Carlos Manuel Vidal

Mr. Vidal earned a public accountant degree from Universidad de Buenos Aires. He was appointed advisor to the Energy Secretariat by the Public Employment Information and Management System (SIGEP) to work in the Financing Scheme of the National Energy Plan from 1986 to 2000. He was a member of the Supervisory Committees of Repsol YPF S.A; Papel Prensa S.A.; Aerolíneas Argentinas S.A; Lotería Nacional S.E; and TELAM S.E., among other. Currently, he is member of the Supervisory Committee of Edenor S.A.; TGS S.A. and NCA S.A.

#### María Rosa Eckard

Ms. Eckard earned a law degree from Universidad Nacional del Litoral. She has an extensive background in organizations and entities of the National Public Sector and Public Administration, where she has held several positions since 1974 related to legality control and supervision as a member of Supervisory Committees. Currently, she is a member of the Supervisory Committees of Casa de la Moneda SE., Coviara Empresa del Estado, SRT SA, Radio Universidad Nacional del Litoral and Télam S.E.

## The Compliance Committee

The information provided below describes the composition and responsibilities of our Compliance Committee as of the date of this annual report.

### Composition and responsibilities

In April 2016, the Board of Directors created the Compliance Committee: to encourage compliance with the requirements of laws, regulations, rules, policies and/or organizational codes and principles of good corporate management and ethical standards applicable to the Company; to monitor the control systems of YPF processes in accordance with the rules that regulate YPF's operation; to reduce exposure to financial, legal and operational risks that could arise from illicit behavior; to safeguard the image and reputation of the Company; and to promote, facilitate and regulate cooperation between the various sectors of the Company to ensure the effectiveness of measures and actions enacted to prevent, detect, punish and eradicate corruption, among other functions.

As of the date of this annual report, the Compliance Committee is composed of the following members:

| Name                   | Position           |  |  |
|------------------------|--------------------|--|--|
| Fabián Rodríguez Simón | Director—President |  |  |
| Inés María Leopoldo    | Director           |  |  |
| Emilio José Apud       | Director           |  |  |

The Risk and Sustainability Committee

The information provided below describes the composition and responsibilities of our Risk and Sustainability Committee as of the date of this annual report.

# Composition and Responsibilities

In April 2016, the Board of Directors created the Risk and Sustainability Committee: to establish comprehensive management policies for business risks and to monitor their adequate implementation; to identify and evaluate the principal risk factors that are specific to the Company and/or its activity; and to monitor risks and implement corresponding mitigation actions, among other functions.

As of the date of this annual report, the Risk and Sustainability Committee is composed of the following members:

| Name                    | Position           |
|-------------------------|--------------------|
| Roberto Luis Monti      | Director—President |
| Nestor José Di Pierro   | Director           |
| Norberto Alfredo Bruno  | Director           |
| Gabriel Alejandro Fidel | Director           |

## The Strategy and Transformation Committee

In August 2017, the Board of Directors created the Strategy and Transformation Committee to discuss issues related to the Company's medium and long-term strategy and to act as liaison between the Board of Directors and the Executive Management Committee and the Company executives who are its members, in order to facilitate and expedite the internal treatment of the Company's business development overall strategies; to promote and transversally review the Company's transformation agenda, covering aspects of excellence and best operational practices in the industry, the commercial agenda, reviewing its organization with a central focus on the customer, the Company's digitalization and technological renewal agenda, and the renewal of support areas with a special focus on cultural change in the area of human resources; and to resolve, in the event of unforeseen or emergency situations, the approval of the Company's operations and / or necessary management.

As of the date of this annual report, The Strategy and Transformation Committee is composed of the following members:

Name Position

 Miguel Ángel Gutiérrez
 President of the Board of Directors

 Carlos Alberto Felices
 President of the Audit Committee

Daniel Gustavo Montamat President of the Compensation and Nomination Committee

Fabián Rodríguez Simón President of the Compliance Committee

Roberto Luis Monti President of the Risk and Sustainability Committee

Emilio José Apud Director for Class A Shares

## **Diversity and Inclusion**

We know that diversity and inclusion, which make it possible to create a more representative workforce, help to build a more successful and profitable company.

Our people are key in this way. Without their commitment, the company could not develop. That is why we are guided by the conviction to respect and value singularity. The will to create opportunities and develop talents. The certainty of promoting inclusion, of seeking plurality, of growing in diversity.

We have taken important steps towards diversity and inclusion.

We incorporated a new value in our Code of Ethics and Conduct: Gender Equality which provides that YPF guarantees that both women and men receive the same treatment and opportunities to grow within the company, with identical conditions and possibilities, including those of economic nature, for persons holding the same offices. Besides, it ensures access to institutional programs and benefits in equality of conditions for both genders.

Since 2016, we have been carrying out the Training Program for the Employability of Persons with Disabilities, in conjunction with the Ministry of Labor. An initiative that lasts ten months and gives participants the opportunity to perform qualifying and professionalizing practices in different areas of the company with the guidance of a tutor assigned by YPF.

We believe that one of the bases of inclusion is access to work, that is why we have an Inclusive Procurement Program that facilitates access to the network of YPF suppliers to all those organizations, cooperatives, protected workshops, associations and entities committed to the employability of people with some physical, sensory or mental disability with skills to create and produce articles of aesthetic value, practical utility and / or attractive for the use. Because people with disabilities do not need special help, they need the same opportunities as everyone else.

During 2017, we invited more than 1,900 YPF women to participate in a survey to find out their opinion about diversity and its impact on the work environment. We also convened open talks in which men and women from our company, from all regions and businesses, told us what they think about gender equality.

Thanks to an active collaboration and participation, we were able to identify ten areas in which women find obstacles to fully develop their careers.

These axes were the basis for the definition of actions to remove these obstacles that will be implemented between 2018 and 2020.

To guarantee equal opportunities, we created a Diversity Committee, with the main objective of leading the implementation of gender equality.

In parallel, the Committee works on the development and presentation of a 5-year plan that includes projects to promote and care for diversity and inclusion for our people and for our customers and suppliers. It will also define the strategy for monitoring and evaluating results.

## **Employee Matters**

Our total workforce consists of permanent and temporary employees. As of December 31, 2015, 2016 and 2017, we had 22,025, 19,257 and 19,072 employees, respectively. In 2017, the number included 8,506 employees in the Downstream business segment, 3,255 employees in the Upstream business segment, 1,649 employees in the Gas & Energy business segment and 5,662 employees in the Central Administration and Others business segments. We had 813 temporary employees in 2017. The most significant variation in 2017 included a decrease of employees at YPF Servicios Petroleros S.A, by approximately 220 employees during 2017. Approximately 45% of our employees are represented by the Federation of Oil Workers Union ("SUPeH") that negotiates labor agreements and salaries applicable to YPF and OPESSA unionized employees. SUPeH is continually negotiating with us, and we maintain a good level of communication. In general, requests of labor unions in connection with the petrochemical industry were consistent with general wage increases given by the General Unions Confederation.

In addition, labor conditions and salaries of third-party employees are represented by sixteen other unions. Approximately 55% of third-party employees, mostly in the Upstream business, are represented by nine unions with whom we directly negotiate labor agreements and salaries. These unions are clustered into three groups: Petroleros Privados, which consists of five unions, Personal Jerárquico, which consists of three unions, and SUPeH Emprendimientos. The remaining 45% of third-party employees are represented by unions with whom we do not participate in labor agreements.

During 2016, YPF sought to create an addendum to the main Union's Labor Agreements that would result in greater levels of efficiency, productivity and sustainability in the Shale and Tight operations. During 2017, as a result of collaboration with the main actors in the industry, including the Argentine government, provincial governors, Unions and representatives of the main production companies, YPF created and rolled out an addendum to the main union's labor agreements that resulted in greater levels of efficiency, productivity and sustainability in the Shale and Tight operations. The addendum was signed with both Neuquén Unions in January 2017, and extended to the Chubut unions, including shale, tight and conventional operations. By the end of 2017, similar agreements were reached individually with Santa Cruz's main services companies.

As of December 31, 2017, YPF was a party to approximately 1,024 labor lawsuits related to events or acts that took place after December 31, 1990. The outcome of these lawsuits will depend on factual issues that vary from case to case, and it is not always feasible to predict the outcome of particular cases. However, based on the number and nature of the lawsuits already commenced, the estimated likelihood of additional claims in view of the number of dismissed employees, applicable statutes of limitations, the legal principles involved in the suits and the financial statement reserves previously established, our management does not expect the outcome of these lawsuits to have a material adverse effect on our financial condition or future results of operations.

As of December 31, 2017, there were also approximately 43,000 third-party employees under contract, mostly with large international service providers. Although we have policies regarding compliance with labor and social security obligations for our contractors, we are not in a position to ensure that the contractors' employees will not initiate legal actions against us seeking indemnification based upon a number of Argentine judicial labor court precedents that recognized joint and several liability between the contractor and the entity to which it was supplying services under certain circumstances.

The following table provides a breakdown of our employees by segment as of December 31, 2017.

| Employees by Business Units           |        |
|---------------------------------------|--------|
| Upstream                              | 3,255  |
| Downstream                            | 8,506  |
| Refining and Marketing                | 8,474  |
| Chemicals                             | 32     |
| Gas and Power (1) (2)                 | 1,649  |
| Central Administration and Others (3) | 5,662  |
| Total YPF                             | 19,072 |
|                                       |        |

- (1) Includes 1,398 employees of Metrogas S.A. and its subsidiaries.
- (2) Includes 117 employees of YPF Energia Eléctrica S.A. and its subsidiaries.
- (3) Includes 3,342 employees of A-Evangelista S.A. and its subsidiaries.

The following table provides a breakdown of our employees by geographic location.

| Employees by geographic location |        |
|----------------------------------|--------|
| Argentina                        | 18,931 |
| Rest of South America            | 141    |
| Total YPF                        | 19,072 |

# ITEM 7. Major Shareholders and Related Party Transactions

The Expropriation Law has significantly changed our shareholding structure. The Class D shares subject to expropriation from Repsol or its controlling or controlled entities, which represent 51% of our share capital and have been declared of public interest, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. In addition, the Argentine Republic and certain provincial governments already own our Class A and Class B shares. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—The Argentine federal government owns 51% of the shares of the Company." Additionally, see "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Law No. 26,932" for a description of the agreement between Repsol and the Argentine Republic relating to compensation for the expropriation of 51% of the share capital of YPF owned, directly or indirectly, by Repsol. As of the date of this annual report, the transfer of the shares subject to expropriation between the National Executive Office and the provinces that compose the National Organization of Hydrocarbon Producing States is still pending. According to Article 8 of the Expropriation Law, the distribution of the shares among the provinces that accept their transfer must be conducted in an equitable manner, taking into account their respective levels of hydrocarbon production and proved reserves. To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. In addition, in accordance with Article 9 of the Expropriation Law, each of the Argentine provinces to which shares subject to expropriation are allocated must enter into a shareholder's agreement with the federal government which will provide for the unified exercise of its rights as a shareholder. See "Item 4. Information on the Company-Legal and Regulatory Framework and Relationship with the Argentine Government—The Expropriation Law."

The following table sets forth information regarding ownership of our capital stock by each person known to us to own beneficially at least 5% of our common shares, the Argentine federal and provincial governments and our Employee fund as of April 9, 2018:

|   | Number of<br>shares | (%)     |
|---|---------------------|---------|
| National State—Ministry of Energy and Mining (1)            | 200,589,525         | 51.000% |
| Floating <sup>(2)</sup>                                     | 144,075,846         | 36.631% |
| Lazard Asset Management LLC (3)                             | 28,620,917          | 7.277%  |
| Slim Family <sup>(4)</sup>                                  | 19,974,695          | 5.079%  |
| Argentine federal and provincial governments <sup>(5)</sup> | 11,388              | 0.003%  |
| Employee fund (6)   | 40,422              | 0.010%  |

(1) The expropriated Class D shares, which represent 51% of our share capital, and which now are owned by the Republic of Argentina, will be assigned as follows: 51% to the Argentine Republic and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. The completion of this assignment is pending. To ensure compliance with its objectives, the Expropriation Law provides that the National Executive Office, by itself or through an appointed public entity, shall exercise all the political rights associated with the shares subject to expropriation until the transfer of political and economic rights to the provinces that compose the National Organization of Hydrocarbon Producing States is completed. In addition, in accordance with Article 9 of the Expropriation Law, each of the Argentine provinces to which shares subject to expropriation are allocated must enter into a shareholder's agreement with the federal government which will provide for the unified exercise of its rights as a shareholder. See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Decree No. 13/2015" and "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Decree No. 272/2015."

- (2) According to data provided by The Bank of New York Mellon, as of April 9, 2018, there were 170,483,216 ADSs outstanding and 47 holders of record of ADSs. Such ADSs represented approximately 43% of the total number of issued and outstanding Class D shares as of such date.
- (3) According to Schedule 13G filed with the SEC on February 9, 2018.
- (4) According to Schedule 13G filed with the SEC on February 14, 2017, "Slim Family" consists of Carlos Slim Helú, Carlos Slim Domit, Marco Antonio Slim Domit, Patrick Slim Domit, María Soumaya Slim Domit, Vanessa Paola Slim Domit and Johanna Monique Slim Domit through Inmobiliaria Carso, S.A. de C.V. and Grupo Financiero Inbursa, S.A.B. de C.V.
- (5) Reflects the ownership of 3,764 Class A shares and 7,624 Class B shares by the Argentine Republic and provincial governments, respectively.
- (6) Reflects the ownership of 40,422 Class C shares.

## **Related Party Transactions**

All material transactions and balances with related parties as of December 31, 2017 are set forth in Note 31 to the Audited Consolidated Financial Statements. The main related party transactions were our sales of refined and other products to certain joint ventures and affiliates (which amounted to Ps. 6.955 million in 2017), our purchase of petroleum and other products that we do not produce ourselves from certain joint ventures and affiliates (which amounted to Ps. 3.667 million in 2017), as well as what is mentioned in the following paragraphs.

In addition, since the Expropriation Law (See "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—The Expropriation Law."), the Argentine Republic owns 51% of the shares of the Company. Consequently, and in addition to transactions mentioned in the paragraph above, we are party to numerous agreements with the federal government, as well as with certain agencies or institutions dependent on such governments and stated-owned companies.

The information disclosed in Note 31 to the Audited Consolidated Financial Statements disclose the balances with joint ventures and affiliated companies as of December 31, 2017, December 31, 2016 and December 31, 2015, and transactions with the aforementioned parties for the twelve-month periods ended December 31, 2017, 2016 and 2015. Additionally, the balances and transactions held with the entities within the Repsol group are included until the date the conditions required to be considered as related parties were met. Information regarding major transactions with government entities are also described in Note 31 to the Audited Consolidated Financial Statements.

In addition, see Note 2.b.10.iii to our Audited Consolidated Financial Statements regarding our long-term share compensation plan offered to certain personnel.

For an organizational chart showing our organizational structure, including our interests in our principal affiliates, see "Item 4. Information on the Company—History and Development of YPF—Overview."

## **Argentine Law Concerning Related Party Transactions**

Section 72 of the Stock Market Law provides that before a company whose shares are listed in Argentina may enter into an act or contract involving a "significant amount" with a related party or parties, such company must obtain approval from its board of directors, and obtain an opinion, prior to such board approval, from its audit committee or from two independent valuation firms that states that the terms of the transaction are consistent with those that could be obtained on an arm's-length basis.

For the purpose of Section 72 of the Stock Market Law and CNV Regulations, "significant amount" means an amount that exceeds 1% of the issuer's net worth as reflected in the latest approved financial statements. For purposes of the Stock Market Law, "related party" means (i) directors, members of the supervisory committee or managers; (ii) the persons or entities that control or hold a significant participation in the company or in its controlling shareholder (to be regulated by CNV); (iii) any other company under common control; (iv) direct relatives of the persons mentioned in (i) and (ii); or (v) companies in which the persons referred to in (i) to (iv) hold directly or indirectly significant participations.

The acts or contracts referred to above, immediately after being approved by the board of directors, shall be disclosed to the CNV, making express indication of the audit committee's or independent valuation firm's opinion, as the case may be. Also, beginning on the business day following the day the transaction was approved by the board of directors, the audit committee's or independent valuation firm's reports shall be made available to the shareholders at the company's principal executive offices.

If the audit committee or the two independent valuation firms do not find that the contract is on arm's-length terms, prior approval must be obtained at the company's shareholders' meeting.

#### ITEM 8. Financial Information

#### **Financial Statements**

See Item 18 for our Audited Consolidated Financial Statements.

#### **Legal Proceedings**

The descriptions of the legal proceedings in Notes 14.a, 27.a and 28.b to the Audited Consolidated Financial Statements are incorporated herein by reference.

## **Dividend Policy**

See "Item 10. Additional Information-Dividends."

# **Significant Changes**

Since December 31, 2017, there have been no significant changes regarding the Company. Notwithstanding the foregoing, see Note 34 to the Audited Consolidated Financial Statements.

## ITEM 9. The Offer and Listing

#### **Shares and ADSs**

#### New York Stock Exchange

The ADSs, each representing one Class D share, are listed on the NYSE under the trading symbol "YPF." The ADSs began trading on the NYSE on June 28, 1993, and have been issued by The Bank of New York Mellon, as depositary (the "Depositary").

The following table sets forth, for the five most recent full financial years and for the current financial year, the high and low closing prices in U.S. dollars of our ADSs on the NYSE:

|         | High  | Low   |
|---------|-------|-------|
| 2013    | 34.17 | 12.26 |
| 2014    | 38.91 | 21.85 |
| 2015    | 31.58 | 14.91 |
| 2016    | 21.98 | 12.83 |
| 2017    | 26.16 | 16.85 |
| 2018(1) | 26.27 | 20.89 |

## (1) Through April 9, 2018

The following table sets forth, for each quarter of the most recent two financial years and for each quarter of the current financial year, the high and low closing prices in U.S. dollars of our ADSs on the NYSE.

|              | _High_      | Low           |
|--------------|-------------|---------------|
| 2016:        |             | · <del></del> |
| First Quarte | er 18.83    | 12.83         |
| Second Qua   | arter 21.98 | 16.52         |
| Third Quart  | ter 19.77   | 16.88         |
| Fourth Qua   | 19.46       | 15.09         |

| 2017:                         |       |       |
|-------------------------------|-------|-------|
| First Quarter                 | 24.28 | 16.85 |
| Second Quarter                | 26.16 | 21.09 |
| Third Quarter                 | 22.44 | 18.80 |
| Fourth Quarter                | 25.16 | 21.00 |
| 2018:                         |       |       |
| First Quarter                 | 26.27 | 20.89 |
| Second Quarter <sup>(1)</sup> | 21.58 | 21.13 |

## (1) Through April 9, 2018

The following table sets forth, for each of the most recent six months and for the current month, the high and low closing prices in U.S. dollars of our ADSs on the NYSE.

|           | High  | Low   |
|-----------|-------|-------|
| 2017:     |       |       |
| September | 22.28 | 20.04 |
| October   | 24.73 | 22.23 |
| November  | 25.16 | 22.26 |
| December  | 22.99 | 21.00 |
| 2018:     |       |       |
| January   | 26.27 | 23.01 |
| February  | 24.60 | 21.12 |
| March     | 22.85 | 21.89 |
| April (1) | 21.58 | 21.13 |

# (1) Through April 9, 2018

According to data provided by The Bank of New York Mellon, as of April 9, 2018, there were 170,483,216 ADSs outstanding and 47 holders of record of ADSs. Such ADSs represented approximately 43% of the total number of issued and outstanding Class D shares as of such date. The Buenos Aires Stock Market is the principal Argentine market for trading the ordinary shares.

"BYMA" (Bolsas y Mercados Argentinos) is the largest stock market in Argentina and has been authorized by the CNV to delegate certain functions to the Buenos Aires Stock Exchange ("BASE"). Trading on the BYMA is conducted either through the traditional auction system from 11 a.m. to 5 p.m. on trading days, or through Millenium, which allows electronic negotiation with automatic execution of transactions. Currently, all transactions relating to listed securities can be executed through Millenium result in an additional 10-minute successive suspension period.

Investors in the Argentine securities market are mostly individuals and companies. Institutional investors, which are responsible for a growing percentage of trading activity, consist mainly of insurance companies and to a lesser extent mutual funds.

The last information available to us regarding the Argentine stock market is set forth in the table below:

|                                       | 2017      | 2016      | 2015    | 2014    | 2013    | 2012    | 2011    |
|---------------------------------------|-----------|-----------|---------|---------|---------|---------|---------|
| Market capitalization (in billions of |           |           |         |         |         |         |         |
| pesos)                                | 6,877     | 4,512     | 3,292   | 3,893   | 3,356   | 2,300   | 1,611   |
| As percent of GDP                     | 65%(1)    | 56%(1)    | 56%     | 86%     | 124%    | 107%    | 87%     |
| Volume (in millions of pesos)         | 2,558.539 | 1,329.607 | 749,829 | 621,831 | 367,830 | 242,324 | 207,805 |
| Average daily trading volume (in      |           |           |         |         |         |         |         |
| millions of pesos)                    | 13,509    | 5,949     | 4,822.6 | 2,581   | 1,526.3 | 1,005.5 | 848.2   |

### (1) INDEC GDP Provisional Data

The following table sets forth, for the five most recent full financial years and for the current financial year, the high and low closing prices in Argentine pesos of our Class D shares on the BASE:

|          | High   | Low    |
|----------|--------|--------|
| 2013     | 294.00 | 101.30 |
| 2014     | 558.00 | 250.00 |
| 2015     | 375.50 | 207.00 |
| 2016     | 303.00 | 179.00 |
| 2017     | 437.35 | 270.00 |
| 2018 (1) | 518.65 | 421.85 |

# (1) Through April 9, 2018

The following table sets forth, for each quarter of the most recent two financial years and for each quarter of the current financial year, the high and low closing prices in Argentine pesos of our Class D shares on the BASE.

|                    | High   | Low    |
|--------------------|--------|--------|
| 2016:              |        |        |
| First Quarter      | 295.00 | 179.00 |
| Second Quarter     | 303.00 | 238.50 |
| Third Quarter      | 296.25 | 255.90 |
| Fourth Quarter     | 295.50 | 233.00 |
| 2017:              |        |        |
| First Quarter      | 375.00 | 270.00 |
| Second Quarter     | 411.00 | 341.50 |
| Third Quarter      | 389.25 | 333.00 |
| Fourth Quarter     | 437.35 | 368.80 |
| 2018:              |        |        |
| First Quarter      | 518.65 | 421.85 |
| Second Quarter (1) | 434.80 | 429.25 |

# (1) Through April 9, 2018

The following table sets forth, for each of the most recent seven months and for the current month, the high and low closing prices in Argentine pesos of our Class D shares on the BASE.

|           | High   | Low    |
|-----------|--------|--------|
| 2017:     |        |        |
| September | 389.25 | 345.00 |
| October   | 435.40 | 386.70 |
| November  | 437.35 | 388.30 |
| December  | 422.10 | 368.80 |
| 2018:     |        |        |
| January   | 518.65 | 431.75 |
| February  | 480.05 | 421.85 |
| March     | 461.15 | 422.75 |
| April (1) | 434.80 | 429.25 |

## (1) Through April 9, 2018

As of April 9, 2018, there were approximately 32,187 holders of Class D shares in the BASE.

## Stock Exchange Automated Quotations System International

The ADSs are also quoted on the Stock Exchange Automated Quotations System International.

### **Argentine Securities Market**

The securities market in Argentina was originally composed of 5 stock exchanges, which are located in the City of Buenos Aires (the Buenos Aires Stock Exchange "BASE"), Córdoba, Mendoza, Rosario and Santa Fe, with affiliated stock markets and, accordingly, authorized to quote publicly offered securities. However this system was affected by the enactment of Law No. 26,831, Decree No 1,203/2013 issued by the National Executive Office and the new regulations issued by the CNV, mainly contained in Resolution No. 622/2013, as amended, which stated that securities can only be listed and exchanged in stock markets authorized to function as such by the CNV.

The BASE, which began operating in 1854, was the principal and longest-established stock exchange in Argentina. The exchange functions of the BASE have now been absorbed by the Buenos Aires Stock Market ("MERVAL"), which is a stock market authorized by the CNV to function as such, under Law No. 26,831. The MERVAL and the BASE have entered into an agreement which has been approved by the CNV, whereby the MERVAL has delegated to the BASE certain functions, such as: (i) the authority to grant listing authorization for securities; (ii) the authority to constitute arbitration courts; and (iii) the issuance of a public information bulletin.

On December 29, 2016, the Board of Directors of the CNV approved the creation of Bolsas y Mercados Argentinos ("ByMA") as a new market. The shareholders of ByMA are the MERVAL and BASE, with each holding initially 60% and 40% of the capital stock of ByMA, respectively.

The Argentine securities market is regulated and overseen by the CNV, pursuant to Law No. 26,831 (the "Capital Markets Law") which governs the regulation of securities exchanges, as well as stockbroker transactions, market operations, the public offering of securities, corporate governance matters relating to public companies and the trading of futures and options. Argentine institutional investors and insurance companies are regulated by separate government agencies, whereas financial institutions are regulated primarily by the Argentine Central Bank.

In Argentina, debt and equity securities traded on an exchange or the over-the-counter market must, unless otherwise instructed by their shareholders, be deposited with Caja de Valores S.A., a corporation owned 99.96% by Bolsas y Mercados Argentinos S.A. ("ByMA"). This company is the central securities depositary of Argentina and provides central depositary facilities, as well as acting as a clearinghouse for securities trading and as a transfer and paying agent for securities transactions. Additionally, it handles the settlement of securities transactions carried out by the ByMA and operates through Millenium .

Among the key provisions of the Capital Markets Law are the following: the definition of a "security," that governs the treatment of negotiable securities; the corporate governance requirements, including the obligations for publicly listed companies to form audit committees composed of three or more members of the Board of Directors (the majority of whom must be independent under CNV regulations); regulations for market stabilization transactions under certain circumstances, regulations that governs insider trading, market manipulation and securities fraud and regulates going-private transactions and acquisitions of voting shares, including controlling stakes in public companies. In addition, the Capital Markets Law includes provisions regarding the demutualization of the stock exchanges; new regulatory powers and resources for the CNV; a mandatory tender offer system and other provisions, like new requirements for brokers/dealers and other market participants. These provisions were regulated by the CNV pursuant to General Resolution No. 622/2013, as amended. Before offering securities to the public in Argentina, an issuer must fulfill certain requirements established by the CNV in regard to the issuer's assets, operating history and management. Only securities approved for a public offering by the CNV may be listed on an authorized market. However, CNV approval does not imply any kind of certification as to the quality of the securities or the solvency of the issuer, even though issuers of listed securities are required to file unaudited quarterly financial statements and audited annual financial statements in accordance with IFRS and various other periodic reports with the CNV and the authorized market on which their securities are listed, as well as to report to the CNV and the relevant authorized market any event related to the issuer and its shareholders that may materially affect the value of the securities traded.

## Anti-Money laundering and Terrorism Prevention regulations

Modifications to Argentine money laundering regulations have resulted in their application to increasing numbers and types of securities transactions.

The notion of money laundering is generally used to refer to transactions aimed at introducing funds derived from unlawful activities into the institutionalized system and therefore, transforming profits obtained from unlawful activities into assets having a presumed lawful origin.

Law No. 25,246 (as subsequently amended by Law No. 26,087, Law No. 26,119, Law No. 26,268 and Law No 26,683) provides for an administrative criminal system and replaces several sections of the Argentine Criminal Code, incorporating, among other matters, the definition of money laundering as a type of crime committed whenever a person converts, transfers, manages, sells, charges, conceals or otherwise markets any asset derived from a criminal offense, with the possible consequence that the original assets or substitutes thereof appear to come from a lawful source, provided that the total value of the asset exceeds Ps. 300,000 regardless of whether such amount results from one act or a series of related acts. Law No. 26,683 considers money laundering to be an autonomous crime against the economic and financial order, separate from the crime of concealment, which is an offense against the public administration, which allows for sanctions for the autonomous crime of money laundering regardless of participation in the crime that originated the funds subject to such money laundering. With the enactment of Law No. 27,260 and Decree No. 895/2016, the Financial Information Unit (*Unidad de Información Financiera* or "UIF") was moved under the jurisdiction of the Ministry of Finance and Public Finance. Subsequently, in accordance with Decree No. 2/2017, the UIF acts under the jurisdiction of the Ministry of Finance.

According to Article 303 of the Argentine Criminal Code, money laundering (as defined above) shall be punished with three to ten years of imprisonment and a fine of two to ten times the amount of the transactions made. The penalty prescribed above shall be increased by one third of the maximum and one half of the minimum if: (a) the wrongdoer carries out the act on a regular basis or as a member of an association or gang organized with the purpose of continuously committing acts of a similar nature; or (b) if the primary wrongdoer is a public officer who committed the infringement in the exercise of his/her duties (in such a case, the wrongdoer shall also be punished by special disqualification for three to ten years, and the same penalty shall apply to a wrongdoer who commits the offense in the service of a profession or trade requiring special qualification). The individual who receives money or other assets derived from a criminal offense with the purpose of applying them to a money laundering transaction shall be punished with imprisonment from six months to three years. If the value of the assets is not over Ps.300,000, the wrongdoer will be punished with imprisonment from six months to three years. The provisions in this section shall apply even when the criminal offense is committed outside the geographical jurisdiction of the Argentine Criminal Code, so long as the crime is also penalized in the jurisdiction where it was committed.

Article 277 of the Argentine Criminal Code sets forth that an imprisonment of between six months and three years shall be applied (with varying minimum terms attaching depending on the particular circumstances) to any person who helps a perpetrator avoid or be removed from prosecution, obscures or destroys evidence of a crime, acquires, receives, hides or alters money or other proceeds from a crime, does not report the commission of the crime or does not identify the perpetrator or participant in a crime with knowledge that such person would have been obliged to assist in the criminal prosecution of such crime and/or aids or abets the perpetrator or participant in making safe the proceeds of the crime. The minimum and maximum terms of punishment shall be doubled when: (a) the offense implies a particularly serious crime (for which minimum penalty is higher than three years of imprisonment); (b) the abettor acts for profit; (c) the abettor habitually commits concealment acts; or (d) the abettor is a public official.

At the end of 2011, with the enactment of Laws No. 26,733 and 26,734, new crimes were introduced into the Argentine Criminal Code to protect financial and stock market activities and to prevent the financing of terrorism. On the one hand, Law No. 26,733 established penalties of imprisonment, fines and special disqualification for anyone who: uses or supplies inside information to conduct securities transactions (Article 307); manipulates stock markets by offering or conducting securities transactions through false information, feigned negotiations or meeting of the main shareholders in order to negotiate at a certain price (Article 308); and carry out financial and stock market activities without corresponding authorization (Article 309). On the other hand, Law No. 26,734 incorporated into the Argentine Criminal Code Article 306, which punishes with imprisonment and fines those who directly or indirectly collect assets or money to be used to finance a crime or an individual or organization that threatens the population, or to force national or foreign authorities or an international organization to perform or refrain from performing a particular act. The penalties will apply regardless of whether the crime was committed or the financing was used. Additionally, the penalties will apply if the crime, individual or organization that is intended to be financed is carried out or located outside of Argentina. Likewise, the UIF was empowered to freeze assets linked to the financing of terrorism through a reasoned decision and immediate communication to a competent judge.

Law No. 25,246 contemplates that the legal entity whose management collected or provided assets or money, whatever their value, knowing that such assets were to be used by a terrorist organization, may be subject to a fine between five to 20 times the value of such assets. Furthermore, whenever the management of the legal entity infringes the duty to treat the information submitted to the UIF as confidential, the legal entity shall be subject to a fine between Ps. 50,000 to Ps. 500,000. Additionally such regulation created the UIF as an autonomous and financially self-sufficient entity within the jurisdiction of the Argentine Ministry of Justice and Human Rights, in charge of analyzing, treating and transmitting information in order to preclude and prevent money laundering. Pursuant to this legislation, the UIF is empowered to receive and request reports, documents, background and any other information deemed useful to fulfill its duties from any public entity, whether federal, provincial or municipal, and from individuals or public or private entities, all of which entities must furnish such information in accordance with Law No. 25,246. Whenever the information furnished

or analyses performed by the UIF show the existence of sufficient evidence to suspect that a money laundering or terrorist financing crime has been committed, the UIF shall transmit such evidence to the Government Attorney's Office so that it may start the relevant criminal action, and the UIF may appear as an accusing party to such proceedings. Moreover, Law No. 26,087 mandates that banking secrecy or professional privilege, or legal or contractual commitments, cannot be considered exceptions to the compliance with the obligation to submit information to the UIF in the context of an investigation of suspicious activity. The main goal of Law No. 25,246 is to prevent money laundering and the financing of terrorism. In line with internationally accepted practices, the duty to control such illegal transactions is not concentrated solely in Argentine federal governmental entities but also distributed among several private sector entities such as banks, brokers, brokerage firms and insurance companies. One of the mechanisms of the regime of preventing and combating these crimes consists of the obligation to inform the UIF imposed by Article 20 of the Prevention of Money Laundering Law to those parties listed that, due to their profession, activity or industry, hold a key position in the detection of suspicious moneylaundering operations and/or terrorist financing transactions. Such duties mainly consist of data collection functions, such as: (i) gathering from clients, applicants or contributors any documentation sufficient to prove their identity, legal capacity, domicile and further data as necessary on a case by case basis; (ii) reporting any suspicious fact or transaction irrespective of its amount; and (iii) abstaining from disclosing to the client or third parties any procedures being followed pursuant to law. According to Law No. 25,246, a suspicious transaction shall mean any transaction that, in accordance with standard business practices and in the experience of the entities and individuals subject to reporting obligations, is regarded as unusual, unjustified from an economic or legal standpoint, or unnecessarily complex, whether it is a one-time transaction or a series of transactions.

In February 2016, the National Executive Office issued Decree No. 360/2016, through which it creates, under the jurisdiction of the Ministry of Justice and Human Rights, and directly dependent on its leadership, the "National Coordination Program in the Fight against Money Laundering and Terrorist Financing," with the mission of reorganizing, coordinating and strengthening the national antimoney laundering system and against the financing of terrorism, attending to the specific risks that could impact national terrorism and effective global exigencies in compliance with international obligations and recommendations established by the United Nations Conventions and the standards of the Financial Action Task Force ("FATF"). By virtue of Article 6 of Decree No. 360/2016, the UIF will act as the coordinator in the material operation of the national, provincial and municipal order in the strict compliance of its duties as an financial information organization.

Resolution No. 30-E/2017 of the UIF ("Resolution 30"), which became effective on September 15, 2017, abrogated Resolution No. 121/2011 and set forth new obligations that financial entities subject to Law No. 21,526 and exchange entities subject to Law No. 18,924, as amended (the "Resolution 30 Reporting Parties"), must observe in their capacity as reporting parties pursuant to article 20, paragraphs 1 and 2, of Law No. 25,246. Resolution 30 follows the International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation issued by the Financial Action Task Force in 2012, with the purpose of adopting a risk-based approach to ensure that measures to prevent or mitigate money laundering and terrorist financing are commensurate with the risks identified.

Among other duties and obligations, Resolution 30 provided that Resolution 30 Reporting Parties must: (i) develop and document the risk identification and assessment methodology they will implement in order to identify, evaluate, mitigate and monitor their ML/TF (as defined below) risks, prior to December 31, 2017; (ii) have a technical report reflecting the results of the implementation of the methodology described in (i) above, prior to March 31, 2018; and (iii) have adjusted their policies and procedures, as set forth in Resolution 30, and in accordance with the results of the risk self-assessment performed (which policies should be incorporated into the Resolution 30 Reporting Party's money laundering and financing of terrorism ("ML/FT") Prevention Manual (as defined below)).

Resolution No. 229/2011 of the UIF, as amended by UIF Resolutions No. 52/2012, 140/2012, 104/2016, 141/2016 and 4/2017 ("Resolution 229"), is applicable to Stockbrokers and stockbrokerage firms, companies managing mutual funds, over-the-counter market agents, and all those intermediaries engaged in the purchase, lease or borrowing of securities trading in the field of stock exchanges with or without markets attached to them and intermediaries registered with futures and options markets, whichever their purpose may be ("Resolution 229 Reporting Parties", and together with the Resolution 30 Reporting Parties, the "Reporting Parties"). Resolution 30 and Resolution 229 regulate, among other matters, (i) the obligation to collect certain documentation from clients, (ii) the obligations and internal restrictions to be implemented for purposes of complying with their duty to report suspicious ML/TF operations and (iii) know your customer (KYC) policies (including the distinction between regular and occasional clients), information which must be requested from clients, documentation storage requirements and the procedures for purposes of detecting and reporting suspicious transactions.

Pursuant to Resolution 30 and Resolution 229, the Reporting Parties' main duties consist of: a) implementing a manual (the "Prevention Manual"), based on the Reporting Party's particular activities, setting forth the mechanisms and procedures to be used to prevent ML/TF; b) the designation of a compliance officer pursuant to article 20 bis of Law 25,246, as amended, and article 20 of Decree No. 290/07, as amended; c) the implementation of periodic audits; d) personnel training; e) elaborating and maintaining analysis records and risk management of detected unusual operations and operations reported because they were considered suspicious; f) implementation of technological tools to have efficient control systems and be able to prevent money laundering and terrorism financing; and g) implementation of measures that allow the Reporting Parties, respectively, to electronically consolidate the operations they perform with clients, as well as technological tools, which enable analyzing or monitoring different variables to identify certain behaviors and detect possible suspicious operations. The Reporting Parties must report to the UIF any suspicious transaction within 30 calendar days from the day a transaction is qualified as a suspicious transaction on money laundering grounds (and regardless of whether the action was completed or attempted) and any suspicious transaction on terrorism financing grounds of within 48 hours of its occurrence.

Resolution 30 defines (i) "unusual transactions" as those which lack economic and/or legal justification, whether attempted or performed in isolation or repeatedly, regardless of their amount, do not correspond to the client's risk or transactional profile, or that, due to their frequency, recurring nature, amount, complexity, nature and/or other particular characteristics, deviate from standard market practices, and (ii) "suspicious transactions" as those operations, whether attempted or performed, that cause a suspicion of ML/FT activities, or that have previously been identified as an unusual transaction, and after the analysis and evaluation carried out by the Reporting Party, cannot be justified. Resolution 229 defines (i) "unusual transactions" as those operations that are attempted or carried out in isolation or repeatedly, without economic and/or legal justification, and that do not relate to the risk or transactional profile of the client or deviate from standard market practices, due to their frequency, recurring nature, amount, complexity, nature and/or particular characteristics, and (ii) "suspicious transactions" as those operations that are attempted or carried out that cause a suspicion of ML/FT activities, or that have previously been identified as an "unusual transaction", and after the analysis and evaluation carried out by the Reporting Party, they create a doubt about the authenticity, veracity or coherence of the documentation presented by the client, in relation to their activity. Pursuant to Resolution 30, financial entities have the duty to (i) implement an ML/FT prevention system (the "Prevention System"), which must contain all the policies, procedures and controls established for ML/FT prevention committee.

Furthermore, Resolution 30 modified compliance officers' duties and required entities to upload the following reports through the UIF website: (a) a report of cash transactions in excess of Ps. 200,000; (b) a report detailing international transfers from and to Argentine accounts; and (c) an annual systematic report.

Resolution No. 92/2016 of the UIF imposed on the reporting parties the obligation to implement a risk management system in accordance with the "voluntary and exceptional affidavit of holding of national currency, foreign currency and other assets in the country or abroad" established by Law No. 27,260, in order to report suspicious transactions performed by clients until March 31, 2017, derived from the tax amnesty regime.

In addition, the CNV rules, under Title XI of "Prevention of Money Laundering and Terrorist Financing," establish that brokers and brokerage firms, and companies managing common investment funds, agents of the over-the-counter market, intermediaries in the purchase or lease of securities affiliated with stock exchange entities with or without associated markets and intermediary agents registered on forwards or option markets, and individuals or legal entities acting as trustees, for any type of trust fund, and individuals or legal entities, owners of or related to, directly or indirectly, with trust accounts, trustees and grantors in the context of a trust agreement, shall comply with Law No. 25,246, the UIF's rulings and the CNV's regulations. Additionally, companies managing common investment funds, any person acting as placement agent or performing activities relating to the trading of common investment funds, any person acting as placement agent in any primary issuance of marketable securities, and any issuer with respect to capital contributions, irrevocable capital contributions for future issuances of stock or significant loans, must also comply with such regulations.

Such resolutions also contain certain requirements for the reception and delivery of checks and payments made between the individuals and entities listed above, as well as the prohibition of transactions relating to the public offering of securities, when they are consummated or ordered by individuals or companies domiciled or residing in domains, jurisdictions, territories or associated states not included in the list of Decree No. 589, as amended (regulating mainly the jurisdictions which are considered "cooperatives for fiscal transparency purposes").

Brokers and dealers must duly know their clients and apply policies and maintain adequate structures and systems in line with a policy against money laundering and terrorist financing. Also, interested investors undertake the obligation to submit any information and documents that may be required in order to comply with criminal regulations and other laws and regulation in connection with money laundering, including capital market regulations preventing money laundering issued by the UIF and similar regulations issued by the CNV.

According to the regulations related to the prevention of money laundering, the financing of terrorism and other illicit activities issued by the Central Bank, financial entities should take certain measures with respect to its clients, including, without limitation:

- observe the norms governing the collection of proceeds, the legislation applicable to these matters (laws and regulatory decrees) and the norms of the UIF. This includes the decrees of the National Executive Office with reference to the decisions adopted by the United Nations Security Council in combatting terrorism and comply with the resolutions (and their respective annexes) issued by the Ministry of Foreign Affairs and Worship;
- in the absence of documentation or the existence of doubts and/or the detection of irregularities regarding veracity, accuracy, coherence or integrity of the documents provided by the clients, or because situations have been detected that deviate from the customer profile (as determined in accordance with existing regulations), require additional information and/or documentation, indicating to the client the obligation to comply with such additional requests;
- under no circumstance can relationships with new clients be carried out until the provisions of current regulations regarding the identification and knowledge of the client, and risk management are duly complied with;
- in the case of existing clients in respect of which identification and knowledge could not be complied with in accordance with the regulations in force, an analysis should be made with a risk-based approach, in order to assess the continuity of the relationship with the client. In September 2016, Communication "A" 6060 of the BCRA came into force, which set forth that the criteria and procedures to be applied in this process must be described by the financial entities in their Prevention Manual. If it is appropriate to discontinue the relationship with a client, the procedures and deadlines established by the provisions of the Argentine Central Bank that are specific to the applicable product(s) must be observed. The reporting subjects must keep the written records of the procedures applied in each case where they discontinue the relationship with a client, for a period of 10 years;
- send a certified copy of the designation of the regular and alternate chief compliance officer, if any, to the UIF of the Central Bank, carried out in accordance with the conditions and within the terms established in the regulations issued by the UIF;
- keep a database with information corresponding to clients that perform individual operations for amounts equal to or greater than Ps. 240,000 (or its equivalent in other currencies) for certain concepts. The scope of this obligation will also include cases relating to customers who, in the opinion of the intervening entity, carry out related-party operations that do not reach the minimum threshold on an individual basis, but exceed or reach such amount in the aggregate. For such purpose, they are also required to store information corresponding to persons who conduct transactions which in the aggregate during any day are equal to or greater than Ps. 30,000 (or its equivalent in other currencies).

Failure to comply with the requirements established by the BCRA to access the local exchange market for transactions involving the purchase and sale of securities of all types constitute an infraction subject to the criminal exchange regime.

In addition, in November 2016, BCRA Communication "A" 6094 established that the regulations of the prevention of money laundering, terrorist financing and other illicit activities issued by the Central Bank must also be complied with by the foreign representatives of the financial entities that are not authorized to operate in Argentina.

Through the enactment of Law No. 27,260 and its related regulations and Decree No. 895/2016, the UIF was granted the power to communicate information to other public entities with intelligence or investigation powers, provided that such powers can only be exercised following a well-founded resolution issued by the UIF's president and solely in those case where there are serious, precise and concordant signs regarding the commission of any of the crimes set forth by Law N° 25,246. Any information provided by the UIF will be transferred along with the obligation to maintain secrecy pursuant to Article 22 of Law N°25,246, and any unlawful disclosure of confidential information by any entity will be subject to certain penalties. The UIF will not exercise the authority referred to in cases related to voluntary and exceptional declarations made under Law No. 27,260.

For a more exhaustive analysis of the anti-money laundering regime applicable as of the date of this annual report, it is suggested that investors should consult with their legal advisors and read Title XVIII, Book Two of the Argentine Criminal Code, and the regulations issued by the UIF, the CNV and the Central Bank, which can be found on the website of the Ministry of Justice and Human Rights of Argentina, under the section Legislative Information (www.infoleg.gov.ar), and/or on the UIF's website (www.uif.gov.ar) and/or on the CNV's website (www.cnv.gov.ar) and/or the Central Bank's website (www.bcra.gov.ar).

## Law No. 27,401 on Corporate Criminal Liability

On November 8, 2017, a law establishing the criminal liability regime applicable to private legal entities, state-owned or not, was enacted by the Argentine Congress and published in the Official Gazette of the Argentine Republic on December 1, 2017 (the "Corporate Criminal Liability Law"). The law entered into force in March 2018, 90 days following its publication.

The Corporate Criminal Liability Law applies to private legal entities for the crimes of national and transnational bribery and influence peddling; transactions that are incompatible with the exercise of public offices; and illegal exaction committed by public officials; among others.

Legal entities are liable for those crimes, carried out directly or indirectly, with their intervention or in their name, interest and benefit. The legal entity is also liable if a third party, without any capacity to act on its behalf, acted in its own benefit or interest, provided the legal entity has ratified the third party's acts, even implicitly.

In the event of transformation, merger, absorption, spin-off or any other corporate restructuring, the legal entity's responsibility will be transferred to the resulting or absorbing legal entity.

The law also provides that the legal entity may be convicted even if the individual involved could not be identified or judged, provided that the circumstances of the case allow establishing that the crime could not have been committed without the acquiescence of the legal entity's bodies.

The penalties that could be applicable to legal entities included fines, total or partial suspension of commercial activities of up to ten (10) years, suspension from participating in public bids or tenders for the execution of public works or services, dissolution and winding up of the legal entity under certain circumstances, loss or suspension of government benefits, among others.

Penalties can be graduated by judges, who will contemplate the compliance of internal rules and procedures, the number and hierarchy of the officials, employees and collaborators involved; the lack of surveillance; the extent of damage caused; the amount of money involved; the willingness to reduce or repair the damage and recidivism.

The legal entity will be exempted from penalties and administrative liability provided that: a) It has self-reported an offense under the Corporate Criminal Liability Law; b) It has implemented an adequate monitoring and supervision system (Compliance Program), prior to the fact under prosecution occurred, and c) It has returned the undue benefit obtained.

The Ministerio Público Fiscal (Public Prosecutor's Office) and the legal entity may enter into a effective collaboration agreement, whereby the latter undertakes to cooperate by disclosing data or information for the clarification of the facts, the identification of the participants and/or the recovery of the assets or profits proceeding from the crime, as well as to comply with the conditions established.

Legal entities are not required under the Corporate Criminal Liability Law to implement Compliance Programs with the exception of those entering into certain agreements with the Government. The Compliance Programs shall include a set of internal actions, mechanisms and procedures to promote integrity, supervision and control aimed at preventing, detecting and correcting irregularities and unlawful acts under this law.

#### ITEM 10. Additional Information

Capital Stock

Our capital stock consists of Ps.3,933,127,930, divided into 3,764 Class A shares, 7,624 Class B shares, 40,422 Class C shares and 393,260,983 Class D shares, each fully subscribed and paid, with a par value of ten pesos each and the right to one vote per share. Our total capital stock has not changed since December 31, 2004.

In November 1992, the Privatization Law became effective. Pursuant to the Privatization Law, in July 1993, we completed a worldwide offering of 160 million Class D shares, representing approximately 45% of our outstanding capital stock, which had been owned by the Argentine government. Concurrently with the completion of such offering, the Argentine government transferred approximately 40 million Class B shares to the Argentine provinces, which represented approximately 11% of our outstanding capital stock, and made an offer to holders of pension bonds and certain other claims to exchange such bonds and other claims for approximately 46.1 million Class B shares, representing approximately 13% of our outstanding capital stock. As a result of these transactions, the Argentine government's ownership percentage of our capital stock was reduced from 100% to approximately 30%, including shares that had been set aside to be offered to our employees upon establishment of the terms and conditions by the Argentine government in accordance with Argentine law. The shares set aside to be offered to employees represented 10% of our outstanding capital stock.

In July 1997, the Class C shares set aside for the benefit of our employees in conjunction with the privatization, excluding approximately 1.5 million Class C shares set aside as a reserve against potential claims, were sold through a global public offering, increasing the percentage of our outstanding shares of capital stock held by the public to 75%. Proceeds from the transactions were used to cancel debt related to the employee plan, with the remainder distributed to participants in the plan. Additionally, Resolution No. 1,023/06 of the Ministry of Economy, dated December 21, 2006, effected the transfer to the employees covered by the employee share ownership plan, or PPP, of 1,117,717 Class C shares, corresponding to the Class C shares set aside as a reserve against potential claims, and reserving 357,987 Class C shares until a decision was reached in a pending lawsuit. Subsequently, with a final decision having been reached in the lawsuit, and consistent with the mechanism of conversion of Class C shares into Class D shares established by Decree 628/1997 and its accompanying rules, as of December 31, 2009, 1,447,983 Class C shares had been converted into Class D shares. In 2010, a former employee of the Company who was allegedly excluded from the Argentine government's YPF PPP filed a claim against YPF seeking recognition of his status as a shareholder of YPF. In addition, the Federation of Former Employees of YPF joined the proceeding as a supporting third-party claimant, purportedly acting on behalf of other former employees who were also allegedly excluded from the PPP. Under the jurisprudence of the CSJN upholding numerous decisions of the relevant Argentine Courts of Appeals, YPF believes it will not be held liable for claims of this nature related to the PPP. Through Law No. 25,471, the Argentine government assumed sole responsibility for any compensation to be received by YPF's former employees who were excluded from the PPP.

The Expropriation Law has significantly changed our shareholding structure. The Class D shares subject to expropriation from Repsol YPF or its controlling or controlled entities, which represent 51% of our share capital and were declared of public interest and are currently held by the Republic of Argentina, will be assigned as follows: 51% to the Argentine federal government and 49% to the governments of the provinces that compose the National Organization of Hydrocarbon Producing States. In addition, the Argentine federal government and certain provincial governments already own our Class A and Class B shares. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina— The Argentine Republic owns 51% of the shares of the Company."

See Note 25 to the Audited Consolidated Financial Statements, "Item 4. Information on the Company—History and Development of YPF," "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—The Expropriation Law," "Item 4. Information on the Company—Legal and Regulatory Framework and Relationship with the Argentine Government—Decree No. 272/2015" and "Item 7. Major Shareholders and Related Party Transactions."

#### **Memorandum and Articles of Association**

YPF's by-laws were approved by National Executive Decree No. 1,106, dated May 31, 1993, and notarized by public deed No. 175, dated June 15, 1993 at the National Notary Public Office, sheet 801 of the National Registry, and registered at the Inspection Board of Legal Entities of the Argentine Republic on the same date, June 15, 1993 under number 5,109 of the book of Corporations number 113, volume "A."

At a shareholders' meeting on April 29, 2016, YPF's shareholders approved an amendment to YPF's by-laws. Copies of the by-laws, which have been filed as Exhibit 1.2. to YPF's 2016 annual report on Form-20 filed on April 7, 2017, are also available at the offices of YPF.

For a detailed description of YPF's object and purpose, see "Item 4. Information on the Company." YPF's object is set forth in Section 4 of its by-laws.

Pursuant to Argentine Corporations Law, the Board of Directors or the Supervisory Committee shall call either annual general or extraordinary shareholders' meetings in the cases provided by law and whenever they consider appropriate. Shareholders representing not less than 5% of YPF's capital stock may also request that a shareholders' meeting be called.

A shareholders' meeting shall be called at least twenty days prior to the meeting date by notice published in the legal publications journal for a period of five days. The notice shall include the nature, date, time and place of the meeting, the agenda to be discussed and the specific requirements shareholders must meet to attend the meeting.

#### Shareholders' Meetings

Pursuant to the Argentine Corporations Law, the Board of Directors or the Supervisory Committee shall call either annual ordinary or extraordinary shareholders' meetings in the cases provided by law and whenever they consider appropriate. Shareholders representing not less than 5% of our capital stock may also request that a shareholders' meeting be called, in which case the meeting must take place within 40 days of such shareholders' request. If the Board of Directors or the Supervisory Committee fails to call a meeting following such a request, a meeting may be ordered by the CNV or by the courts.

Shareholders' meetings may be ordinary meetings or extraordinary meetings. We are required to convene and hold an ordinary meeting of shareholders within four months of the closing of each fiscal year to consider the matters specified in the first two paragraphs of Section 234 of the Argentine Corporations Law, such as the approval of our financial statements, allocation of net income for such fiscal year, approval of the reports of the Board of Directors and the Audit Committee and the election, performance and remuneration of directors and members of the Supervisory Committee. In addition, pursuant to the Stock Market Law, at ordinary shareholders' meetings, shareholders must consider (i) the disposition of, or creation of any lien over, assets as long as such decision has not been performed in the ordinary course of business and (ii) the execution of administration or management agreements and whether to approve any agreement by virtue of which the assets or services provided to us are paid partial or totally with a percentage of our income, results or earnings, if the payment is material when measured against the volume of the ordinary course of business and our shareholders' equity. Other matters which may be considered at an ordinary shareholders' meeting convened and held at any time include the responsibility of directors and members of the Supervisory Committee, capital increases and the issuance of certain notes. Extraordinary shareholders' meetings may be called at any time to consider matters beyond the authority of an ordinary meeting including, without limitation, the amendment of our by-laws, issuance of debentures, early dissolution, merger, spin-off, reduction of capital stock and redemption of shares, transformation from one type of entity to another and limitation or suspension of shareholders' preemptive rights.

## Notices of meetings

Notice of shareholders' meetings must be published for five days in the Official Gazette, in an Argentina newspaper of wide circulation and in the bulletin of the BASE, at least 20 but not more than 45 days prior to the date on which the meeting is to be held. Such notice must include information regarding the type of meeting to be held, the date, time and place of such meeting and the agenda. If a quorum is not available at such meeting, a notice for a meeting on second call, which must be held within 30 days of the date on which the first meeting was called, must be published for three days at least eight days before the date of the meeting on second call. The above-described notices of shareholders' meetings may be effected simultaneously for the meeting on second call to be held on the same day as the first meeting, only in the case of ordinary meetings. Shareholders' meetings may be validly held without notice if all the shares of our outstanding share capital are present and resolutions are adopted by unanimous vote of shares entitled to vote.

#### Quorum and voting requirements

Except as described below, the quorum for ordinary meetings of shareholders on first call is a majority of the shares entitled to vote, and action may be taken by the affirmative vote of an absolute majority of the shares present that are entitled to vote on such action. If a quorum is not available at the first meeting, a meeting on second call may be held at which action may be taken by the holders of an absolute majority of the shares present, regardless of the number of such shares. The quorum for an extraordinary shareholders' meeting on first call is 60% of the shares entitled to vote, and if such quorum is not available, a meeting or second call may be held, at which action may be taken by the holders of an absolute majority of the shares present, regardless of the number of such shares.

Our by-laws establish that in order to approve (i) the transfer of our domicile outside Argentina, (ii) a fundamental change of the corporate purpose set forth in our by-laws, (iii) delisting of our shares from the BASE or NYSE, and (iv) a spin-off by us, when as a result of such spin-off more than 25% of our assets are transferred to the resulting corporations, a majority of the shares representing 75% or more of our voting shares is required, both in first and second call. Our by-laws also establish that in order to approve (i) certain amendments to our by-laws concerning tender offers of shares (as described below), (ii) the granting of certain guarantees in favor of our shareholders, (iii) full stop of refining, commercialization and distribution activities and (iv) rules regarding appointment, election and number of members of our Board of Directors, a majority of the shares representing 66% or more of our voting shares is required, both in first and second call, as is the affirmative vote of the Class A shares, voting at a special meeting of the holders of such shares.

In order to attend the meeting, shareholders must deposit their shares, or a certificate representing book-entry shares issued by a bank, clearing house or depository trust company, with us. This certificate will allow each shareholder to be registered in the attendance book which closes three business days before the date on which the meeting will be held. We will issue to each shareholder a deposit certificate required for admission into the meeting. Shares certified and registered in the attendance book may not be disposed of before the meeting is held unless the corresponding deposit is cancelled.

Under the Argentine Corporations Law, foreign companies that own shares in an Argentine corporation are required to register in the National Corporations Registry (held by the Ministry of Justice and Human Rights, or the agency to be determined by such ministry to that effect, according to Decree N°27/2018—published on January 11, 2018 in the Official Gazette of the Republic of Argentina) in order to exercise certain shareholder rights, including voting rights. Such registration requires the filing of certain corporate and accounting documents. Accordingly, if a shareholder owns Class D shares directly (rather than in the form of ADSs) and it is a non-Argentine company, and such shareholder fails to register in the National Corporations Registry, the ability to exercise its rights as a holder of Class D shares may be limited.

Directors, members of the Supervisory Committee and senior managers are both entitled and required to attend all shareholders' meetings. These persons may only exercise voting power to the extent they have been previously registered as shareholders, in accordance with the provisions described in the above paragraph. Nevertheless, these persons are not allowed to vote on any proposal regarding the approval of their management duties or their removal for cause.

Shareholders who have a conflict of interest with us and who do not abstain from voting may be liable for damages to us, but only if the transaction would not have been approved without such shareholders' votes. Furthermore, shareholders who willfully or negligently vote in favor of a resolution that is subsequently declared void by a court as contrary to the law or our by-laws may be held jointly and severally liable for damages to us or to other third parties, including shareholders.

Our major shareholders do not have different voting rights.

#### **Directors**

Election of Directors

Our business and affairs are managed by the Board of Directors in accordance with our by-laws and the Argentine Corporations Law. Our by-laws provide for a Board of Directors of 11 to 21 members, and up to an equal number of alternates. Alternates are those elected by the shareholders to replace directors who are absent from meetings or who are unable to exercise their duties, when and for whatever period appointed to do so by the Board of Directors. Alternates have the responsibilities, duties and powers of directors only if and to the extent they are called upon to attend board meetings or for such longer period as they may act as replacements.

Directors hold office from one to three years, as determined by the shareholders' meetings. As of the General Ordinary and Extraordinary Shareholders' meeting and the Board of Directors' meeting, both held on April 28, 2017, and the Board of Director' meeting held on February 15, 2018, our Board of Directors is composed of 14 directors and 9 alternates.

In accordance with our by-laws, the Argentine government, as sole holder of Class A shares, is entitled to elect one director and one alternate.

Under the Argentine Corporations Law, a majority of our directors must be residents of Argentina. All directors must establish a legal domicile in Argentina for service of notices in connection with their duties.

Our by-laws require the Board of Directors to meet at least once every quarter in person or by video conference, and a majority of directors is required in order to constitute a quorum. If a quorum is not met one hour after the start time set for the meeting, the President or his substitute may invite alternates of the same class as that of the absent directors to join the meeting, or call a meeting for another day. Resolutions must be adopted by a majority of the directors present, and the President or his substitute is entitled to cast the deciding vote in the event of a tie. Our Directors are not required to hold any shares in us, and there is no age limit requirement for the retirement or non-retirement of our Directors.

According to our by-laws, the Board of Directors shall have wide powers to organize, conduct and manage the affairs of the Corporation. Specifically, it is empowered to aprove the annual budget, expenditure and investment estimates, the necessary borrowing levels and the annual action plan of the Corporation.

#### Duties and liabilities of Directors

In accordance with the Argentine Corporations Law, directors have an obligation to perform their duties with loyalty and with the diligence of a prudent business person. Directors are jointly and severally liable to us, our shareholders and to third parties for the improper performance of their duties, for violating the law or our by-laws or regulations, and for any damage caused by fraud, abuse of authority or gross negligence. Specific duties may be assigned to a director by the by-laws, company regulations, or by resolution of the shareholders' meeting. In such cases, a director's liability will be determined by reference to the performance of such duties.

Only shareholders, through a shareholders' meeting may authorize directors to engage in activities in competition with us. Transactions or contracts between directors and us in connection with our activities are permitted to the extent they are performed under fair market conditions. Transactions that do not comply with the Argentine Corporations Law require prior approval of the Board of Directors or the Supervisory Committee. In addition, these transactions must be subsequently approved by the shareholders at a general meeting. If our shareholders do not approve the relevant transaction, the directors and members of the Supervisory Committee who approved such transactions are jointly and severally liable for any damages caused to us.

Any director whose personal interests are adverse to ours shall notify the Board of Directors and the Supervisory Committee and abstain from voting on such matters. Otherwise, such director may be held liable to us.

A director will not be liable if, notwithstanding his presence at the meeting at which a resolution was adopted or his knowledge of such resolution, a written record exists of his opposition to such resolution and he reports his opposition to the Supervisory Committee before any complaint against him is brought before the Board of Directors, the Supervisory Committee, the shareholders' meeting, the appropriate governmental agency or the courts. Any liability of a director to us terminates upon approval of the director's actions by the shareholders at a general meeting, provided that shareholders representing at least 5% of our capital stock do not object and provided further that such liability does not result from a violation of the law, our by-laws or other regulations.

### Foreign Investment Legislation

Under the Argentine Foreign Investment Law, as amended, and its implementing regulations (together, referred to as the "Foreign Investment Legislation"), the purchase of shares of an Argentine corporation by an individual or legal entity domiciled abroad or by an Argentine company of "foreign capital" (as defined in the Foreign Investment Legislation) constitutes foreign investment. Currently, foreign investment in industries other than broadcasting, purchase land located in frontier and other security areas by foreigners and limits on the ownership of rural land by foreign individuals or legal entities according to Law 26,737, is not restricted, and no prior approval is required to make foreign investments. No prior approval is required in order to purchase Class D shares or ADSs or to exercise financial or corporate rights thereunder.

### **Dividends**

Under our by-laws, all Class A, Class B, Class C and Class D shares rank equally with respect to the payment of dividends. All shares outstanding as of a particular record date share equally in the dividend being paid, except that shares issued during the period to which a dividend relates may be entitled only to a partial dividend with respect to such period if the shareholders' meeting that approved the issuance so resolved. No provision of our by-laws or of the Argentine Corporations Law gives rise to future special dividends only to certain shareholders.

The amount and payment of dividends are determined by majority vote of our shareholders voting as a single class, generally, but not necessarily, on the recommendation of the Board of Directors. In addition, under the Argentine Corporations Law, our Board of Directors has the right to declare dividends subject to further approval of the shareholders' meeting.

After the enactment of the Expropriation Law, at our shareholder's meeting held on July 17, 2012 a dividend of Ps. 303 million (Ps. 0.77 per share or ADS) was authorized for payment during 2012. Although we have not adopted a formal policy regarding dividends, we intend to maintain the practice of an annual distribution, within the framework of a management that will also consider, among other factors, the capital requirements related to investment plans, the attention of debt services, working capital needs, legal and / or contractual restrictions that apply at all times, and the general conditions of the economic and financial context. At the shareholders' ordinary and extraordinary general meeting held on April 30, 2015, a dividend of Ps. 503 million (Ps. 1.28 per share or ADS) was authorized for distribution by December 31, 2015, which was paid in July 2015. At the shareholders' ordinary and extraordinary general meeting held on April 29, 2016, a dividend of Ps. 889 million (Ps. 2.26 per share or ADS) was authorized for distribution by December 31, 2016, which was paid in July 2016. At the shareholders' ordinary and extraordinary general meeting held on April 28,

2017, a dividend of Ps. 716 million (Ps. 1.82 per share or ADS) was authorized and paid in December 2017. On March 2, 2018, the Board decided to propose the following to the General Ordinary Shareholders' Meeting: (i) allocate the sum of Ps. 120 million to constitute a Reserve for the purchase of own shares, in order to grant the Board the possibility of acquiring shares owned at the time it deems appropriate, and comply, during the execution of the plans, with the commitments generated and to be generated by it in the future, (ii) allocate the sum of Ps. 11,020 million to constitute a reserve for investments in the terms of Article 70, third paragraph of the General Companies Act No. 19,550 (TO 1984) and its amendments, and (iii) allocate the sum of Ps. 1,200 million to a reserve for future dividends, empowering the Board of Directors, up to the date of the next Ordinary General Shareholders Meeting that deals with the Financial Statements for the period ended December 31, 2018, to determine the opportunity and amount for its distribution, taking into account the financial and availability of funds as well as operating results, investments and other aspects that it considers relevant in the development of the activities of the Company, or its application in accordance with the provisions of article 224 second paragraph of the General Companies Act and other applicable regulations.

The following table sets forth for the periods and dates indicated, the quarterly dividend payments made by us, expressed in pesos.

|                         |       | Pesos Per Share/ADS |      |      |       |
|-------------------------|-------|---------------------|------|------|-------|
| Year Ended December 31, | 10    | 2 <u>Q</u>          | 3Q   | 4Q   | Total |
| 2005                    | _     | 8.00                | —    | 4.40 | 12.40 |
| 2006                    | _     | 6.00                | —    |      | 6.00  |
| 2007                    | 6.00  |                     |      |      | 6.00  |
| 2008                    | 10.76 | 6.50                |      | 6.35 | 23.61 |
| 2009                    | _     | 6.30                |      | 6.15 | 12.45 |
| 2010                    |       | 5.50                |      | 5.80 | 11.30 |
| 2011                    | _     | 7.00                |      | 7.15 | 14.15 |
| 2012                    | _     |                     |      | 0.77 | 0.77  |
| 2013                    | _     |                     | 0.83 |      | 0.83  |
| 2014                    |       |                     | 1.18 |      | 1.18  |
| 2015                    | _     |                     | 1.28 |      | 1.28  |
| 2016                    |       |                     | 2.26 |      | 2.26  |
| 2017                    | _     | _                   |      | 1.82 | 1.82  |

## **Amount Available for Distribution**

Under Argentine law, dividends may be lawfully paid only out of our retained earnings reflected in the annual audited financial statements prepared in accordance with accounting rules prevailing in Argentina and CNV regulations and approved by a shareholders' meeting. The Board of Directors of a listed Argentine company that makes public offering of its shares may declare interim dividends, based on special or quarterly financial statements with the report of the external auditor and the Supervisory Committee, in which case the members of the Board and of the Supervisory Committee are jointly and severally liable for the repayment of such dividend if retained earnings at the close of the fiscal year in which the interim dividend was paid would not have been sufficient to permit the payment of such dividend.

According to the Argentine Corporations Law and our by-laws, we are required to maintain a legal reserve of at least 5% of the fiscal year's income until such reserve equals 20% of our then-outstanding capital stock. The legal reserve is not available for distribution to shareholders.

Under our by-laws, our net income is applied as follows:

- first, at least 5% of net income, plus (less) prior year adjustments, is segregated to build the legal reserve until such reserve is equal to 20% of our subscribed capital;
- second, an amount is segregated to pay the accrued fees of the members of the Board of Directors and of the Supervisory Committee. See "Item 6. Directors, Senior Management and Employees—Compensation of members of our Board of Directors and Supervisory Committee";
- third, an amount is segregated to pay dividends on preferred stock, if any; and
- fourth, the remainder of net income in whole or in part may be distributed as dividends to common shareholders or allocated for voluntary or contingent reserves as determined by the shareholders' meeting.

Our Board of Directors submits our financial statements for the preceding fiscal year, together with reports thereon by the Supervisory Committee and the external auditor, at the annual ordinary shareholders' meeting for approval. Within four months of the end of each fiscal year, an ordinary shareholders' meeting must be held to consider our yearly financial statements and determine the allocation of our net income for such year.

Under applicable CNV regulations, cash dividends must be paid to shareholders within 30 days from the shareholders' meeting approving such dividends. In cases where the shareholders meeting delegates the authority for the distribution of dividends to the Board of Directors, the Company has consistently paid the declared dividends within 30 days from the relevant Board of Directors' resolution. In the case of payment of stock dividends, or payment of both stock and cash dividends, both shares and cash are required to be available within three months of the receipt of notice of the authorization of the CNV for the public offering of the shares arising from such dividends. In accordance with the Argentine Civil and Commercial Code, the statute of limitations to the right of any shareholder to receive dividends declared by the shareholders' meeting is five years from the date on which it has been made available to the shareholder. However, according to Article 2537 of the Argentine Civil and Commercial Code, the statute of limitations on the right of any shareholder to receive dividends declared before August 1, 2015 is three years.

Owners of ADSs are entitled to receive any dividends payable with respect to the underlying Class D shares. Cash dividends are paid to the Depositary in pesos, directly or through BoNY, as depositary, although we may choose to pay cash dividends outside Argentina in a currency other than pesos, including U.S. dollars. The deposit agreement provides that the Depositary shall convert cash dividends received by the Depositary in pesos to dollars, to the extent that, in the judgment of the Depositary, such conversion may be made on a reasonable basis, and, after deduction or upon payment of the fees and expenses of the Depositary, shall make payment to the holders of ADSs in U.S. dollars.

## **Preemptive and Accretion Rights**

Except as described below, in the event of a capital increase, a holder of existing shares of a given class has a preferential right to subscribe a number of shares of the same class sufficient to maintain the holder's existing proportionate holdings of shares of that class. Preemptive rights also apply to issuances of convertible securities, but do not apply upon conversion of such securities. Pursuant to the Argentine Corporations Law, in exceptional cases and on a case-by-case basis when required for our best interest, the shareholders at an extraordinary meeting with a special majority may decide to limit or suspend shareholders' preemptive rights, provided that such limitation or suspension of the shareholders' preemptive rights is included in the agenda of the meeting and the shares to be issued are paid in kind or are issued to cancel preexisting obligations.

Under our by-laws, we may only issue securities convertible into Class D shares, and the issuance of any such convertible securities must be approved by a special meeting of the holders of Class D shares.

Holders of ADSs may be restricted in their ability to exercise preemptive rights if a registration statement under the Stock Market Law relating thereto has not been filed or is not effective. Preemptive rights are exercisable during the 30 days following the last publication of notice informing shareholders of their right to exercise such preemptive rights in the Official Gazette and in an Argentine newspaper of wide circulation. Pursuant to the Argentine Corporations Law, if authorized by an extraordinary shareholders' meeting, companies authorized to make public offering of their securities, such as us, may shorten the period during which preemptive rights may be exercised from 30 to ten days following the publication of notice of the offering to the shareholders to exercise preemptive rights in the Official Gazette and a newspaper of wide circulation in Argentina. Pursuant to our by-laws, the terms and conditions on which preemptive rights may be exercised with respect to Class C shares may be more favorable than those applicable to Class A, Class B and Class D shares.

Shareholders who have exercised their preemptive rights have the right to exercise accretion rights, in proportion to their respective ownership, with respect to any unpreempted shares, in accordance with the following procedure:

- Any unpreempted Class A shares will be converted into Class D shares and offered to holders of Class D shares that
  exercised preemptive rights and indicated their intention to exercise additional preemptive rights with respect to any such
  Class A shares.
- Any unpreempted Class B shares will be assigned to those provinces that exercised preemptive rights and indicated their
  intention to exercise accretion rights with respect to such shares; any excess will be converted into Class D shares and
  offered to holders of Class D shares that exercised preemptive rights and indicated their intention to exercise accretion rights
  with respect to any such Class D shares.

- Any unpreempted Class C shares will be assigned to any PPP participants who exercised preemptive rights and indicated their intention to exercise accretion rights with respect to such shares; any excess will be converted into Class D shares and offered to holders of Class D shares that exercised preemptive rights and indicated their intention to exercise accretion rights with respect to any such Class C shares.
- Any unpreempted rights will be assigned to holders of Class D shares that exercised their preemptive rights and indicated their intention to exercise accretion rights; any remaining Class D shares will be assigned pro rata to any holder of shares of another class that indicated his or her intention to exercise accretion rights.

The term for exercise of additional preemptive rights is the same as that fixed for exercising preemptive rights.

## **Voting of the Underlying Class D Shares**

Under the by-laws, each Class A, Class B, Class C and Class D share entitles the holder thereof to one vote at any meeting of the shareholders of YPF, except that a specified number of Directors is elected by majority vote of each class (except as provided below). See "—Directors—Election of Directors" above for information regarding the number of directors that holders of each class of shares are entitled to elect and certain other provisions governing nomination and election of directors. The Depositary has agreed that, as soon as practicable after receipt of a notice of any meeting of shareholders of YPF, it will mail a notice to the holders of ADRs, evidencing ADSs, registered on the books of the Depositary which will contain the following:

- a summary in English of the information contained in the notice of such meeting;
- a statement that the holders of ADRs at the close of business on a specified record date will be entitled, subject to any applicable provisions of Argentine law, the by-laws of YPF and the Class D shares, to instruct the Depositary to exercise the voting rights, if any, pertaining to the Class D shares evidenced by their respective ADSs; and
- a statement as to the manner in which such instructions may be given to the Depositary.

The Depositary shall endeavor, to the extent practicable, to vote or cause to be voted the amount of Class D shares represented by the ADSs in accordance with the written instructions of the holders thereof. The Depositary will vote Class D shares, as to which no instructions are received, in accordance with the recommendations of the Board of Directors of YPF. The Depositary will not vote Class D shares, as to which no instructions have been received, in accordance with the recommendations of the Board of Directors, however, unless YPF has provided to the Depositary an opinion of Argentine counsel stating that the action recommended by the Board of Directors is not illegal under Argentine law or contrary to the by-laws or Board regulations of YPF. In addition, the Depositary will, if requested by the Board of Directors and unless prohibited by any applicable provision of Argentine law, deposit all Class D shares represented by ADSs for purposes of establishing a quorum at meetings of shareholders, whether or not voting instructions with respect to such shares have been received.

## Voting

Under our by-laws, each Class A, Class B, Class C and Class D share entitles the holder thereof to one vote at any meeting of our shareholders, except that the Class A shares (i) vote separately with respect to the election of our Board of Directors and are entitled to appoint one director and one alternate director and, (ii) have certain veto rights, as described below.

## Class A Veto Rights

Under the by-laws, so long as any Class A shares remain outstanding, the affirmative vote of such shares is required in order to: (i) decide upon the merger of the company; (ii) approve any acquisition of shares by a third party representing more than 50% of the company's capital; (iii) transfer to third parties all the exploitation rights granted to YPF pursuant to the Hydrocarbons Law, applicable regulations thereunder or the Privatization Law, if such transfer would result in the total suspension of the company's exploration and production activities; (iv) voluntarily dissolve the company; and (v) transfer our legal or fiscal domicile outside Argentina. The actions described in clauses (iii) and (iv) above also require prior approval of the Argentine congress through enactment of a law.

### Reporting Requirements

Pursuant to our by-laws, any person who, directly or indirectly, through or together with its affiliates and persons acting in concert with it, acquires Class D shares or securities convertible into Class D shares, so that such person controls more than 3% of the Class D shares, is required to notify us of such acquisition within five days of such acquisition, in addition to complying with any requirements imposed by any other authority in Argentina or elsewhere where our Class D shares are traded. Such notice must include the name or names of the person and persons, if any, acting in concert with it, the date of the acquisition, the number of shares acquired, the price at which the acquisition was made, and a statement as to whether it is the purpose of the person or persons to acquire a greater shareholding in, or control of, us. Each subsequent acquisition by such person or persons requires a similar notice.

### **Certain Provisions Relating to Acquisitions of Shares**

Pursuant to our by-laws:

- each acquisition of shares or convertible securities, as a result of which the acquirer, directly or indirectly through or together with its affiliates and persons acting in concert with it (collectively, an "Offeror"), would own or control shares that, combined with such Offeror's prior holdings, if any, of shares of such class, would represent:
- 15% or more of the outstanding capital stock, or
- 20% or more of the outstanding Class D shares; and
- each subsequent acquisition by an Offeror (other than subsequent acquisitions by an Offeror owning or controlling more than 50% of our capital prior to such acquisition) (collectively, "Control Acquisitions"), must be carried out in accordance with the procedure described under "—Restrictions on Control Acquisitions" below.

In addition, any merger, consolidation or other combination with substantially the same effect involving an Offeror that has previously carried out a Control Acquisition, or by any other person or persons, if such transaction would have for such person or persons substantially the same effect as a Control Acquisition ("Related Party Share Acquisition"), must be carried out in accordance with the provisions described under "—Restrictions on Related Party Share Acquisitions" below. The voting, dividend and other distribution rights of any shares acquired in a Control Acquisition or a Related Party Share Acquisition carried out other than in accordance with such provisions will be suspended, and such shares will not be counted for purposes of determining the existence of a quorum at shareholders' meetings.

The Expropriation Law has not triggered these obligations.

#### Restrictions on Control Acquisitions

Prior to consummating any Control Acquisition, an Offeror must obtain the approval of the Class A shares, if any are outstanding, and make a public tender offer for all of our outstanding shares and convertible securities. The Offeror will be required to provide us with notice of, and certain specified information with respect to, any such tender offer at least fifteen business days prior to the commencement of the offer, as well as the terms and conditions of any agreement with any shareholder proposed for the Control Acquisition (a "Prior Agreement"). We will send each shareholder and holder of convertible securities a copy of such notice at the Offeror's expense. The Offeror is also required to publish a notice containing substantially the same information in a newspaper of general circulation in Argentina, New York and each other city in which our securities are traded on an exchange or other securities market, at least once per week, beginning on the date notice is provided to us, until the offer expires.

Our Board of Directors shall call a special meeting of the holders of Class A shares to be held ten business days following the receipt of such notice for the purpose of considering the tender offer. If the special meeting is not held, or if the shareholders do not approve the tender offer at such meeting, neither the tender offer nor the proposed Control Acquisition may be completed.

The tender offer must be carried out in accordance with a procedure specified in our by-laws and in accordance with any additional or stricter requirements of jurisdictions, exchanges or markets in which the offer is made or in which our securities are traded. Under the by-laws, the tender offer must provide for the same price for all shares tendered, which price may not be less than the highest of the following (the "Minimum Price"):

- (i) the highest price paid by, or on behalf of, the Offeror for Class D shares or convertible securities during the two years prior to the notice provided to us, subject to certain antidilution adjustments with respect to Class D shares;
- (ii) the highest closing price for the Class D shares on the BASE during the thirty-day period immediately preceding the notice provided to us, subject to certain antidilution adjustments;

- (iii) the price resulting from clause (ii) above multiplied by a fraction, the numerator of which shall be the highest price paid by or on behalf of the Offeror for Class D shares during the two years immediately preceding the date of the notice provided to us and the denominator of which shall be the closing price for the Class D shares on the BASE on the date immediately preceding the first day in such two-year period on which the Offeror acquired any interest in or right to any Class D shares, in each case subject to certain antidilution adjustments; and
- (iv) the net earnings per Class D share during the four most recent full fiscal quarters immediately preceding the date of the notice provided to us, multiplied by the higher of (A) the price/earnings ratio during such period for Class D shares (if any) and (B) the highest price/earnings ratio for us in the two-year period immediately preceding the date of the notice provided to us, in each case determined in accordance with standard practices in the financial community.

Any such offer must remain open for a minimum of 20 days and a maximum of 30 days following the provision of notice to the shareholders or publication of the offer, plus an additional period of a minimum of five days and a maximum of ten days required by CNV regulations, and shareholders must have the right to withdraw tendered shares at any time up until the close of the offer. Following the close of such tender offer, the Offeror will be obligated to acquire all tendered shares or convertible securities, unless the number of shares tendered is less than the minimum, if any, upon which such tender offer was conditioned, in which case the Offeror may withdraw the tender offer. Following the close of the tender offer, the Offeror may consummate any Prior Agreement within thirty days following the close of the tender offer; provided, however, that if such tender offer was conditioned on the acquisition of a minimum number of shares, the Prior Agreement may be consummated only if such minimum was reached. If no Prior Agreement existed, the Offeror may acquire the number of shares indicated in the notice provided to us on the terms indicated in such notice, to the extent such number of shares were not acquired in the tender offer, provided that any condition relating to a minimum number of shares tendered has been met.

The Expropriation Law has not triggered these obligations.

Restrictions on Related Party Share Acquisitions

The price per share to be received by each shareholder in any Related Party Share Acquisition must be the same as, and must not be less, than the highest of the following:

- (i) the highest price paid by or on behalf of the party seeking to carry out the Related Party Share Acquisition (an "Interested Shareholder") for (A) shares of the class to be transferred in the Related Party Share Acquisition (the "Class") within the two-year period immediately preceding the first public announcement of the Related Party Share Acquisition or (B) shares of the Class acquired in any Control Acquisition, in each case as adjusted for any stock split, reverse stock split, stock dividend or other reclassification affecting the Class;
- (ii) the highest closing sale price of shares of the Class on the BASE during the thirty days immediately preceding the announcement of the Related Party Share Acquisition or the date of any Control Acquisition by the Interested Shareholder, adjusted as described above;
- (iii) the price resulting from clause (ii) multiplied by a fraction, the numerator of which shall be the highest price paid by or on behalf of the Interested Shareholder for any share of the Class during the two years immediately preceding the announcement of the Related Party Transaction and the denominator of which shall be the closing sale price for shares of the Class on the date immediately preceding the first day in the two-year period referred to above on which the Interested Shareholder acquired any interest or right in shares of the Class, in each case as adjusted as described above; and
- (iv) the net earnings per share of the shares of the Class during the four most recent full fiscal quarters preceding the announcement of the Related Party Transaction multiplied by the higher of the (A) the price/earnings ratio during such period for the shares of the Class and (B) the highest price/earnings ratio for us in the two-year period preceding the announcement of the Related Party Transaction, in each case determined in accordance with standard practices in the financial community.

In addition, any transaction that would result in the acquisition by any Offeror of ownership or control of more than 50% of our capital stock, or that constitutes a merger or consolidation of us, must be approved in advance by the Class A shares while any such shares remain outstanding.

### **Material Contracts**

None.

### **Exchange Regulations**

See "Item 3. Key Information—Exchange Regulations" for information on the monetary and currency exchange control restrictions in effect in Argentina.

### **Taxation**

### **Argentine Tax Considerations**

The following discussion is a summary of the material Argentine tax considerations relating to the purchase, ownership and disposition of our Class D shares or ADSs.

### Dividends tax

Dividends paid on our Class D shares or ADSs, whether in cash, property or other equity securities, are subject to income tax withholding for dividends paid in excess of our taxable accumulated income for the previous fiscal period, at a rate of 35% in respect of such excess. This is a final tax, and it is not applicable if dividends are paid in shares rather than in cash. On December 29, 2017, Law No. 27,430 introducing modifications to the income tax was published in the Official Gazette, and this "equalization tax" no longer applied to income accrued from January 1, 2018.

The law also establishes dividend withholding tax rates of 7% for profits accrued during fiscal years starting January 1, 2018 to December 31, 2019, and 13% for profits accrued in fiscal years starting January 1, 2020 and onwards.

### Personal assets tax

Argentine individuals and undivided estates, foreign individuals and undivided estates, and foreign entities are subject to personal assets tax of 0.25% of the value of any shares or ADSs issued by Argentine entities, held at December 31 of each year. The tax is levied on the Argentine issuers of such shares or ADSs, such as the Company, which must pay this tax in substitution of the relevant shareholders, and is based on the equity value (*valor patrimonial proporcional*), of the shares derived from the latest financial statements at December 31 of each year. Pursuant to the Personal Assets Tax Law, we are entitled and expect to seek reimbursement of such paid tax from the applicable shareholders, including by foreclosing on the shares, or by withholding dividends.

On July 22, 2016, Law 27,260 was published in the Official Gazette which makes changes to the Argentine tax laws and establishes a new tax debt settlement plan and new benefits for compliant taxpayers. According to this law, the Company has applied for an exemption in 2017, for the benefit of its shareholders, from this tax. That exemption will apply for fiscal years 2016 to 2018, inclusive.

### Tax on debits and credits in bank accounts

Tax on debits and credits in bank accounts is levied, with certain exceptions, for debits and credits on checking accounts maintained at financial institutions located in Argentina and other transactions that are used as a substitute for the use of checking accounts. The general tax rate is 0.6% for each debit and credit, although in certain cases a decreased rate may apply. The account holder may use up to 34% of the tax paid in respect of credits as a credit against other federal taxes. On December 29, 2017, Law No. 27,432 introducing modifications to this credit mechanism was published in the Official Gazette. The PEN may fix the tax percentage to be computed as payment on account of the income tax, which will be progressively increased by up to 20% per year as of January 1, 2018, and it may also establish that this tax will be fully computed as payment on account of the income tax in 2022.

### Value added tax

The sale, exchange or other disposition of our Class D shares or ADSs and the distribution of dividends are exempt from the value added tax.

### Stamp taxes

Stamp taxes may apply in certain Argentine provinces if transfer of our Class D shares or ADSs is performed or executed in such jurisdictions by means of written agreements. Transfer of our Class D shares or ADSs is exempt from stamp tax in the City of Buenos Aires.

### Estate and gift tax

The province of Buenos Aires has imposed a tax on the reception of assets through inheritance or gift, effective January 1, 2011. The tax rates vary from 4% to 21.925%, depending on the value of the transferred assets and the relationship between the transferor and the transferee. The transfer of Class D shares or ADSs among residents of the province of Buenos Aires shall be subject to this tax if other applicable conditions are met.

### Other taxes

Subject to the discussion above regarding estate and gift taxes in the province of Buenos Aires, there are no Argentine inheritance or succession taxes applicable to the ownership, transfer or disposition of our Class D shares or ADSs. In addition, neither the minimum presumed income tax nor any local gross turnover tax in the City of Buenos Aires is applicable to the ownership, transfer or disposition of our Class D shares or ADSs.

In the case of litigation regarding the Class D shares or ADSs before a court of the City of Buenos Aires, a 3% court fee would be charged, calculated on the basis of the claim.

### Tax treaties

Argentina has tax treaties for the avoidance of double taxation currently in force with Australia, Belgium, Bolivia, Brazil, Canada, Chile, Denmark, Finland, France, Germany, Italy, Mexico, the Netherlands, Norway, Russia, Spain, Sweden, Switzerland, the United Kingdom and Uruguay. The tax treaty between Argentina and the United Arab Emirates has been signed, but the treaty has not yet been ratified by their respective governments. The new tax treaty between Argentina and Mexico was ratified by their governments and went into effect as of January 1, 2018. There is currently no tax treaty or convention in effect between Argentina and the United States. It is not clear when, if ever, a treaty will be ratified or entered into effect. As a result, the Argentine tax consequences described in this section will apply, without modification, to a holder of our Class D shares or ADSs that is a U.S. resident. Foreign shareholders located in certain jurisdictions with a tax treaty in force with Argentina may be (i) exempted from the payment of the personal assets tax and (ii) entitled to apply for reduced withholding tax rates on payments to be made by Argentine parties.

### Modifications to the Income Tax Law

On December 29, 2017, Law No. 27,430 and 27,432 introducing modifications to the Income Tax and other taxes was published in the Official Gazette This summary describes some of the main changes to the corporate income tax and cross-border transaction provisions. As of the date of this annual report, this law has not been regulated by the Executive Branch.

### Income tax

• Corporate income tax rate and dividend withholding tax

The law decreases the corporate income tax rate from 35% to 30% for fiscal years starting January 1, 2018 to December 31, 2019, and to 25% for fiscal years starting January 1, 2020 and onwards. The law also establishes a dividend withholding tax and repeals the current "equalization tax". See section "Dividends tax".

• Nonresident's capital gains tax

The new law establishes a 15% withholding on capital gains derived from the sale of shares or other similar securities (calculated on the actual or presumed gains equivalent to 90% of the sale price). The law establishes an exemption applicable to foreign beneficiaries who sell listed shares under the supervision of the CNV. Furthermore, an exemption is established for the interest and sale results of government bonds, NO and ADRs. These exemptions will only apply to non-resident foreign beneficiaries do not reside or whose funds do not derive from non-cooperating jurisdictions. Finally, such exemptions do not apply to those benefits derived from the securities known as Lebacs.

In the case of ADRs, the law established that the "source" thereof is given by the residence of the issuer of the respective shares. The law established that the income from the purchase-sale of an ADR is of Argentine source if the company that issues the share is Argentine and that it is from a foreign source if the issuer is foreign.

• Indirect transfers made by nonresidents

The law establishes a tax on the indirect transfer of assets located in Argentina. In particular, the tax is triggered on the sale or transfer by nonresidents of shares or other participations in foreign entities when the following two conditions are met: (i) at least 30% of the

value of the foreign entity derives from assets located in Argentina; and (ii) the participation being transferred represents (at the moment of the sale or during the 12 prior months) at least 10% of the equity of the foreign entity.

The applicable rate is generally 15% (calculated on the actual net gain or a presumed net gain equal to 90% of the sale price), of the proportional value that corresponds to the Argentine assets.

### **United States Federal Income Tax Considerations**

The following are the material U.S. federal income tax consequences of owning and disposing of our Class D shares or ADSs. This discussion does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a particular person's decision to hold such securities.

This discussion applies only if you are a U.S. Holder (as defined below) and you hold our Class D shares or ADSs as capital assets for U.S. federal income tax purposes, and it does not describe all of the tax consequences that may be relevant to holders subject to special rules, such as:

- certain financial institutions;
- insurance companies;
- dealers and traders in securities or financial instruments, who use a mark-to-market method of tax accounting;
- persons holding Class D shares or ADSs as part of a hedge, "straddle," wash sale, conversion transaction, integrated transaction or similar transaction or persons entering into a constructive sale with respect to the Class D shares or ADSs;
- U.S. Holderswhose functional currency for U.S. federal income tax purposes is not the U.S. dollar;
- certain taxpayers who file applicable financial statements required to recognize income when the associated revenue is reflected on such financial statements;
- entities classified as partnerships for U.S. federal income tax purposes;
- persons liable for the alternative minimum tax;
- persons who acquired our Class D shares or ADSs pursuant to the exercise of an employee stock option or otherwise as compensation;
- persons holding Class D shares or ADSs in connection with a trade or business conducted outside of the United States;
- tax-exempt entities, including "individual retirement accounts" or "Roth IRAs"; or
- persons holding Class D shares or ADSs that own or are deemed to own ten percent or more of our voting stock.

If an entity that is classified as a partnership for U.S. federal income tax purposes holds Class D shares or ADSs, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and upon the activities of the partnership. Partnerships holding Class D shares or ADSs and partners in such partnerships should consult their tax advisers as to the particular U.S. federal income tax consequences of holding and disposing of the Class D shares or ADSs.

This discussion is based on the Internal Revenue Code of 1986, as amended (the "Code"), administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, all as of the date hereof. These laws are subject to change, possibly on a retroactive basis. It is also based in part on representations by the Depositary and assumes that each obligation under the deposit agreement and any related agreement will be performed in accordance with its terms.

You are a "U.S. Holder" if you are a beneficial owner of Class D shares or ADSs and are, for U.S. federal income tax purposes:

- a citizen or individual resident of the United States for U.S. federal income tax purposes;
- a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia; or
- an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

In general, if you own ADSs, you will be treated as the owner of the underlying shares represented by those ADSs for U.S. federal income tax purposes. Accordingly, no gain or loss will be recognized if you exchange ADSs for the underlying shares represented by those ADSs.

The U.S. Treasury has expressed concerns that parties to whom American depositary shares are released before the underlying shares are delivered to the depositary, or intermediaries in the chain of ownership between U.S. Holders and the issuer of the shares underlying the American depositary shares, may be taking actions that are inconsistent with the claiming of foreign tax credits by U.S. holders of American depositary shares. Such actions would also be inconsistent with the claiming of the reduced rate of tax, described below, applicable to dividends received by certain non-corporate holders. Accordingly, the analysis of the creditability of Argentine taxes, and the availability of the reduced tax rate for dividends received by certain non-corporate holders, each described below, could be affected by actions taken by such parties or intermediaries.

Please consult your own tax adviser concerning the U.S. federal, state, local and foreign tax consequences of owning and disposing of Class D shares or ADSs in your particular circumstances.

This discussion assumes that YPF is not, and will not become, a passive foreign investment company, as described below.

### Taxation of distributions

Distributions paid on Class D shares or ADSs, other than certain pro rata distributions of ordinary shares, will be treated as dividends to the extent paid out of current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Because we do not maintain calculations of earnings and profits under U.S. federal income tax principles, it is expected that distributions will generally be reported to U.S. Holders as dividends. Subject to applicable limitations (including a minimum holding period requirement), the discussion above regarding concerns expressed by the U.S. Treasury and the discussion below regarding passive foreign investment company rules, certain non-corporate U.S. dividends paid by qualified foreign corporations to certain non-corporate U.S. Holders are taxable at a reduced rate if they are "qualified dividend income". Dividends paid on the Class D shares or ADSs will be treated as qualified dividend income if (i) the Class D shares or ADSs are readily tradable on an established securities marked in the United States, (ii) the U.S. Holder meets the holding period requirement for the Class D shares or ADSs (generally more than 60 days during the 121-day period that begins 60 days before the ex-dividend date), and (iii) we were not in the year prior to the year in which the dividend was paid, and are not in the year in which the dividend is paid, a PFIC (Passive foreign investment company). Some non-corporate U.S. Holders may also be subject to a 3.8% net investment surtax. A foreign corporation is treated as a qualified foreign corporation with respect to dividends paid on stock that is readily tradable on an established securities market in the United States, such as the NYSE, where our ADSs are listed. As it relates to certain corporate U.S. Holders, U.S. tax rules may apply to reduce the tax rate on dividend income based on the holders' ownership and minimum holding period in the Class D shares or ADSs. You should consult your own tax adviser to determine whether the favorable rate may apply to dividends you receive in respect of our Class D shares or ADSs and whether you are subject to any special rules that limit your ability to be taxed at this favorable rate. The amount of a dividend will include any amounts withheld by us in respect of Argentine income taxes. The dividends will be treated as foreign-source dividend income and may, other than as discussed above, not be eligible for the dividends-received deduction generally allowed to U.S. corporations under the Code.

Any dividends paid in Argentine pesos will be included in your income in a U.S. dollar amount calculated by reference to the exchange rate in effect on the date of your, or in the case of ADSs, the Depositary's, receipt of the dividend, regardless of whether the payment is in fact converted into U.S. dollars. If the dividend is converted into U.S. dollars on the date of receipt, you generally would not recognize foreign currency gain or loss in respect of the dividend income. You may have foreign currency gain or loss if the dividend is converted into U.S. dollars after the date of receipt. Foreign currency gain or loss that you recognize will generally be treated as U.S.-source ordinary income or loss.

Subject to applicable limitations (including a minimum holding period requirement) that may vary depending upon your circumstances and, in the case of ADSs, subject to the discussion above regarding concerns expressed by the U.S. Treasury, Argentine income taxes, if any, withheld from dividends on Class D shares or ADSs will be creditable against your U.S. federal income tax liability. Amounts paid on account of the Argentine personal assets tax may not be eligible for credit against your U.S. federal income tax liability. You should consult your tax adviser to determine the tax consequences applicable to you as a result of the payment of the Argentine personal assets tax or the withholding of the amount of such tax from distributions, including whether such amounts are includible in income or are deductible for U.S. federal income tax purposes. The rules governing the foreign tax credit are complex. You are urged to consult your tax adviser regarding the availability of the foreign tax credit under your particular circumstances.

### Sale or other disposition of Class D shares or ADSs

For U.S. federal income tax purposes, gain or loss you realize on the sale or other disposition of Class D shares or ADSs generally will, subject to the discussion below regarding passive foreign investment company rules, be capital gain or loss and will be long-term capital gain or loss if you held the Class D shares or ADSs for more than one year. Certain non-corporate U.S. Holders (including individuals) may be eligible for preferential rates of U.S. federal income tax in respect of longterm capital gains. The deductibility of capital losses is subject to limitations under the Code. The amount of your gain or loss will be equal to the difference between the amount realized on the disposition and your adjusted tax basis in the relevant Class D shares or ADSs, each as determined in U.S. dollars. The deductibility of capital losses is subject to limitations.

If Argentine income tax is withheld on the sale or other taxable disposition of a Class D share or ADS, the amount realized by a U.S. Holder will include the gross amount of the proceeds of the sale or other taxable disposition before deduction of such tax. Capital gain or loss, if any, realized by a U.S. Holder on the sale or other taxable disposition of the Class D share or ADS generally will be treated as U.S.-source gain or loss for U.S. foreign tax credit purposes. Consequently, in the case of a gain from the disposition of a Class D share or ADS that is subject to Argentine income tax, the U.S. Holder may not be able to benefit from the U.S. foreign tax credit for the tax unless the U.S. Holder can apply the credit against U.S. federal income tax payable on other income from foreign sources. Alternatively, the U.S. Holder may take a deduction for the Argentine income tax if it does not elect to claim a foreign tax credit for any non-U.S. income taxes paid during the taxable year.

### Passive foreign investment company rules

YPF believes that it was not a "passive foreign investment company" ("PFIC") for U.S. federal income tax purposes for the taxable year of 2017 and does not expect to be a PFIC in the foreseeable future. However, since PFIC status depends upon the composition of a company's income and assets and the market value of its assets (including, among other things, less than 25 percent owned equity investments) from time to time, there can be no assurance that YPF will not be considered a PFIC for any taxable year. If YPF were treated as a PFIC for any taxable year during which you held a Class D share or ADS, you generally would be subject to additional filing requirements, imputed interest charges and other disadvantageous tax treatment (including the denial of taxation at the lower rates applicable to long-term capital gains with respect to any gain from the sale or exchange of Class D shares or ADSs). Certain elections might be available that would result in alternative treatments (such as mark-to-market treatment). U.S. Holders should consult their tax advisers to determine whether any of these elections would be available and, if so, what the consequences of the alternative treatments would be in their particular circumstances.

In addition, if YPF were to be treated as a PFIC in a taxable year in which it paid a dividend or the prior taxable year, the dividend rate discussed above with respect to dividends paid by qualified foreign corporations to certain non-corporate holders would not apply.

### Information reporting and backup withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting and may be subject to backup withholding unless (i) you are an exempt recipient or (ii) in the case of backup withholding, you provide a correct taxpayer identification number and certify that you are not subject to backup withholding.

The amount of any backup withholding from a payment to you will be allowed as a credit against your U.S. federal income tax liability and may entitle you to a refund, provided that the required information is timely furnished to the Internal Revenue Service.

Certain U.S. Holders may be required, generally on Internal Revenue ServiceForm 8938, to report information relating to their ownership of securities of a non-U.S. person, subject to certain exceptions (including an exception for stock held in certain accounts maintained by a U.S. financial institution, such as our ADSs). A U.S. Holder who fails to timely furnish the required information may be subject to a penalty. U.S. Holders are urged to consult their tax advisers regarding the effect, if any, of these rules on their ownership and disposition of Class D shares or ADSs.

### **Documents on Display**

YPF is subject to the information requirements of the U.S. Securities Exchange Act (the "Exchange Act"), except that as a foreign issuer, YPF is not subject to the proxy rules or the short-swing profit disclosure rules of the Exchange Act. In accordance with these statutory requirements, YPF files or furnishes reports and other information with the SEC. Reports and other information filed or furnished by YPF with the SEC may be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N. E., Washington, D.C. 20549. Copies of such material may be obtained by mail from the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. You may obtain information on the operation of the Public Reference Section

by calling the SEC at  $\pm 1-800-732-0330$ . All of the SEC filings made electronically by YPF are available to the public on the SEC's website at http://www.sec.gov.

### ITEM 11. Quantitative and Qualitative Disclosures about Market Risk

The following quantitative and qualitative information is provided about financial instruments to which we are a party as of December 31, 2017, and from which we may derive gains or incur losses from changes in market, interest rates, foreign exchange rates or commodity prices. We do not enter into derivative or other financial instruments for trading purposes.

This discussion contains forward-looking statements that are subject to risks and uncertainties. Actual results could vary materially as a result of a number of factors including those set forth in "Item 3. Key Information—Risk Factors."

### Foreign currency exposure

The value of financial assets and liabilities denominated in a currency different from the Company's functional currency is subject to variations resulting from fluctuations in exchange rates. Since YPF's functional currency is the U.S. dollar, the currency that generates the greatest exposure is the Argentine peso, the Argentine legal currency. See Note 2.b.1 to the Audited Consolidated Financial Statements.

In addition, our costs and receipts denominated in currencies other than the Argentine peso, including the U.S. dollar, often do not match. We generally follow a policy of not hedging our debt obligations in U.S. dollars. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—We may be exposed to fluctuations in foreign exchange rates."

Additionally, YPF is enabled to operate as settlement agent in the Rosario Futures Market ("ROFEX").

The annual rate of devaluation of the Argentine peso was approximately 18.4% considering the period-end exchange rates for U.S. dollars as of December 31, 2017 and 2016. See "Item 5. Operating and Financial Review and Prospects—Factors Affecting Our Operations—Macroeconomic conditions" for additional information. The main effects of a devaluation of the Argentine Peso on our net income are those related to the accounting of deferred income tax related mainly to fixed assets, which we expect would have a negative effect; current income tax which we expect would have a positive effect; increased depreciation and amortization resulting from the remeasurement in pesos of our fixed and intangible assets; and exchange rate differences as a result of our exposure to the peso, which we expect would have a positive effect due to the fact that our functional currency is the U.S. dollar. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—We may be exposed to fluctuations in foreign exchange rates."

As mentioned in Note 2.b to Audited Consolidated Financial Statements, the Company has determined that the U.S. dollar is its functional currency. Therefore, the effect of changes in the dollar exchange rate on dollar currency positions have no impact on the exchange difference recorded in the consolidated statements of comprehensive income included in the Audited Consolidated Financial Statements, but affect the amount of our assets and liabilities remeasured in pesos as a consequence of devaluation and considering our reporting currency (pesos). For additional information about our assets and liabilities denominated in currencies other than pesos (principally U.S. dollars) see Annex iii to our Audited Consolidated Financial Statements.

### Interest rate exposure

The table below provides information about our assets and liabilities as of December 31, 2017 that may be sensitive to changes in interest rates. See "Item 3. Key Information—Risk Factors—Risks Relating to Argentina—Variations in interest rates and exchange rate on our current and/or future financing arrangements may result in significant increases in our borrowing costs.. See additionally Note 4 and Note 16 to the Audited Consolidated Financial Statements.

|                   |                  |                | Expe                           | cted Mat                          | urity Dat                          | te                |              |            |
|-------------------|------------------|----------------|--------------------------------|-----------------------------------|------------------------------------|-------------------|--------------|------------|
|                   | Less than 1 year | 1 –<br>2 years | 2 – 3<br><u>years</u><br>(in 1 | 3 – 4<br><u>years</u><br>nillions | 4 – 5<br><u>years</u><br>of pesos) | More than 5 years | <u>Total</u> | Fair Value |
| Assets            |                  |                |                                |                                   |                                    |                   |              |            |
| Fixed rate        |                  |                |                                |                                   |                                    |                   |              |            |
| Other Receivables | 15               | _              | —                              |                                   | _                                  | _                 | 15           | 15         |
| Interest rate     | 0.2%             |                |                                |                                   |                                    |                   |              |            |
| Variable rate     |                  |                |                                |                                   |                                    |                   |              |            |
| Other Receivables | 13               |                |                                |                                   |                                    | _                 | 13           | 13         |
| Interest rate     | CER(1)+8%        |                |                                |                                   |                                    |                   |              |            |
| Liabilities       |                  |                |                                |                                   |                                    |                   |              |            |
| Fixed rate        |                  |                |                                |                                   |                                    |                   |              |            |

|                     |  |  |                                    | Expected Maturity Da                                | ıte                               |                                  |         |            |
|---------------------|--|--|------------------------------------|---|-----------------------------------|----------------------------------|---------|------------|
|                     | Less than<br>1 year  | 1 – 2 years                            | 2 – 3 years                        | 3 – 4 years<br>(in millions of pesos                | 4 – 5 years                       | More than<br>5 years             | Total   | Fair Value |
| YPF's<br>Negotiable |  |  |                                    | (in milions of pesos)                               | ,                                 |                                  |         |            |
| Obligations         | 11,989   | 5,956                                  | 1,078                              | 18,599  | 13,095                            | 80,559                           | 131,277 | 144,496    |
| Interest rate       | 3,5%-8,875%  | 3,5%-3,75%                             | ,                                  | 9%  | 8,75%-16,5%                       | 7%-10%                           | ,       | ,          |
| Other debt          | 8,496  | 1,238                                  | 442                                | 4,994   |                                   |                                  | 15,170  | 15,171     |
| Interest rate       | 1,18%-20%  | 1,18%-16%                              | 1,9%-16%                           | 1,9%-6%   |                                   |                                  |         |            |
| Variable rate       |  |  |                                    |   |                                   |                                  |         |            |
| YPF's<br>Negotiable | 4.651  | 2.510                                  | 17.400                             | 2 102   | 922                               | 1 000                            | 20.696  | 20.696     |
| Obligations         | 4,651  | 3,519                                  | 17,499                             | 2,183   | 833                               | 1,000                            | 29,686  | 29,686     |
| Interest rate       | BADLAR <sup>(2)</sup><br>+ <b>0%-7.5%</b> /                | BADLAR <sup>(2)</sup><br>+0-+4.75%     | BADLAR <sup>(2)</sup><br>+0%-4.75% | BADLAR <sup>(2)</sup><br>+ <b>0%</b> -+ <b>0.1%</b> | BADLAR <sup>(2)</sup><br>0%-+0.1% | BADLAR <sup>(2)</sup><br>0%-0.1% |         |            |
| Other debt          | 9,594  | 688                                    | 40                                 | _   | <del></del>                       | _                                | 10,323  | 10,323     |
| Interest rate       | LIBOR<br>6.75%/<br>BADLAR <sup>(2)</sup><br>+3 -<br>+3.5%% | BADLAR <sup>(2)</sup><br>+3%-<br>+3.5% | BADLAR<br>+3%                      |   |                                   |                                  |         |            |

- (1) Coeficiente de Estabilización de Referencia (CER) is a reference stabilization index established by the Public Emergency Law and published by the Argentine Central Bank.
- (2) Refers to the average interest rate that banks pay for deposits of more than Ps. 1 million.

### Crude oil and other hydrocarbon product price exposure

Our results of operations are also exposed to volatility mainly in the prices of certain oil products, especially in connection with imports. Although we have occasionally contracted financial derivatives in the past with the aim of decreasing exposure to these commodities price risks, as of the date of this annual report YPF was not a party to any commodity hedging instruments in connection with crude oil and other hydrocarbon product prices. For information on our hydrocarbons delivery commitments as of December 31, 2017, see "Item 4. Information on the Company—Exploration and Production—Delivery commitments."

### ITEM 12. Description of Securities Other than Equity Securities

### American Depositary Shares

Our ADSs are listed on the NYSE under the symbol "YPF." The Bank of New York Mellon is the Depositary. Each ADS represents the right to receive one share.

The Depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The Depositary may collect its annual fee for depositary services by deductions from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The Depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

The table below sets forth the fees payable, either directly or indirectly, by a holder of ADSs as of the date of this annual report.

| Persons depositing or withdrawing shares must pay:   | For:   |
|--|--|
| U.S.\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)   | Issuance of ADRs (including, without limitation, issuance pursuant to a stock dividend or stock split declared by YPF, an exchange of stock or a distribution of rights) and surrender of ADRs |
| Cancellation of ADSs for the purpose of withdrawal   |  |
| A fee equivalent to the fee that would be payable if securities distributed to a holder had been shares and the shares had been deposited for issuance of ADSs                             | Sale, on behalf of the holder, of rights to subscribe for additional shares or any right of any nature distributed by YPF  |
| Transfer fees, as may from time to time be in effect   | Transfer and registration of shares on YPF share register to or<br>from the name of the depositary or its agent when a holder<br>deposits or withdraws shares                                  |
| Expenses of the depositary   | Cable, telex and facsimile transmission expenses, as provided in the deposit agreement   |
|  | Expenses incurred by the depositary in the conversion of foreign currency <sup>(1)</sup>   |
| Taxes and other governmental charges the depositary or the custodian have to pay on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or withholding taxes | As necessary   |

(1) Pursuant to our deposit agreement, whenever the depositary shall receive foreign currency, as a cash dividend or other distribution which, in the judgment of the depositary, can be converted on a reasonable basis into U.S. dollars and transferred to the United States, it will convert such foreign currency into U.S. dollars and transfer the resulting U.S. dollars (after deduction of its customary charges and expenses in effecting such conversion) to the United States.

In 2017, the Depositary made no direct or indirect payments to YPF.

### PART II

ITEM 13. Defaults, Dividend Arrearages and Delinquencies

None.

ITEM 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

### ITEM 15. Controls and Procedures

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

As of December 31, 2017, YPF, under the supervision and with the participation of YPF's management, including our current Principal Executive Officer and Principal Financial Officer, performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) or Rule 15d-15(e) under the Exchange Act). There are, as described below, inherent limitations to the effectiveness of any control system, including disclosure controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives.

Based on this evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that there was reasonable assurance that the design and operation of these disclosure controls and procedures were effective as of December 31, 2017, in ensuring that information required to be disclosed in reports that the company files under the Exchange Act is (1) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and (2) accumulated and communicated to our management, including our Principal Executive Officer and Principal Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Management of YPF is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). YPF's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS and includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of YPF;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in
  accordance with IFRS, and that our receipts and expenditures are being made only in accordance with authorizations of
  YPF's management and directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, any system of internal control over financial reporting, no matter how well designed, may not prevent or detect misstatements, due to the possibility that a control can be circumvented or overridden or that misstatements due to error or fraud may occur that are not detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of YPF's management, including our current Principal Executive Officer and Principal Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting using the criteria established in "Internal Control-Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission ("the COSO criteria"). Based on this assessment, our management concluded that , our internal control over financial reporting was effective as of December 31, 2017.

Our internal control over financial reporting as of December 31, 2017 has been audited by Deloitte & Co. S.A., an independent registered public accounting firm, as stated in their report included in the F-pages of this annual report.

Changes in Internal Control Over Financial Reporting

There were no changes in the YPF's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the period covered by this annual report on Form 20-F that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

### **ITEM 16.**

### ITEM 16A. Audit Committee Financial Expert

Our Board of Directors determined that Carlos Alberto Felices is the Audit Committee Financial Expert at the meetings held on on April 29, 2016 and April 28, 2017. YPF believes that Mr. Felices possesses the attributes of an Audit Committee Financial Expert set forth in the instructions to Item 16A of Form 20-F. Mr. Felices is an independent director.

### ITEM 16B. Code of Ethics

YPF has adopted a Code of Ethics and Conduct ("Code of Ethics") applicable to the Board of Directors, all YPF employees, contractors, sub-contractors, vendors, suppliers and business partners conducting business with YPF, which was most recently amended effective August 8, 2017. The amendment introduced a new value to the Code of Ethics regarding gender equality. Since August 15, 2003, we have not waived compliance with the Code of Ethics. YPF undertakes to provide to any person without charge, upon request, a copy of such Code of Ethics.

The Code of Ethics establishes the implementation of an ethics hotline to receive complaints regarding the lack of fulfilment of the Code of Ethics, an Ethics Committee that will consider complaints received, the appointment of an Ethics Officer who will conduct pertinent investigations, the incorporation of a policy on prohibited periods for trading YPF securities to be followed by officers and those others to whom the Code of Ethics is applicable when conducting stock transactions, among other requirements.

### **Ethics Committee**

The Board of Directors created the Ethics Committee, which is in charge of implementing the Code of Ethics and Conduct of YPF, and assessing and establishing the actions required to address the reported situations. It also supervises YPF's "Ethics Line". It is composed of five members, three of which shall serve as Internal Auditor, Legal Affairs Corporate Vice-President and Human Resources Vice-President, while the other two will be appointed by the Chairman of the Board of Directors of YPF S.A. from among employees which perform in operative or business areas. As of the date of this annual report, the Ethics Committee is composed of the following members: Javier Fevré (Internal Auditor) Germán Fernánez Lahore (Legal Affairs Corporate Vice President), José Manuel Aggio (Human Resources Vice President), Marcos Browne (Gas and Energy Executive Vice President) and Carlos Alfonsi (Operations and Transformation Executive Vice President).

A copy of the Code of Ethics can be found at the Company's web page, www.ypf.com, or it can be requested in writing by telephone or facsimile from us at the following address: YPF S.A.

Office of Investors Relations

### Macacha Güemes 515 C1106BKK Buenos Aires, Argentina Tel. (011-54-11) 5441-1276 Fax (011-54-11) 5441-3726

### ITEM 16C. Principal Accountant Fees and Services

The following table provides information on the aggregate fees billed by our principal accountants, Deloitte & Co. S.A. and affiliates by type of service rendered for the periods indicated.

| 2017   |                               | 20   | 016  | 2015  |   |  |
|--------|-------------------------------|--|--|---|---|--|
| Fees   | Expenses                      | Fees   | Expenses   | Fees  | Expenses  |  |
|        |                               | (in thousan  | ids of pesos)  |   |   |  |
| 61,318 | 668                           | 53,855   | 857  | 41,561  | 931   |  |
| 3,666  |                               | 1,801  | _  | 2,384   |   |  |
| 1,011  | _                             | 638  | _  | 895   | _   |  |
| 7,156  |                               | 2,434  | _  | 2,824   | _   |  |
| 73,151 | 668                           | 58,728   | 857  | 47,664  | 931   |  |
|        | Fees 61,318 3,666 1,011 7,156 | Fees         Expenses           61,318         668           3,666         —           1,011         —           7,156         — | Fees         Expenses (in thousand in the thousand in thousand in the second in the second in thousand in the second in th | Fees         Expenses (in thousands of pesos)           61,318         668         53,855         857           3,666         —         1,801         —           1,011         —         638         —           7,156         —         2,434         — | Fees         Expenses (in thousands of pesos)         Fees (in thousands of pesos)           61,318         668         53,855         857         41,561           3,666         —         1,801         —         2,384           1,011         —         638         —         895           7,156         —         2,434         —         2,824 |  |

(1) Mainly Includes accounting certification, special reports, agreed upon procedures (including Due Diligence reports) and other assurance reports provided by auditors to be presented within regulatory agencies and bodies, financial institutions and others.

The annual shareholders' meeting of YPF appoints the external auditor of YPF, along with the Audit Committee's non-binding opinion, which is submitted for consideration to the annual shareholders' meeting.

The Audit Committee of YPF has a pre-approval policy regarding the contracting of YPF's external auditor, or any affiliate of the external auditor, for professional services. The professional services covered by such policy include audit and non-audit services provided to YPF or any of its subsidiaries.

The pre-approval policy is as follows:

- 1. The Audit Committee must pre-approve all audit and non-audit services to be provided to YPF or any of its subsidiaries by the external auditor (or any of its affiliates) of YPF.
- 2. The Chairman of the Audit Committee has been delegated the authority to approve the hiring of YPF's external auditor (or any of its affiliates) without first obtaining the approval of the Audit Committee for any of the services which require pre-approval as described in (1) above.

Services approved by the Chairman of the Audit Committee as set forth above must be ratified at the next plenary meeting of the Audit Committee.

All of the services described in the table above were approved by the Audit Committee of YPF. For 2016, "Tax Fees" mainly corresponds to services related to tax compliance and advice for certain subsidiaries and "All Other Fees" mainly corresponds to fees billed for services related to quality assurance for a system implementation in a subsidiary and services related to methodology assistance on sustainability reports for YPF.

### ITEM 16D. Exemptions from the Listing Standards for Audit Committees

None

ITEM 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

| Period                       | Total<br>Number<br>of Shares<br>Purchased | Average<br>Prices<br>Paid<br>per<br>Share<br>(Ps. per<br>share) | Total Number of Shares Purchased as Part of Publicly Announced Plans or | Maximum Approximate Ps. Value of Shares that May Yet Be Purchased Under the Plans or |
|------------------------------|---|---|---|--|
| January 2017                 | 1 ul chaseu                               | share)  | Programs  | Programs (a)   |
| ·                            | _   | _   | _   | _  |
| February 2017                | _   | _   |   | _  |
| March 2017                   | _   | _   | _   | _  |
| April 2017                   | _   | _   |   | _  |
| May 2017                     |   |   |   | 100,000,000  |
| May 2017 (from 5/15 to 5/23) | 263,298                                   | 379.64  | 263,298   | 41,547.28  |
| June 2017                    | _   | _   | _   |  |
| July 2017                    | _   | _   |   |  |
| August 2017                  | _   | _   | _   | _  |
| September 2017               |   | _   |   | _  |
| October 2017                 | _   | _   |   | _  |
| November 2017                | _   | _   |   | _  |
| December 2017                | _   | _   | _   | _  |

(a) On April 28, 2017, the General and Extraordinary Shareholders' Meeting was held, approving the amount of Ps. 100 million to establish a reserve to purchase Company shares, in order to make it possible for the Board of Directors to acquire Company shares when they consider it opportune, and to fulfill commitments under the bonus and incentive plans, both currently existing and those that may arise in the future. The Board of Directors, at its meeting held on May 9, 2017, approved a Stock Compensation Plan for employees, which allows YPF to repurchase its shares on the BASE and NYSE for an aggregate amount of up to Ps. 100 million.

See Note 2.b.10.iii to the Audited Consolidated Financial Statements.

### ITEM 16F. Change in Registrant's Certifying Accountant

During the years ended December 31, 2017, 2016 and 2015 and through the date of this annual report, the principal independent accountant engaged to audit our financial statements, Deloitte & Co S.A., has not resigned, indicated that it has declined to stand for re-election after the completion of its current audit or been dismissed.

### ITEM 16G. Corporate Governance

See "Item 6. Directors, Senior Management and Employees—Compliance with New York Stock Exchange Listing Standards on Corporate Governance."

### ITEM 16H. Mine Safety Disclosure

None

### **PART III**

### ITEM 17. Financial Statements

The registrant has responded to Item 18 in lieu of responding to this Item.

### ITEM 18. Financial Statements

The following financial statements are filed as part of this annual report:

| Reports of Independent Registered Public Accounting Firm  |     |
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| Consolidated Statements of Changes in Shareholders' Equity of YPF S.A. for the years ended December 31, 2017, 2016      |     |
| and 2015  | F-5 |
| Consolidated Statements of Cash Flow of YPF S.A. for the years ended December 31, 2017, 2016 and 2015                   | F-8 |
| Notes to the Audited Consolidated Financial Statements of YPF S.A. for the years ended December 31, 2017, 2016 and 2015 | F-9 |

| ITEM 19. | Exhibits  |
|----------|---|
| 1.1      | By-laws (Estatutos) of YPF S.A. as amended (Spanish Version) *  |
| 1.2      | By-laws (Estatutos) of YPF S.A. as amended (English Version) *  |
| 11.1     | Code of Ethics  |
| 12.1     | Section 302 Certification by Chief Executive Officer  |
| 12.2     | Section 302 Certification by Controller (Principal Financial Officer)   |
| 13.1     | Section 906 Certification   |
| 15.1     | Consent of Gaffney, Cline & Associates  |
| 15.2     | Reserves Audit Report of Gaffney, Cline & Associates for YPF S.A. as of December 31, 2017, dated February 21, 2018. |
| 101. INS | XBRL Instance Document.   |
| 101. SCH | XBRL Taxonomy Extension Schema Document.  |
| 101. CAL | XBRL Taxonomy Extension Calculation Linkbase Document.  |
| 101. LAB | XBRL Taxonomy Extension Label Linkbase Document.  |
| 101. PRE | XBRL Taxonomy Extension Presentation Linkbase Document.   |
| 101. DEF | XBRL Taxonomy Extension Definition Document.  |

<sup>\*</sup> Incorporated by reference to YPF's 2016 annual report on Form 20-F filed on April 7, 2017.

### **SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

YPF SOCIEDAD ANÓNIMA

By: /s/ Diego Pando

Name: Diego Pando

Title: Controller (Principal Financial Officer)

Dated: April 23, 2018



Consolidated Financial Statements as of December 31, 2017, 2016 and 2015

### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and shareholders of YPF SOCIEDAD ANONIMA

### Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of YPF SOCIEDAD ANONIMA (an Argentine Corporation) and its controlled companies (the "Company") as of December 31, 2017, 2016, and 2015, the related consolidated statements of comprehensive income, changes in shareholders' equity, and cash flow, for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017, 2016 and 2015, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

### **Basis for Opinions**

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting (Item 15). Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

### **Definition and Limitations of Internal Control over Financial Reporting**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Co. S.A. Buenos Aires City, Argentina

April 23, 2018

We have served as the Company's auditor since 2002.

### YPF SOCIEDAD ANONIMA CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2017, 2016 AND 2015



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### YPF SOCIEDAD ANONIMA CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2017, 2016 AND 2015



### **GLOSSARY OF TERMS**

Term Definition

ADRAmerican Depositary ReceiptADSAmerican Depositary ShareAESASubsidiary A-Evangelista S.A.AFIPArgentine Tax Authority

Associate Company over which YPF has significant influence as provided for in IAS 28

BONAR Argentine Treasury Bonds
CDS Associate Central Dock Sud S.A.

CGU Cash-Generating Units

CIMSA Subsidiary Compañía de Inversiones Mineras S.A.

CNDC Argentine Antitrust Authority
CNV Argentine Securities Commission
CSJN Argentine Supreme Court of Justice

DOP Deliver or Pay

Eleran Inversiones 2011 S.A.U.

ENARGAS Argentine Gas Regulator
ENRE Argentine Electricity Regulator

FACPCE Argentine Federation of Professional Councils in Economic Sciences

Group YPF and its subsidiaries

IASInternational Accounting StandardIASBInternational Accounting Standards BoardIFRSInternational Financial Reporting StandardIDSAssociate Inversora Dock Sud S.A.

Joint venture Company jointly owned by YPF as provided for in IFRS 11

JO Joint operation

IPIM Internal Wholesale Price Index (Índice de Precios Internos al por Mayor)

IVA Value Added Tax

LGS Argentine General Corporations Law No. 19,550 (T.O. 1984), as amended

MEGA Joint Venture Company Mega S.A.
MEM Wholesale Electricity Market
Metroenergía Subsidiary Metroenergía S.A.
Metrogas Subsidiary Metrogas S.A.
MINEM Ministry of Energy and Mining
MMBtu Million British thermal units
NO Negotiable Obligations

Oiltanking Associate Oiltanking Ebytem S.A.
Oldelval Associate Oleoductos del Valle S.A.

OPESSA Subsidiary Operadora de Estaciones de Servicios S.A.
OTA Associate OleoductoTrasandino (Argentina) S.A.
OTC Associate OleoductoTrasandino (Chile) S.A.

Profertil Joint Venture Profertil S.A.

Refinor Joint Venture Refinería del Norte S.A. SEC U.S. Securities and Exchange Commission

Subsidiary Company controlled by YPF in accordance with the provisions of IFRS 10.

Termap Associate Terminales Marítimas Patagónicas S.A.

TSEP Transportation system entry point

US\$ U.S. dollar

US\$/Bbl U.S. dollar per barrel

Y-GEN I Joint venture Y-GEN Eléctrica S.R.L. Y-GEN II Joint venture Y-GEN Eléctrica II S.R.L.

YPF Brasil Comercio Derivado de Petróleo Ltda.

YPF Chile Subsidiary YPF Chile S.A.

YPF EE Subsidiary YPF Energía Eléctrica S.A.

YPF Gas Associate YPF Gas S.A.

Subsidiary YPF Holdings, Inc. Subsidiary YPF International S.A. YPF Holdings YPF International YPF or the Company YPF Sociedad Anónima YPF SP

Subsidiary YPF Servicios Petroleros S.A. Subsidiary YPF Tecnología S.A. YTEC

### YPF SOCIEDAD ANONIMA CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2017, 2016 AND 2015



### LEGAL INFORMATION

### Legal Domicile

Macacha Güemes 515 – Autonomous City of Buenos Aires, Argentina

### Fiscal year number 41

Beginning on January 1, 2017

### Principal business of the Company:

The Company's purpose will be to perform, directly, through third parties or in association with third parties, the exploration, development and production of oil, natural gas and other minerals and refining, marketing and distribution of oil and petroleum products and direct and indirect petroleum derivatives, including petrochemicals, chemicals, including those derived from hydrocarbons and non-fossil fuels, biofuels and their components, as well as production of electric power from hydrocarbons, through which it may manufacture, use, purchase, sell, exchange, import or export them. It will also be the Company's purpose to render, directly, through a subsidiary, or in association with third parties, telecommunications services in all ways authorized by the legislation in force after applying for the relevant licenses, as required by the regulatory framework, as well as the production, industrialization, processing, commercialization, conditioning, transportation and stockpiling of grains and products derived from grains, as well as any other activity complementary of its industrial and commercial business or any activity which may be necessary to attain its purpose. In order to fulfill such purposes, the Company may set up, become associated with or have an interest in any public or private entity, whether domiciled in Argentina or abroad, subject to the restrictions set forth in the Bylaws.

### Filing with the Public Registry:

Bylaws filed on February 5, 1991 under No. 404, Book 108, Volume "A", Corporations, with the Public Registry of Buenos Aires City, in charge of the Argentine Registrar of Companies (*Inspección General de Justicia*); and Bylaws in substitution of previous Bylaws, filed on June 15, 1993, under No. 5109, Book 113, Volume "A", Corporations, with the above mentioned Registry.

### Duration of the Company:

Through June 15, 2093.

### Last amendment to the bylaws:

April 29, 2016 registered with the Argentine Registrar of Companies (Inspección General de Justicia) on December 21, 2016 under No. 25,244, Book 82 of Corporations.

### Optional Statutory Regime related to Compulsory Tender Offer provided by Decree No. 677/2001 art. 24:

Not incorporated (modified by Law No. 26,831).

### Capital structure

393,312,793 shares of common stock, Argentine pesos 10 par value and 1 vote per share.

### Subscribed, paid-in and authorized capital for stock exchange listing

3,933,127,930

### YPF SOCIEDAD ANONIMA CONSOLIDATED STATEMENTS OF FINANCIAL POSITION AS OF DECEMBER 31, 2017, 2016 AND 2015



(Amounts expressed in millions of Argentine Pesos)

|   | Notes | 2017    | 2016    | 2015    |
|---|-------|---------|---------|---------|
| ASSETS  |       |         |         |         |
| Noncurrent Assets   |       |         |         |         |
| Intangible assets   | 7     | 9,976   | 8,114   | 7,279   |
| Property, plant and equipment   | 8     | 354,443 | 308,014 | 270,905 |
| Investments in associates and joint ventures                            | 9     | 6,045   | 5,488   | 4,372   |
| Assets held for disposal  | 3     | 8,823   |         |         |
| Net deferred income tax assets  | 15    | 588     | 564     | 954     |
| Other receivables   | 11    | 1,335   | 3,909   | 2,501   |
| Trade receivables   | 12    | 2,210   | 87      | 469     |
| Investment in financial assets  | 6     |         | 7,737   |         |
| Total noncurrent assets   |       | 383,420 | 333,913 | 286,480 |
| Current Assets  |       |         |         |         |
| Inventories   | 10    | 27,291  | 21,820  | 19,258  |
| Other receivables   | 11    | 12,684  | 13,456  | 19,413  |
| Trade receivables   | 12    | 40,649  | 33,645  | 22,111  |
| Investment in financial assets  | 6     | 12,936  | 7,548   | 804     |
| Cash and cash equivalents   | 13    | 28,738  | 10,757  | 15,387  |
| Total current assets  |       | 122,298 | 87,226  | 76,973  |
| TOTAL ASSETS  |       | 505,718 | 421,139 | 363,453 |
| SHAREHOLDERS' EQUITY  |       |         |         |         |
| Shareholders' contributions   |       | 10,402  | 10,403  | 10,349  |
| Reserves, other comprehensive income and retained earnings              |       | 141,893 | 108,352 | 110,064 |
| Shareholders' equity attributable to shareholders of the parent company |       | 152,295 | 118,755 | 120,413 |
| Non-controlling interest  |       | 238     | (94)    | 48      |
| TOTAL SHAREHOLDERS' EQUITY  |       | 152,533 | 118,661 | 120,461 |
| LIABILITIES   |       |         |         |         |
| Noncurrent Liabilities  |       |         |         |         |
| Provisions  | 14    | 54,734  | 47,358  | 39,623  |
| Liabilities associated with assets held for disposal                    | 3     | 4,193   | _       | _       |
| Net deferred income tax liabilities                                     | 15    | 37,645  | 42,465  | 44,812  |
| Taxes payable   |       | 220     | 98      | 207     |
| Loans   | 16    | 151,727 | 127,568 | 77,934  |
| Other liabilities   | 17    | 277     | 336     | 340     |
| Accounts payable  | 18    | 1,655   | 2,187   | 285     |
| Total noncurrent liabilities  |       | 250,451 | 220,012 | 163,201 |
| Current Liabilities   |       |         |         |         |
| Provisions  | 14    | 2,442   | 1,994   | 2,009   |
| Income tax liability  |       | 191     | 176     | 1,487   |
| Taxes payable   |       | 6,879   | 4,440   | 6,047   |
| Salaries and social security  |       | 4,132   | 3,094   | 2,452   |
| Loans   | 16    | 39,336  | 26,777  | 27,817  |
| Other liabilities   | 17    | 2,383   | 4,390   | 413     |
| Accounts payable  | 18    | 47,371  | 41,595  | 39,566  |
| Total current liabilities   |       | 102,734 | 82,466  | 79,791  |
| TOTAL LIABILITIES   |       | 353,185 | 302,478 | 242,992 |
| TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY                              |       | 505,718 | 421,139 | 363,453 |

Accompanying notes are an integral part of consolidated financial statements

### YPF SOCIEDAD ANONIMA CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2017, 2016 AND 2015



(Amounts expressed in millions of Argentine Pesos)

|   | Notes     | 2017      | 2016      | 2015      |
|---|-----------|-----------|-----------|-----------|
| Revenues  | 19        | 252,813   | 210,100   | 156,136   |
| Costs   | 20        | (211,812) | (177,304) | (119,537) |
| Gross profit  |           | 41,001    | 32,796    | 36,599    |
| Selling expenses  | 21        | (17,954)  | (15,212)  | (11,099)  |
| Administrative expenses   | 21        | (8,736)   | (7,126)   | (5,586)   |
| Exploration expenses  | 21        | (2,456)   | (3,155)   | (2,473)   |
| Recovery / (Impairment) of property, plant and equipment and intangible assets          | 2.c and 8 | 5,032     | (34,943)  | (2,535)   |
| Other net operating results   | 22        | (814)     | 3,394     | 1,682     |
| Operating profit / (loss)   |           | 16,073    | (24,246)  | 16,588    |
| Income from equity interests in associates and joint ventures                           | 9         | 1,428     | 588       | 318       |
| Financial income  | 23        | 17,623    | 16,759    | 27,263    |
| Financial loss  | 23        | (28,629)  | (24,944)  | (16,016)  |
| Other financial results   | 23        | 2,208     | 2,039     | 910       |
| Net financial results   | 23        | (8,798)   | (6,146)   | 12,157    |
| Net profit / (loss) before income tax   |           | 8,703     | (29,804)  | 29,063    |
| Income tax  | 15        | 3,969     | 1,425     | (24,637)  |
| Net profit / (loss) for the year  |           | 12,672    | (28,379)  | 4,426     |
| Net profit / (loss) for the year attributable to:                                       |           |           |           |           |
| - Shareholders of the parent company  |           | 12,340    | (28,237)  | 4,579     |
| - Non-controlling interest  |           | 332       | (142)     | (153)     |
| Profit / (loss) per share attributable to shareholders of the parent company basic      |           |           |           |           |
| and diluted   | 26        | 31.43     | (72.13)   | 11.68     |
| Other comprehensive income  |           |           |           |           |
| Actuarial results—Pension plans <sup>(1)</sup>  |           |           | _         | 6         |
| Exchange differences from investments in subsidiaries <sup>(2)</sup>                    |           |           |           | (189)     |
| Translation differences from Assets held for disposal                                   |           | (499)     |           |           |
| Translation differences from investments in subsidiaries, associates and joint ventures |           | (641)     | (938)     | (1,466)   |
| Translation differences from YPF (4)  |           | 23,057    | 28,352    | 45,407    |
| Total other comprehensive income for the year <sup>(5)</sup>                            |           | 21,917    | 27,414    | 43,758    |
| Total comprehensive income / (loss) for the year  |           | 34,589    | (965)     | 48,184    |

- (1) Immediately reclassified to retained earnings.
- (2) Exchange differences as recognized by the merged indirect subsidiary Gas Argentino S.A. in its statement of comprehensive income, which was reclassified by YPF as other comprehensive income upon the acquisition of the NO of said subsidiary.
- (3) Will be reversed to net income at the moment of the sale of the investment or full or partial reimbursement of the capital.
- (4) Will not be reversed to net income.
- (5) Entirely assigned to the parent company's shareholders.

Accompanying notes are an integral part of consolidated financial statements

# YPF SOCIEDAD ANONIMA CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2017, 2016 AND 2015 (Amounts expressed in millions of Argentine Pesos)



| Settlement of share-<br>based benefit<br>plans <sup>(2)</sup> | Repurchase of treasury shares | Accrual of share-<br>based benefit plans | Balance at the beginning of the fiscal year |                                    |                        |      | Balance at the end of the fiscal year | Net income | Other comprehensive income | As decided by the Board of Directors on June 8, 2017, July 9, 2017 and December 14, 2017 <sup>(3)</sup> | As decided by the Shareholders' Meeting on April 28, 2017 (3) | Settlement of share-<br>based benefit<br>plans (2) | Repurchase of treasury shares | Accrual of share-<br>based benefit plans | Balance at the beginning of the fiscal year |                                     |                                     |
|---|-------------------------------|--|---|------------------------------------|------------------------|------|---------------------------------------|------------|----------------------------|---|---|--|-------------------------------|--|---|-------------------------------------|-------------------------------------|
| share-<br>it  | res                           | re-<br>it plans                          | e<br>of the                                 |                                    |                        |      | e end of<br>ear                       |            | nensive                    | the rectors .017, and 4,  | the<br>s'<br>117 <sup>(3)</sup>                               | share-<br>it                                       | res                           | ire-<br>it plans                         | of the                                      |                                     |                                     |
| I   | I                             | l  | 2,007                                       | Legal                              |                        |      | 3,924                                 |            |                            | I   | I   | 4  | (3)                           | l  | 3,923                                       | Subscribed<br>capital               |                                     |
| I   | I                             |  | 5   | Future<br>dividends                |                        |      | 6,085                                 |            | I                          | I   | I   | 4  | (4)                           |  | 6,085                                       | Adjustment<br>to<br>contributions   |                                     |
| I   | I                             |  | 24,904                                      | Investments                        | Reserves               |      | 9                                     |            | I                          | 1   | l   | (4)  | 3                             | l  | 10  | Treasury<br>shares                  |                                     |
| I   | I                             |  | 490   | Purchase of treasury shares        |                        |      | 16                                    |            | l                          | I   | I   | (4)  | 4                             |  | 16  | Adjustment<br>to treasury<br>shares | Sha                                 |
| I   | I                             |  | 3,648                                       | Initial IFRS<br>adjustment         |                        |      | 36                                    |            |                            | I   | I   | (187)  | I                             | 162                                      | 61  | Share-<br>based<br>benefit<br>plans | 2017<br>Shareholders' contributions |
|   | I                             |  | 105,529                                     | Other comprehensive income         |                        | 2017 | (91)                                  |            | I                          | I   | I   | 161  | (100)                         | l  | (152)                                       | Acquisition cost of treasury shares | ibutions                            |
| I   | ı                             |  | (28,231)                                    | Retained<br>earnings               |                        |      | (217)                                 |            | 1                          | I   | I   | (37)   | I                             |  | (180)                                       | Share trading premium               |                                     |
| (63)  | (100)                         | 162                                      | 118,755                                     | Shareholders of the parent company | Equity attributable to |      | 640                                   |            | I                          | 1   | I   | I  | I                             |  | 640   | Issuance<br>premiums                |                                     |
| I   | l                             |  | (94)  | Non-<br>controlling<br>interest    | outable to             |      | 10,402                                |            |                            | I   | I   | (63)   | (100)                         | 162                                      | 10,403                                      | Total                               |                                     |
| (63)  | (100)                         | 162                                      | 118,661                                     | Total<br>shareholders'<br>equity   |                        |      |                                       |            |                            |   |   |  |                               |  |   |                                     |                                     |

| Balance at the end of the fiscal year | Net income | Other comprehensive income | As decided by the Board of Directors on June 8, 2017, July 9, 2017 and December 14, 2017 <sup>(3)</sup> | As decided by the Shareholders' Meeting on April 28, 2017 (3) |
|---------------------------------------|------------|----------------------------|---|---|
| 2,007                                 |            | I                          | I   | I   |
|                                       |            | I                          | (716)   | 711   |
|                                       |            | I                          | 1   | (24,904)  |
| 100                                   |            | I                          | I   | (390)   |
|                                       |            | I                          | I   | (3,648)   |
| 127,446(1)                            |            | 21,917                     | I   | I   |
| 12,340                                | 12,340     | I                          | I   | 28,231  |
| 152,295                               | 12,340     | 21,917                     | (716)   | I   |
| 238                                   | 332        | I                          | I   | I   |
| 152,533                               | 12,672     | 21,917                     | (716)   | I   |

- $\Xi$ Includes 132,391 corresponding to the effect of the translation of the financial statements of YPF S.A. and (4,945) corresponding to the effect of the translation of the financial statements of investments in subsidiaries, associates and joint ventures with functional currencies other than the U.S. dollar, as detailed in Note 2.b.1. Net of employees' income tax withholding related to the share-based benefit plans.

  See Note 25.

  See Note 32.
- <u>3</u>24

English translation of the financial statements originally filed in Spanish with the Argentine Securities Commission ("CNV"). In case of discrepancy, the financial statements filed with the CNV prevail over this translation

## CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2017, 2016 AND 2015 (Cont.) (Amounts expressed in millions of Argentine Pesos) YPF SOCIEDAD ANONIMA



| Settlement of share-<br>based benefit<br>plans (2) | Repurchase of treasury shares | Accrual of share-based<br>benefit plans <sup>(3)</sup> | Balance at the beginning of the fiscal year |                                    |                        | Balance at the end of<br>the fiscal year | Net loss | Other comprehensive income | As decided by the<br>Board of Directors of<br>June 9, 2016 | As decided by Ordinary<br>and Extraordinary<br>Shareholders'<br>meeting of April 29,<br>2016 | Settlement of share-<br>based benefit<br>plans <sup>(2)</sup> | Repurchase of treasury shares | Accrual of share-based benefit plans <sup>(3)</sup> | Balance at the beginning of the fiscal year |                                     |                                     |
|--|-------------------------------|--|---|------------------------------------|------------------------|--|----------|----------------------------|--|--|---|-------------------------------|---|---|-------------------------------------|-------------------------------------|
| ı  |                               |  | 2,007                                       | Legal                              |                        | 3,923                                    |          | I                          | of<br>   | , y  | ω   | (2)                           |   | 3,922                                       | Subscribed capital                  |                                     |
| ı  | I                             | I  | 5   | Future<br>dividends                |                        | 6,085                                    |          | I                          | I  | I  | S.  | (3)                           | I   | 6,083                                       | Adjustment<br>to<br>contributions   |                                     |
| I  | I                             | I  | 21,264                                      | Investments                        | Reserves               | 10                                       |          | I                          | I  | l  | (3)   | 2                             | I   | 11  | Treasury<br>shares                  |                                     |
| I  | I                             | I  | 440   | Purchase of treasury shares        |                        | 16                                       |          | 1                          | I  | I  | (5)   | ω                             | I   | 18  | Adjustment<br>to treasury<br>shares | Sha                                 |
| I  | I                             | I  | 3,648                                       | Initial IFRS<br>adjustment         |                        | 61                                       |          | I                          | I  | I  | (159)   | 1                             | 153   | 67  | Share-based<br>benefit plans        | 2016<br>Shareholders' contributions |
| I  | I                             | I  | 78,115                                      | Other comprehensive income         | 2016                   | (152)                                    |          | I                          | I  | I  | 175   | (50)                          | I   | (277)                                       | Acquisition cost of treasury shares | ibutions                            |
| I  | I                             | I  | 4,585                                       | Retained earnings                  |                        | (180)                                    |          | I                          | 1  | I  | (65)  |                               | l   | (115)                                       | Share<br>trading<br>premium         |                                     |
| (49)   | (50)                          | 153  | 120,413                                     | Shareholders of the parent company | Equity att             | 640                                      |          | I                          | I  | I  | I   | 1                             | I   | 640   | Issuance<br>premiums                |                                     |
| I  | Ι                             | I  | 48  | Non-controlling interest           | Equity attributable to | 10,403                                   |          | I                          | I  | I  | (49)  | (50)                          | 153   | 10,349                                      | Total                               |                                     |
| (49)   | (50)                          | 153  | 120,461                                     | Total<br>shareholders'<br>equity   |                        |  |          |                            |  |  |   |                               |   |   |                                     |                                     |

|   | the fis         | Balance               | Net loss | incom  | Other co  | June 9 | Board                 | As decid  | 2016    | meetii      | Share    | and E             | As decid               |  |
|---|-----------------|-----------------------|----------|--------|-----------|--------|-----------------------|-----------|---------|-------------|----------|-------------------|------------------------|--|
|   | the fiscal year | Balance at the end of |          | е      | mprehensi | , 2016 | Board of Directors of | ed by the |         | ng of April | holders' | and Extraordinary | As decided by Ordinary |  |
| I |                 | of.                   |          |        | ve        |        | rs of                 |           |         | 29,         |          | Q                 | inary                  |  |
|   | 2,007           |                       | 1        |        |           |        |                       |           | Ī       |             |          |                   |                        |  |
| Ī |                 |                       |          |        |           |        |                       |           |         |             |          |                   |                        |  |
|   | 5               |                       |          |        |           | (889)  |                       |           | 889     |             |          |                   |                        |  |
|   | 24,904          |                       |          | ı      |           | 1      |                       |           | 3,640   |             |          |                   |                        |  |
| 1 | 04              |                       |          | 1      |           | ı      |                       |           | 40      |             |          |                   |                        |  |
|   | 490             |                       |          |        |           |        |                       |           | 50      |             |          |                   |                        |  |
|   | 3,648           |                       |          |        |           |        |                       |           |         |             |          |                   |                        |  |
|   | ,648            |                       |          |        |           |        |                       |           |         |             |          |                   |                        |  |
|   | 105             |                       |          | 27     |           |        |                       |           |         |             |          |                   |                        |  |
|   | $105,529^{(1)}$ |                       |          | 27,414 |           |        |                       |           |         |             |          |                   |                        |  |
|   | (28,231)        |                       | (28,237) |        |           |        |                       |           | (4,579) |             |          |                   |                        |  |
|   | 118,755         |                       | (28,237) | 27,    |           |        |                       |           |         |             |          |                   |                        |  |
| 1 | 755             |                       | 237)     | 414    |           | (889)  |                       |           |         |             |          |                   |                        |  |
|   |                 |                       |          |        |           |        |                       |           |         |             |          |                   |                        |  |
|   | (94)            |                       | (142)    |        |           |        |                       |           |         |             |          |                   |                        |  |
|   | 118,661         |                       | (28,379) | 27,414 |           | (889)  |                       |           | 1       |             |          |                   |                        |  |

- $\Xi$ Includes 109,334 corresponding to the effect of the translation of the financial statements of YPF and (3,805) corresponding to the effect of the translation of the financial statements in subsidiaries, associates and joint ventures with functional currencies other than the U.S. dollar, as detailed in Note 2.b.1.

  Net of employees' income tax withholdings related to the share-based benefit plans.
- $\Im \Im$

### YPF SOCIEDAD ANONIMA CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2017, 2016 AND 2015 (Cont.)



(Amounts expressed in millions of Argentine Pesos)

| non-controlling<br>interest | Settlement of share-<br>based benefit plans (3)<br>Contributions of | Repurchase of treasury shares | Accrual of share-based benefit plans <sup>(4)</sup> | Balance at the beginning of the fiscal year |                                    |                        | the fiscal year | Balance at the end of | Net income | Other comprehensive | Actuarial gains<br>reclassification -<br>Pension Plan <sup>(2)</sup> | As decided by the Board of Directors of June 8, 2015 | As decided by Ordinary<br>and Extraordinary<br>Shareholders' meeting<br>of April 30, 2015 | Contributions of non-controlling interest | Settlement of share-<br>based benefit plans (3) | Repurchase of treasury shares | Accrual of share-based<br>benefit plans <sup>(4)</sup> | Balance at the beginning of the fiscal year |                                     |                                     |
|-----------------------------|---|-------------------------------|---|---|------------------------------------|------------------------|-----------------|-----------------------|------------|---------------------|--|--|---|---|---|-------------------------------|--|---|-------------------------------------|-------------------------------------|
|                             | ns <sup>(3)</sup>   | sury                          | ısed  |   |                                    | •                      |                 | e,                    |            | ve                  | ·  | 3oard<br>ine 8,                                      | nary<br>y<br>eeting   |   | ns (3)  | sury                          | ısed   | , ,   |                                     | •                                   |
| 1                           | I   | 1                             | I   | 2,007                                       | Legal                              |                        | 3,922           |                       |            |                     | I  | I  | I   | I   | 4   | (4)                           |  | 3,922                                       | Subscribed capital                  |                                     |
|                             | I   | I                             | I   | <b>υ</b>                                    | Future<br>dividends                |                        | 6,083           |                       |            |                     | l  | I  | I   | l   | 6   | (6)                           | I  | 6,083                                       | Adjustment to contributions         |                                     |
| 1                           | I   | I                             | I   | 12,854                                      | Investments                        | Reserves               | =               |                       |            |                     |  | I  |   | I   | (4)   | 4                             | I  | <b>=</b>                                    | Treasury<br>shares                  |                                     |
|                             | I   | I                             | I   | 320   | Purchase of treasury shares        |                        | 18              |                       |            |                     | I  | I  |   | I   | (6)   | 6                             | I  | 18  | Adjustment<br>to treasury<br>shares | Shar                                |
|                             | I   | I                             | I   | 3,648                                       | Initial IFRS<br>adjustment         | 2                      | 67              |                       |            |                     | I  | I  | l   | I   | (108)   |                               | 124  | 51  | Share-based<br>benefit plans        | 2015<br>Shareholders' contributions |
| I                           | I   | I                             | I   | 34,363                                      | Other comprehensive income         | 2015                   | (277)           |                       |            |                     | I  | I  | I   | I   | 153   | (120)                         |  | (310)                                       | Acquisition cost of treasury shares | utions                              |
| I                           | I   |                               | I   | 9,033                                       | Retained earnings                  |                        | (115)           |                       |            |                     | l  | I  |   |   | (100)   |                               |  | (15)  | Share<br>trading<br>premium         |                                     |
|                             | (55)  | (120)                         | 124   | 72,630                                      | Shareholders of the parent company | Equity attributable to | 640             |                       |            |                     | I  | I  | I   |   | l   | 1                             | I  | 640   | Issuance<br>premiums                |                                     |
| 50                          | I   | I                             | I   | 151   | Non-<br>controlling<br>interest    | utable to              | 10,349          |                       | I          |                     |  | I  |   | I   | (55)  | (120)                         | 124  | 10,400                                      | Total                               |                                     |
| 50                          | (55)  | (120)                         | 124   | 72,781                                      | Total<br>shareholders'<br>equity   |                        |                 |                       |            |                     |  |  |   |   |   |                               |  |   |                                     |                                     |

| the fiscal year | Ralance at the end of | Net income | income | Other comprehensive | reclassification – Pension Plan (2) | As decided by the Board of Directors of June 8, 2015 | As decided by Ordinary<br>and Extraordinary<br>Shareholders' meeting<br>of April 30, 2015 |
|-----------------|-----------------------|------------|--------|---------------------|-------------------------------------|--|---|
|                 | d of                  | Ī          |        | ive                 | I                                   | Board<br>June 8,                                     | linary<br>ury<br>neeting  |
| 2,007           |                       |            | 1      |                     | I                                   |  | l   |
| 5               |                       |            | 1      |                     | l                                   | (503)  | 503   |
| 21,264          |                       |            | 1      |                     | l                                   | I  | 8,410   |
| 440             |                       |            | I      |                     | l                                   | 1  | 120   |
| 3,648           |                       |            | I      |                     | I                                   | 1  | I   |
| 78,115(1)       |                       |            | 43,758 |                     | (6)                                 | ı  | I   |
| 4,585           |                       | 4,579      | 1      |                     | 6                                   |  | (9,033)   |
| 120,413         |                       | 4,579      | 43,758 |                     | I                                   | (503)  | I   |
| 48              |                       | (153)      | 1      |                     |                                     | I  | l   |
| 120,461         |                       | 4,426      | 43,758 |                     | I                                   | (503)  | I   |

 $<sup>\</sup>Xi$ Includes 80,982 corresponding to the effect of the translation of the financial statements of YPF and (2,867) corresponding to the effect of the translation of the financial statements in subsidiaries, associates and joint ventures with functional currencies other than the U.S. dollar, as detailed in Note 2.b.1.

Pension plans of investments in subsidiaries.

Net of employees' income tax withholdings related to the share-based benefit plans.

See Note 32.

Accompanying notes are an integral part of consolidated financial statements

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### YPF SOCIEDAD ANONIMA CONSOLIDATED STATEMENTS OF CASH FLOW **FOR THE YEARS ENDED DECEMBER 31, 2017, 2016 AND 2015** (Amounts expressed in millions of Argentine Pesos)



|  | 2017       | 2016           | 2015     |
|--|------------|----------------|----------|
| Cash flows from operating activities   | 12 (72     | (20.270)       | 4.406    |
| Net income  A direct manufacture to recome to each flower provided by encreting activities.  | 12,672     | (28,379)       | 4,426    |
| Adjustments to reconcile net income to cash flows provided by operating activities:  Result on interest in associates and joint ventures | (1,428)    | (588)          | (318)    |
| Depreciation of property, plant and equipment  | 53,512     | 44,752         | 26,685   |
| Amortization of intangible assets  | 838        | 717            | 323      |
| Consumption of materials and retirement of property, plant and equipment and intangible assets   | 4,592      | 5,791          | 3,773    |
| Charge on income tax   | (3,969)    | (1,425)        | 24,637   |
| (Recovery) / Impairment of plant and equipment and intangible assets   | (5,909)    | 34,943         | 2,535    |
| Net increase in provisions   | 4,924      | 6,040          | 3,598    |
| Exchange differences, interest and other (1)   | 7,611      | 3,298          | (13,449) |
| Share-based benefit plans  | 162        | 153            | 124      |
| Accrued insurance  | (206)      | _              | (1,688)  |
| Income on deconsolidation of subsidiaries  | (200)<br>— | (1,528)        | (1,000)  |
| Changes in assets and liabilities:   |            | (1,520)        |          |
| Trade receivables  | (8,073)    | (16,079)       | (8,031)  |
| Other receivables  | 895        | 5,406          | (6,143)  |
| Inventories  | (1,686)    | 1,469          | 101      |
| Accounts payable   | 6,408      | (1,133)        | 6,676    |
| Taxes payables   | 2,550      | (1,776)        | 4,544    |
| Salaries and social security   | 1,065      | 784            | 549      |
| Other liabilities  | (717)      | 190            | (465)    |
| Decrease in provisions due to payment/use  | (1,388)    | (1,753)        | (1,758)  |
| Dividends received   | 328        | 420            | 180      |
| Proceeds from collection of lost profit insurance  | _          | 607            | 2,036    |
| Income tax payments  | (1,084)    | (2,726)        | (6,931)  |
| Net cash flows from operating activities   | 71,974     | 49,183         | 41,404   |
| Investing activities: <sup>(2)</sup>   | 71,571     | 17,105         | 11,101   |
| Acquisition of property, plant and equipment and intangible assets   | (59,618)   | (64,160)       | (63,774) |
| Contributions and acquisitions of interests in associates and joint ventures   | (891)      | (448)          | (163)    |
| Proceeds from sales of financial assets  | 4,287      | 1,072          | (103)    |
| Acquisition of financial assets  | ,207       | (3,476)        | (324)    |
| Proceeds from collection of damaged property's insurance   |            | 355            | 212      |
| Interests received from financial assets   | 980        | 483            |          |
| Net cash flows used in investing activities  | (55,242)   | (66,174)       | (64,049) |
|  | (33,242)   | (00,174)       | (04,049) |
| Financing activities: <sup>(2)</sup>   | (26.246)   | (72.206)       | (24,000) |
| Repayment of loans  Poyments of interest   | (36,346)   | (73,286)       | (24,090) |
| Payments of interest Proceeds from loans   | (17,912)   | (16,330)       | (6,780)  |
| Repurchase of treasury shares  | 54,719     | 101,322        | 55,158   |
| · ·  | (100)      | (50)<br>50     | (120)    |
| Contributions of non-controlling interests   | (716)      |                | (502)    |
| Dividends paid   | (716)      | (889)          | (503)    |
| Net cash flows provided by financing activities  | (355)      | 10,817         | 23,665   |
| Translation differences provided by cash and cash equivalents  | 1,665      | 1,692          | 4,609    |
| Reclassification of assets held for disposal   | (61)       |                |          |
| Deconsolidation of subsidiaries  |            | (148)          |          |
| Net increase / (decrease) in cash and cash equivalents   | 17,981     | (4,630)        | 5,629    |
| Cash and cash equivalents at the beginning of year   | 10,757     | 15,387         | 9,758    |
| Cash and cash equivalents at the end of year   | 28,738     | 10,757         | 15,387   |
| Net increase / (decrease) in cash and cash equivalents   |            |                |          |
| rict merease / (decrease) in eash and eash equivalents   | 17,981     | <u>(4,630)</u> | 5,629    |

- (1) Does not include exchange differences generated by cash and cash equivalents, which is exposed separately in the statement.
- (2) The main investing and financing transactions that have not affected cash and cash equivalents correspond to:

|   | 2017    | 2016  | 2015    |
|---|---------|-------|---------|
| Acquisition of property, plant and equipment and concession extension easements not paid                  | 6,019   | 6,559 | 6,799   |
| Net increases (decreases) related to hydrocarbon wells abandonment obligation costs                       | (4,913) | 2,243 | (1,281) |
| Contributions in joint ventures   | 19      |       | —       |
| Dividends to collect  | _       | 100   | 100     |
| Increase in investments in financial assets through a decrease in trade receivables and other receivables | _       | 9,918 | _       |
| Decrease of loans due to "El Orejano" agreement   |         | _     | 2,373   |
| Contributions of non-controlling interests  | _       |       | 50      |

Accompanying notes are an integral part of consolidated financial statements.



(Amounts expressed in millions of Argentine Pesos, except shares and per shares amounts expressed in Argentine Pesos, and as otherwise indicated)

# 1. GENERAL INFORMATION, STRUCTURE AND ORGANIZATION OF THE BUSINESS OF THE GROUP

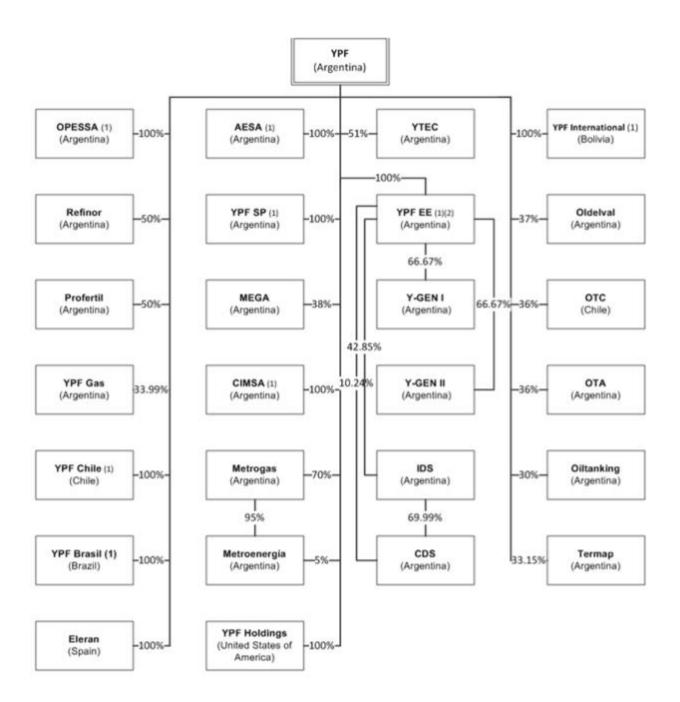
# General information

YPF Sociedad Anónima is a stock corporation (*sociedad anónima*) incorporated under the laws of the Argentine Republic, with a registered office at Macacha Güemes 515, in the City of Buenos Aires.

YPF and its subsidiaries form the leading energy group in Argentina, which operates a fully integrated oil and gas chain with leading market positions across the domestic Upstream and Downstream segments.

# Structure and organization of the economic group

The following table shows the organizational structure, including the main companies of the Group, as of December 31, 2017:



- (1) Held directly and indirectly.
- (2) See Note 3.



# 1. GENERAL INFORMATION, STRUCTURE AND ORGANIZATION OF THE BUSINESS OF THE GROUP (Cont.)

# Organization of the business

As of December 31, 2017, the Group carries out its transactions and operations in accordance with the following structure:

- Upstream;
- · Gas and Power;
- Downstream:
- Central administration and others, which covers the remaining activities not included in the previous categories.

Activities covered by each business segment are detailed in Note 5.

Almost all operations, properties and clients are located in Argentina. However, the Group also holds equity interests in exploratory and production areas in Chile and in Bolivia. The Group also sells lubricants and derivatives in Brazil and Chile.

#### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

#### 2.a) Basis of preparation

### Application of IFRS

The consolidated financial statements of the Group for the year ended December 31, 2017 are presented in accordance with IFRS, as issued by IASB.

Additionally, some additional issues required by the LGS and/or CNV's regulations have been included. This information is contained in the Notes to these consolidated financial statements, with the purpose of fulfilling regulatory requirements.

The amounts and other information corresponding to the years ended on December 31, 2016 and 2015 are an integral part of the consolidated financial statements mentioned above and are intended to be read only in relation to these financial statements.

These consolidated financial statements were approved by the Board of Directors' meeting and authorized to be issued on March 2, 2018. Additionally, see Note 34.

### Current and Noncurrent classification

The presentation in the statement of financial position makes a distinction between current and noncurrent assets and liabilities, according to the activities operating cycle. Current assets and liabilities include assets and liabilities, which are realized or settled within the 12-month period from the end of the fiscal year.

All other assets and liabilities are classified as noncurrent. Current and deferred tax assets and liabilities (payable income tax) are presented separately from each other and from other assets and liabilities, as current and noncurrent, as applicable.

# Fiscal year-end

The Company's fiscal year begins on January 1 and ends on December 31, each year.

### Use of estimates

The preparation of financial statements at a certain date requires the Management to make estimates and assessments affecting the amount of assets and liabilities recorded, contingent assets and liabilities disclosed at such date, as well as income and expenses recorded during the period. Actual future results might differ from the estimates and assessments made at the date of preparation of these consolidated financial statements.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

The description of any significant estimates and accounting judgments made by Management in applying the accounting policies, as well as the key estimates and areas with greater degree of complexity which require more critical judgments, are disclosed in Note 2.c).

### Consolidation policies

For purposes of presenting the consolidated financial statements, the full consolidation method was used with respect to all subsidiaries, which are those companies in which the Group holds control. The Group controls an entity when it is exposed, or is entitled to the variable results arising from its equity interest in the entity, and has the ability to affect those results through its power over the entity. This capacity is, in general but not exclusively, obtained by the ownership, direct or indirect, of more than 50% of the voting shares of a company.

Interest in JO and other agreements which give the Group a contractually-established percentage over the rights of the assets and obligations that emerge from the contract, have been consolidated line by line on the basis of the mentioned participation over the assets, liabilities, income and expenses related to each contract. Assets, liabilities, income and expenses of JO are presented in the consolidated financial position and in the consolidated statement of comprehensive income, in accordance with their respective nature.

Note 9 details the fully consolidated controlled subsidiaries. Furthermore, Note 24 details the main JO, on a pro rata consolidation basis.

In the consolidation process, balances, transactions and profits between consolidated companies and JO have been eliminated.

The Company's consolidated financial statements are based on the most recent available financial statements of the companies in which YPF holds control, taking into consideration, where necessary, significant subsequent events and transactions, information available to the Company's management and transactions between YPF and such subsidiaries, which could have produced changes to their shareholders' equity. The date of the financial statements of such subsidiaries used in the consolidation process may differ from the date of YPF's financial statements due to administrative reasons. The accounting principles and procedures used by subsidiaries have been homogenized, where appropriate, with those used by YPF in order to present the consolidated financial statements based on uniform accounting and presentation policies. The financial statements of subsidiaries whose functional currency is different from the presentation currency are translated using the procedure set out in Note 2.b.1.

The Group holds 100% of capital of the consolidated companies, with the exception of the holdings in Metrogas and YTEC. The Group takes into account quantitative and qualitative aspects to determine which subsidiaries have significant non-controlling interests. In accordance with the previously mentioned, there are no material non-controlling interests to be disclosed, as required by IFRS 12 "Disclosure of Interests in Other Entities".

### Financial information of subsidiaries, associates and joint ventures in hyperinflationary economies

IAS 29 "Financial reporting in hyperinflationary economies" requires the financial statements of an entity whose functional currency is that of a hyperinflationary economy to be expressed in terms of the current measurement unit as of the closing date of the reporting fiscal year, regardless of whether they are based on the historical cost method or the current cost method. For such purpose, in general terms, inflation that has occurred from the date of acquisition or from the revaluation date, as appropriate, is to be computed in non-monetary items. In order to conclude on the existence of a hyperinflationary economy, such standard describes in detail a number of quantitative and qualitative factors to be taken into account including an accumulated inflation rate during a three—year period that amounts to or exceeds 100%.

As of December 31, 2017, taking into account the decreasing inflation trend, the inconsistency of the published inflation data in previous years, and the fact that the rest of the indicators do not lead to a definitive conclusion, the Management of the Company understands that there is not enough evidence for Argentina to be considered a country with a hyperinflationary economy. This conclusion is in line with that expressed by the International Practices Task Force of AICPA ("American Institute of Certified Public Accountants") which did not consider Argentina as a country with a hyperinflationary economy. Therefore, the criteria for restatement of information established under IAS 29 in the current year have not been applied.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

However, in recent years, certain macroeconomic variables affecting the business of these companies, such as wages, prices of main raw materials and inputs and services, have undergone variations of some importance. This circumstance must be considered in the evaluation and interpretation of the financial condition and the results of these companies in the financial statements.

### 2.b) Significant Accounting Policies

### 2.b.1) Functional and reporting currency and tax effect on Other comprehensive income

#### Functional currency

YPF, based on parameters set out in IAS 21 "The effects of change in foreign exchange rates", has defined the U.S. dollar as its functional currency. Consequently, non-monetary cost-based measured assets and liabilities, as well as income or expenses, are remeasured into functional currency by applying the exchange rate prevailing at the date of the transaction.

Transactions in currencies other than the functional currency of the Company are deemed to be "foreign currency transactions" and are remeasured into functional currency by applying the exchange rate prevailing at the date of the transaction (or, for practical reasons and when exchange rates do not fluctuate significantly, the average exchange rate for each month). At the end of each year or at the time of cancellation, the balances of monetary assets and liabilities in currencies other than the functional currency are measured at the exchange rate prevailing at such date and the exchange differences arising from such measurement are recognized as "Net financial results" in the consolidated statement of comprehensive income for the year in which they arise.

Assets, liabilities and results of subsidiaries, associates and joint ventures are shown in their respective functional currencies. The effects of the conversion into U.S. dollars of the financial information of those companies whose functional currency is other than U.S. dollar are recorded as "Other comprehensive income" in the Consolidated Statement of Comprehensive Income.

#### Presentation currency

According to CNV Resolution No. 562, the Company must present its financial statements in pesos. Therefore, the financial statements prepared in the Company's functional currency are translated into the presentation currency, as per the following procedures:

- Assets and liabilities of each of the balance sheets presented are translated using the exchange rate at the balance sheet closing date;
- Items of the consolidated statement of comprehensive income are translated using the exchange rate at the time the transactions were generated (or, for practical reasons, and provided the exchange rate has not changed significantly, using each month's average exchange rate);
- All translation differences resulting from the foregoing are recognized under "Other Comprehensive Income" in the statement of comprehensive income.

#### Tax effect on Other Comprehensive Income

Results included in Other Comprehensive Income in connection with translation differences generated by investments in subsidiaries, associates and joint ventures whose functional currency is other than U.S. dollar as well as conversion differences arising from the translation of YPF's financial statements into its presentation currency (pesos), have no effect on the income tax or in the deferred tax since at the time they were generated, the relevant transactions did not make any impact on net income or taxable income.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### 2.b.2) Financial Assets

#### Classification

In accordance with IFRS 9 "Financial instruments", the Group classifies its financial assets into two categories:

Financial assets at amortized cost

Financial assets are measured at amortized cost if both of the following criteria are met: (i) the objective of the Group's business model is to hold the assets to collect the contractual cash flow, and (ii) the contractual terms only require specific dates for payment of principal and interest.

In addition, and for assets that meet the above conditions, IFRS 9 contemplates the option of designating, at the time of the initial recognition, an asset as measured at its fair value, if doing so would eliminate or significantly reduce the valuation or recognition inconsistency that could arise in the event that the valuation of the assets and liabilities or the recognition of profit or losses resulting therefrom be carried out on different bases. The Group has not designated a financial asset at fair value by using this option.

As of the closing date of these consolidated financial statements, the Group's financial assets at amortized cost include certain elements of cash and cash equivalents, trade receivables and other receivables.

• Financial assets at fair value through profit or loss

If either of the two criteria above are not met, the financial asset is classified as an asset measured "at fair value through profit or loss".

As of the closing date of these consolidated financial statements, the Group's financial assets at fair value through profit or loss include mutual funds and public securities.

### Recognition and measurement

Purchases and sales of financial assets are recognized on the date on which the Group commits to purchase or sell the assets. Financial assets are recognized when the rights to receive cash flows from the investments and the risks and rewards of ownership have expired or have been transferred.

Financial assets at amortized cost are initially recognized at fair value plus transaction costs. These assets accrue interest based on the effective interest rate method.

Financial assets at their fair value through profit or loss are initially recognized at fair value and transaction costs are recognized as an expense in the statement of comprehensive income. They are subsequently valued at fair value. Changes in fair values and results from sales of financial assets at fair value through profit or loss are recorded in "Net financial results" in the statement of comprehensive income.

In general, the Group uses the transaction price to ascertain the fair value of a financial instrument on initial recognition. In other cases, the Group records a gain or loss on initial recognition only if the fair value of the financial instrument can be supported by other comparable and observable market transactions for the same type of instrument or if it is based in a technical valuation that only inputs observable market information. Unrecognized gains or losses on initial recognition of a financial asset are recognized later on, only to the extent they arise from a change in the factors (including time) that market participants would consider upon setting the price.

Gains/losses on debt instruments measured at amortized cost and not included for hedging purposes are charged to income when the financial assets are derecognized or an impairment loss is recognized and during the amortization process using the effective interest rate method. The Group reclassifies all investments on debt instruments only when its business model for managing those assets changes.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### Impairment of financial assets

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or group of financial assets measured at amortized cost is impaired. Impairment losses are recognized only if there is objective evidence of impairment because of one or more events that occurred after the initial recognition of the assets and such impairment may be reliably measured.

Evidence of impairment includes indications that a debtor or a group of debtors are experiencing significant financial difficulty, default or delinquency in interest or principal payments, the probability that they will enter bankruptcy or other financial reorganization, and when observable information indicates that there is a measurable decrease in the estimated future cash flows.

The impairment amount is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred), discounted at the financial asset's original effective interest rate. The carrying amount of the asset is reduced and the amount or the loss is recognized in the statement of comprehensive income. For practical purposes, the Group may measure impairment based on an instrument's fair value, using an observable market price. If, in a subsequent period, the amount the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the reversal of the previously recognized impairment loss is recognized in the statements of comprehensive income.

### Offsetting financial instruments

Financial assets and liabilities are offset when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

#### 2.b.3) Inventories

Inventories are valued at the lower of their cost and their net realizable value. Cost includes acquisition costs (less trade discount, rebates and other similar items), transformation and other costs, which have been incurred when bringing the inventory to its present location and condition. The net realizable value is the estimated selling price in the ordinary course of business less selling expenses.

In the case of refined products, costs are allocated in proportion to the selling price of the related products (isomargen method) due to the difficulty for distributing the production costs to each product. Raw materials, packaging and other inventory are valued at their acquisition cost.

The Group assesses the net realizable value of the inventories at the end of each year and recognizes in profit or loss in the consolidated statement of comprehensive income the appropriate valuation adjustment if the inventories are overstated. When the circumstances that previously caused impairment no longer exist or when there is clear evidence of an increase in the inventories' net realizable value because of changes in economic circumstances, the amount of a write-down is reversed.

#### 2.b.4) Intangible assets

The Group initially recognizes intangible assets at their acquisition or development cost. This cost is amortized on a straight-line basis over the useful lives of these assets. At the end of each year, such assets are measured at their acquisition or development cost, considering the criteria adopted by the Group in the transition to IFRS, less any accumulated amortization and any accumulated impairment losses.

The main intangible assets of the Group are as follows:

# i. <u>Service concessions arrangements</u>

Includes transportation and storage concessions. These assets are valued at their acquisition cost, considering the criteria adopted by the Group in the transition to IFRS, net of accumulated amortization. They are depreciated using the straight-line method during the course of the concession period.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

The Argentine Hydrocarbons Law allows the executive branch of the Argentine government to award 35-year concessions for the transportation of oil, gas and petroleum products following submission of competitive bids. The term of a transportation concession may be extended for an additional ten-year term. Pursuant to Law No. 26,197, provincial governments have the same powers. Holders of production concessions are entitled to receive a transportation concession for the oil, gas and petroleum products that they produce. The holder of a transportation concession has the right to:

- Transport oil, gas and petroleum products;
- Build and operate oil, gas and products pipelines, storage facilities, pump stations, compressor plants, roads, railways and other facilities and equipment necessary for the efficient operation of a pipeline system.

In addition, a transportation concession holder is under an obligation to transport hydrocarbons to third parties, without discrimination, in exchange for a tariff. This obligation, however, is applicable to oil or gas producers only to the extent the concession holder has available additional capacity, and is expressly subject to the transportation requirements of the concession holder. Transportation tariffs are subject to approval by the Federal Energy Secretariat for oil and petroleum derivatives pipelines, and by ENARGAS, for gas pipelines. Upon expiration of a transportation concession, oil pipelines and related facilities revert to the Argentine Government, without any payment to the concession holder.

In connection with the foregoing, the Privatization Law granted the Company 35-year transportation concessions for the transportation facilities operated by Yacimientos Petrolíferos Fiscales as of such date. The main pipelines related to said transportation concessions are the following:

- · La Plata / Dock Sud
- Puerto Rosales / La Plata
- Monte Cristo / San Lorenzo
- Puesto Hernández / Luján de Cuyo
- Luján de Cuyo / Villa Mercedes

Thus, assets meeting certain requirements set forth by the IFRIC 12, which at Management of the Company's judgment are met in the facilities mentioned in the preceding paragraphs, are recognized as intangible assets.

### ii. Exploration rights

The Group classifies exploration rights as intangible assets, which are valued at their cost, considering the criteria adopted by the Group in the transition to IFRS, net of the related impairment, if applicable.

Investments related to unproved reserves or fields under evaluation are not depreciated. These investments are reviewed for impairment at least once a year, or whenever there are indicators that the assets may have become impaired. Any impairment loss or reversal is recognized in profit or loss in the consolidated statement of comprehensive income. Exploration costs (geological and geophysical expenditures, expenditures associated with the maintenance of unproved reserves and other expenditures relating to exploration activities), excluding exploratory well drilling costs, are charged to expense in the consolidated statement of comprehensive income as incurred.

### iii. Other intangible assets

In this section, it mainly includes costs relating to computer software development expenditures, as well as assets that represent the rights to use technology and knowledge ("know how") for the manufacture and commercial exploitation of equipment related to oil extraction. These items are valued at their acquisition cost, considering the criteria adopted by the Group in the transition to IFRS, net of the related depreciation and impairment, if applicable.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

These assets are amortized on a straight-line basis over their useful lives, which range between 3 and 14 years. The Group reviews annually the mentioned estimated useful life.

The Group has no intangible assets with indefinite useful lives as of December 31, 2017, 2016 and 2015.

### 2.b.5) Investments in associates and joint ventures

Investments in associates and joint ventures are valued using the equity method.

According to this method, the investment is initially recognized at cost under "Investments in associates and joint ventures" in the statement of financial position, and the book value increases or decreases to recognize the investor's interest in the income of the associate or joint venture after the acquisition date, which is reflected in the statement of comprehensive income under "Result from participation in associates and joint ventures". The investment includes, if applicable, the goodwill identified in the acquisition.

Associates are considered those in which the Group has significant influence, understood as the power to participate in the financial and operating policy decisions of the investee but does not have control or joint control over those policies. Significant influence is presumed in companies in which a company has an interest of 20% or more and less than 50%.

Joint arrangements are contractual agreements through which the Group and the other party or parties have joint control. Under the provisions of IFRS 11, "Joint arrangements", and IAS 28, "Investments in Associates and Joint Ventures", investments in which two or more parties have joint control (defined as a "joint arrangement") will be classified as either a joint operation (when the parties that have joint control have rights to the assets and obligations for the liabilities relating to the joint arrangement) or a joint venture (when the parties that have joint control have rights to the net assets of the joint arrangement). Considering such classification, joint operations will be proportionally consolidated and joint ventures will be accounted for under the equity method.

Associates and joint ventures have been valued based upon the latest available financial statements of these companies as of the end of each year, taking into consideration, if applicable, significant subsequent events and transactions, available management information and transactions between the Group and the related company, which have produced changes on the latter's shareholders' equity. The dates of the financial statements of such related companies used in the consolidation process may differ from the date of the Company's financial statements due to administrative reasons. The accounting principles and procedures used by associates and joint ventures have been homogenized, where appropriate, with those used by the Group in order to present the consolidated financial statements based on uniform accounting and presentation policies. The financial statements of associates and joint ventures whose functional currency is different from the presentation currency are translated using the procedure set out in Note 2.b.1).

Investments in companies in which the Group has no significant influence or joint control, are valued at cost.

Investments in companies with negative shareholders' equity are disclosed in the "Other Liabilities" account.

On each closing date or upon the existence of signs of impairment, it is determined whether there is any objective evidence of impairment in the value of the investment in associates and joint ventures. If this is the case, the Group calculates the amount of the impairment as the difference between the recoverable value of associates and joint ventures and their book value, and recognizes the difference under "Result from participation in associates and joint ventures" in the statement of comprehensive income. The recorded value of investments in associates and joint ventures does not exceed their recoverable value.

Note 9 details the investments in associates and joint ventures.

As from the effective date of Law No. 25,063, dividends, either in cash or in kind, that the Group receives from investments in other companies and which are in excess of the accumulated income that these companies carry upon distribution will be subject to a 35% income tax withholding as a sole and final payment. The Group has not recorded any charge for this tax since it has estimated that dividends from earnings recorded by the equity method will not be subject to such tax. However, according to of the aforementioned Argentine Tax Reform Law No. 27,430, this tax is eliminated for income accrued as of 2018 (see Note 30.1).



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### 2.b.6) Property, plant and equipment

# General criteria

Property, plant and equipment are valued at their acquisition cost, plus all the costs directly related to the location of such assets for their intended use, considering the deemed cost criteria adopted by the Group in the transition to IFRS.

Borrowing costs of assets that require a substantial period to be ready for their intended use are capitalized as part of the cost of these assets.

Major inspections, necessary to restore the service capacity of the related asset are capitalized and depreciated on a straight-line basis over the period until the next overhaul is scheduled.

The costs of renewals, betterments and enhancements that extend the useful life of properties and/or improve their service capacity are capitalized. As property, plant and equipment are retired, the related cost and accumulated depreciation are derecognized.

Repair, conservation and ordinary maintenance expenses are recognized in the statement of comprehensive income as incurred.

These assets are reviewed for impairment at least once a year, or whenever there are indicators that the assets may have become impaired, as detailed in Note 2.b.8.

### Depreciation

Property, plant and equipment, other than those related to oil and gas exploration and production activities, are depreciated using the straight-line method, over the years of estimated useful life of the assets, as follows:

|   | Years of Estimated<br>Useful Life |
|---|-----------------------------------|
| Buildings and other constructions           | 50                                |
| Refinery equipment and petrochemical plants | 20-25                             |
| Infrastructure of natural gas distribution  | 20-50                             |
| Transportation equipment                    | 5-25                              |
| Furniture, fixtures and installations       | 10                                |
| Selling equipment                           | 10                                |
| Electric power generation facilities        | 15-20                             |
| Other property                              | 10                                |

Land is classified separately from the buildings or facilities that may be located on it and is deemed to have an indefinite useful life. Therefore, it is not depreciated.

The Group reviews annually the estimated useful life of each class of assets.

#### Oil and gas exploration and production activities

The Group recognizes oil and gas exploration and production transactions using the "successful-efforts" method. The costs incurred in the acquisition of new interests in areas with proved and unproved reserves are capitalized as incurred under Mineral properties, wells and related equipment. Costs related to exploration permits are classified as intangible assets.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

Exploration costs, excluding the costs associated with exploratory wells, are charged to expense as incurred. Costs of drilling exploratory wells, including stratigraphic test wells, are capitalized pending determination as to whether the wells have found proved reserves that justify commercial development. If such reserves are not found, the mentioned costs are charged to expense. Occasionally, an exploratory well may be determined to have found oil and gas reserves, but classification of those reserves as proved cannot be made. In those cases, the cost of drilling the exploratory well will continue to be capitalized if the well has found a sufficient quantity of reserves to justify its completion as a producing well, and the Group is making sufficient progress assessing the reserves as well as the economic and operating viability of the project. If any of the mentioned conditions are not met, the cost of drilling exploratory wells is charged to expense. In addition, the exploratory activity involves, in many cases, the drilling of multiple wells through several years in order to completely evaluate a project. As a consequence, some exploratory wells may be kept in evaluation for long periods, pending the completion of additional wells and exploratory activities needed to evaluate and quantify the reserves related to each project. The detail of the exploratory well costs in evaluation stage is described in Note 8.

Drilling costs applicable to productive wells and to developmental dry holes, as well as tangible equipment costs related to the development of oil and gas reserves, have been capitalized.

The capitalized costs described above are depreciated as follows:

- a) The capitalized costs related to productive activities have been depreciated by field on a unit-of-production basis by applying the ratio of produced oil and gas to estimate proved, developed oil, and gas reserves.
- b) The capitalized costs related to the acquisition of property and the extension of concessions with proved reserves have been depreciated by field on a unit-of-production basis by applying the ratio of produced oil and gas to the estimated proved oil and gas reserves.

Revisions in estimates of crude oil and gas proved reserves are considered prospectively in the calculation of depreciation. Revisions in estimates of reserves are performed at least once a year. Additionally, estimates of reserves are audited by external independent petroleum engineers on a three-year rotation plan.

#### Costs related to hydrocarbon well abandonment obligations

Costs related to hydrocarbon well abandonment obligations are capitalized at their discounted value along with the related assets, and are depreciated using the unit-of-production method. As compensation, a liability is recognized for this concept at the estimated value of the discounted payable amounts. Revisions of the payable amounts are performed upon consideration of the current costs incurred in abandonment obligations on a field-by-field basis or other external available information if abandonment obligations were not performed. Due to the number of wells in operation and/or not abandoned and as well as the complexity with respect to different geographic areas where the wells are located, current costs incurred in plugging activities, weighted by the complexity level of the wells, are used for estimating the plugging activities costs of the wells pending abandonment. Current costs incurred are the best source of information in order to make the best estimate of asset retirement obligations. Future changes in the costs mentioned above, the useful life of the wells and their estimate of abandonment, as well as changes in regulations related to abandonment, which are not possible to be predicted at the date of issuance of these consolidated financial statements, could affect the value of the abandonment obligations and, consequently, the related asset, affecting the results of future operations.

#### Environmental property, plant and equipment

The Group capitalizes the costs incurred in limiting, neutralizing or preventing environmental pollution only in those cases where at least one of the following conditions is met: (a) the expenditure improves the safety or efficiency of an operating plant (or other productive assets); (b) the expenditure prevents or limits environmental pollution at operating facilities; or (c) the expenditure is incurred to prepare assets for sale and does not raise the assets' carrying value above their estimated recoverable value.

The environmental related property, plant and equipment and the corresponding accumulated depreciation are disclosed in the consolidated financial statements together with the other elements that are part of the corresponding property, plant and equipment which are classified according to their accounting nature.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### 2.b.7) Provisions and contingent liabilities

The Group makes a distinction between:

#### i. Provisions

Represent legal or assumed obligations arising from past events, the settlement of which is expected to give rise to an outflow of resources and which amount and timing are uncertain. Provisions are recognized when the liability or obligation-giving rise to an indemnity or payment arises, to the extent that its amount can be reliably estimated and that the obligation to settle is probable or certain. Provisions include both obligations whose occurrence does not depend on future events (such as provisions for environmental liabilities and provision for hydrocarbon wells abandonment obligations); as well as obligations that are probable and can be reasonably estimated whose realization depends on the occurrence of future events that are out of the control of the Group (such as provisions for contingencies). The amount recorded as provision corresponds to the best estimate of expenditures required to settle the obligation, taking into consideration the relevant risks and uncertainties. See Note 14.

### ii. Contingent liabilities

Represent possible obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more future events not wholly within the control of the Group, or present obligations arising from past events, the amount of which cannot be estimated reliably or whose settlement is not likely to give rise to an outflow of resources embodying future economic benefits. Contingent liabilities are not recognized in the consolidated financial statements, but rather are disclosed to the extent they are significant, as required by IAS 37, "Provisions, contingent liabilities and contingent assets". See Note 28.

Provisions are measured at their current value of cash flows estimated to satisfy the obligation, applying a pre-tax rate that reflects the market valuations of the time value of money and the specific risks of the obligation. The increase in the provision due to the passage of time is recognized in the statement of comprehensive income.

When a contract qualifies as onerous, the related unavoidable liabilities are recognized in the consolidated financial statements as provisions, net of the expected benefits.

Except for provisions for hydrocarbon wells abandonment obligations, where the timing of settlement is estimated on the basis of the work plan of the Group, and considering the estimated production of each field (and therefore its abandonment), in relation to other noncurrent provisions, it is not possible to reasonably estimate a specific schedule of settlement of the provisions considering the characteristics of the concepts included.

In relation to certain provisions and contingent liabilities, the Group, in accordance with the established exemption contemplated in IAS 37, has decided not to set forth certain critical information that could seriously impair it in the claims made by third parties.

### 2.b.8) Impairment of property, plant and equipment and intangible assets

To evaluate the impairment of property, plant and equipment and intangible assets, the Group compares their carrying value with their recoverable amount at the end of each year, or more frequently, if there are indicators that the carrying value of an asset may not be recoverable.

In order to assess impairment, assets are grouped into CGU, whereas the assets do not generate cash flows that are independent of those generated by other assets or CGU, considering regulatory, economic, operational and commercial conditions. Considering the above mentioned, the Group's assets were grouped into nine CGU, which are described below:

#### Upstream Segment

The assets included in this segment have been grouped into four CGU: one of them groups the assets of YPF fields with crude oil reserves, and three of them group the assets of fields with natural gas reserves, according to Argentina's basins.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

- CGU Oil;
- CGU Gas Neuquina Basin;
- CGU Gas Noroeste Basin;
- CGU Gas Austral Basin;

As of December 31, 2016, there were the Gas UGE—Neuquina Basin—YSUR and UGE Gas—Austral Basin—YSUR, which after the operative merger of the YSUR Group with YPF, were incorporated to the UGE Gas—Neuquina Basin and UGE Gas—Austral Basin, both of YPF.

As of December 31, 2015, the Petroleum CGU—YPF Holdings, was in existence; however, such CGU was deconsolidated during fiscal year 2016.

### ii. Gas and Power Segment

The assets of this segment have been grouped into three CGU: CGU Gas and Power YPF, which mainly includes the commercialization and regasification of natural gas; CGU Metrogas, which includes assets related to natural gas distribution activities; and CGU YPF EE, which includes the assets related to the generation and commercialization of electric energy. In connection with CGU YPF EE, see Note 3.

### iii. Downstream Segment

The assets of this segment have been grouped in the CGU Downstream YPF, which mainly comprises the assets involved in crude oil refining (or supplementing that activity), the petrochemical industry and the marketing of such products.

### iv. Central Administration and Others

It includes the AESA CGU, which primarily comprises the assets used for construction purposes related to the activities of the subsidiary.

This aggregation is the best reflection of how the Group currently makes its management decisions for the generation of separate cash flows of the assets.

The recoverable amount is the higher of the fair value less costs of disposal and the value in use. In assessing the value in use, the estimated future cash flows are discounted to their present value using a rate that reflects the weighted average capital cost employed for the Group.

If the recoverable amount of a CGU is estimated to be less than its carrying amount, the carrying amount of the CGU is reduced to its recoverable amount, and an impairment loss is recognized in the consolidated statement of comprehensive income.

Any impairment loss is allocated to the assets comprising the CGU on a pro-rata basis based on their carrying amount. Consequently, the basis for future depreciation or amortization will take into account the reduction in the value of the asset as a result of any accumulated impairment losses.

Upon the occurrence of new events or changes in existing circumstances, which prove that an impairment loss previously recognized could have disappeared or decreased, a new estimate of the recoverable amount of the corresponding asset is calculated to determine whether a reversal of the impairment losses recognized in previous periods needs to be made. See Note 2.c).

In the event of a reversal, the carrying amount of the asset (or the CGU) is increased to the revised estimate of its recoverable amount so that the increased carrying amount does not exceed the carrying amount that would have been determined in case no impairment loss had been recognized for the asset (or the CGU) in the past.

#### 2.b.9) Methodology used in the estimation of recoverable amounts

The methodology used to estimate the recoverable amount of property, plant and equipment and intangible assets consists of using the higher of: i) the calculation of the use value, based on expected future cash flows from the use of such assets, discounted at a rate that reflects the weighted average cost of the allocated principal amount, and, if available, ii) the price that would be received in a regular transaction between market participants to sell the asset as of the date of these consolidated financial statements, less the disposal costs of such assets.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

In the assessment of the value in use, cash flow forecasts based on the best estimate of income and expense available for each CGU using sector inputs, past results and future expectations of business evolution and market development are utilized. The most sensitive aspects included in the cash flows used in all the CGU are the purchase and sale prices of hydrocarbons (including applicable gas distribution fees), outstanding regulations, estimates of cost increases, personnel costs and investments.

The cash flows from Upstream assets are generally projected for a period that covers the economically productive useful lives of the oil and gas fields and is limited by the contractual expiration of the concession permits, agreements or exploitation contracts. The estimated cash flows are based on production levels, commodity prices and estimates of the future investments that will be necessary in relation to undeveloped oil and gas reserves, production costs, field decline rates, market supply and demand, contractual conditions and other factors. The unproved reserves are weighted with risk factors, based on the type of each one of the Upstream assets.

Downstream and Gas and Power cash flows are estimated on the basis of projected sales trends, contribution margins by unit, fixed costs and investment flows, in line with the expectations regarding the specific strategic plans of each business. However, cash inflows and outflows relating to planned restructurings or productivity enhancements are not considered. The projections' evaluation horizon is 10 years, considering annual rent for the last period, based on the long useful life of these CGU assets.

The reference prices considered are based on a combination of market prices available in those markets where the Group operates, also taking into consideration specific circumstances that could affect different products the Group commercializes and management's estimations and judgments.

### 2.b.10) Employee benefit plans and share-based payments

### i. Retirement plan

Effective March 1, 1995, the Group has established a defined contribution retirement plan that provides benefits for each employee who elects to join the plan. Each plan member will pay an amount between 3% and 10% of his monthly compensation, and the Group will pay an amount equal to that contributed by each member.

The plan members will receive from the Group the contributed funds before retirement only in the case of voluntary termination under certain circumstances or dismissal without cause and, additionally, in case of death or incapacity. The Group has the right to discontinue this plan at any time, without incurring termination costs.

### ii. Performance Bonus Programs

These programs cover certain of the Group's personnel. These bonuses are based on compliance with corporate business unit objectives and performance. They are calculated considering the annual compensation of each employee, certain key factors related to the fulfillment of these objectives and the performance of each employee, and are paid in cash.

#### iii. Share-based benefit plan

From the year 2013, YPF has decided to implement a share-based benefit plan. This plan, organized in annual programs, covers certain executive and management positions and key personnel or personnel with critical technical knowledge. The abovementioned plan is aimed at aligning the performance of these personnel with the objectives of the strategic plan of the Company.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

This plan consists in giving participation, through shares of the Company, to each selected employee with the condition of remaining in it for the previously defined period (up to three years from the grant date, hereinafter "service period"), being this the only condition necessary to access the agreed final retribution.

For accounting purposes, YPF recognizes the effects of the plans in accordance with the guidelines of IFRS 2, "Share-based Payment". In this order, the total cost of the plans granted is measured at the grant date, using the fair value or market price of the Company's share in the United States market. The above-mentioned cost is accrued in the Company's net income for the year, over the vesting period, with the corresponding increase in Shareholders' equity in the "Share-based Benefit Plans" account.

# 2.b.11) Revenue recognition

#### General criteria

Revenue is recognized on sales of crude oil, refined products and natural gas, in each case, when title and risks are transferred to the customer following the conditions described below:

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods.
- The Group does not retain neither continuing managerial involvement to the degree usually associated with ownership nor
  effective control over the goods sold.
- The amount of revenue can be measured reliably.
- It is probable that the economic benefits associated with the transaction will flow to the Group.
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

#### Revenue recognition related to Government incentive programs

Incentives for the additional injection of natural gas and for the production of crude oil granted by the Planning and Strategic Coordination Commission of the National Plan of Hydrocarbons Investment by Resolutions No. 1/2013 and No. 14/2015, respectively (see Note 30), fall within the scope of the IAS 20 "Accounting for Government grants and disclosure of government assistance", because they constitute economic compensation for the companies committed to increasing their respective production. Incentives have been included in "Revenues" in the consolidated statement of comprehensive income.

Likewise, these regulations also apply to the temporary economic assistance by Metrogas (see Note 30), as enacted by the MINEM under Resolution No. 312-E/1016 and by the former Argentine Energy Secretariat under Resolution No. 263/2015, as its purpose is to fund the expenses and investments related to the normal operation of the natural gas distribution service through networks, while preserving the chain of payment to natural gas producers until the Tariff Review is concluded. The incentives have been included in the item "Other net operating results" in the consolidated statement of comprehensive income.

In addition, Argentine tax authorities provide a tax incentive for investment in capital goods, computers and telecommunications for domestic manufacturers through a fiscal bond, provided that manufacturers have industrial establishments located in Argentina, a requirement that is satisfied by the controlled company AESA. The Group recognizes such incentive when the formal requirements established by Decrees No. 379/2001, 1551/2001, its amendments and regulations are satisfied, to the extent that there is reasonable certainty that the grants will be received. The bond received may be computed as a tax credit for the payment of national taxes (i.e., income tax, tax on minimum presumed income, value added tax and domestic taxes) and may be transferred to third parties only one time. The incentives have been included in the item "Other net operating results" in the consolidated statement of comprehensive income.

Recognition of this income is made at its fair value when there is a reasonable certainty that incentives will be received and that regulatory requirements related therewith have been fulfilled.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

Recognition of revenues and costs associated with construction contracts method

Revenues and costs related to construction activities performed by AESA are accounted for in the consolidated statement of comprehensive income for the year using the percentage of completion method, considering the final contribution margin estimated for each project at the date of issuance of the financial statements, which arises from technical studies on sales and total estimated costs for each of them, as well as their physical progress.

The adjustments in contract values, changes in estimated costs and anticipated losses on contracts in progress are reflected in earnings in the year when they become evident.

The table below details information related to the construction contracts as of December 31, 2017, 2016 and 2015:

|      |                       | Contracts in progress                                    |                   |            |
|------|-----------------------|--|-------------------|------------|
|      | Revenues for the year | Costs incurred plus<br>accumulated<br>recognized profits | Advances received | Retentions |
| 2017 | 710                   | 1,398  | 61                |            |
| 2016 | 778                   | 1,236  |                   |            |
| 2015 | 455                   | 577  | _                 | _          |

### **2.b.12)** Leases

The Group's leases are classified as operating or financial leases, taking into account the economic substance of the contracts.

The Group as a lessee:

### Operating leases

A lease is classified as an operating lease when the lessor does not transfer substantially to the lessee the entire risks and rewards incidental to ownership of the asset.

Costs related to operating leases are recognized on a straight-line basis in "Rental of real estate and equipment" and "Operation services and other service contracts" of the consolidated statement of comprehensive income for the year in which they arise.

#### · Financial Leases

Leases are classified as financial when the lessor transfers to the lessee substantially all the risks and benefits inherent in the leased property.

The Group has no significant financial leases as they are defined by current IFRS regulations.

The Group has not entered into any significant leases with third parties.

#### 2.b.13) Net income per share

Net income per share is calculated by dividing the net income for the year attributable to YPF's shareholders by the weighted average of shares of YPF outstanding during the year net of repurchased shares as mentioned in Note 25.

Diluted net income per share is calculated by dividing the net income for the fiscal year by the weighted average of shares outstanding, and when dilutive, adjusted for the effect of all potentially dilutive shares, including share options, on an as if they had been converted.

In computing diluted net income per share, income available to ordinary shareholders, used in the basic earnings per share calculation, is adjusted by those results that would result of the potential conversion into ordinary stock. The weighted average number of ordinary shares outstanding is adjusted to include the number of additional ordinary shares that would have been outstanding if the dilutive potential ordinary shares had been issued. Diluted net income per share is based on the most advantageous conversion rate or exercise

price over the entire term of the instrument from the standpoint of the security holder. The calculation of diluted net income per share excludes potential ordinary shares if their effect is anti-dilutive.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

As of the date of the issuance of these consolidated financial statements, there are no YPF instruments outstanding that imply the existence of potential ordinary shares (taking into account the Company's intent to cancel the share-based benefit plans through their repurchase in the market), thus the basic net income per share matches the diluted net income per share. See Note 26.

### 2.b.14) Financial liabilities

Financial liabilities are initially recognized at their fair value less the transaction costs incurred. Because the Group does not have financial liabilities whose characteristics require the recognition at their fair value, according to IFRS, after their initial recognition, financial liabilities are measured at amortized cost. Any difference between the financing received (net of transaction costs) and the repayment value is recognized in the consolidated statement of comprehensive income over the life of the related debt instrument, using the effective interest rate method.

The Group eliminates a financial liability (or a part thereof) from its statement of financial position when it has been extinguished, i.e., when the obligation specified in the corresponding contract has been paid or canceled, or has expired.

The Group will account for a swap of financial instruments with substantially different conditions by eliminating the original financial liability and registering a new financial liability. Similarly, the Group will account for a substantial change in the current conditions of an existing financial liability or part of it as a cancellation of the original financial liability and the recognition of a new financial liability.

At the closing of these consolidated financial statements, the Group's financial liabilities at amortized cost include accounts payable, other liabilities and loans.

### 2.b.15) Taxes, withholdings and royalties

#### Income tax and tax on minimum presumed income

The Group recognizes income tax applying the liability method, which considers the effect of temporary differences between the financial and tax bases of assets and liabilities and the tax loss carry forwards and other tax credits, which may be used to offset future taxable income, at the statutory rate then in force, at the time of its use or reversion.

According to the latest amendments introduced by the Argentine Tax Reform Law No. 27,430 published in the Official Gazette on December 29, 2017 (see Note 30.1), the general tax rate is reduced from 35% currently in force to 30% for fiscal years 2018 and 2019 and to 25% from year 2020. Accordingly, although the gradual changes of the income tax rate are not applicable to the measurement of the current tax accrued as of December 31, 2017, the main accounting impact of the new regulations occurs in the measurement of deferred assets and tax liabilities. See Note 15.

Additionally, upon the determination of taxable profit tax on minimum presumed income is calculated by applying the current 1% tax rate to taxable assets as of the end of each year. This tax supplements income tax. The tax liability will coincide with the higher of the determination of tax on minimum presumed income and the Group's tax liability related to income tax, calculated applying the current 35% income tax rate to taxable income for the year. However, if the tax on minimum presumed income exceeds income tax during one tax year, such excess may be computed as prepayment of any income tax excess over the tax on minimum presumed income that may be generated in the next ten years.

In relation to the minimum presumed income tax, it is worth mentioning that it was overruled for the years beginning on January 1, 2019, as established by Law No. 27,260.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

Under Law No. 25,063, dividends distributed, either in cash or in kind, in excess of accumulated taxable income as of the end of the year immediately preceding the dividend payment or distribution date, will be subject to a 35% income tax withholding as a sole and final payment, except for those distributed to shareholders residing in countries benefited from treaties for the avoidance of double taxation, which will be subject to a minor tax rate. However, according to the aforementioned Tax Reform Law No. 27,430, this tax is eliminated for those incomes accrued as of 2018 (See Note 30.1).

### Personal assets tax – Substitute responsible

Individuals and foreign entities, as well as their undistributed estates, regardless of whether they are domiciled or located in Argentina or abroad, are subject to personal assets tax of 0.25% of the value of any shares or ADSs issued by Argentine entities, held at December 31 of each year. The tax is levied on the Argentine issuers of such shares or ADSs, such as YPF, which must pay this tax in substitution of the relevant shareholders, and is based on the equity value (following the equity method), or the book value of the shares derived from the latest financial statements at December 31 of each year. Pursuant to the Personal Assets Tax Law, the Group is entitled to seek reimbursement of such paid tax from the applicable shareholders, using the method the Group considers appropriate. However, according to Law 27,260 YPF has requested the exemption of this tax (for the benefit of its shareholders). This exemption will apply to fiscal periods 2016 to 2018.

### Royalties and withholding systems for hydrocarbon exports

A 12% (or 15%, if applicable) royalty is payable on the value at the wellhead of crude oil production and the commercialized natural gas volumes. In addition, and pursuant to the extension of the original terms of exploitation concessions, the Group has agreed to pay an extraordinary production royalty and in some cases a royalty of 10% is payable over the production of unconventional hydrocarbons (see Note 30).

Royalty expense and extraordinary production royalties are accounted for as a production cost.

### 2.b.16) Shareholders' equity accounts

Shareholders' equity accounts have been valued in accordance with accounting principles in effect as of the transition date. The accounting transactions that affect shareholders' equity accounts were accounted for in accordance with the decisions taken by the Shareholders' meetings, and legal standards or regulations.

### Subscribed capital stock and adjustments to contributions

Consists of the shareholders' contributions represented by shares and includes the outstanding shares at face value net of treasury shares mentioned in the following paragraph "Treasury shares and adjustment to treasury shares". The subscribed capital account has remained at its historical value and the adjustment required previous Argentine GAAP (Generally Accepted Accounting Principles) to state this account in constant Argentine pesos is disclosed in the "Adjustments to contributions" account.

The adjustment to contributions cannot be distributed in cash or in kind, but is allowed its capitalization by issuing shares. In addition, this item may be used to compensate for accumulated losses.

#### Treasury shares and adjustments to treasury shares

Corresponds to the reclassification of the nominal value and the corresponding adjustment in constant peso (Adjustment to Contributions) of shares issued and repurchased by YPF in market transactions, as is required by the CNVs regulations in force.

#### Share-based benefit plans

Corresponds to the balance related to the share-based benefit plans as mentioned in Note 2.b.10.iii).

#### Acquisition cost of repurchased shares

| Corresponds to the cost incurred in the acquisition of the shares that | at YPF holds as treasury shares. Additionally, see Note 25. |
|--|---|
|--|---|



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

Considering CNV regulations RG 562, the balance of this account restricts the distribution of retained earnings.

#### Share trading premium

Corresponds to the difference between accrued amount in relation to the share-based benefit plans and acquisition cost of the shares settled during the year in relation with the mentioned plans.

Considering the debit balance of the premium, distribution of retained earnings is restricted by the balance of this premium.

#### Issuance premiums

Corresponds to the difference between the amount of subscription of the capital increase and the corresponding face value of the shares issued.

#### Legal reserve

In accordance with the provisions of LGS, YPF has to appropriate to the legal reserve no less than 5% of the algebraic sum of net income, prior year adjustments, and transfers from other comprehensive income to retained earnings and accumulated losses from previous years, until such reserve reaches 20% of the subscribed capital plus adjustment to contributions. As of December 31, 2017, the legal reserve has been fully integrated, amounting to 2,007.

#### Reserve for future dividends

Corresponds to the allocation made by the YPF's Shareholders' meeting, whereby a specific amount is transferred to the reserve for future dividends.

# Reserve for investments and reserve for purchase of treasury shares

Corresponds to the allocation made by the YPF's Shareholders' meeting, whereby a specific amount is being assigned to be used in future investments and in the purchase of YPF's shares to meet the obligations arising from share-based benefit plan described in Note 2.b.10.iii).

#### Initial IFRS adjustment reserve

Corresponds to the initial adjustment in the transition to IFRS application, which was approved by the Shareholders' meeting of April 30, 2013, in accordance with the General Resolution No. 609 of the CNV.

Such reserve may not be used in distributions in cash or in kind to the shareholders or owners of YPF and may be reversed only for capitalization or absorption of an eventual negative balance on the "Retained earnings" account according the aforementioned Resolution.

Such reserve was disaffected in the fiscal year ended December 31, 2017. See Note 25.

# Other comprehensive income

Includes income and expenses recognized directly in equity accounts and the transfer of such items from equity accounts to the income statement of the year or to retained earnings, as defined by IFRS.

# Retained earnings

Includes accumulated gains or losses without a specific appropriation that being positive can be distributed upon the decision of the Shareholders' meeting, while not subject to legal restrictions. Additionally, it includes the net income of previous years that was not

distributed, the amounts transferred from other comprehensive income and adjustments to income of previous years produced by the application of accounting standards.

Additionally, pursuant to the regulations of the CNV, when the net balance of other comprehensive income account is positive, it will not be distributed or capitalized nor used to compensate accumulated losses, and when the net balance of these results at the end of a year is negative, a restriction on the distribution of retained earnings for the same amount will be imposed.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### Non-controlling interest

Corresponds to the interest in the net assets of Metrogas (30%) and YTEC (49%), representing the rights on shares that are not owned by YPF.

### 2.b.17) Derivative financial instruments and hedge transactions

Derivative financial instruments are recognized at fair value. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedge instrument, and, if so, the nature of the item being hedged.

The Group manages exposures to several risks using different financial instruments. The Group does not use derivative financial instruments for speculative purposes.

The Group's policy is to apply hedge accounting to hedging relationships where it is both permissible and practical under IFRS 9, and its application reduces volatility. Transactions that may be effective hedges in economic terms may not always qualify for hedge accounting under IFRS 9. During the fiscal year ended as of December 31, 2017, the Group did not used derivative financial instruments. During the fiscal years ended December 31, 2016, and 2015, the Group has not applied hedge accounting to its derivative financial instruments. Gains or losses from these derivative financial instruments are classified as "Net financial results", in the statement of comprehensive income.

Fair values of derivative financial instruments that are traded in active markets are computed by reference to market prices. The fair value of derivative financial instruments that are not traded in an active market is determined using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each fiscal year.

During the fiscal year ended December 31, 2017, the Group did not use derivative financial instruments. During the fiscal years ended December 31, 2016 and 2015, the Group only used derivative financial instruments traded on active markets (futures contracts in dollars).

#### 2.b.18) Trade receivables and other receivables

Trade receivables are initially recognized at fair value and subsequently measured at amortized cost using the effective interest rate method.

A provision for bad debt is created where there is objective evidence that the Group may not be able to collect all receivables within the original payment terms. Indicators of bad debts include significant financial distress of the debtor, the debtor potentially filing a petition for reorganization or bankrupt, or any event of default or past due account.

In the case of larger non-homogenous receivables, the impairment provision is calculated on an individual basis. When assessed individually, the Group records a provision for impairment which amounts to the difference between the value of the discounted expected future cash flows of the receivable and its carrying amount, taking into account existing collateral, if any. This provision takes into consideration the financial condition of the debtor, the resources, payment track record and, if applicable, the value of collateral.

The carrying amount of the assets is reduced through the use of the provision account, and the amount of the loss is recognized in the statement of comprehensive income within "Selling expenses". Subsequent recoveries of amounts previously written off are also credited against "Selling expenses" in the statement of comprehensive income.

#### 2.b.19) Cash and cash equivalents

In the statement of cash flow, cash and cash equivalents include cash in hand, deposits held at call with banks and other short-term highly liquidity investments with original maturities of three months or less. They do not include bank overdrafts.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

#### 2.b.20) Dividends distribution

Dividends payable by the Group are recognized as liabilities in the period in which they are approved.

#### 2.b.21) Business combinations

Business combinations are accounted for by applying the acquisition method when the Group takes effective control over the acquired company.

The Group recognizes in its financial statements the identifiable assets acquired, the liabilities assumed, any non-controlling interest and goodwill, if any, in accordance with IFRS 3.

The acquisition cost is measured as the sum of the consideration transferred, measured at fair value at its acquisition date and the amount of any non-controlling interest in the acquired entity. The Group will measure the non-controlling interest in the acquired entity at fair value or at the non-controlling interest's proportionate share of the acquired entity's identifiable net assets.

If the business combination is achieved in stages, the Group will remeasure its previously held equity interest in the acquired entity at its acquisition date fair value and recognize a gain or loss in the statement of comprehensive income.

The goodwill cost is measured as the excess of the consideration transferred over the identifiable assets acquired and liabilities assumed net by the Group. If this consideration is lower than the fair value of the assets identifiable and liabilities assumed, the difference is recognized in the statement of comprehensive income.

#### 2.b.22) Total or partial disposal of foreign operation whose functional currency is other than the U.S. Dollar

On the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation), all of the translation differences accumulated in equity in respect of that operation attributable to the equity holders of the Company are reclassified to profit or loss of that fiscal year.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated translation differences are reclassified to non-controlling interest and are not recognized in profit or loss.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate. Translation differences arising are recognized in other comprehensive income.

#### 2.b.23) Segment Information

Operating segments are reported in a manner consistent with the internal reporting provided to the top authority decision-maker, who is the person responsible for allocating resources and assessing the performance of the operating segments. Operating segments are described in Note 5.

### 2.b.24) Assets held for disposal

In the event that the Group is engaged in a disposal plan, which involves the loss of control of a subsidiary, it will classify the assets and liabilities of such subsidiary as held for disposal provided that they comply with the criteria required by the IFRS 5 and its interpretations, regardless of whether the Group withholds a non-controlling interest in its former subsidiary after the transaction.

In order to apply the above classification, the asset (or group of assets) must be available for its immediate disposal or dilution in its current conditions, exclusively subject to the usual and habitual terms for the disposal or dilution of these assets (or groups of assets) and such transaction must be highly probable.

For the transaction to be highly probable the appropriate level of Management or Board of Directors of the Company must be committed to a plan and an active program must have been actively initiated. In addition, the disposal of the asset (or groups of assets) must be actively negotiated at a reasonable price in relation to its or their current fair value. Moreover, the transaction must also be expected to meet the conditions for recognition as a completed disposal within one year after the classification date, with the exceptions permitted by IFRS 5, and the activities required to complete the plan should indicate that it is unlikely that significant changes are made to the plan or that it will be canceled.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

Noncurrent assets classified as held for disposal will be measured at the lower of their carrying amount or fair value less sale-related costs.

As of the closing of these consolidated financial statements, the Group classified the investment in the subsidiary YPF EE as an asset held for disposal. See Note 3.

### 2.b.25) New standards issued

As required by IAS 8"Accounting policies, changes in accounting estimates and errors", we detail below a brief summary of the standards or interpretations issued by the IASB, whose application is mandatory as of the closing date of these consolidated financial statements, as well as of those whose application has not been mandatory as of the closing date of these consolidated financial statements and have, therefore, not been adopted by the Group.

Those standards or interpretations issued by the IASB, the application of which is mandatory as of the closing date of these consolidated financial statements, have been adopted by the Group, if applicable.

#### • Amendments to IAS 7—Information disclosure initiative

In January 2016, the IASB amended IAS 7 and such amendments are to be applied to fiscal years beginning on or after January 1, 2017, though they may be implemented in advance.

The Disclosure Initiative was amended for the purpose of disclosing information that allows users of financial statements to evaluate the changes in liabilities (and certain assets) that have occurred during a period, derived from financing activities.

The explanation for the changes must differentiate those "changes from cash flows deriving from financing" from those "changes other than cash".

Also, when explaining changes other than cash, the following sources of changes should be differentiated, to the extent necessary to meet the purpose: (i) changes resulting from the acquisition or loss of control of subsidiaries and other businesses; (ii) the effect of foreign exchange rate changes; (iii) changes in fair value; and (iv) other changes (by separately identifying any variance deemed relevant).

The IASB defines liabilities arising from financing activities as liabilities "for which cash flows were or will be classified in the statement of cash flows as cash flows deriving from financing activities". Additionally, it emphasizes that new disclosure requirements also relate to changes in financial assets (for example, assets covering liabilities arising from financing activities) if they meet the same definition.

Finally, the amendments set forth that changes in liabilities arising from financing activities must be disclosed separately from changes in other assets and liabilities.

The adoption of such amendments did not have any effects on the Group's consolidated financial statements.

#### Amendments to IAS 12—Recognition of deferred tax assets for unrealized losses

In January 2016, the IASB amended IAS 12 and such amendments are to be applied to fiscal years beginning on or after January 1, 2017, though they may be implemented in advance.

The amendment to IAS 12 provides that when an entity assesses whether the taxable profit against which a deductible temporary difference may be available, it will consider whether the tax legislation restricts the sources of taxable income against which it may make deductions at the time of the reversal of that temporary deductible difference. If the tax law does not impose those restrictions, an entity will evaluate a deductible temporary difference in combination with all others. However, if the tax law restricts the use of losses

to be deducted against income of a specific type, a deductible temporary difference will be evaluated in combination only with the appropriate rate.

The adoption of the foregoing modifications did not have any effects on the consolidated financial statements of the Group.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### • Amendments to IFRS12 – Disclosure of interests in other entities

The amendment made in compliance with the annual improvements to IFRS 2014-2016, applicable to those fiscal years beginning on or after January 1, 2017, introduces a change in the scope of this standard, considering that an entity does not need to provide summarized financial information for those equity interests in subsidiaries, associates or joint ventures which are classified (or included in a the held-for-sale group which is classified) as held for disposal. The amendments clarify that this is the only concession of the disclosure requirements of IFRS 12 for such equity interests.

The adoption of the foregoing modifications did not have any effects on the consolidated financial statements of the Group.

Standards or interpretations issued by the IASB, the application of which is not mandatory as of the closing date of these consolidated financial statements and which, therefore, have not been adopted by the Group.

#### • Amendments to IFRS 10 and IAS 28—Sale or contribution of assets between an investor and its associate or joint venture

In September 2014, the IASB amended IFRS 10 and IAS 28 to clarify that in transactions involving a controlled company, the extent of the gain or loss to be recognized in the financial statements depends on whether the sold or contributed controlled company is considered a business in accordance with IFRS 3.

On August 10, 2015, the IASB issued a proposal to postpone the effective date of these changes indefinitely depending on the outcome of its research project on accounting by the equity method, which was approved on December 17, 2015.

#### • IFRS 9—Financial Instruments

In July 2014, the IASB completed the amendment to the accounting for financial instruments and issued IFRS 9 "Accounting for financial instruments" (in its revised version of 2014 in effect for annual periods beginning on or after January 1, 2018), which will replace IAS 39 "Financial Instruments: Recognition and Measurement" after the expiration of the effective date thereof.

The following describes the key requirements of IFRS 9:

# • Classification and measurement of financial assets and liabilities:

The IFRS 9 requires that all recognized financial assets that are within the scope of IAS 39 Financial Instruments: Recognition and Measurement be subsequently measured at amortized cost or at fair value. Specifically, the debt instruments that are maintained within a business model whose objective is to collect the contractual cash flows, and which have contractual cash flows that are only principal and interest payments on the amount of outstanding capital, are generally measured at amortized cost at the end of subsequent accounting periods. All other investments in debt and equity securities are measured at their fair values as of the closing of subsequent accounting periods.

The most significant effect of IFRS 9 with respect to the classification and measurement of financial liabilities is related to the accounting for changes in the fair value of a financial liability (designated at fair value through profit or loss) attributable to the changes in the credit risk of such liability. Specifically, under IFRS 9, for financial liabilities that are designated at fair value through profit or loss, the amount of the change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognized in other comprehensive income, unless the recognition of the effects of the changes in the credit risk of the liability in other comprehensive income creates or increases a measurement inconsistency (accounting asymmetry) in the results. The changes in fair value attributable to the credit risk of the financial liability are not reclassified subsequently to the results of the fiscal year. Previously, under IAS 39, the total amount of the change in the fair value of the financial liability designated at fair value through profit or loss was recognized in the income statement of the fiscal year.

The Group has adopted IFRS 9 as of the transition date in advance in accordance with the regulations in force in 2013, which deal with everything related to the classification and measurement of financial assets and liabilities, so it is not expected that there will be an impact on the described treatments, based on the analysis of the Group's financial assets and liabilities as of December 31, 2017, and based on the facts and circumstances that exist on that date.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### • Impairment Methodology

The impairment model in accordance with IFRS 9 reflects expected credit losses, as opposed to credit losses incurred under IAS 39. In regard to the impairment in IFRS 9, it is no longer necessary for a credit event to occur before it is incurred. In contrast, an entity always accounts for both the expected credit losses and their changes. The amount of expected credit losses must be updated on each reporting date to reflect changes in credit risk from initial recognition.

During fiscal year 2017, the Group has analyzed the calculation model of the impairment of its commercial loans and other receivables, based on the simplified approach indicated by such standard. Moreover, it has evaluated the necessary changes in the systems and processes to record the expected credit losses, since until now the calculation contemplated the impairment due to the incurred loss.

The Group has prepared a matrix, based on certain special characteristics indicating the ability to repay the loan, such as i) payments in arrears, ii) existence of guarantees, iii) existence of a legal proceeding, among others; and it has also assigned an expected uncollectibility rate based on historical default rates adjusted to future economic conditions.

After the analysis, the Group considers that the application of the model will not have a significant effect on the financial statements for the fiscal year beginning on January 1, 2018.

#### Hedge accounting:

The general hedge accounting requirements of IFRS 9 maintain the three types of hedge accounting mechanisms included in IAS 39. However, the eligible types of hedge accounting transactions are now much more flexible, especially by expanding the types of instruments that are classified as hedging instruments and the types of risk components of non-financial elements ideal for hedge accounting.

In addition, the effectiveness test has been reviewed and replaced by the principle of "economic relationship". A retrospective evaluation is no longer required to measure the effectiveness of the coverage. Many more disclosure requirements have been added regarding the entity's risk management activities.

The Group does not anticipate that the application of this part of the standard will have a significant effect on its financial statements because it has not carry out this type of transactions at the end of the fiscal year ended December 31, 2017.

Additionally, during October 2017, a modification related to the early cancellation with negative compensation was introduced, for which the lender (i.e., the holder) could be forced to accept the payment for the early cancellation, of an amount substantially less than the unpaid amounts of principal and interest. In these cases, the amendment proposes that financial assets with these characteristics be measured at amortized cost or at fair value with changes in other comprehensive income.

The Group estimates that the application of this latest amendment, effective as of January 1, 2019 with the possibility of being applied before such date, will not have a significant effect on its financial statements because it has not carried out transactions with these characteristics.

### • IFRS 15—Income from ordinary activities arising from contracts entered into with customers

IFRS 15 is in effect for periods to be reported as from January 1, 2018, or afterwards, and may also be implemented in advance. Entities may decide whether to retrospectively apply the model or to use a modified transitional approach, to which the standard will be retrospectively applied only with regard to those contracts that are not completed by the initial date of application (e.g., January 1, 2018 for an entity with a fiscal year ended December 31).



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

IFRS 15 establishes an extensive and detailed model to be used by entities at the time of accounting for income from contracts entered into with their customers. It will replace the following Income Standards and Interpretations after the effective date:

- IAS 18 Revenue;
- IAS 11 Construction contracts;
- IFRIC 13 Customer loyalty programs;
- IFRIC 15 Agreements for the construction of real estate;
- IFRIC 18 Transfers of assets from customers; and
- SIC 31: Revenue Barter transactions involving advertising services.

As stated in the heading of the new income standard, IFRS 15 will only cover income from contracts entered into with clients. Under IFRS 15, a customer of an entity is a party that has executed a contract with such entity for the provision of goods and services that are the product of ordinary business activities in exchange for consideration. Unlike the scope of the IAS 18, the recognition and measurement of income from interest and dividends on the debt and investments in shareholders' equity are not contemplated under the scope of IFRS 15. Conversely, they are contemplated under the scope of IAS 39 "Financial Instruments: Recognition and Measurement" (or IFRS 9 "Financial Instruments", if such IFRS is adopted in advance).

As mentioned above, the new income standard relies upon a detailed model to explain income from contracts entered into with customers. Its fundamental principle is that an entity should recognize income to represent the transfer of goods or services promised to customers, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services.

The new income recognition standard adds a five-step approach to income recognition and measurement:

- 1. Identify the contract entered into with the customer.
- 2. Identify the separable obligations of the contract.
- 3. Determine the transaction price.
- 4. Allocate the transaction price between the obligations of the contract.
- 5. Recognize the income when the entity meets the obligations.

The new revenue standard has introduced many indications that are more prescriptive:

- If the contract (or combination of contracts) contains or does not contain more than one of the promised goods or services and, if so, when and how the goods or services should be delivered or provided.
- If the transaction price distributed to each performance obligation should be recognized as income over time or at a specific time. Under IFRS 15, an entity recognizes income when the obligation is satisfied, that is, when the control of the goods and services underlying a particular obligation is transferred to the customer. Unlike IAS 18, the new model does not include separate guidelines for the "sale of goods" and the "provision of services"; instead, it requires entities to assess whether income should be recognized over time or at a specific time, regardless of whether such income includes "the sale of goods" or "the provision of services".
- When the transaction price includes an element of estimation of variable payments, the way in which it will affect the amount and the time for the recognition of the income. The concept of variable payment estimation is broad. A transaction price is considered as a variable for discounts, refunds, credits, price concessions, incentives, performance bonds, penalties and contingency agreements. The new model introduces a material condition for variable consideration to be recognized as income: only until it is very unlikely that a significant change in the amount of accumulated income will occur when the uncertainties inherent in the variable payment estimate have been resolved.
- When the execution costs of an agreement and the performance costs thereof may be recognized as an asset.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

During fiscal year 2017, the Group has carried out tasks aimed at a preliminary evaluation of the impact generated by the application of this standard. In this process, the unique model of five-step income recognition, described in previous paragraphs, has been taken as the basis for analysis, and it has been applied to the following main income from contracts with customers:

- Contracts for the sale of fuels under the consigned pattern;
- Contracts for the direct sale of fuels;
- Contracts for the sale of natural gas;
- Contracts and sales agreements of other refined products;
- Construction contracts.

In the first four types of contracts, related to the sale of goods, income is recognized when ownership and risks of the goods are transferred to the customer. Even in the case of contracts under the consigned pattern, income is not recognized until the good is sold to the intermediary's customer. It is emphasized that in these contracts there are no separate performance obligations nor any obligations other than the delivery of goods.

In the case of the construction contracts, income is recognized considering the estimated final margin for each project that arises from technical studies on sales and the estimated total costs of each of them, as well as the physical progress thereof. In this type of contract, there are performance obligations that are fulfilled over time.

From such analysis, the Group has not identified a significant impact on its financial statements with respect to: (i) changes in transactions within the scope of the new standard; (ii) the identification of performance obligations; (iii) the determination and distribution of the price; (iv) the accrual of income accounts; with respect to the income recognition criteria that are being applied and which are described in the foregoing paragraphs.

On the contrary, in accordance with the introduced requirements the need has been identified to make new dissagregations of the information to be disclosed. To such effect, the Group has evaluated to make such dissagregations based on the analysis carried out by the Board of Directors on this item; consequently, it is expected that a breakdown of the income reported in note 19 will be incorporated by (i) type of good or service and target market, and (ii) sales channels. In addition, the Group has reviewed and adapted its information, management and reporting systems.

### IFRS 16—Leases

IFRS 16 is in effect for reporting periods beginning on January 1, 2019 and its implementation in advance is permitted for entities that use IFRS 15 "Revenue from ordinary activities from contracts entered into with customers" prior to the date of initial application of IFRS 16.

IFRS 16 sets out the principles required for the recognition, measurement, presentation and disclosure of leases. The purpose thereof is to ensure that lessees and lessors provide relevant information in a way that faithfully represents those transactions. The changes incorporated by such standard mainly impact the accounting of tenants. It will replace the following Standards and Interpretations after the effective date thereof:

- IAS 17 "Leases";
- IFRIC 4 "Determination whether an agreement contains a lease";
- SIC 15 "Operating leases-incentives"; and
- SIC 27 "Evaluating the substance of transactions involving the legal form of a lease".

This standard applies to all leases, including leases of rights-of-use assets in a sublease, with the exception of specific leases covered by other standards:

• Leases to explore or use minerals, oil, natural gas and similar non-renewable resources;

| • | Leases of biological | assets within the | e scope of IAS 41 | l "Agriculture" | kept by a lessee; |
|---|----------------------|-------------------|-------------------|-----------------|-------------------|
|---|----------------------|-------------------|-------------------|-----------------|-------------------|



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

- Contracts included in the scope of application of IFRIC 12 "Service Concession Agreements";
- Intellectual property licenses granted by a lessor within the scope of IFRS 15 "Revenue from contracts with customers"; and
- Rights enjoyed by a lessee under license agreements that are within the scope of IAS 38 "Intangible assets" for items such as movies, videos, games, manuscripts, patents and copyrights.

The new leasing rule has introduced many other prescriptive indications:

### • Measurement of the asset by right of use

The cost of the right to use the assets includes the following items:

- (a) the amount of the initial measurement of the lease liability (as described below);
- (b) any rent paid to the lessor prior to the commencement date or on the same date, after discounting any incentive received for the lease;
- (c) the initial direct costs incurred by the lessee; and
- (d) an estimate of the costs to be incurred by the lessee in dismantling and eliminating the underlying asset, restoring the place where the underlying asset is located or restoring the underlying asset to the condition required by the terms and conditions of the lease, unless such costs are incurred at the time of making of the inventories. The lessee could incur certain obligations because of such costs either on the date of commencement of the term of the lease, or because of having used the underlying asset during a specified period.

Subsequently, the valuation of the right to use the assets will be based on the cost model or the revaluation model under IAS 16 "Property, Plant and Equipment" (recognizing therefore the amortization and impairment in the profit and loss account and, if applicable the revaluation model, revaluations in equity). However, the IFRS 16 requires that the right to use a leased property investment be valued at its fair value under the provisions set forth in IAS 40 "Investment properties" for the investment property it holds.

#### Lease liability

A lessee will measure the lease liability at the present value of the lease payments that have not been paid on that date. Lease payments will be discounted using the interest rate implied in the lease, if that rate could be easily determined. If that rate cannot be easily determined, the lessee will use the incremental rate for the lessee's loans.

Lease liabilities must include the following items:

- (a) fixed payments (including essentially fixed payments), less any lease incentive receivable;
- (b) variable payments, which depend on an index or a rate, initially measured by using the index or rate (e.g., payments related to the consumer price index, prices related to a benchmark interest rate such as LIBOR, or payments that vary to reflect changes in market rental prices) on the effective date of the contract;
- (c) amounts that the lessee expects to pay as residual value guarantees;
- (d) the exercise price of a call option if the lessee is reasonably certain to exercise that option; and
- (e) payment of penalties for terminating the lease, if the lease period reflects that the lessee will exercise an option to terminate it (i.e., because there is a reasonable certainty thereon).

Subsequently, the lessee will be increasing the liability for the lease to reflect the accrued interest (and recognized in the profit and loss account), deduct the installments that are being paid from such liability and recalculate the book value to reflect any review, amendment to the lease or review of the so-called "in-substance" installments.



# 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### • Revision of the lease liability

The lessee must review the lease liability in the following cases:

- (a) when there is a change in the amount expected to be paid under a residual value guarantee;
- (b) when there is a change in future rental payments to reflect the variation of an index or an interest rate used to determine such rental payments (including, for example, a market rent review);
- (c) when there is a change in the term of duration of the lease as a result of a change in the non-cancellable period of the lease (for example, if the lessee does not exercise an option previously included in the determination of the lease period); or
- (d) when there is a change in the evaluation of the call option of the underlying asset.

### Lessor's accounting

IFRS 16 requires the lessor to classify the lease as operational or financial. A finance lease is a lease in which substantially all the risks and benefits derived from ownership of the asset are transferred. A lease will be classified as operating if it does not transfer substantially all the risks and benefits derived from the ownership of an underlying asset.

The classification of the lease is made on the effective date of the agreement and is evaluated again only if there is an amendment to the lease. Changes in estimates (e.g., changes in the economic life or in the residual value of the underlying asset) or changes in circumstances (e.g., non-compliance by the lessee) will not result in a new classification of the lease for accounting purposes.

### • Sale and Leaseback Transactions

This type of transaction is dealt with from the point of view of the lessee-seller as lessor-buyer. The fundamental aspect of dealing with such transactions depends on whether the transfer of the relevant asset meets the criteria of IFRS 15 "Revenue from contracts with customers", to be recognized as a sale.

The Group is still in the process of assessing the full impact of the IFRS 16 application on its financial statements and does not intend to apply such standard in advance.

### Amendments to IFRS 2—Classification and Measurement of Share-based Payment Transactions

In June 2016, the IASB amended IFRS 2, and such amendments are to be applied for fiscal years beginning on or after January 1, 2018, though they may be implemented in advance.

IFRS 2 has been amended to reflect the following:

- For share-based payment transactions that are settled in cash, the goods or services purchased and the liability, which they incur, will be measured at the fair value of the liability, subject to the requirements of this standard. Until the liability is settled, the fair value of the liability is remeasured at the end of each reporting period, as well as on the settlement date, recognizing any change in fair value in the results for the period.
- The conditions for the irrevocability of concession and conditions other than the irrevocability of the concession, other than market conditions, will not be taken into account when estimating the fair value of the share-based payment that is settled in cash on the date of measurement. Instead, they will be taken into account by adjusting the number of incentives included in the measurement of liabilities arising from the transaction. Accordingly, an amount will be recognized for the goods or services received during the period up to the irrevocability of the concession. This amount will be based on the best available estimate of the number of incentives that are expected to be irrevocable.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

• If the terms and conditions of a share-based payment transaction to be settled in cash are modified to become a share-based payment transaction that is settled by equity securities, such transaction will be accounted for as of the date of the modification. Specifically, (a) a share-based payment transaction that is settled by equity securities is measured by reference to the fair value of the equity securities granted on the date of the modification. The share-based payment transaction settled by equity securities is recognized in equity on the date of the change, in proportion to the goods or services that have been received; (b) the liability for the share-based payment transaction settled in cash on the date of the amendment will be written off in the accounts on the same date; and (c) any difference between the carrying amount of the written off liability and the amount of equity recognized on the date of the change will be recognized immediately in the income statement for such period.

The Group does not anticipate that the application of the amendments to the standard will have a significant effect on its financial statements.

#### • IFRIC 22—Transactions in Foreign Currency and Advance Payments

In December 2016, the IASB approved the interpretation of IFRIC 22 "Transactions in foreign currency and advance payments", which is applicable for the fiscal years beginning on or after January 1, 2018, though they may be implemented in advance. The scope of this interpretation applies to a foreign currency transaction (or any part thereof) where an entity recognizes a non-financial asset or non-financial liability arising from the payment or collection of an early consideration before the entity recognizes the asset, expense or related income (or any part thereof that may be appropriate). This interpretation does not apply when an entity measures the related asset, expense or income at the time of the initial recognition: (a) at fair value; or (b) the fair value of the consideration paid or received as of a date other than that of the initial recognition of the non-monetary asset, or non-monetary liability, arising from the anticipated consideration (e.g., measurement of the goodwill by applying the IFRS 3 "Business Combinations").

The Group does not anticipate that the application of the interpretation of the standard will have a significant effect on its financial statements.

#### • Annual improvements to IFRS –2014 – 2016 Cycle

In December 2016, the IASB issued the annual improvements 2014 - 2016, which are applicable to fiscal years beginning on or after January 1, 2018, though they may be implemented in advance.

| Standard  | Amended Subject   | Detail  |
|---|---|---|
| IFRS 1 "First-time                                    | Elimination of short-                                       | The amendment introduces the deletion of paragraphs that consider the limited   |
| Adoption of International                             | term exemptions for   | exemption of comparative disclosure from IFRS 7 for first-time adopters of  |
| Financial Reporting Standards"                        | first-time adopters of IFRS.                                | IFRS, disclosures of transfers of financial assets and paragraph 39AA considered the annual best improvements to IFRS 2014-2016 Cycle.  |
| IAS 28 "Investments in associates and joint ventures" | Measurement at fair value of an associate or joint venture. | The amendment introduces changes in relation to the exemption and the procedures to be applied to the equity method, clarifies that an entity will apply this exemption or the method separately to each associate or joint venture, in the case of exemption in the initial recognition of the associate or joint venture, and with respect to the method on a date that is the later of: a) when the associate or joint venture that is an investment entity is initially recognized; b) when the associate or joint venture becomes an investment entity; or c) when the associate or joint venture that is an investment entity becomes a parent company. |

The Group does not anticipate that the application of the amendments to the standard will have a significant effect on its financial statements.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### • Amendments to IAS 40—Investment Properties

In December 2016, the IASB made amendments to IAS 40 applicable to fiscal years beginning on or after January 1, 2018.

IAS 40 has been modified to reflect that in relation to transfers, an entity will transfer an investment property to, or from investment properties when, and only when, there is a change in use. This change in use occurs when a property meets or fails to meet the definition of investment property and there is evidence of a change in use. It also clarifies that the change in the management's intentions regarding the use of a property does not provide evidence of a change of use.

The Group does not anticipate that the application of the amendments to the abovementioned standards will have a significant effect on its financial statements.

### • IFRIC 23—Uncertainty about income tax treatment

The Interpretation issued in June 2017 clarifies how to apply the recognition and measurement requirements of IAS 12 when there is uncertainty regarding income tax treatment.

For such purpose, the entity must evaluate whether the tax authority will accept an uncertain tax treatment used, or proposed to be used, or which is intended to be used in its income tax return.

If an entity concludes that the tax authority is likely to accept an uncertain tax treatment, the entity will determine the tax position consistent with the tax treatment used or intended to be used on its income tax return. If an entity concludes that such acceptance is improbable, the entity will reflect the effect of the uncertainty in determining the fiscal result, the tax bases, unused tax credits and tax rates. An entity will reflect the effect of the uncertainty for each uncertain tax treatment by using one of the following methods, depending on which method the entity expects to better predict the resolution of the uncertainty:

- The most probable amount—the only most probable amount in a range of possible outcomes. The most probable amount may better predict the resolution of the uncertainty if the possible outcomes are dual or are concentrated in a value.
- The expected value—the addition of the amounts weighted by their probability in a range of possible outcomes. The expected value may better predict the resolution of the uncertainty if there is a range of possible outcomes that are not dual or are concentrated in a value.

This amendment will be effective for the fiscal years beginning on or after January 1, 2019 and may be early applied.

The Group is in the process of evaluating the impact of this modification on its financial statements.

### Amendments to IAS 28 – Long-term Investments in associates and joint ventures

In October 2017, the IASB issued amendments to IAS 28, which are applicable to the fiscal years beginning on or after January 1, 2019, allowing early application. It is recommended to apply this modification simultaneously with the application of IFRS 9 for the first time.

The amendment defines that the long-term investments in associates and joint ventures, which are not accounted for using the equity method, will be accounted for in accordance with IFRS 9.

The Group estimates that the application of the aforementioned interpretation will not have a significant effect on the financial statements of the Company.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### Annual improvements to IFRS—2015-2017 cycle

In December 2017, the IASB issued the 2015-2017 cycle of annual improvements that are applicable for the years beginning on or after January 1, 2019, allowing early application.

A summary of the main modified standards and their purpose follows:

| Standard                                       | Amended Subject                                   | Detail  |
|--|---|---|
| IFRS 3 "Business                               | Holdings previously                               | The amendment to IFRS 3 establishes that when obtaining control of a business   |
| Combinations" and IFRS 11 "Joint arrangements" | held in a joint operation                         | that was a joint operation, the acquirer will apply the requirements for a business combination carried out in stages, including the re-measurement of its previously held share in the joint operation at the reasonable value on the acquisition date. On the other hand, the amendment to IFRS 11 establishes that when obtaining joint control of a business that was a joint operation, it does not measure again its previously held shares.  |
| IAS 12 "Income Tax"                            | Exposure of the effect of dividends on Income Tax | The amendment clarifies that the entity will recognize the consequences of the dividends on the income tax where it has recognized the transactions or events that gave rise to those distributable profits.  |
| IAS 23 "Loan Costs"                            | Capitalization of generic loans                   | The amendment to this standard clarifies that, for the capitalization of costs from generic loans, it must necessarily consider all outstanding loans when determining the capitalization rate, except those taken specifically to finance an eligible asset that is not yet ready for its intended use or sale; i.e., if any specific loan remains unpaid after the related eligible asset is ready for its intended use or for sale, that loan becomes part of the funds that the entity took as generic loans. |

The Group does not anticipate that the application of the amendments to the mentioned standards will have a significant effect on its financial statements.

### • Amendments to IFRS 4—Application of IFRS 9 "Financial Instruments" with IFRS 4 "Insurance Contracts"

In September 2016, the IASB issued amendments to IFRS 4 that are applicable to those fiscal years beginning on or after January 1, 2018.

The Group does not anticipate that this standard will have effects on its financial statements, because of not providing this type of services.

### IFRS 17—Insurance contracts

The IFRS 17 issued in May 2017 is applicable to those fiscal years beginning on or after January 1, 2021, allowing its early application and replacing IFRS 4.

The Group does not anticipate that this standard will have effects on its financial statements because it does not provide this type of services



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

### 2.c) Accounting Estimates and Judgments

The items in the financial statements and areas which require the highest degree of judgment and estimates in the preparation of these financial statements are:

### Crude oil and natural gas reserves

Estimating crude oil and gas reserves is an integral part of the Group's decision-making process. The volume of crude oil and gas reserves is used to calculate depreciation using the unit of production ratio and to assess the impairment of the capitalized costs related to the Upstream assets (see Notes 2.b.8 and 2.b.9 and the last paragraph of this Note).

The Group prepares its estimates of crude oil and gas reserves in accordance with the rules and regulations established for the crude oil and natural gas industry by Rule 4-10 (a) of Regulation S-X of the SEC.

### Provision for litigation and other contingencies

The final costs arising from litigation and other contingencies, and the perspective given to each issue by the Management of the Company may vary from their estimates due to different interpretations of laws, contracts, opinions and final assessments of the amount of the claims. Changes in the facts or circumstances related to these types of contingencies can have, consequently, a significant effect on the amount of the provisions for litigation and other contingencies recorded or the perspective given by the Management of the Company.

### Provision for environmental costs and obligations for the abandonment of hydrocarbon wells

Given the nature of its operations, the Group is subject to various laws and regulations relating to the protection of the environment. These laws and regulations may, among other things, impose liability on companies for the cost of pollution cleanup and environmental damages resulting from operations. YPF management believes that the Group's operations are in substantial compliance with laws and regulations of Argentina and the countries where the Group operates, relating to the protection of the environment as such laws have historically been interpreted and enforced.

The Group periodically conducts new studies to increase its knowledge of the environmental situation in certain geographic areas where it operates in order to establish the status, cause and remedy of a given environmental issue and, depending on its years of existence, analyze the Argentine Government's possible responsibility for any environmental liabilities existing prior to December 31, 1990. The Group cannot estimate what additional costs, if any, will be required until such studies are completed and evaluated; however, provisional remedial or other measures may be required.

In addition to the hydrocarbon wells abandonment legal obligation, the Group has accrued environmental remediation which evaluations and/or remediation works are probable and can be reasonably estimated, based on the Group's existing remediation program. Legislative changes, on individual costs and/or technologies may cause a re-evaluation of the estimates. The Group cannot predict what environmental legislation or regulation will be enacted in the future or how future laws or regulations will be administered. In the long-term, these potential changes and ongoing studies could materially affect the Group's future results of operations.

The main guidelines on the provision for the obligations for the abandonment of hydrocarbon wells are set forth in detail in Note 2.b.6.

### Income tax and deferred income tax

The proper assessment of income tax expenses depends on several factors, including interpretations related to tax treatment for transactions and/or events that are not expressly provided for by current tax law, as well as estimates of the timing and realization of deferred income taxes. The actual collection and payment of income tax expenses may differ from these estimates due to, among others, changes in applicable tax regulations and/or their interpretations, as well as unanticipated future transactions affecting the Group's tax balances.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

Provision for impairment of property, plant and equipment and intangible assets

The methodology used in estimating the recoverable amount of property, plant and equipment and intangible assets is stated detailed in Note 2.b.8 and 2.b.9.

The determination of whether an asset is impaired, and by how much, involves management's estimates of highly uncertain matters such as the effects of inflation and deflation on operating expenses, discount rates, production profiles, reserves and future prices of the products, including the prospects of supply and demand conditions of the world or regional market for crude oil, natural gas and refined products, all of which affects the prices taken into account in the projection. Consequently, for oil and natural gas assets, the expected future cash flows are determined using management's best estimate of future oil and natural gas prices and production volumes and reserves. The foregoing implies the use of assumptions about future commodity prices, production and development costs, field decline rates, current tax regimes and other factors. These assumptions and the management decisions on which the estimates of expected cash flows are based are subject to changes as new information becomes available. Changes in economic conditions may also affect the rate used to discount future cash flow estimates.

With regard to the analysis of prior periods until recently, the applicable domestic prices of petroleum products were established for the short term mainly based on negotiations between Producers and Refiners of the country, without keeping a direct or specific reference with respect to the international quotations of such products. That is, the domestic market was decoupled from the international market in terms of prices, which was evidenced in certain periods with movements of prices in meanings (or values) substantially different from those observed in the international market. Notwithstanding the foregoing, the local market started a process to achieve an orderly transition towards international prices (which evidenced a substantial reduction since mid-2014), all of which caused a gradual 6% reduction in the prices of sales of Medanito and Escalante crude oil on the local market (2% monthly as of August 2016).

Likewise, in January 2017, Producers and Refiners reached a new agreement for the transition referred to above, in which a path of prices was established for the sale of oil in the domestic market for the purpose of achieving parity with the international markets during 2017, which took place during the last quarter of 2017. As stated above, this readjustment of prices in the domestic market and other signs that aimed at a convergence with international prices in the near future, coupled with a decline in the prices expected in the medium term compared to the estimates existing as of December 31, 2015, were considered as evidence of impairment of the value of the assets of the CGU Oil in the fiscal year ended December 31, 2016.

Based on the aforementioned methodology, the expected decrease in the oil price as of December 31, 2016 together with the evolution of the cost behavior in terms of macroeconomic variables and the operational behavior of the Group's assets, caused CGU Oil to record an impairment charge for property, plant and equipment in the Upstream segment of 34,943 and 2,361 as of December 31, 2016 and 2015, respectively. The CGU Oil recoverable value after taxes as of December 31, 2016 and 2015 was 71,495 and 76,829 respectively.

In addition, as of December 31, 2015, the Group had recorded a charge for impairment of property, plant and equipment, with respect to the CGU Oil—YPF Holdings, which grouped the assets of the crude oil production fields in the United States which amounted to 94, due to a decline in international crude oil prices. The fair value of the CGU Oil—YPF Holdings amounted to 179. The Group also recorded an impairment charge of intangible assets of 80 related to rights in exploratory areas whose recoverable value was zero. During the fiscal year 2016, this CGU was deconsolidated.



### 2. BASIS OF PREPARATION OF THE CONSOLIDATED FINANCIAL STATEMENTS (Cont.)

Considering what has been mentioned in the previous paragraphs, and in terms specifically of prices according to the expected new behavior of the domestic fuel market (import / export parity), as of December 31, 2017 the expected future cash flows were determined using the estimated future prices, which are based on a forecast thereof made by the Group, which takes into account multiple forecasts or independent estimates. Additionally, prices do not scale to levels that exceed historical market prices observed in the past, applied to projected future production volumes. Moreover, the projected and estimated production volumes for estimating the cash flow are based on the oil and natural gas estimates made at the end of the period.

In general, the Group does not consider temporarily low (or high) prices or margins as an indication of impairment (or reversal of an impairment charge). The impairment assessment mainly reflects long-term oil and natural gas prices that are consistent with intermediate points between the maximum and minimum ranges observed in the market and that are in the range of price forecasts published by third-party experts of the industry and government agencies, within which are the long and short term projections of the "US Energy Information Administration" and the Brent crude forward curve. The assumptions of future prices used by Management of the Company tend to be stable because it does not consider short-term increases or decreases in prices to be indicative of long-term levels, but they are subject to change.

As of December 31, 2017, the Group recognized a reversal in the charge for impairment of the value of its assets for the CGU Oil of 5,032, which arises from the combination of multiple factors, such as the variation in production and associated investments considered in the flow, the effect of variations in operating and abandonment costs, the variation in the discount rate and, to a lesser extent, the variation in oil prices, taking into account also the book value of the assets as of December 31, 2017 affected by depreciation charges for the year and investments made, among others. As indicated above, at the end of 2017, Management of the Company does not see any significant changes in the long-term price curves, given that it does not consider recent (positive) changes in commodity prices, taking into account the high observed volatility, and until the variables that impact them demonstrate a certain stability over time. The recoverable value as of December 31, 2017 of the CGU Oil, after taxes, was 82,802.

### 2.d) Comparative Information

Balance items as of December 31, 2016 and 2015 presented in these financial statements for comparison purposes arise from the consolidated financial statements then ended.

### 3. ACQUISITIONS AND DISPOSITIONS

### Agreement for YPF EE's capitalization

On December 14, 2017, the Board of Directors of the Company approved the terms of a memorandum of understanding signed with GE Energy Financial Services, Inc. ("GE EFS") which established the framework conditions under which the parties would agree to the capitalization of YPF EE. This Agreement, the framework conditions of which were approved by the Board of Directors of the Company, established that GE EFS intended to contribute capital through a vehicle company and subscribe for shares of YPF EE in order to have a shareholding of 25% of its capital stock.

On February 6, 2018, YPF entered into a definitive and binding agreement with EFS Global Energy B.V. ("GE") and GE Capital Global Energy Investments B.V., companies indirectly controlled by GE EFS, which establishes the conditions for the capitalization of YPF EE (the "Share Subscription Agreement"). The Share Subscription Agreement establishes that, subject to compliance with certain conditions precedent, GE will subscribe for shares of YPF EE in order to achieve a participation equal to 24.99% of its capital stock and jointly control this company with YPF.



### 3. ACQUISITIONS AND DISPOSITIONS (Cont.)

The contribution will be composed as follows:

- Subscription price of US\$ 275 million:
  - US\$ 135 million as of the closing date of the transaction; and
  - US\$ 140 million 12 months after the closing date of the transaction.
- Contingent price of up to the maximum sum of US\$ 35 million subject to the evolution of the prices of Resolution 19/17 (33.33% as of 24 months from the closing date of the transaction and 16.67% each subsequent year).

It is estimated that the transaction will be consummated during the month of March 2018.

In this way, the capital structure of YPF EE after the issuance of shares will be as follows:

| Shareholder | Number of<br>Shares | Participation in the capital stock | Kind of Share |
|-------------|---------------------|------------------------------------|---------------|
| YPF         | 2,723,826,879       | 72.69218%                          | A             |
| OPESSA      | 86,476,112          | 2.30783%                           | A             |
| Group       | 2,810,302,991       | 75.00001%                          | A             |
| GE          | 936,767,364         | 24.99999%                          | В             |
| Total       | 3,747,070,355       | 100.00000%                         |               |

As a result of this process, the Group reflects the investment in YPF EE in its consolidated financial statements as of December 31, 2017 as assets and liabilities held for disposal in separate lines from the rest of the assets and liabilities, given that as of that date they had met all the requirements for this classification. (See Note 2.b.24).

According to IFRS 5, assets and liabilities held for disposal must be valued at book value or fair value less costs of the transaction, whichever is lower. Given that, at the time of classification, the fair value less costs of the transaction was higher, the investment in YPF EE has been valued at its book value, therefore, no impairment has been recorded at the time of reclassification nor has it been recorded as of December 31, 2017.

Although YPF EE represents a component within YPF because it is an individual CGU within the Gas and Energy segment, it does not qualify as a discontinued operation since it does not represent a significant line of business nor a geographical area.

The following table shows the main assets and liabilities held for disposal.

• Group of assets held for disposal:

|  | December 31,<br>2017 |
|--|----------------------|
| Property, plant and equipment                | 4,982                |
| Investments in associates and joint ventures | 2,117                |
| Inventories                                  | 1                    |
| Other receivables                            | 914                  |
| Credits for sale                             | 713                  |
| Investments in financial assets              | 78                   |
| Cash and cash equivalents                    | 61                   |
| Subtotal                                     | 8,866                |
| Deletions                                    | (43)                 |
| Total  | 8,823                |

• Liabilities associated to the group of assets held for disposal:

| December 31,<br>2017 |
|----------------------|
| 96                   |
| 282                  |
| 47                   |
| 1                    |
| 4,072                |
| 938                  |
| 5,436                |
| (1,243)              |
| 4,193                |
|                      |



### 3. ACQUISITIONS AND DISPOSITIONS (Cont.)

The following table shows the main results associated with the investment in YPF EE:

|                                      | December 31,<br>2017 |
|--------------------------------------|----------------------|
| Income                               | 1,908                |
| Costs                                | (594)                |
| Gross income                         | 1,314                |
| Operating profit                     | 1,122                |
| Income from investments in companies | 90                   |
| Net financial results                | (76)                 |
| Income Tax                           | (268)                |
| Net income without deletions         | 868                  |
| Deletions                            | 241                  |
| Net income with deletions            | 1,109                |

Regarding the participation held after the aforementioned transaction, the Group has followed the guidelines of IFRS 10 "Consolidated financial statements" and has concluded that from the entry of GE in YPF EE, GE and YPF will jointly control YPF EE Consequently, the Group will apply IFRS 11 "Joint Arrangements" defining such company as a joint venture, and will assess it according to the equity method under the IAS 28 "Investments in associates and joint ventures", once the transaction has been concluded.

Some of the main evaluated assumptions are described below:

- (i) Any decisions about the relevant activities thereof are to be taken jointly, there being no power of one shareholder over the other in relation to the investment, regardless of the different percentages of equity interests held by each of them. Although the Group will own a 75% stake in YPF EE, according to the shareholders' agreement, the approval of at least one Director appointed by each class of shares at the meeting of the Board of Directors or the approval of the full class of shares at the meeting of Shareholders is required for decision-making purposes regarding the relevant activities;
- (ii) No shareholder has any power, as defined in IFRS 10 to the detriment of any other, independently of the number of Directors or personnel (key or not) appointed by each class of shares, in the management of the Company for its own benefit or to unilaterally modify the variable investment returns or ultimately, to unilaterally direct any of the decisions associated with the relevant activities.

### • Assignment of the Cerro Bandera area

YPF and Oilstone Energía S.A. ("OESA") entered into an agreement for the assignment of 100% of the exploitation concession of the Cerro Bandera area in the province of Neuquen (the "Concession") on November 22, 2017. It should be noted that OESA operates the block since 2011 under the respective operating Agreement subscribed with YPF.

The agreement considers the assignment of the Concession for US\$14 million. Moreover, the agreement sets forth that YPF maintains rights, under certain terms and conditions, to (i) the Vaca Muerta and Molles formations, in which it may continue to carry out exploration and potential exploitation works; and (ii) an exploratory project in the northern region of the Concession, and its potential exploitation.

The entry into force of the assignment is subject to compliance with certain conditions precedent, which must be met before May 22, 2018. The above conditions mainly refer to the authorization of the assignments of participation provided in the assignment Agreement by the Executive Branch of the Province of Neuquén.



### 3. ACQUISITIONS AND DISPOSITIONS (Cont.)

### • Assignment of equity interest in the Aguada de la Arena area

As part of the acquisition by Pampa Energía S.A. ("PEPASA") of the total shares of Petrobras Participaciones S.L., which held 67.2% of the capital and voting rights of Petrobras Argentina S.A. ("PESA"), YPF and PEPASA entered into an agreement subject to certain conditions precedent under which, once the acquisition by PEPASA of shareholding control of PESA had been completed, PESA transferred to YPF its equity interests in the operating concessions of two areas located in the Neuquén basin with production and high potential for gas development (of the tight and shale type), to be operated by YPF, in the percentages detailed below: (i) 33.33% participation in the Río Neuquén area, located in the Province of Neuquén and in the Province of Río Negro; and (ii) 80% participation in the Aguada de la Arena area, located in the Province of Neuquén.

In order to implement this agreement, PEPASA and YPF signed a Framework Agreement for the Financing and Acquisition of Units and a Loan Agreement under which YPF, on July 25, 2016, granted PEPASA a guaranteed loan for the Indirect acquisition of the aforementioned areas in the amount of US\$ 140 million, equivalent to the acquisition price of the aforementioned units, which does not differ from the fair value of the participation in said areas.

On October 14, 2016, the assignment of the equity interests in the operating concessions between YPF and PESA was consummated, as follows: (i) an equity interest of 33.33% in the Río Neuquén area for the sum of US\$ 72 million; and (ii) an equity interest of 80% in the Aguada de la Arena area, for the sum of US\$ 68 million.

On February 23, 2017, YPF and Petrouruguay S.A. subscribed the definitive agreement for the assignment in favor of YPF of 20% of the equity interests in the Aguada de la Arena area for US\$ 18 million. Thus, YPF increased its participation to 100% in the aforementioned area.

On March 31, 2017, YPF cancelled, 33.33% of its participation in the Río Neuquén area and 80% of its participation in the Aguada de la Arena area through a payment in kind pursuant to an assignment in favor of PESA of its contractual position under the loan contract with PEPASA.

### • Increased equity interest in YPF Gas and OTC

On May 7 2015, Repsol Butano S.A. transferred to YPF shares representing 33.997 % of YPF Gas's capital stock and Repsol Trading S.A. transferred to YPF 17.79% of OTC's capital stock. The amount of the transaction was 161.



### 4. FINANCIAL RISK MANAGEMENT

The Group's activities involve various types of financial risks: market risk (including exchange rate risk, interest rate risk and price risk), credit risk and liquidity risk. The Group maintains an organizational structure and systems that allow the identification, measurement and control of the risks to which it is exposed.

### Market Risk

The market risk to which the Group is exposed is the possibility that the valuation of the Group's financial assets or financial liabilities as well as certain expected cash flows may be adversely affected by changes in interest rates, exchange rates or certain other price variables.

The following is a description of these risks as well as a detail of the extent to which the Group is exposed and a sensitivity analysis of possible changes in each of the relevant market variables.

### Exchange Rate Risk

The value of financial assets and liabilities denominated in a currency different from the Company's functional currency is subject to variations resulting from fluctuations in exchange rates. Since YPF's functional currency is the U.S. dollar, the currency that generates the greatest exposure is the Argentine peso (the Argentine legal currency).

The Group does not use derivatives as a hedge against exchange rate fluctuations. While during fiscal year 2015 the Group started to operate with U.S. dollars future exchange rate agreements (until their complete termination in fiscal year 2016), for IFRS 7"Financial instruments: disclosures" no exchange rate risk arises from financial instruments denominated in the Company's functional currency.

Otherwise, according to the Company's functional currency, and considering the currency exchange process, the fluctuations in the exchange rate related to the financial assets and liabilities' value in pesos do not have any effect in the Other comprehensive income in Shareholders' equity.

The following table provides a breakdown of the effect a variation of 10% in the prevailing exchange rates on the Group's net income, taking into consideration the exposure of financial assets and liabilities denominated in pesos as of December 31, 2017:

|                                  | Appreciation (+) / depreciation (-) of exchange rate of peso against U.S. dollar | Income(loss) for fiscal year ended December 31, 2017 |
|----------------------------------|--|--|
| Impact on net income before      |  |  |
| income tax corresponding to      | +10%   | 1,248  |
| financial assets and liabilities | -10%   | (1,248)  |

### Interest Rate Risk

The Group is exposed to risks associated with fluctuations in interest rates on loans and investments. Changes in interest rates may affect the interest income or expenses derived from financial assets and liabilities tied to a variable interest rate. Additionally, the fair value of financial assets and liabilities that accrue interests based on fixed interest rates may also be affected.

The table below provides information about the financial assets and liabilities as of December 31, 2017 that accrues interest considering the applicable rate:

|                        | Financial<br>Assets <sup>(1)</sup> | Financial<br>Liabilities <sup>(2)</sup> |
|------------------------|------------------------------------|---|
| Fixed interest rate    | 2,100                              | 149,306                                 |
| Variable interest rate | 1,968                              | 41.757                                  |
| Total <sup>(3)</sup>   | 4,068                              | 191,063                                 |
| Total                  | 4,000                              | 191,003                                 |

- (1) Includes temporary investments. Loans with related companies and trade receivables with interest-bearing payment agreements. It does not include the rest of the trade receivables that are mostly non-interest bearing
- (2) Includes only financial loans. Does not include accounts payable, which mostly do not accrue interest.
- (3) Includes principal and interest.



### 4. FINANCIAL RISK MANAGEMENT (Cont.)

The variable rate financial loans represent 22% of the total loans as of December 31, 2017, and include NO, pre-financing of exports, financing of imports and financial loans with local and international entities. The portion of the loan, which accrues variable interest rate, is mainly exposed to the fluctuations in LIBOR and BADLAR. Approximately 31,500 accrues variable interest of BADLAR plus a spread between 0% and 6% and 8,509 accrues variable interest of LIBOR plus a spread between 1.4% and 7.5%.

Approximately 77% (146,353) of the total of the financial loans of the Group is denominated in U.S. dollars, 3% (5,785) is in Swiss francs and the remainder is mainly in Argentine pesos, as of December 31, 2017.

Financial assets mainly include, in addition to trade receivables, which have low exposure to interest rate risk, bank deposits, fixed-interest deposits and investments in mutual funds such as "money market" or short-term fixed interest rate instruments.

The Group's strategy to hedge interest rate risk is based on placingfunds at a variable interest rate, which partially offset financial loans at a variable interest rate, as well as on maintaining relatively low percentages of debt at a floating interest rate.

The Group does not usually use derivative financial instruments to hedge the risks associated with interest rates.

The table below shows the estimated impact on consolidated comprehensive income that an increase or decrease of 100 basis points in the interest rate would have.

|                            | Increase (+) / decrease (-) in the interest rates (basis points) | Income(loss) for fiscal year ended December 31, 2017 |
|----------------------------|--|--|
| Impact on net income after | +100   | (257)  |
| income tax                 | -100   | 257  |

### Other Price Risks

Although not considered a financial risk, until recently, the Group was not significantly exposed to commodity price risks, as a result, among other reasons, of the existing regulatory, economic and government policies in force that determined that local prices charged for gasoline, diesel and other fuels were not affected in the short-term by fluctuations in the price of such products in international and regional markets. Additionally, the Group was impacted by certain regulations that affected the determination of export prices received by the Group, such as those mentioned in Note 30, which consequently limits the effects of short-term price volatility in the international market. That is, there was a gap between domestic market prices and international market prices, which was evident in certain periods with price variations in directions (or values) substantially different from those observed in the international market.

However, as mentioned above, since the second semester of 2016 a local process was initiated to achieve an orderly transition towards international prices, which implied a gradual decrease in the sales prices of local crudes (Medanito and Escalante). In the same way, in January 2017, the Producers and Refiners entered into a new agreement for the above mentioned transition, in which a range of prices was established for the sale of oil on the domestic market, for the purpose of achieving parity with international markets during fiscal year 2017, all of which occurred during the last quarter of 2017.

Given this transition process to international prices and also that export duties on external prices were not extended in January 2017, the aforementioned price risk exposure has changed and it will depend on the capacity of the Group to transfer to its fuel prices on the local market, the variations in international prices as well as the possibility of adapting its costs to such changes.

In addition, the Group is exposed to the own price risk for investments in financial instruments (public securities and mutual funds), which were classified in the statement of financial position as "at fair value through profit or loss". The Group continuously monitors the change in these investments for significant movements.



### 4. FINANCIAL RISK MANAGEMENT (Cont.)

As of December 31, 2017, the aggregate value of financial assets at fair value through profit or loss amounts to 31,987.

The following table shows the effect that a 10% variation in the prices of investments in financial instruments would have on the Group's results as of December 31, 2017:

|                      |                                    | Profit / (loss) for the year |
|----------------------|------------------------------------|------------------------------|
|                      | Increase (+) / decrease (-) in the | ended                        |
|                      | prices of investments in financial | December 31, 2017            |
| Impact on net result | +10%                               | 3,199                        |
| before income tax    | -10%                               | (3,199)                      |

The Group does not use derivative financial instruments to hedge the risks associated with the fluctuation of the price of commodities as well as the risk inherent to investments in public securities and mutual funds.

### • Liquidity Risk

Liquidity risk is associated with the possibility of a mismatch between the need of funds to meet short, medium or long-term obligations.

As mentioned in previous paragraphs, the Group intends to align the maturity profile of its financial debt to be related to its ability to generate enough cash flows for its cancellation, as well as to finance the projected expenditures for each year. As of December 31, 2017 the availability of liquidity reached 44,454, considering cash of 9,672, other liquid financial assets of 19,066 and available credit lines with banks of 15,716. Likewise, YPF has the ability to issue additional debt under the negotiable obligations global program originally approved by the Shareholders meeting in 2008 expanded in September 2012, in April 2013, in February 2015 and in April 2016.

The following table sets forth the maturity dates of the Group's financial liabilities as of December 2017:

|                                 | December 31, 2017 |            |            |            |            |                   |         |
|---------------------------------|-------------------|------------|------------|------------|------------|-------------------|---------|
|                                 | Maturity date     |            |            |            |            |                   |         |
|                                 | 0 - 1 year        | 1 - 2 year | 2 - 3 year | 3 - 4 year | 4 - 5 year | More than 5 years | Total   |
| Financial liabilities           |                   |            |            |            |            |                   |         |
| Loans                           | 39,336            | 11,411     | 19,051     | 25,776     | 13,929     | 81,560            | 191,063 |
| Other liabilities               | 2,383             | 33         | 24         | 22         | 22         | 176               | 2,660   |
| Accounts payable <sup>(1)</sup> | 45,605            | 150        | 12         |            |            | 6                 | 45,773  |
|                                 | 87,324            | 11,594     | 19,087     | 25,798     | 13,951     | 81,742            | 239,496 |

(1) The amounts disclosed are the contractual, undiscounted cash flows associated to the financial liabilities given that they do not differ significantly from their face values

Most of the Group's loans contain usual covenants for contracts of this nature. Approximately 52% of the outstanding loans as of December 31, 2017 are subject to financial covenants related to the average ratio and debt service coverage ratio.

Under the terms of the loan agreements and NO, if the Group breached a covenant or if it could not remedy it within the stipulated period, it would default, a situation that would limit its liquidity and, given that the majority of its loans contain cross default provisions, it could result in an early enforceability of its obligations.

### Credit Risk

Credit risk is defined as the possibility of a third party not complying with its contractual obligations, thus negatively affecting results of operations of the Group.

Credit risk in the Group is measured and controlled on an individual customer basis. The Group has its own systems to conduct a permanent evaluation of credit performance of all of its debtors, and the determination of risk limits with respect to third parties, in line with best practices using for such end internal customer records and external data sources.



### 4. FINANCIAL RISK MANAGEMENT (Cont.)

Financial instruments that potentially expose the Group to a credit concentration risk consist primarily of cash and cash equivalents, trade receivables and other receivables. The Group invests excess cash primarily in high liquid investments with financial institutions with a strong credit rating both in Argentina and abroad. In the normal course of business and based on ongoing credit evaluations to its customers, the Group provides credit to its customers and certain related parties. Likewise, the Group accounts for doubtful trade losses in the Statement of Comprehensive Income, based on specific information regarding its clients.

The provisions for doubtful accounts are measured by the following criteria:

- The aging of the receivable;
- The analysis of the customer's capacity to return the credit granted, also taking into consideration special situations such as the existence of a voluntary reorganization petition, bankruptcy and arrears, and guarantees, among others.

The maximum exposure to credit risk of the Groups of December 31, 2017 based on the type of its financial instruments and without excluding the amounts covered by guarantees and other arrangements mentioned below is set forth below:

|                           | Maximum           |
|---------------------------|-------------------|
|                           | exposure as of    |
|                           | December 31, 2017 |
| Cash and cash equivalents | 28,738            |
| Other financial assets    | 63,911            |

Considering the maximum exposure to the risk of the Other financial assets based on the concentration variable of the counterparties, credit with the National Government and direct agencies accounts for approximately 31% (14,911), while the Group's remaining debtors are diversified.

Following is the breakdown of the financial assets past due as of December 31, 2017.

|                                       | Current trade receivable | Other current receivables |
|---------------------------------------|--------------------------|---------------------------|
| Less than three months past due       | 5,603                    | 798                       |
| Between three and six months past due | 3,820                    | 453                       |
| More than six months past due         | 2,399                    | 982                       |
|                                       | 11,822                   | 2,233                     |

At such date, the provision for doubtful trade receivables amounted to 1,323 and the provisions for other doubtful receivables amounted to 292. These provisions are the Group's best estimate of the losses incurred in relation with accounts receivables.

### **Guarantee Policy**

As collateral of the credit limits granted to customers, the Group receives several types of guarantees from its customers. In the service stations and distributors market, where generally long-term relationships with customers are established, mortgages prevail. For foreign customers, joint and several bonds from their parent companies prevail. In the industrial and transport market, bank guarantees prevail. To a lesser extent, the Group has also obtained other guarantees such as credit insurances, surety bonds, guarantee customer – supplier, and car pledges, among others.

The Group has effective guarantees granted by third parties for a total amount of 10,789, 9,300 and 6,277 as of December 31, 2017, 2016 and 2015, respectively.

During the fiscal years ended December 31, 2017, 2016, and 2015, the Group executed guarantees received for an amount of 2, 1 and 2, respectively.



### 5. SEGMENT INFORMATION

The different segments in which the Group is organized take into consideration the different activities from which the Group obtains income and incurs expenses. The aforementioned organizational structure is based on the way in which the highest decision-making authority analyzes the main financial and operating magnitudes for making decisions about resource allocation and performance assessment also considering the Group's business strategy.

### • Upstream

The Upstream segment carries out all activities relating to the exploration, development and production of oil and natural gas.

Revenue is generated from (i) the sale of produced oil to the Downstream segment and, marginally, from its sale to third parties; (ii) the sale of produced gas to the Gas and Power segment.

### · Gas and Power

On March 15, 2016, the Gas and Power Executive Vice-presidency was created, and during the current fiscal year, the complete scope of management of this new business unit was determined.

The Gas and Power segment generates its revenue from the development of activities relating to: (i) the natural gas commercialization to third parties and the Downstream segment, (ii) the commercial and technical operation of LNG regasification terminals in Bahía Blanca and Escobar, by hiring two regasification vessels, (iii) the natural gas distribution, and (iv) the generation of conventional and renewable electricity.

In addition to the proceeds derived from the sale of natural gas to third parties and the intersegment, which is then recognized as a "purchase" to the Upstream segment, and including since 2017, the Stimulus Plan for Surplus Natural Gas Injection, Gas and Power accrues a fee in its favor with the Upstream segment to carry out such commercialization.

### Downstream

The Downstream segment develops activities relating to: (i) oil refining and petrochemical production, (ii) commercialization of refined and petrochemical products obtained from such processes, (iii) logistics related to the transportation of oil and gas to refineries and the transportation and distribution of refined and petrochemical products to be marketed in the different sales channels.

It obtains its income from the marketing mentioned in item (ii) above, which is developed through the Retail, Industry, Agro, LPG, Chemicals and Lubricants and Specialties businesses.

It incurs in all expenses relating to the aforementioned activities, including the purchase of oil from the Upstream segment and third parties and the natural gas to be consumed in the refinery and petrochemical industrial complexes from the Gas and Power segment.

### • Central Administration and Others

It covers other activities, not falling into the aforementioned categories, mainly including corporate administrative expenses and assets and construction activities.

Sales between business segments were made at internal transfer prices established by the Group, which generally seek to approximate market prices.

Operating profit and assets for each segment have been determined after consolidation adjustments.

As required by IFRS 8, comparative information has been given retroactive effect by the creation of the new segment.



### 5. SEGMENT INFORMATION (Cont.)

|   | Upstream         | Gas and Power | Downstream    | Central<br>Administration<br>and Others | Consolidation<br>Adjustments <sup>(1)</sup> | Total    |
|---|------------------|---------------|---------------|---|---|----------|
| For the year ended December 31, 2017          | <u>е рыг сиш</u> | <u> </u>      | 2011111111111 |   | - Tujustii tii                              | 1000     |
| Revenues from sales                           | 739              | 56,805        | 195,321       | 2,534                                   | (2,586)                                     | 252,813  |
| Revenues from intersegment sales              | 115,955          | 4,075         | 988           | 7,133                                   | (128,151)                                   | _        |
| Revenues                                      | 116,694          | 60,880        | 196,309       | 9,667                                   | (130,737)                                   | 252,813  |
| Operating profit / (loss)                     | 3,877            | 3,259         | 15,813        | (4,400)                                 | (2,476)                                     | 16,073   |
| Income / (loss) from equity interests in      |                  |               |               |   |   |          |
| associates and joint ventures                 |                  | 634           | 794           |   |   | 1,428    |
| Depreciation of property, plant and equipment | $45,279^{(3)}$   | 290           | 6,926         | 1,017                                   | _   | 53,512   |
| Recovery of property, plant and equipment and |                  |               |               |   |   |          |
| intangible assets <sup>(2)</sup>              | 5,032            | _             | _             | _                                       | _   | 5,032    |
| Acquisition of property, plant and equipment  | 39,411           | 3,867         | 8,179         | 1,639                                   | _   | 53,096   |
| Assets  | 251,525          | 45,395        | 158,800       | 53,934                                  | (3,936)                                     | 505,718  |
| For the year ended December 31, 2016          |                  |               |               |   |   |          |
| Revenues from sales                           | 18,745           | 26,514        | 162,538       | 2,303                                   | _   | 210,100  |
| Revenues from intersegment sales              | 95,398           | 3,212         | 925           | 7,447                                   | (106,982)                                   |          |
| Revenues                                      | 114,143          | 29,726        | 163,463       | 9,750                                   | (106,982)                                   | 210,100  |
| Operating profit / (loss)                     | (26,845)         | 2,008         | 3,093         | (1,615)                                 | (887)                                       | (24,246) |
| Income / (loss) from equity interests in      |                  |               |               |   |   |          |
| associates and joint ventures                 | (1)              | 302           | 287           |   |   | 588      |
| Depreciation of property, plant and equipment | 38,125           | 290           | 5,507         | 830                                     |   | 44,752   |
| Impairment of property, plant and equipment   |                  |               |               |   |   |          |
| and intangible assets <sup>(2)</sup>          | 34,943(3)        | _             |               |   |   | 34,943   |
| Acquisition of property, plant and equipment  | 51,396           | 2,134         | 9,839         | 1,679                                   |   | 65,048   |
| Assets  | 236,173          | 25,866        | 125,536       | 34,739                                  | (1,175)                                     | 421,139  |
| For the year ended December 31, 2015          |                  |               |               |   |   |          |
| Revenues from sales                           | 16,044           | 14,003        | 124,959       | 1,130                                   | _   | 156,136  |
| Revenues from intersegment sales              | 64,243           | 2,184         | 807           | 6,182                                   | (73,416)                                    |          |
| Revenues                                      | 80,287           | 16,187        | 125,766       | 7,312                                   | (73,416)                                    | 156,136  |
| Operating profit / (loss)                     | 7,535            | 1,498         | 6,948         | (2,331)                                 | 2,938                                       | 16,588   |
| Income / (loss) from equity interests in      |                  |               |               |   |   |          |
| associates and joint ventures                 |                  | 267           | 51            |   |   | 318      |
| Depreciation of property, plant and equipment | 23,075           | 255           | 2,913         | 442                                     | _   | 26,685   |
| Impairment of property, plant and equipment   |                  |               |               |   |   |          |
| and intangible assets <sup>(2)</sup>          | 2,535            | _             | _             |   |   | 2,535    |
| Acquisition of property, plant and equipment  | 48,598           | 469           | 8,874         | 1,939                                   | _   | 59,880   |
| Assets  | 223,035          | 13,659        | 100,146       | 26,708                                  | (95)  | 363,453  |

<sup>(1)</sup> Corresponds to the elimination of income among segments of the YPF Group.

<sup>(2)</sup> See Notes 2.c) and 8.

<sup>(3)</sup> Includes depreciation of charges for impairment of property, plant and equipment.



### 5. SEGMENT INFORMATION (Cont.)

The distribution of revenues by geographic area, according to the markets for which they are intended, for the years ended on December 31, 2017, 2016 and 2015, and property, plant and equipment by geographic area as of December 31, 2017, 2016 and 2015 are as follows:

|                                   |         | Revenues |         | Property, plant and equipn |         |         |  |
|-----------------------------------|---------|----------|---------|----------------------------|---------|---------|--|
|                                   | 2017    | 2016     | 2015    | 2017                       | 2016    | 2015    |  |
| Argentina                         | 230,728 | 193,707  | 143,851 | 353,868                    | 307,350 | 269,914 |  |
| Mercosur and associated countries | 8,694   | 7,964    | 6,302   | 575                        | 664     | 553     |  |
| Rest of the world                 | 8,785   | 6,142    | 4,175   | _                          | _       | 438     |  |
| Europe                            | 4,606   | 2,287    | 1,808   |                            |         |         |  |
| Total                             | 252,813 | 210,100  | 156,136 | 354,443                    | 308,014 | 270,905 |  |

Intangible assets are mainly geographically located in Argentina.

As of December 31, 2017, no foreign client represents 10% or more of the Group's revenue from its ordinary activities.

### 6. FINANCIAL INSTRUMENTS BY CATEGORY

The following tables show the financial assets and liabilities by category of financial instrument and a reconciliation to the corresponding line item in the statements of financial position, as appropriate. Since the line items "Trade receivables", "Other receivables", "Accounts payable" and "Other liabilities" contain both financial instruments and non-financial assets and liabilities (such as tax receivables, and receivables and payables in kind, among other) reconciliation is presented in the columns headed "Non-financial assets" and "Non-financial Liabilities".

### Financial Assets

|                                  |  |  | 2017                            |                         |         |
|----------------------------------|--|--|---------------------------------|-------------------------|---------|
|                                  | Financial<br>Assets at<br>amortized cost | Financial<br>Assets at fair<br>value through<br>profit or loss | Subtotal<br>Financial<br>Assets | Non-financial<br>Assets | Total   |
| Other receivables <sup>(1)</sup> | 6,793                                    |  | 6,793                           | 7,541                   | 14,334  |
| Trade receivables <sup>(2)</sup> | 44,182                                   | _  | 44,182                          | _                       | 44,182  |
| Investment in financial assets   | _  | 12,936   | 12,936                          | _                       | 12,936  |
| Cash and cash equivalents        | 9,687                                    | 19,051   | 28,738                          | _                       | 28,738  |
|                                  | 60,662                                   | 31,987   | 92,649                          | 7,541                   | 100,190 |
|                                  |  |  | 2016                            |                         |         |
|                                  | Financial Assets at amortized cost       | Financial Assets at fair value through profit or loss          | Subtotal<br>Financial<br>Assets | Non-financial<br>Assets | Total   |
| Other receivables <sup>(1)</sup> | 8,277                                    | profit of loss   | 8,277                           | 9,145                   | 17,422  |
| Trade receivables <sup>(2)</sup> | 34,816                                   | <u> </u>   | 34,816                          | ),1 <del>1</del> 3      | 34,816  |
| Investment in financial assets   |  | 15,285   | 15,285                          | _                       | 15,285  |
| Cash and cash equivalents        | 7,949                                    | 2,808  | 10,757                          | _                       | 10,757  |
|                                  | 51,042                                   | 18,093   | 69,135                          | 9,145                   | 78,280  |
|                                  |  |  | 2015                            |                         |         |
|                                  | Financial Assets at amortized cost       | Financial<br>Assets at fair<br>value through<br>profit or loss | Subtotal<br>Financial<br>Assets | Non-financial<br>Assets | Total   |
| Other receivables <sup>(1)</sup> | 6,392                                    | <u> </u>   | 6,392                           | 15,574                  | 21,966  |

| Trade receivables <sup>(2)</sup> | 23,428 |       | 23,428 | _           | 23,428 |
|----------------------------------|--------|-------|--------|-------------|--------|
| Investment in financial assets   | _      | 804   | 804    | <del></del> | 804    |
| Cash and cash equivalents        | 14,613 | 774   | 15,387 |             | 15,387 |
|                                  | 44,433 | 1,578 | 46,011 | 15,574      | 61,585 |

- Does not include the provision for other doubtful receivables.
   Does not include the provision for doubtful trade receivables.



### 6. FINANCIAL INSTRUMENTS BY CATEGORY (Cont.)

On May 20, 2016, Decree No. 704/2016 was published, whereby the debt was converted into pesos under the Stimulus Plan for Surplus Natural Gas Injection, the Stimulus Plan for Natural Gas Injection Program for Companies with Reduced Injection and those derived from the Supply of Propane Gas for Undiluted Propane Gas Distribution Networks Agreement at the exchange rate in force at the end of each period, and Argentine National Bonds were granted in US dollars at an interest rate of 8% per annum maturing in 2020 ("BONAR 2020 US\$") for the cancellation thereof.

The sale of these BONAR 2020 US\$ was restricted according to the letters of accession; therefore, until and including December 2017, the Group could not sell on a monthly basis more than 3% of the aggregate amount of the BONAR 2020 US\$ received. In addition, during the months in which the Group did not exercise its right to sell the BONAR 2020 US\$ up to the above-mentioned percentage, it could accumulate the unused percentage for its sale in subsequent months. In no event could the sale in a single month of the accrued balances exceed 12% of the total BONAR 2020 US\$ received.

In order to request the cancellation of outstanding payments, beneficiaries had to sign letters of accession and submit to the Hydrocarbon Resources Secretariat of the MINEM. YPF filed the letters of accession and reserved the right to claim the exchange differences and interest.

On July 13, 2016, the Group received, under the Natural Gas Additional Injection Stimulus Program, BONAR 2020 US\$, with a face value of US\$ 630 million. In addition, on September 21, 2016, under the Supply of Propane Gas for Undiluted Propane Gas Distribution Networks Agreement, the Group received BONAR 2020 US\$, with a face value of US\$ 12 million.

### Financial Liabilities

|                   |   |  | 2017                                 |                              |         |
|-------------------|---|--|--------------------------------------|------------------------------|---------|
|                   | Financial<br>Liabilities at<br>amortized cost | Financial<br>liabilities at<br>fair value<br>through profit<br>or loss | Subtotal<br>financial<br>liabilities | Non-financial<br>liabilities | Total   |
| Loans             | 191,063                                       |  | 191,063                              |                              | 191,063 |
| Other liabilities | 2,660   | _  | 2,660                                | _                            | 2,660   |
| Accounts payable  | 45,773  | _  | 45,773                               | 3,253                        | 49,026  |
|                   | 239,496                                       |  | 239,496                              | 3,253                        | 242,749 |
|                   |   |  | 2016                                 |                              |         |
|                   | Financial<br>Liabilities at<br>amortized cost | Financial<br>liabilities at<br>fair value<br>through profit<br>or loss | Subtotal<br>financial<br>liabilities | Non-financial<br>liabilities | Total   |
| Loans             | 154,345                                       |  | 154,345                              |                              | 154,345 |
| Other liabilities | 4,726   | _  | 4,726                                | _                            | 4,726   |
| Accounts payable  | 43,287  | <u> </u>   | 43,287                               | 495                          | 43,782  |
|                   | 202,358                                       |  | 202,358                              | 495                          | 202,853 |
|                   |   |  | 2015                                 |                              |         |
|                   | Financial<br>Liabilities at<br>amortized cost | Financial<br>liabilities at<br>fair value<br>through profit<br>or loss | Subtotal<br>financial<br>liabilities | Non-financial<br>liabilities | Total   |
| Loans             | 105,751                                       |  | 105,751                              |                              | 105,751 |
| Other liabilities | 752   | _  | 752                                  | 1                            | 753     |
| Accounts payable  | 39,376  | _  | 39,376                               | 475                          | 39,851  |
|                   | 145,879                                       |  | 145,879                              | 476                          | 146,355 |



### 6. FINANCIAL INSTRUMENTS BY CATEGORY (Cont.)

Gains and losses on financial instruments are allocated to the following categories:

|   |  | 2017  |          |
|---|--|---|----------|
|   | Financial and non-<br>financial Assets /<br>Liabilities at amortized<br>cost | Financial Assets /<br>Liabilities at fair value<br>through profit or loss | Total    |
| Interest income   | 1,598  |   | 1,598    |
| Interest loss   | (18,385)   | <u> </u>  | (18,385) |
| Financial accretion   | (3,169)  | <del>_</del>  | (3,169)  |
| Net exchange differences  | 8,950  |   | 8,950    |
| Fair value gains on financial assets at fair value through profit or loss | _  | 2,208   | 2,208    |
| Gains on derivative financial instruments                                 | <del>_</del>   | _   | _        |
|   | (11,006)   | 2,208   | (8,798)  |
|   | Financial and non-   | 2016  |          |
|   | financial and non-<br>financial Assets /<br>Liabilities at amortized<br>cost | Financial Assets /<br>Liabilities at fair value<br>through profit or loss | Total    |
| Interest income   | 1,472  | through profit of loss  | 1,472    |
| Interest loss   | (18,109)   |   | (18,109) |
| Financial accretion   | (3,159)  |   | (3,159)  |
| Net exchange differences  | 11,611   |   | 11,611   |
| Fair value gains on financial assets at fair value through profit or loss |  | 1,826   | 1,826    |
| Gains on derivative financial   |  | 1,020   | 1,020    |
| instruments   |  | 213   | 213      |
|   | (8,185)  | 2,039   | (6,146)  |
|   |  | 2015  |          |
|   | Financial and non-<br>financial Assets /<br>Liabilities at amortized<br>cost | Financial Assets /<br>Liabilities at fair value<br>through profit or loss | Total    |
| Interest income   | 1,638  | through profit of loss  | 1,638    |
| Interest loss   | (8,618)  |   | (8,618)  |
| Financial accretion   | (1,987)  | <u> </u>  | (1,987)  |
| Net exchange differences  | 20,214   | <u> </u>  | 20,214   |
| Fair value gains on financial assets at fair value through profit or loss | 20,214   | <del></del><br>446  | 446      |
| Gains on derivative financial   | <u>—</u>   | 440   | 440      |
| instruments   |  | 464   | 464      |
| msuuments   | 11.047   |   |          |
|   | 11,247   | 910   | 12,157   |

### Fair value measurements

IFRS 9 defines the fair value of a financial instrument as the amount for which an asset could be exchanged, or a financial liability settled, between knowledgeable, independent parties in an arm's length transaction. All financial instruments recognized at fair value are allocated to one of the valuation hierarchy levels of IFRS 7. This valuation hierarchy provides for three levels.

In the case of Level 1, valuation is based on unadjusted quoted prices in active markets for identical financial assets or liabilities that the Group can refer to at the end of the period. A market is deemed active if transactions take place with sufficient frequency and in sufficient quantity for price information to be available on an ongoing basis. Since a quoted price in an active market is the most reliable indicator of fair value, this should always be used if available. Financial instruments assigned by the Group to this level comprise investments in listed mutual funds and public securities.

In the case of Level 2, fair value is determined by using valuation methods based on inputs directly or indirectly observable in the market. If the financial instrument concerned has a fixed contract period, the inputs used for valuation must be observable for the whole of this period. The Group has not valued financial instruments under this category.



### 6. FINANCIAL INSTRUMENTS BY CATEGORY (Cont.)

In the case of Level 3, the Group uses valuation techniques not based on inputs observable in the market. This is only permissible insofar as no market data are available. The inputs used reflect the Group's assumptions regarding the factors, which market players would consider in their pricing. The Group uses the best available information for this, including internal company data. The Group has not valued financial instruments under this category.

YPF's Corporative Finance Division has a team in place in charge of estimating valuation of financial instruments required to be reported in the financial statements, including the fair value of Level 3 instruments. The team directly reports to the Chief Financial Officer ("CFO"). The CFO and the valuation team discuss the valuation methods and results upon the acquisition of a financial instrument and, if necessary, on a quarterly basis, in line with the Group's quarterly reports.

The tables below show the Group's financial assets measured at fair value as of December 31, 2017, 2016 and 2015 and their allocation to their fair value levels.

|                                  |           | 201     | 7       |        |
|----------------------------------|-----------|---------|---------|--------|
| Financial Assets                 | Level 1   | Level 2 | Level 3 | Total  |
| Investment in financial assets:  |           |         |         |        |
| - Public securities              | 12,936(1) |         |         | 12,936 |
|                                  | 12,936    | _       | _       | 12,936 |
| Cash and cash equivalents:       |           |         |         |        |
| - Mutual funds                   | 19,051    |         |         | 19,051 |
|                                  | 19,051    |         |         | 19,051 |
|                                  | 31,987    |         |         | 31,987 |
|                                  | <u> </u>  |         |         |        |
|                                  |           | 201     | 6       |        |
| Financial Assets                 | Level 1   | Level 2 | Level 3 | Total  |
| Investments in financial assets: |           |         |         |        |
| - Mutual funds                   | 53        |         |         | 53     |
| - Public securities              | 15,232(1) |         |         | 15,232 |
|                                  | 15,285    | _       |         | 15,285 |
| Cash and cash equivalents:       |           |         |         |        |
| - Mutual funds                   | 2,808     |         |         | 2,808  |
|                                  | 2,808     | _       | _       | 2,808  |
|                                  | 18,093    |         |         | 18,093 |
|                                  |           | =====   |         |        |
|                                  |           | 201     | 15      |        |
| Financial Assets                 | Level 1   | Level 2 | Level 3 | Total  |
| Investments in financial assets: |           |         |         |        |
| - Mutual funds                   | 340       |         | _       | 340    |
| - Other financial assets         | 464       |         |         | 464    |
|                                  | 804       |         |         | 804    |
| Cash and cash equivalents:       |           |         |         |        |
| - Mutual funds                   | 774       |         |         | 774    |
|                                  | 774       |         | _       | 774    |
|                                  | 1,578     |         |         | 1,578  |

(1) As of December 31, 2017, it has been classified as Current. As of December 31, 2016, 7,737 have been classified as Noncurrent and 7,495 has been classified as Current.

The Group has no financial liabilities measured at fair value through profit or loss.

The Group's policy is to acknowledge transfers among the several categories of valuation hierarchies when occurred, or when there are changes in the prevailing circumstances requiring such transfer. During the years ended December 31, 2017, 2016 and 2015, there were no transfers between the different hierarchies used to determine the fair value of the Group's financial instruments.

### Fair value of financial assets and financial liabilities measured at amortized cost

The estimated fair value of loans, considering unadjusted listed prices (Level 1) for Negotiable Obligations and interest rates offered to the Group (Level 3) for the other financial loans remaining, amounted to 200,264, 157,133 and 106,336 as of December 31, 2017, 2016 and 2015, respectively.

The fair value of other receivables, trade receivables, cash and cash equivalents, accounts payable and other liabilities do not differ significantly from their book value.



### 7. INTANGIBLE ASSETS

|   | 2017  | 2016  | 2015  |
|---|-------|-------|-------|
| Net book value Intangible assets              | 9,976 | 8,114 | 7,359 |
| Provision for impairment of intangible assets |       |       | (80)  |
|   | 9,976 | 8,114 | 7,279 |

The evolution of the Group's intangible assets for the years ended December 31, 2017, 2016 and 2015 is as follows:

|                                 | Service concession | Exploration rights | Other intangibles | Total       |
|---------------------------------|--------------------|--------------------|-------------------|-------------|
| Cost                            | 5,707              | 1,975              | 2,607             | 10,289      |
| Accumulated amortization        | 3,475              | 150                | 2,271             | 5,896       |
| Balance as of December 31, 2014 | 2,232              | 1,825              | 336               | 4,393       |
| Cost                            |                    |                    |                   | <del></del> |
| Increases                       | 653                | 270                | 190               | 1,113       |
| Translation effect              | 3,218              | 928                | 1,443             | 5,589       |
| Decreases and reclassifications | (51)               | (183)              | 20                | (214)       |
| Accumulated amortization        |                    |                    |                   |             |
| Increases                       | 180                | _                  | 143               | 323         |
| Translation effect              | 1,904              | 5                  | 1,296             | 3,205       |
| Decreases and reclassifications | (6)                | _                  | _                 | (6)         |
| Cost                            | 9,527              | 2,990              | 4,260             | 16,777      |
| Accumulated amortization        | 5,553              | 155                | 3,710             | 9,418       |
| Balance as of December 31, 2015 | 3,974              | 2,835              | 550               | 7,359       |
| Cost                            |                    |                    |                   |             |
| Increases                       | 642                | 75                 | 171               | 888         |
| Translation effect              | 2,127              | 612                | 936               | 3,675       |
| Decreases and reclassifications | (547)              | (584)              | 127               | (1,004)     |
| Accumulated amortization        |                    |                    |                   |             |
| Increases                       | 437                | _                  | 280               | 717         |
| Translation effect              | 1,245              | _                  | 848               | 2,093       |
| Decreases and reclassifications | _                  | (6)                | _                 | (6)         |
| Cost                            | 11,749             | 3,093              | 5,494             | 20,336      |
| Accumulated amortization        | 7,235              | 149                | 4,838             | 12,222      |
| Balance as of December 31, 2016 | 4,514              | 2,944              | 656               | 8,114       |
| Cost                            |                    |                    |                   |             |
| Increases                       | 947                | 8                  | 198               | 1,153       |
| Translation effect              | 2,141              | 513                | 953               | 3,607       |
| Decreases and reclassifications | (13)               | (149)              | 185               | 23          |
| Accumulated amortization        |                    |                    |                   |             |
| Increases                       | 615                | _                  | 223               | 838         |
| Translation effect              | 1,330              | _                  | 885               | 2,215       |
| Decreases and reclassifications | _                  | (149)              | 17                | (132)       |
| Cost                            | 14,824             | 3,465              | 6,830             | 25,119      |
| Accumulated amortization        | 9,180              |                    | 5,963             | 15,143      |
| Balance as of December 31, 2017 | 5,644              | 3,465              | 867               | 9,976       |

### 8. PROPERTY, PLANT AND EQUIPMENT

|   | 2017     | 2016     | 2015    |
|---|----------|----------|---------|
| Net book value of property, plant and equipment           | 382,630  | 345,679  | 274,122 |
| Provision for obsolescence of materials and equipment     | (1,652)  | (1,380)  | (762)   |
| Provision for impairment of property, plant and equipment | (26,535) | (36,285) | (2,455) |

<u>354,443</u> <u>308,014</u> <u>270,905</u>



## 8. PROPERTY, PLANT AND EQUIPMENT (Cont.)

Changes in Group's property, plant and equipment for the years ended December 31, 2017, 2016 and 2015 are as follows:

| Accumulated depreciation | Decreases and reclassifications | Translation effect | Cost<br>Increases | Balances as of<br>December 31,<br>2016 | Accumulated depreciation | Cost    | Decreases and reclassifications | Translation effect | Increases | Accumulated depreciation | Decreases and reclassifications | Translation effect | Cost<br>Increases | Balances as of<br>December 31,<br>2015 | Accumulated depreciation | reclassifications<br>Cost       | Decreases and | Translation effe | Accumulated depreciation  | Decreases and reclassifications | Translation effect | Cost        | Balances as of December 31, 2014 | Accumulated depreciation | Cost    |  |
|--------------------------|---------------------------------|--------------------|-------------------|--|--------------------------|---------|---------------------------------|--------------------|-----------|--------------------------|---------------------------------|--------------------|-------------------|--|--------------------------|---------------------------------|---------------|------------------|---------------------------|---------------------------------|--------------------|-------------|----------------------------------|--------------------------|---------|--|
|                          | ons (112)                       | ect 3,028          | 49                | 10,932                                 | 7,497                    | 18,429  | S.                              | ect 1,257          | 360       |                          | ons 1,365                       | 2,                 | 140               | 1, <u>8,029</u>                        | 5,920                    | ons (4)<br>13,949               |               | 211<br>211       |                           | ons 212                         | ect 4,630          | 3           | 5,305                            | 3,779                    | 9,084   | Land and<br>buildings                                  |
|                          | 40,614                          | 113,481            | (4,370)(4)        | 193,626(1)                             | 432,002                  | 625,628 | (6,937)                         | 73,288             | 40,729(4) |                          | 59,645                          | 104,086            | 3.831(4)          | 133,144(1)                             | 324,922                  | (433) <sup>(5)</sup><br>458,066 | 110,501       | 110 301          | <i>77</i> 88 <i>4</i> (4) | 37,986(5)                       | 155,844            | (1 1 40)(4) | 73,206                           | 192,170                  | 265,376 | Mineral<br>property, wells<br>and related<br>equipment |
|                          | 2,284                           | 19,728             |                   | 57,825                                 | 54,735                   | 112,560 | (3)                             | 9,288              | 4,312     |                          | 26,529                          | 16,601             | _                 | 28,291                                 | 41,138                   | (12)<br>69,429                  | 14,019        | 14 019           | 7 789                     | 3,634                           | 23,707             |             | 17,239                           | 24,842                   | 42,081  | Refinery equipment and petrochemical plants            |
|                          | 965                             | 1,032              | 66                | 2,266                                  | 3,285                    | 5,551   | (37)                            | 516                | 414       |                          | 1,096                           | 802                | در                | 1,258                                  | 2,392                    | (54)<br>3,650                   | 773           | 773              | 218                       | 330                             | 1,155              | 'n          | 705                              | 1,455                    | 2,160   | Transportation equipment                               |
|                          | (7,741)                         | 2,101              | 7,394             | 14,239                                 |                          | 14,239  | l                               |                    | 1         |                          | (8,701)                         | 2,494              | 6,968             | 13,478                                 | I                        | 13,478                          |               |                  | I                         | (7,018)                         | 4,432              | 7 077       | 8,241                            |                          | 8,241   | Materials and equipment in warehouse                   |
|                          | (49,165)                        | 8,568              | 47,453            | 52,673                                 |                          | 52,673  | l                               | 1                  | I         |                          | (91,342)                        | 14,602             | 52.610            | 76,803                                 | I                        | —<br>76,803                     |               |                  | I                         | (42,392)                        | 24,005             | 50 120      | 45,051                           | <br> <br> 1              | 45,051  | Drilling and<br>work in<br>progress                    |
|                          | (1,687)                         | 373                | 2,207             | 1,978                                  |                          | 1,978   | l                               |                    | I         |                          | (3,687)                         | 626                | 1.392             | 3,647                                  | I                        | 3,647                           |               |                  | I                         | (1,893)                         | 992                | 2 767       | 1,781                            |                          | 1,781   | Exploratory<br>drilling in<br>progress                 |
|                          | 879                             | 1,466              | 20                | 1,688                                  | 6,401                    | 8,089   | (18)                            | 1,052              | 668       |                          | 1,201                           | 1,260              | 25                | 904                                    | 4,699                    | <br>5,603                       | 1,009         | 1 559            | 373                       | 388                             | 1,865              | 36          | 497                              | 2,817                    |         | Furniture,<br>fixtures and<br>installations            |
|                          | 1,698                           | 2,744              | 1                 | 5,227                                  | 9,119                    | 14,346  | (2)                             | 1,558              | 642       |                          | 1,138                           | 2,430              | I                 | 3,857                                  | 6,921                    | 10,778                          | 2,301         | 2 361<br>C+C     | 345                       | 1,617                           | 3,640              | _           | 1,305                            | 4,215                    | 5,520   |  |
|                          | 215                             | I                  | -                 | 1,890                                  | 1,301                    | 3,191   | 45                              |                    | 75        |                          | 260                             | 1                  | 1                 | 1,750                                  | 1,181                    | (3)<br>2,931                    |               | 8                | 68                        | 209                             | 1 1                |             | 1,606                            | 1,116                    | 2,722   | Infrastructure<br>for natural gas<br>distribution      |
|                          | (1,762)(7)                      | I                  |                   | 368                                    | 1,394                    | 1,762   | I                               | 1                  | 111       |                          | 187                             | ١,                 | 2                 | 290                                    | 1,283                    | 1,573                           | I             | [                | 112                       | 6                               | 1 1                |             | 396                              | 1,171                    | 67      |  |
|                          | 188                             | 1,651              | 174               | 2,967                                  | 6,998                    | 9,965   | (82)                            | 1,142              | 318       |                          | (60)                            | 1,658              | 76                | 2,671                                  | 5,620                    | (2)<br>8,291                    | 1,770         | 1 796            | 235                       | (63)                            | 2,633              | 310         | 1,911                            | 3,591                    | 5,502   | Other property   |
|                          | (13,624)(3)                     | 154,172            | 53,096            | 345,679                                | 522,732                  | 868,411 |                                 | 88,101             |           |                          |                                 | 147,534            | 65.048            | 274,122                                | 394,076                  | (508)<br>668,198                |               | 137 743          |                           | (6,984) <sup>(3)</sup>          | 222,903            | 50 000      | 157,243                          | 235,156                  | 392,399 |  |

| Balances as of December 31, 2017 | Accumulated depreciation | Cost      | Decreases and reclassifications | Translation effect | Increases |
|----------------------------------|--------------------------|-----------|---------------------------------|--------------------|-----------|
| 12,144                           | 9,250                    | 21,394    | 13                              | 1,303              | 437       |
| "Ē<br>∥                          | 566,334                  | 775,353   | (1,756)                         | 81,108             | 54,980(4) |
| 11                               | 69,160                   | 134,675   | (953)                           | 9,983              | 5,395     |
| 3,102                            | 4,512                    | 7,614     | 16                              | 609                | 602       |
| ū                                | I                        | 15,993    | 1                               | I                  | I         |
| 59,529                           | I                        | 59,529    | 1                               | 1                  | I         |
| 1(2)                             |                          | 2,871     |                                 | I                  | I         |
| 1,768                            | 8,686                    | 10,454    |                                 | 1,196              | 717       |
| II                               | 11,656                   |           |                                 | 1,684              | 854       |
| ii                               | 1,381                    | 3,406     | 1                               |                    |           |
| 11                               | I                        |           | $(1,481)^{(7)}$                 | I                  | 87        |
| 3,532                            | 8,446 679,425            | 11,978    | (18)                            | 1,151              | 315       |
| 2 382,630                        | 679,425                  | 1,062,055 | (3,808)                         | 97,034             | 63,467    |

Includes 10,003, 9,147 and 8,435 of mineral property as of December 31, 2017, 2016 and 2015, respectively.

As of December 31, 2017, there are 35 exploratory wells in progress. During year ended on such date, 37 wells were drilled, 24 wells were charged to exploratory expense and 15 were transferred to prove properties which are included in the account Mineral property, wells and related equipment.

Includes 7, 2 and 6 of net book value charged to property, plant and equipment provisions for the years ended December 31, 2017, 2016 and 2015, respectively.

Includes (4,913), 2,243 and (1,281) corresponding to hydrocarbon wells abandonment costs for the years ended December 31, 2017, 2016 and 2015, respectively.

Includes (4,913), 1,243 and (1,281) corresponding to hydrocarbon wells abandonment costs for the years ended December 31, 2017, 2016 and 2015, respectively.

Includes (3,071) residual value of the decrease in participation in the Magallanes area; and (8) corresponding to the decrease in participation in the Puesto Corradera area.

**30 0400**0

Includes reductions for the deconsolidation of subsidiaries of 500, net. Includes reductions for the deconsolidation of subsidiaries of 500, net. Include 6,722 y 1,790 de valor de origen y depreciación acumulada, respectivamente, correspondientes a la reclasificación de los activos de YPF EE como mantenidos para su disposición.



### 8. PROPERTY, PLANT AND EQUIPMENT (Cont.)

The Group capitalizes the financial cost as a part of the cost of the assets. For the year ended December 31, 2017, 2016 and 2015, the rate of capitalization has been 11.63%, 13.03% and 12.01%, respectively, and the amount capitalized amounted to 707, 1,234 and 1,003, respectively, for the years mentioned above.

Set forth below is the evolution of the provision for obsolescence of materials and equipment for the years ended December 31, 2017, 2016 and 2015:

| <u>16</u> <u>2015</u>  |
|--|
| 62 313   |
| 28 243   |
|  |
| (2) (6)  |
|  |
| 92 212   |
| 80 762   |
| (2) (2) (2) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4 |

Set forth below is the evolution of the provision for impairment of property, plant and equipment for 2017, 2016 and 2015:

|  | 2017    | 2016    | 2015  |
|--|---------|---------|-------|
| Amount at beginning of year            | 36,285  | 2,455   |       |
| Increase charged to profit/ (loss) (1) | _       | 36,188  | 2,455 |
| Decrease charged to profit/ (loss) (1) | (5,032) | (1,245) | _     |
| Depreciation <sup>(2)</sup>            | (9,955) | (2,877) | _     |
| Translation differences                | 5,237   | 1,869   | _     |
| Deconsolidation of subsidiaries        |         | (105)   |       |
| Amount at end of year                  | 26,535  | 36,285  | 2,455 |

- (1) See Note 2.c).
- (2) Included in "Depreciation of property, plant and equipment" in Note 21.

Set forth below is the cost evolution for the exploratory wells in evaluation stage as of the years ended on December 31, 2017, 2016 and 2015:

|  | 2017  | 2016    | 2015  |
|--|-------|---------|-------|
| Amount at beginning of year  | 1,475 | 1,777   | 993   |
| Additions pending the determination of proved reserves                         | 758   | 1,112   | 1,219 |
| Decreases charged to exploration expenses                                      | (591) | (700)   | (479) |
| Decrease of assets assignment  | _     | (15)    | (89)  |
| Reclassifications to mineral property, wells and related equipment with proved |       |         |       |
| reserves   | (581) | (1,004) | (466) |
| Translation difference   | 175   | 305     | 599   |
| Amount at end of year  | 1,236 | 1,475   | 1,777 |

The following table shows the capitalized cost for exploratory wells for a period greater than a year and the number of projects related as of December 31, 2017.

|                       |        | Number of |                 |
|-----------------------|--------|-----------|-----------------|
|                       | Amount | projects  | Number of Wells |
| Between 1 and 5 years | 413    | 3         | 3               |



### 9. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES

The Group does not participate in subsidiaries with a significant non-controlling interest. Furthermore, no investments in associates or joint ventures are deemed individually material.

The following table shows the value of the investments in associates and joint ventures at an aggregate level, considering that none of the individual companies is material, as of December 31, 2017, 2016 and 2015:

|  | 2017  | 2016  | 2015  |
|--|-------|-------|-------|
| Amount of investments in associates                                      | 911   | 1,478 | 1,248 |
| Amount of investments in joint ventures                                  | 5,146 | 4,022 | 3,135 |
| Provision for impairment of investments in associates and joint ventures | (12)  | (12)  | (12)  |
|  | 6,045 | 5,488 | 4,371 |
| Disclosed in investments in associates and joint ventures                | 6,045 | 5,488 | 4,372 |
| Disclosed in Other liabilities   |       |       | 1     |

The main movements during the years ended December 31, 2017, 2016 and 2015, which affected the value of the aforementioned investments, correspond to:

|  | 2017    | 2016  | 2015  |
|--|---------|-------|-------|
| Amount at the beginning of year                        | 5,488   | 4,371 | 3,175 |
| Acquisitions and contributions                         | 910     | 448   | 163   |
| Income on investments in associates and joint ventures | 1,428   | 588   | 318   |
| Conversion differences                                 | 662     | 601   | 999   |
| Distributed dividends                                  | (328)   | (520) | (280) |
| Other movements  | 2       |       | (4)   |
| Reclassification of assets held for disposal           | (2,117) |       |       |
| Amount at the end of year                              | 6,045   | 5,488 | 4,371 |

The following table shows the principal amounts of the results of the investments in associates and joint ventures of the Group, calculated according to the equity value therein, for the years ended December 31, 2017, 2016 and 2015. The Group has adjusted, if applicable, the values reported by these companies to adapt them to the accounting criteria used by the Group for the calculation of the proportional equity value in the aforementioned dates:

|                                   | A    | Associates |      |       | Joint ventures |      |  |  |
|-----------------------------------|------|------------|------|-------|----------------|------|--|--|
|                                   | 2017 | 2016       | 2015 | 2017  | 2016           | 2015 |  |  |
| Net income                        | 543  | 225        | 321  | 885   | 363            | (3)  |  |  |
| Other comprehensive income        | 34   | 35         | 50   | 628   | 566            | 949  |  |  |
| Comprehensive income for the year | 577  | 260        | 371  | 1,513 | 929            | 946  |  |  |

On May 13, 2016, the companies Y-GEN I and Y-GEN II were created, for the purpose of submitting a bid to the tender No. 21/2016 launched by the MINEM, for the new generation of energy and thermal power, which, if awarded, they would enter into with Compañía Administradora del Mercado Mayorista Eléctrico S.A. ("CAMMESA") a contract of sale of offered energy for a term of between 5 and 10 years, as offered, and with a price denominated in U.S. dollars. The created companies submitted their bids for the construction of new thermal power plants in Loma Campana (Añelo, Province of Neuquén) and in Central El Bracho (Province of Tucumán), which were finally awarded.

In both companies, 66.67% of the shareholding is owned by the subsidiary YPF EE and the remaining 33.33% is owned by Guayama PR Holdings of the General Electric Group.

The Group has followed the guidelines set forth in IFRS 10 "Consolidated financial statements" and has concluded that it exercises joint control over Y-GEN I and Y-GEN II. As a result, it has applied IFRS 11 "Joint Arrangements" which defines these companies as joint ventures, and has measured them in accordance with the equity method in accordance with IAS 28 "Investments in associates and joint ventures". Some of the main assumptions under evaluation were as follows: (i) Contractually, both shareholders exercise joint control

over each of the companies, so any decisions on their relevant activities are taken jointly, requiring their unanimous vote to do so and there is no power of one party (shareholder) over the other in relation to the investment, regardless of the different percentages of ownership thereof; (ii) there is no power as defined in IFRS 10 of one party to the detriment of another, either in relation to the voting rights in the nomination of directors or even personnel (whether key or not), in the management of the entity to benefit itself or to unilaterally modify the variable return on investment, or ultimately to unilaterally address any of the decisions associated with the relevant activities. In addition, see Note 3.



# 9. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES (Cont.)

The following table shows information of the subsidiaries:

### Information of the issuer

| Registered Address Date  Street La Plata 19, Santa Cruz de la Sierra, República de Bolivia 12-31- 10333 Richmond Avenue I, Suite 1050, TX, U.S.A. Macacha Güemes 515, Buenos Aires, Argentina Macacha Güemes 515, Buenos Aires, Argentina Macacha Güemes 515, Buenos Aires, Argentina Macacha Güemes 515, Buenos Aires, 12-31- Macacha Güemes 515, | Street La Plata 19, Santa Cruz de la Sierra, República de Bolivia 12-3 1033 Richmond Avenue I, Suite 1050, and finance TX, U.S.A. 12-3 1 Macacha Güemes 515, It of YPF's Buenos Aires, Argentina Macacha Güemes 515, gand Buenos Aires, Argentina Güemes 515, Buenos Aires, Argentina Macacha Güemes 515, Buenos Aires, Argentina Macacha Güemes 515, Gand Buenos Aires, Argentina 12-3 ration Buenos Aires, Argentina 12-3 Cregorio Aráoz de Lamadrid 1360, |
|--|--|
| Date ierra, 12-31- 515, 12-31- 515, 12-31- 515, 12-31- 515, 12-31-   | Teess Date  ierra, 12-31- yia 12-31- 515, 12-31- 515, 12-31- 515, 12-31- 515, 12-31-   |
|  | tavailable financial state Capital Net profit  stock (loss)  15 (  15,075 (42)  164 709  307 307 3   |

| Bajo del Toro II S.R.L.   | Compañía de Inversiones<br>Mineras S.A.   | YSUR Petrolera Argentina<br>S.A. <sup>(6)(9)</sup>   | YSUR Inversiones Petroleras<br>S.A.U. <sup>(6)(9)</sup> |
|---|---|--|---|
| Social  | Common  | l  | I   |
| <del>≶</del>  | €9  |  |   |
| -   | -   |  |   |
| 1,270,815,165   | 236,474,420   | I  | I   |
| Exploration, discovery, exploitation, purchase, production, storage, transport, import, export and marketing of all types of liquid or gaseous hydrocarbons and exercise all acts that are not prohibited by law including but not limited to the execution of money loans as lender and/or borrower. | Exploration, exploitation, processing, management, storage and transport of all types of minerals; assembly, construction and operation of facilities and structures and processing of products related to mining | Exploration, extraction, exploitation, storage, transportation, industrialization and marketing of hydrocarbons, as well as other related operations | Investment  |
| Macacha Güemes 515,<br>Buenos Aires,<br>Argentina   | Macacha Güemes 515,<br>Buenos Aires,<br>Argentina   | Macacha Güemes 515,<br>Buenos Aires,<br>Argentina  | Macacha Güemes 515,<br>Buenos Aires,<br>Argentina       |
| 12-31-17  | 12-31-17  | 12-31-16   | 12-31-16  |
| 1,271   | 236   | 634  | 230   |
| 90  | (21)  | 106  | (T)   |
| 1,341   | 182   | 570  | 391   |
| 100.00%   | %00.00%   | 100.00%  | 100.00%   |
|   |   |  |   |



# 9. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES (Cont.)

The following table shows the investments in associates and joint ventures:

| Oleoducto Trasandino (Argentina) S.A. P                 | Inversora Dock Sud S.A.   | Central Dock Sud<br>S.A.  | Gasoducto del Pacífico (Argentina) S.A. P            | Oiltanking<br>Ebytem S.A.   | as<br>icas   | del<br>L   | Associates: |       | Refinería del<br>Norte S.A.                   | Profertil S.A. <sup>(6)</sup>                                      | 6 ··  | Name and Issuer             | I                                   | ı                         |            |
|---|---|---|--|---|--|--|-------------|-------|---|--|---|-----------------------------|-------------------------------------|---------------------------|------------|
| Preferred \$  | Common \$   | Common \$   | Preferred \$   | Common \$   | Common \$  | Common \$  |             |       | Common \$                                     | Common \$  | Common \$   | Class F                     | Descri                              |                           |            |
| _   | _   | 0.01  | _  | 10  | 10   | 10   |             |       | _   | _  | -   | Face Value                  | Description of the Securities       |                           |            |
| 12,135,167  | 355,270,303   | 11,869,095,145  | 15,579,578   | 351,167   | 476,034  | 4,072,749  |             |       | 45,803,655                                    | 391,291,320  | 244,246,140   | Amount                      | Securities                          |                           |            |
| 41  | (10)  | (10)  | 4  | 211   | 103  | 242  |             | 5,070 | 483   | 2,862  | 1,725   | Book value <sup>(2)</sup>   |                                     |                           |            |
| I   | I   | I   |  | I   | 1  |  |             | ı     |   |  | I   | Cost (1)                    |                                     |                           |            |
| Oil<br>transportation<br>by pipeline                    | Investment and finance  | Electric power generation and bulk marketing                        | Gas<br>transportation<br>by pipeline                 | Hydrocarbon<br>transportation<br>and storage                                      | Oil storage and<br>shipment  | Oil transportation by pipeline                   |             |       | Refining                                      | Production and<br>marketing of<br>fertilizers                      | Separation, fractionation and transportation of natural gas liquids | Main Business               |                                     |                           | 12-31-2017 |
| Macacha Güemes<br>515, P.3°, Buenos<br>Aires, Argentina | Pasaje Ingeniero<br>Butty 220, P.16°,<br>Buenos Aires,<br>Argentina | Pasaje Ingeniero<br>Butty 220, P.16°,<br>Buenos Aires,<br>Argentina | San Martín 323,<br>P.13°, Buenos<br>Aires, Argentina | Terminal Marítima<br>Puerto Rosales –<br>Provincia de Buenos<br>Aires, Argentina. | Av. Leandro N.<br>Alem 1180, P. 11°,<br>Buenos Aires,<br>Argentina | Florida 1, P. 10°,<br>Buenos Aires,<br>Argentina |             |       | Maipú 1, P. 2°,<br>Buenos Aires,<br>Argentina | Alicia Moreau de<br>Justo 740, P. 3,<br>Buenos Aires,<br>Argentina | San Martín 344, P.<br>10°, Buenos Aires,<br>Argentina               | Registered Address          |                                     |                           | 017        |
| 09-30-17  | 03-31-17  | 03-31-17  | 12-31-17   | 09-30-17  | 09-30-17   | 09-30-17   |             |       | 09-30-17                                      | 09-30-17   | 09-30-17  | Date                        | Last ava                            | Information of the issuer |            |
| 34  | 829   | 1,231   | 156  | 12  | 14   | 110  |             |       | 92  | 783  | 643   | Stock (loss)                | ailable fina                        | of the issue              |            |
| 9   | 32  | 46  | 116  | 247   | 20   | 135  |             |       | (10)  | 197  | 1,071   |                             | Last available financial statements | •                         |            |
| 118   | 1,343   | 1,865   | 445  | 279   | 304  | 576  |             |       | 980   | 1,249  | 2,381   | Equity                      | ents                                |                           |            |
| 36.00%  | 42.86%  | 10.25%(4)   | 10.00%   | 30.00%  | 33.15%   | 37.00%   |             |       | 50.00%  | 50.00%   | 38.00%  | Holding in<br>Capital Stock |                                     |                           |            |
| 37  | 569   | 175   | 33   | 184   | 94   | 174  |             | 3,573 | 468   | 1,897  | 1,208   | Book Value (2)              |                                     |                           | 12-31-2016 |

|       |       | Other <sup>(3)</sup> | Other companies: | YPF Gas S.A   |
|-------|-------|----------------------|------------------|---|
|       |       |                      |                  | Common \$   |
|       |       |                      |                  | -   |
|       |       | <br>                 |                  | 59,821,434  |
| 6,057 | 987   | 111(10)              |                  | 235   |
| 208   | 208   | 208                  |                  | I   |
|       |       |                      |                  | Gas<br>fractionation,<br>bottling,<br>distribution<br>and transport<br>for industrial<br>and/or<br>residential use                              |
|       |       |                      |                  | Gas fractionation, bottling, distribution and transport for industrial Macacha Güemes and/or 515, P.3°, Buenos residential use Aires, Argentina |
|       |       |                      |                  | 09-30-17  |
|       |       |                      |                  | 176   |
|       |       |                      |                  | 215   |
|       |       |                      |                  | 884   |
|       |       |                      |                  | 34.00%  |
| 5,500 | 1,927 | 489                  |                  | 172   |

- Corresponds to cost and contributions, net of dividends collected and capital reductions.
- $\mathfrak{S}\mathfrak{S}\mathfrak{S}$ S.A Corresponds to Holding in shareholders' equity plus adjustments to conform to YPF accounting principles. Includes Gasoducto del Pacífico (Cayman) Ltd., A&C Pipeline Holding Company, Poligás Luján S.A.C.I., Oleoducto Transandino (Chile) S.A., Bizoy S.A., Civeny S.A., Bioceres S.A. and Petrofaro Includes Gasoducto del Pacífico (Cayman) Ltd., A&C Pipeline Holding Company, Poligás Luján S.A.C.I., Oleoducto Transandino (Chile) S.A., Bizoy S.A., Civeny S.A., Bioceres S.A. and Petrofaro
- €€€€ Additionally, the Group has a 29.99% indirect holding in capital stock through Inversora Dock Sud S.A. As stipulated by shareholders' agreement, joint control is held in this company by shareholders.
  - The U.S. dollar has been defined as the functional currency of this company.
- No value is disclosed because the carrying value is less than 1.

  Additionally, consolidates Compañía Minera de Argentina S.A., YPF Services USA Corp., YPF Europe B.V., YPF Brasil Comércio Derivado de Petróleo Ltda, Wokler Investment S.A., YPF Colombia S.A.S., Miwen S.A., Eleran Inversiones 2011 S.A.U., Lestery S.A., Energía Andina S.A Resources Netherlands B.V. and Bajo de Toro I S.R.L.
- 9 Companies merged with YPF.
- associates and joint ventures in this Note. The investments that YPF holds in CDS, IDS, YGEN I e YGEN II through its subsidiary YPF EE were reclassified to Assets held for disposal. See Note 3 and the evolution of Investments in



### 10. INVENTORIES

|  | 2017      | 2016      | 2015      |
|--|-----------|-----------|-----------|
| Refined products                                 | 16,260    | 13,390    | 10,709    |
| Crude oil and natural gas                        | 8,474     | 6,551     | 7,155     |
| Products in process                              | 640       | 411       | 169       |
| Construction works in progress for third parties | 142       | 12        | 85        |
| Raw materials, packaging materials and others    | 1,775     | 1,456     | 1,140     |
|  | 27,291(1) | 21,820(1) | 19,258(1) |

(1) As of December 31, 2017, 2016 and 2015, the cost of inventories does not exceed their net realizable value.

### 11. OTHER RECEIVABLES

|  | 2017       | 7       | 2016       |         | 2015       | 5       |
|--|------------|---------|------------|---------|------------|---------|
|  | Noncurrent | Current | Noncurrent | Current | Noncurrent | Current |
| Trade  | 74         | 2,892   | _          | 1,733   | _          | 928     |
| Tax credit, export rebates and production incentives         | 360        | 3,131   | 291        | 4,648   | 304        | 8,058   |
| Loans to third parties and balances with related parties (1) | 185        | 1,116   | 2,495(3)   | 1,703   | 297        | 2,366   |
| Collateral deposits  | 1          | 315     | 17         | 214     | 318        | 895     |
| Prepaid expenses   | 180        | 934     | 159        | 702     | 198        | 682     |
| Advances and loans to employees                              | 17         | 412     | 12         | 335     | 8          | 285     |
| Advances to suppliers and custom agents (2)                  | 2          | 1,700   |            | 1,691   | _          | 3,147   |
| Receivables with partners in JO                              | 743        | 1,165   | 816        | 1,361   | 1,118      | 1,881   |
| Insurance receivables  | _          | 206     | _          | _       |            | 808     |
| Miscellaneous  | 31         | 870     | 134        | 1,111   | 271        | 402     |
|  | 1,593      | 12,741  | 3,924      | 13,498  | 2,514      | 19,452  |
| Provision for other doubtful receivables                     | (258)      | (57)    | (15)       | (42)    | (13)       | (39)    |
|  | 1,335      | 12,684  | 3,909      | 13,456  | 2,501      | 19,413  |

- (1) See Note 31 for information about related parties.
- (2) Includes among others, advances to customs agents for the payment of taxes and import rights related to the imports of fuels and goods.
- (3) Includes the loan granted to Pampa Energía S.A. See Note 3.

### 12. TRADE RECEIVABLES

|   | 201        | 7       | 2010       | 6       | 2015       |         |  |
|---|------------|---------|------------|---------|------------|---------|--|
|   | Noncurrent | Current | Noncurrent | Current | Noncurrent | Current |  |
| Accounts receivable and related parties (1) | 2,210      | 41,972  | 87         | 34,729  | 469        | 22,959  |  |
| Provision for doubtful trade receivables    |            | (1,323) |            | (1,084) |            | (848)   |  |
|   | 2,210      | 40,649  | 87         | 33,645  | 469        | 22,111  |  |

(1) See Note 31 for information about related parties.

Changes in the provision for doubtful trade receivables

|                                     | 201        | 7       | 201        | 6       | 2015       |         |  |
|-------------------------------------|------------|---------|------------|---------|------------|---------|--|
|                                     | Noncurrent | Current | Noncurrent | Current | Noncurrent | Current |  |
| Balance at beginning of year        |            | 1,084   |            | 848     | 7          | 866     |  |
| Increases charged to expenses       | _          | 222     |            | 197     |            | 313     |  |
| Decreases charged to income         | _          | (194)   | _          | (28)    | —          | (412)   |  |
| Amounts incurred due to utilization |            | _       |            | _       | (7)        | (17)    |  |
| Other movements                     |            | 119     | _          | _       | _          | _       |  |
| Translation differences             |            | 92      |            | 67      |            | 98      |  |
| Balance at end of year              |            | 1,323   | _          | 1,084   | _          | 848     |  |

### 13. CASH AND CASH EQUIVALENTS

|   | 2017   | 2016   | 2015   |
|---|--------|--------|--------|
| Cash and Banks  | 9,672  | 7,922  | 13,920 |
| Short-term investments                                    | 15     | 27     | 693    |
| Financial assets at fair value through profit or loss (1) | 19,051 | 2,808  | 774    |
|   | 28,738 | 10,757 | 15,387 |

(1) See Note 6.



### 14. PROVISIONS

Changes in the Group's provisions for the fiscal years ended December 31, 2017, 2016 and 2015 are as follows:

| pending<br>ntingenci                                    | Nonc       | Amount as of 7,014 8 |       | charged to | (434)   | to | payments/utilization — (( | Net exchange and represent 2 383 |        | acquisition — - | Reclassifications and other | (650)              | Amount as of 10,375 10,375 | arged to       |     | (158)   | Amounts incurred due to payments/utilization 9 (2) | Net exchange and translation differences 1,221 |              | Reclassifications and other $(1,608)^{(2)}$ |        | ĺ     | harged to (1,570) |         | es 1,483 | Reclassifications and other | 180(3) |
|---|------------|----------------------|-------|------------|---------|----|---------------------------|----------------------------------|--------|-----------------|-----------------------------|--------------------|----------------------------|----------------|-----|---------|--|--|--------------|---|--------|-------|-------------------|---------|----------|-----------------------------|--------|
| 1   | Noncurr    | 851 1,269            |       |            | (141) — |    | (374) —                   | 10 464                           |        |                 |                             | (292) $(1,099)$    | 1,620                      |                |     | (258) — | (239) —  | 7 159  | (11) (1,351) | 586 (860)                                   |        | 1     | (410) (6)         | (187)   | 75 —     | 558 (811)                   |        |
| ivironmental  | Current    | 1,145                |       |            |         |    | (1,030)                   | 186                              | 100    |                 |                             | 1,099              | 1,400                      | 22             | i   | I       | (869)  | 52   | (607)        | 860   | 868    |       | I                 | (661)   |          | 811                         |        |
| Provision for hydrocarbon wells abandonment obligations | Noncurrent | 18,087               | 1,694 |            | (314)   |    | I                         | 10 109                           | 10,107 |                 |                             | $(2,196)^{(1)}$    | 27,380                     | 3 022          | - 3 | (10)    | (48)   | 6,245  | (515)        | 1,548(1)                                    | 37,623 | 2,946 | ∞                 |         | 6,874    | $(5,580)^{(1)}$             |        |
| earbon wells  | Current    | 376                  |       |            |         |    | (283)                     | 150                              | 10)    | (504)           | ( )                         | 681 <sup>(1)</sup> | 429                        |                |     | (77)    | (584)  | 94   | I            | 695(1)                                      | 557    |       | 2                 | (515)   | 121      | 571(1)                      |        |
| Provision for pensions                                  | Noncurrent | 194                  | 23    |            |         |    | I                         | 100                              | 102    |                 |                             | (71)               | 248                        | 07             | :   | (1)     | 1  | 26   | (357)        | (13)  | I      |       |                   |         | l        | I                           |        |
| pensions  | Current    | 27                   |       |            | (13)    |    | (71)                      | 17                               | 1.1    |                 |                             | 71                 | 31                         |                |     | ı       | (13)   | ယ  | (34)         | 13  | I      |       |                   |         |          |                             |        |
| Total   | Noncurrent | 26,564               | 4,765 |            | (748)   |    | I                         | 13.058                           | 10,000 |                 |                             | (4,016)            | 39,623                     | <i>\$ 66</i> 1 | 9 - | (169)   | (39)   | 7,651  | (4,436)      | (933)                                       | 47,358 | 6,823 | (1,568)           | (25)    | 8,357    | (6,211)                     |        |
|   | Current    | 2,399                | 95    |            | (154)   |    | (1,758)                   | 370                              | 0.1    | (504)           | (* 5 - 7                    | 1,559              | 2,009                      | 267            |     | (335)   | (1,705)  | 156  | (652)        | 2,154                                       | 1,994  | 83    | (408)             | (1,363) | 196      | 1,940                       | )<br>- |

Includes (4,913), 2,243 and (1,281) corresponding to the annual recalculation of costs for abandonment of hydrocarbon wells for the years ended December 31, 2017, 2016 and 2015, respectively; (96) corresponding to liabilities reclassified as Liabilities associated to assets held for disposal as of December 31, 2017; (226) corresponding to the decrease due to the change in the participation of the Magallanes area as of December 31, 2015; and (8) corresponding to December 31, 2015; and (8) corresponding to a decrease in the Puesto Cortadera area as of December 31, 2015; Includes (950) corresponding to resolutions for contractual claims that were reclassified to Other liabilities (see Note 14.a.2); and (75) corresponding to tax claims that were reclassified to Other liabilities (see Note 14.a.2); and 2,932 of reclassifications of Other liabilities (see Note 27).

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### 14. PROVISIONS (Cont.)

The Group is party to a number of labor, commercial, civil, tax, criminal, environmental, customs and administrative proceedings that, either alone or in combination with other proceedings, could, if resolved in whole or in part adversely against it, result in the imposition of material costs, judgments, fines or other losses. While the Group believes that such risks have been provisioned appropriately based on the opinions and advice of our legal advisors and in accordance with applicable accounting standards, certain loss contingencies are subject to change as, among other factors, new information develops and results of the presented evidence are obtained. It is possible that losses resulting from such risks, if proceedings are decided in whole or in part adversely to the Group, could significantly exceed the recorded provisions.

Additionally, due to its operations, the Group is subject to various laws and regulations relating to the protection of the environment. These laws and regulations may impose, among other things, liability on companies for the cost of pollution clean up and environmental damages resulting from operations. Management believes that the Group's operations are in substantial compliance with laws and regulations currently in force relating to the protection of the environment as such laws have historically been interpreted and enforced.

However, the Group is periodically conducting new studies to increase its knowledge concerning the environmental situation in certain geographic areas where the Group operates in Argentina, in order to establish their status, causes and necessary remediation and, based on the aging of the environmental issue, to analyze the possible responsibility of the Argentine Government, in accordance with the contingencies assumed by the Argentine Government for which YPF has the right of indemnity for liabilities existing as of December 31, 1990. Until these studies are completed and evaluated, the Group cannot estimate what additional costs, if any, will be required. However, it is possible that other work, including provisional remedial measures, may be required.

### 14.a) Provision for litigation and contingencies

As of December 31, 2017, the Group has accrued pending lawsuits, claims and contingencies, which are probable and can be reasonably estimated. The most significant pending lawsuits and contingencies accrued are described in the following paragraphs.

### 14.a.1) Liabilities and contingencies assumed by the Argentine Government before 1990

Under YPF's Privatization Law, the Argentine Government took over certain obligations of the predecessor company as of December 31, 1990. In certain lawsuits related to events or acts that took place before December 31, 1990, YPF has been required to make advance payments established in certain judicial decisions. YPF has the right to be reimbursed for these payments by the Argentine Government pursuant to the above-mentioned indemnity.

### 14.a.2) Claims arising from restrictions in the natural gas market

### DOP Claims

Pursuant to Resolution No. 265/2004 of the Secretariat of Energy, the Argentine Government created a program of useful cutbacks of natural gas exports and their associated transportation services. Such program was initially implemented by means of Regulation No. 27/2004 of the Under-Secretariat of Fuels, which was subsequently substituted by the Program of Rationalization of Gas Exports and Use of Transportation Capacity (the "Program") approved by Resolution No. 659/2004 of the Secretariat of Energy. Additionally, Resolution No. 752/2005 provided that industrial users and thermal generators (which according to this resolution will have to request volumes of gas directly from the producers) could also acquire the natural gas from the cutbacks on natural gas exports through the "Permanent Additional Injection" mechanism created by this resolution. Through the Program and/or the Permanent Additional Injection, the Argentine Government requires natural gas exporting producers to deliver additional volumes to the domestic market in order to satisfy natural gas demand of certain consumers in the Argentine market ("Additional Injection Requirements"). Such additional volumes are not contractually committed by YPF, which is thus forced to affect natural gas exports, which execution has been conditioned. The mechanisms established by the Resolutions No. 659/2004 and 752/2005 have been adapted by Secretariat of Energy Resolution No. 599/2007, which modifies the conditions for the imposition of the requirements, depending on whether the producers have signed the proposed agreement, ratified by such resolution, between the Secretariat of Energy and the producers.



### 14. PROVISIONS (Cont.)

Resolution No. 1410/2010 of the ENARGAS also approved the procedure which sets new rules for natural gas dispatch applicable to all participants in the natural gas industry, imposing new and more severe regulations to the producers' availability of natural gas (*Procedimiento para Solicitudes, Confirmaciones y Control de Gas*). Additionally, the Argentine Government, through instructions made using different procedures, has ordered limitations on natural gas exports (in conjunction with the Program and the Permanent Additional Injection, named the "Export Administration"). On January 5, 2012, the Official Gazette published Secretariat of Energy Resolution No. 172, which temporarily extends the rules and criteria established by Resolution No. 599/07, until new legislation replaces the resolution previously mentioned. This resolution was appealed on February 17, 2012 by filing a motion for reconsideration with the Secretariat of Energy.

Because of the resolutions mentioned before, in several occasions since 2004, YPF was forced to suspend, either totally or partially, its natural gas deliveries to some of its export clients, with whom YPF has undertaken firm commitments to deliver natural gas.

YPF has challenged the Program, the Permanent Additional Injection and the Additional Injection Requirements, established by Secretariat of Energy Resolutions No. 599/2007 and 172/2011 and ENARGAS Resolution No. 1410/2010, as arbitrary and illegitimate, and has invoked vis-à-vis the relevant clients that the Export Administration constitute a fortuitous case or force majeure event (act of authority) that releases YPF from any liability and/or penalty for the failure to deliver the contractual volumes. These clients have rejected the force majeure argument invoked by YPF, and some of them have demanded the payment of indemnifications and/or penalties for the failure to comply with firm supply commitments, and/or reserved their rights to future claims in such respect. On December 9, 2015, the ENARGAS rejected YPF's challenge to Resolution No. 1410/2010. YPF did not appeal the ENARGAS resolution that dismissed the presented challenge.

Costs from contractual penalties arising from the failure to deliver natural gas until December 31, 2017, have been provisioned to the extent that such costs are probable and can be reasonably estimated.

### • AES Uruguaiana Empreendimentos S.A. ("AESU") and Transportadora de Gas del Mercosur S.A. ("TGM")

On June 25, 2008, AESU claimed damages in a total amount of US\$ 28.1 million for natural gas "deliver or pay" penalties for cutbacks accumulated from September 16, 2007 until June 25, 2008, and also claimed an additional amount of US\$ 2.7 million for natural gas "deliver or pay" penalties for cutbacks accumulated from January 18, 2006 until December 1, 2006. YPF has rejected both claims. On September 15, 2008, AESU notified YPF that it would no longer be complying with its obligations, alleging late payments and non-compliance by YPF. YPF rejected the arguments of this notification. On December 4, 2008, YPF notified AESU that, having ceased the force majeure conditions pursuant to the contract in force; it would suspend its delivery commitments, due to repeated breaches of AESU obligations. AESU has rejected this notification. On December 30, 2008, AESU rejected YPF's right to suspend its natural gas deliveries. On March 20, 2009, AESU formally notified YPF of the termination of the contract. On April 6, 2009, YPF promoted an arbitration process at the International Chamber of Commerce ("ICC") against AESU, Companhía do Gas do Estado do Río Grande do Sul ("SULGAS") and Transportadora de Gas del Mercosur S.A. ("TGM"). On the same date, YPF was notified by the ICC of an arbitration process initiated by AESU and SULGAS against YPF in which they claimed, among other matters considered inadmissible by YPF, consequential loss, AESU's plant dismantling costs and the payment of "deliver or pay" penalties mentioned above, all of which totaled approximately US\$ 1,052 million.



### 14. PROVISIONS (Cont.)

Additionally, YPF was notified of the arbitration process brought by TGM at the ICC, claiming from YPF the payment of approximately US\$ 10 million plus interest up to the date of effective payment, in connection with the payment of invoices related to the Transportation Gas Contract entered into in September 1998 between YPF and TGM, associated with the aforementioned exportation of natural gas contract signed with AESU. On April 8, 2009, YPF requested that this claim be rejected and counterclaimed for the termination of the natural gas transportation contract based on its termination rights upon the termination by AESU and SULGAS of the related natural gas export contract. In turn, YPF initiated an arbitration process at the ICC against TGM, among others. YPF received the reply to the complaint from TGM, which requested the full rejection of YPF's claims and filed a counterclaim against YPF asking the Arbitration Tribunal to require YPF to compensate TGM for all present and future damages suffered by TGM due to the termination of the Transportation Gas Contract and the Memorandum of Agreement dated on October 2, 1998, through which YPF undertook to pay irrevocable non-capital contributions to TGM in return for the Uruguayana Project pipeline expansion, and to require AESU and SULGAS (in the case the Arbitration Tribunal finds that the termination of the Gas Contract occurred due to the failure of AESU or SULGAS) to indemnify all damages caused by such termination to TGM jointly and severally. Additionally, on July 10, 2009, TGM increased the amount of its claim to US\$ 17 million and claimed an additional amount of approximately US\$ 366 million for loss of profits, which were considered inadmissible with respect to YPF, based on the foregoing the amendment to the complaint was answered rejecting the grounds alleged by TGM.

On April 6, 2011, the Arbitration Tribunal appointed in the "YPF vs. AESU" arbitration decided to sustain YPF's motion, and determined the consolidation of all the related arbitrations ("AESU vs. YPF", "TGM vs. YPF" and "YPF vs. AESU") in the "YPF vs. AESU" arbitration. Consequently, AESU and TGM desisted from and abandoned their respective arbitrations, and all the matters claimed in the three proceedings are to be resolved in the "YPF vs. AESU" arbitration.

On May 24, 2013, YPF was notified of the partial award decreed by a majority in the ICC Arbitration "YPF vs. AESU and TGM" whereby YPF was deemed responsible for the termination in 2009 of natural gas export and transportation contracts signed with AESU and TGM. Such award only decided on the responsibility of the parties, leaving the determination of the damages that could exist subject to the subsequent proceedings before the same Tribunal. Moreover, the Tribunal rejected the admissibility of "deliver or pay" claims asserted by SULGAS and AESU for the years 2007 and 2008 for a value of US\$ 28 million and for the year 2006 for US\$ 2.4 million. On May 31, 2013, YPF filed with the Arbitration Tribunal a writ of nullity, in addition to making several presentations in order to safeguard its rights, which was rejected by such court. Against the rejection of the writ of nullity, on August 5, 2013 YPF filed an appeal with the Argentinian Ordinary Court (finally heard by the Federal Contentious Administrative Tribunal). Despite the foregoing, the Arbitration Tribunal continued as scheduled.

On December 27, 2013, the Federal Contentious Administrative Tribunal hearing Administrative Litigation matters was moved to grant the reconsideration motion from denial on appeal, then sustaining the appeal for procedural violations and declaring that the grant thereof will have stay effects in connection with the arbitration process.

Despite the foregoing, on January 10, 2014, YPF was served with the complaint for damages filed by AESU with the Arbitration Tribunal claiming a total amount of US\$ 815.5 million and also with the complaint for damages filed by TGM with the Arbitration Tribunal claiming a total amount of US\$ 362.6 million, which were rejected by YPF.

On October 7, 2014, the Federal Court of Appeals hearing Administrative Litigation matters, besides having jurisdiction in the application of the writ of nullity, ordered the suspension of the court calendar related to the second stage of its arbitration process until a final court decision was rendered on the writ of nullity filed by YPF against the arbitral award on adjudication of liability. On October 8, 2014, the Arbitration Tribunal was served with notice of the decision rendered by the said Federal Court of Appeals and on October 31, 2014, the Arbitration Tribunal determined to suspend the arbitration process. In spite of the foregoing, on April 24, 2015, the Arbitration Tribunal resumed the proceedings and invited the parties to consult with each other regarding the continuation of the arbitration and to provide joint or individual report on next steps. On December 23, 2015, the Federal Contentious Administrative Tribunal granted the nullity request and vacated the partial arbitral award. On the same date, YPF notified the Arbitration Tribunal of the decision and requested the termination of the arbitration proceeding. On February 3, 2016, TGM filed an extraordinary appeal against the Federal Contentious Administrative Tribunal ruling to the National Supreme Court of Justice ("CSJN"). On February 2, 2016, AESU and SULGAS filed a nullity request against the Federal Contentious Administrative Tribunal ruling, and on February 23, 2016, the Tribunal rejected the request in limine. AESU and SULGAS filed a motion before the CSJN contesting this rejection, which was communicated to YPF on March 31, 2016. On the same date, the Court of Appeals rejected the motion to appeal before the CSJN filed by TGM on February 2, 2016.



### 14. PROVISIONS (Cont.)

On April 26, 2016, Division IV of the Court denied the motion filed by AESU and SULGAS (which was communicated to YPF on March 31, 2016) and passed a new resolution declaring the nullity and ineffectiveness of all proceedings filed by the parties until then and by the Arbitration Tribunal regarding the second stage of the arbitration, on the basis that they lacked legal grounds. In turn, the resolution reiterates the legal order arising from Section 34, subsection 5, paragraph b, of the Argentine Civil and Commercial Code of Procedures ("CPCCN"), advising the Arbitration Tribunal that it may not issue any resolution regarding the second stage of the arbitration, including a final award of damages, and also advising AESU, SULGAS and TGM that any of their respective acts to that end or any act of the Arbitration Tribunal that might involve them, in violation of the above referred judgment, will be evaluated by the court in the exercise of its powers granted by the CPCCN as process manager (pursuant to section 45 and related sections). In addition, this Division was ordered to notify the Arbitration Tribunal and the International Arbitration Secretary's Office for the ICC, advising them that the Arbitration Tribunal is not in a position to issue an award in accordance with applicable law.

This resolution was communicated by YPF to the Arbitration Tribunal, the parties and the ICC. On the same date but following this notification, YPF was given notice of the arbitration damages award issued by a majority of the Arbitration Tribunal, whereby the Company was ordered to pay damages of US\$185 million to AESU for the early termination of the gas export contract in 2009 and on account of the DOP penalty, and of US\$ 319 million to TGM on account of the amount of its principal invoices, irrevocable contributions and damages for the early termination of the transportation contract.

On May 2, 2016, YPF filed a writ of nullity with the ICC and the Arbitration Tribunal contesting the arbitration award. On the same date, it also filed a writ of nullity and, in the event the writ of nullity were not accepted, a complaint, before Division IV of the Federal Contentious Administrative Tribunal.

As a result of the legal and commercial complexities of the dispute between YPF, AESU and SULGAS, as well as the existence of litigation rights in different jurisdictions around the world (including the Republic of Argentina, the Republic of Uruguay and the United States of America), on December 30, 2016, these companies executed an agreement under which YPF undertook to pay a total of US\$60 million for which, without admitting facts or rights, they waived all claims that as of the date they had or could reciprocally have, with the exception, in the case of YPF, of the nullity remedies filed against the arbitral awards that remain in effect. The payment was made on January 10, 2017.

Moreover, on December 4, 2017, YPF entered into a settlement agreement with TGM terminating all existing claims between the parties, under which YPF agreed to pay TGM the sum of US\$ 114 million in compensation as total and final payment of all the arbitration and legal actions of TGM (US\$ 107 million in an initial payment on January 2, 2018 and the balance of US\$ 7 million in 7 annual installments of US\$ 1 million each, the first one maturing on February 1, 2018 and the rest on the same date of the following years). In addition, YPF committed to pay TGM the sum of US\$ 13 million (in 7 annual installments of US\$ 1.86 million each, with the same maturity date as the compensation balance) as payment on account of an interruptible exportation transport contract to be entered into by the parties and effective until 2027). This settlement agreement implied the withdrawal of the proceedings brought by YPF to obtain the declaration of the annulment of the Final Award of Damages and of the resources filed by TGM to obtain the revocation of the ruling of Division IV of the Federal Contentious Administrative Court of Appeals, which ordered the annulment of the Responsibility Award. Both the initial payment for US\$ 107 million and the first installments for US\$ 1 million and US\$ 1.86 million were made on the stipulated dates.

### • Transportadora de Gas del Norte S.A. ("TGN")

On April 8, 2009, YPF filed a complaint against TGN with ENARGAS, seeking the termination of the natural gas transportation contract with TGN in connection with the natural gas export contract entered into with AESU and other parties. The termination of the contract with that company is based on: (a) the impossibility of YPF to receive the service and of TGN to render the transportation service, due to (i) the termination of the natural gas contract with SULGAS and AESU and (ii) the legal impossibility of assigning the transportation contract to other shippers because of the regulations in effect, (b) the legal impossibility of TGN to render the transportation service on a firm basis because of certain changes in law in effect since 2004, and (c) the "Teoría de la Imprevisión" available under Argentine law, when extraordinary events render a party's obligations excessively burdensome. As of the date of these financial statements, this complaint has not been resolved.



### 14. PROVISIONS (Cont.)

On March 12, 2010, YPF was notified of a complaint filed by TGN demanding compliance with the contract and payment of unpaid invoices from February 20, 2007 until December 15, 2010 for a total of US\$ 64 million.

Additionally, TGN notified YPF of the rescission of its transportation contract because of YPF's alleged failure to pay its transportation invoices. YPF has responded to these claims, rejecting them based on the legal impossibility of TGN to render the transportation service and in the termination of the transportation contract determined by YPF and formalized with a complaint initiated before ENARGAS.

On the trial for the collection of bills, on September 2011, YPF was notified of the resolution of the Court of Appeals rejecting YPF's claims and declaring that ENARGAS is not the appropriate forum to decide on the matter and giving jurisdiction to the Civil and Commercial Federal courts to decide on the claim for the payment of unpaid invoices mentioned above.

On September 21, 2016, evidence was submitted and the case was opened.

On April 3, 2013, YPF was notified of the complaint for damages brought by TGN, whereby TGN demanded the amount of US\$ 142 million from YPF, plus interest and legal fees for the termination of the transportation contract. On May 31, 2013, YPF responded to the claim, requesting the dismissal thereof. On April 3, 2014, the evidence production period commenced for a 40-day lapse, and the court notified the parties that they would submit a copy of evidence offered by them to create an exhibit binder. YPF submitted its plea on June 21, 2017, after the closing of the evidentiary period.

After both parties' pleas were submitted, the Lower Court decided it would defer its final judgment until after deciding on the claim brought by TGN to litigate in forma pauperis. TGN appealed through separate complaints, which were dismissed by the Court of Appeals in November 2017. As of the date of issuance of these consolidated financial statements, TGN's claim is still pending.

Taking into account the information available to date, the estimated time remaining until the completion of the process and the results of additional evidence presented in the continuation of the litigation, YPF has provisioned its best estimate with respect to the value of these claims.

### • Nación Fideicomisos S.A. ("NAFISA")

NAFISA initiated a claim against YPF in relation to payments of applicable fees to Fideicomiso Gas I and Fideicomiso Gas II, respectively, for natural gas transportation services to Uruguaiana corresponding to the transportation invoices claimed by TGN. A mediation hearing finished without resulting in an agreement, concluding the pre-trial stage. Additionally, on January 12, 2012 and following a mediation process that ended without any agreement, NAFISA filed a complaint against YPF, under article 66 of Law No. 24,076, before ENARGAS, claiming the payment of certain transportation charges in an approximate amount of 339. On February 8, 2012, YPF answered the claim raising ENARGAS' lack of jurisdiction, referring to the connection with the "TGN vs. YPF" trial, the consolidation in the "TGN vs. YPF" trial and rejecting the claim based on the theory of legal impossibility of TGN to provide the transportation services. On the same date, a similar order of consolidation was also submitted in the "TGN vs. YPF" trial. On April 12, 2012, ENARGAS resolved in favor of NAFISA. On May 12, 2012, YPF filed an appeal against such resolution to the National Court of Appeals in the Federal Contentious Administrative. On November 11, 2013, the court dismissed the direct appeal filed by YPF. In turn, on November 19, 2013, YPF submitted an ordinary appeal before the CSJN and on November 27, an extraordinary appeal was lodged before the CSJN. The ordinary appeal was granted and YPF timely filed the grounds of such appeal. On September 29, 2015, the CSJN upheld YPF's appeal and reversed the resolution issued by the Federal Contentious Administrative Court – Division IV – because ENARGAS lacks legal capacity to participate in these proceedings, as the parties are not subject to the Gas Law. The administrative instance for this case has been concluded, following the exhaustion of the administrative proceedings before ENARGAS. NAFISA has failed to file a complaint in court to date.

YPF has provisioned its best estimate with respect to the claim mentioned above.



### 14. PROVISIONS (Cont.)

### 14.a.3) Claims within the jurisdiction of the National Antitrust Protection Board CNDC

The Users and Consumers Association claimed (originally against Repsol YPF S.A. before extending its claim to YPF) the reimbursement of the overprice allegedly charged to bottled LPG consumers between 1993 and 1997 and 1997 to 2001. In the response to the claim, YPF requested the application of the statute of limitations since at the date of the extension of the claim, the two-year limit had already elapsed.

On December 28, 2015, the lower court rendered judgment admitting the claim seeking compensation for the term between 1993 and 1997 filed by the Users and Consumers Association against YPF and ordered the Company to transfer the amount of 98 plus interest (to be estimated by the expert witness in the settlement period) to the Secretariat of Energy, to be allocated to the trust fund created by Law No. 26,020.

The judgment dismissed the claim for the items corresponding to the period between 1997 and 2001, considering the dominant position of YPF in the domestic bulk LPG market had not been sufficiently proved. The Company appealed the decision of the lower court.

Furthermore, the judgment dismissed the complaint against Repsol S.A., as Repsol YPF S.A. had no equity interest in YPF, nor any other kind of relation with YPF from 1993 to 1997, the period in which the plaintiffs claim YPF abused its dominant position.

The Company appealed the judgment, which was admitted with staying effect. The Users and Consumers Association also appealed the judgment and both parties filed their respective appellate briefs.

On December 7, 2017, the Company was served with notice of the judgment of the Court of Appeals whereby: (i) confirming the claims for compensation for the 1993 to 1997 period; (ii) extending the claim of Users and Consumers Association for the period 1997 to December 1999 for the item "equity transfer of consumers to producers for the higher cost of liquefied petroleum gas", postponing the liquidation of the item for the execution stage of the judgment (the Court of Appeals did not set this amount); and (iii) partially granting the appeal filed by the defendant with respect to the item "damage caused by lower or different energy consumption due to the higher cost of Liquefied Petroleum Gas". The Company has analyzed the economic impact of the judgment of the Court of Appeals, which by extending the item of paragraph (i) above for the period 1997-1999, would increase the duly estimated amount. It should be noted that the ruling confirmed by the Court of Appeals does not order YPF to pay the claimant the ultimately settled amount, but rather to transfer such funds to the National Secretariat of Energy for the funds to be allocated to a trust fund created by Law No. 26,020, for purposes of the expansion of the natural gas network in areas with lower resources according to the criteria established by the enforcement authority. The enforcement authority, within six months from the settlement of the judgment amount, must present the corresponding feasibility studies (Dec. 470/15) together with a work plan, which must begin within six months from the presentation of the feasibility studies. Finally, the Company has filed an extraordinary appeal against the judgment of the Court of Appeals.

The Company has provisioned its best estimate for the aforementioned claim.

### 14.a.4) Environmental claims:

### • La Plata

In relation with the operation of the refinery that YPF has in La Plata, there are certain claims for compensation of individual damages purportedly caused by the operation of the La Plata refinery and the environmental remediation of the channels adjacent to the mentioned refinery. During 2006, YPF submitted a presentation before the Environmental Secretariat of the Province of Buenos Aires, which put forward for consideration the performance of a study for the characterization of environmental associated risks. As previously mentioned, YPF has the right to indemnity for events and claims prior to January 1, 1991, according to Law No. 24,145 and Decree No. 546/1993. Besides, there are certain claims that could result in the requirement to make additional investments connected with the operations of La Plata refinery.



### 14. PROVISIONS (Cont.)

On January 25, 2011, YPF entered into an agreement with the environmental agency of the Government of the Province of Buenos Aires (*Organismo Provincial para el Desarrollo Sostenible*, or "OPDS"), within the scope of the Remediation, Liability and Environmental Risk Control Program, created by Resolution No. 88/2010 of the OPDS. Pursuant to the agreement, the parties agreed to jointly perform an eight-year work program in the channels adjacent to the La Plata refinery, including characterization and risk assessment studies of the sediments. The agreement provides that, in the case that a required remediation action is identified because of the risk assessment studies, the different alternatives and available techniques will be considered, as well as the steps needed for the implementation. Dating studies will also be performed pursuant to the agreement, in order to determine responsibilities of the Argentine Government in accordance with its obligation to hold YPF harmless in accordance with the article 9 of Law No. 24,145 of the Privatization of YPF. In this context, YPF, with the agreement of OPDS, has carried out several studies and characterizations through specialized consultants whose progress has been notified to the provincial body.

In addition to the above, there are other similar claims made by neighbors of the same locale, alleging environmental and other associated damages.

The estimate of the claims for damages discussed above and the cost of the remediation actions, if required, are recorded in those situations where the loss is probable and can be reasonably estimated.

### Quilmes

The plaintiffs who allege to be residents of Quilmes, Province of Buenos Aires, have filed a lawsuit in which they have requested remediation of environmental damages and also the payment as compensation for alleged personal damages. They base their claim mainly on a fuel leak in the pipeline running from La Plata to Dock Sud, currently operated by YPF, which occurred in 1988 as a result of an unlawful act that caused the rupture of the polyduct, when YPF was a state-owned company. Fuel would have emerged and become perceptible on November 2002, which resulted in remediation works that are being performed by the Company in the affected area, supervised by the environmental authority of the Province of Buenos Aires. The Argentine Government has denied any responsibility to indemnify YPF for this matter, and the Company has sued the Argentine Government to obtain a declaration of invalidity of such decision. The suit is still pending.

In addition to the above, YPF was notified of a similar environmental claim made by residents of the same locale, for damages. Such complaint has been answered in due course. At present, the case is undergoing the evidentiary stage.

Considering the information available as of the date hereof, the estimated time remaining until the completion of the litigation proceedings and the results of additional evidence presented in the litigation proceedings, the Company has provisioned its best estimate with respect to the value of the claims.

### Other environmental claims

In addition to claims discussed above, the Group has other legal claims against it based on similar arguments. In addition, non-judicial claims have been initiated against YPF based on similar arguments. In all these cases, considering the information available to date, the estimated time remaining until the end of the proceedings, and the results of the additional evidence presented during the continuation of the litigation, the Group has provisioned its best estimate for the objective value of the claims.

### 14.a.5) Tax claims

The Group has received a number of complaints from the Federal Administration of Public Income (AFIP) and the provincial and municipal tax authorities that are not individually significant, and for which the corresponding provision has been granted, based on the best estimate according to the information available as of the date of the issuance of these consolidated financial statements.



### 14. PROVISIONS (Cont.)

### 14.a.6) Other pending litigation

During the normal course of its business dealings, the Group has been sued in numerous legal proceedings in labor, civil and commercial courts. The management of the Company, in consultation with its outside counsel, has established a provision considering the best estimate for these purposes, based on the information available as of the date of issuance of these consolidated financial statements, including legal fees and expenses.

### 14.b) Provision for environmental expenses and obligations for the abandonment of hydrocarbon wells

Based on the Group's current remediation plan, the Group has accrued environmental remediation costs where assessments and/or remedies are probable and can reasonably be estimated.

### 15. INCOME TAX

The calculation of the income tax expense accrued for the years ended December 31, 2017, 2016 and 2015 is as follows:

|                     | 2017  | 2016  | 2015     |
|---------------------|-------|-------|----------|
| Current income tax  | (605) | (734) | 517      |
| Deferred income tax | 4,574 | 2,159 | (25,154) |
|                     | 3,969 | 1,425 | (24,637) |

The reconciliation between the charge to income for income tax for the years ended December 31, 2017, 2016 and 2015 and the one that would result from applying the prevailing tax rate on net income before income tax arising from the consolidated statements of comprehensive income for each year is as follows:

|  | 2017     | 2016     | 2015          |
|--|----------|----------|---------------|
| Net income before income tax                                 | 8,703    | (29,804) | 29,063        |
| Statutory tax rate   | 35%      | 35%      | 35%           |
| Statutory tax rate applied to net income before income tax   | (3,046)  | 10,431   | (10,172)      |
| Effect of the valuation of property, plant and equipment and |          |          |               |
| intangible assets measured in functional currency            | (18,185) | (19,543) | (31,200)      |
| Exchange differences   | 12,318   | 12,237   | 19,164        |
| Effect of the valuation of inventories                       | (1,558)  | (1,819)  | (2,412)       |
| Income on investments in associates and joint ventures       | 500      | 206      | 111           |
| Effect by change of tax rate <sup>(1)</sup>                  | 13,892   |          |               |
| Miscellaneous  | 48       | (87)     | $(128)^{(2)}$ |
| Income tax expense   | 3,969    | 1,425    | (24,637)      |

- (1) Contemplates the recovery of the deferred income tax decrease. See Notes 2.b.15 and 30.l.
- (2) Includes 301 of tax loss carryforwards originated during previous years

Breakdown of deferred tax as of December 31, 2017, 2016 and 2015 is as follows:

|   | 2017     | 2016     | 2015     |
|---|----------|----------|----------|
| Deferred tax assets                             |          |          |          |
| Provisions and other non-deductible liabilities | 1,861    | 3,607    | 3,093    |
| Tax losses carryforward and other tax credits   | 6,484    | 3,837    | 3,236    |
| Miscellaneous                                   | 99       | 82       | 83       |
| Total deferred tax assets                       | 8,444    | 7,526    | 6,412    |
| Deferred tax liabilities                        |          |          |          |
| Property, plant and equipment                   | (43,931) | (45,579) | (45,393) |
| Miscellaneous                                   | (1,570)  | (3,848)  | (4,877)  |

| Total deferred tax liabilities | (45,501) | (49,427) | (50,270) |
|--------------------------------|----------|----------|----------|
| Total Net deferred tax         | (37,057) | (41,901) | (43,858) |



### 15. INCOME TAX (Cont.)

For fiscal year ended December 31, 2017, the Group estimated a tax loss carryforward of 8,776. Deferred income tax assets are recognized for tax loss carryforwards to the extent their setoff through future taxable profits is probable. Tax loss carryforwards in Argentina expire within 5 years.

In order to fully realize the deferred income tax asset, the Group will need to generate taxable income. Based upon the level of historical taxable income and projections for future over the years in which the deferred income tax are deductible, Management of the Company believes that as of December 31, 2017 it is probable that the Group will realize all of the deferred income tax assets.

As of December 31, 2017, Group's tax loss carryforwards at the expected recovery rate were as follows:

| Date of generation | Date of expiration | Jurisdiction | Amount |
|--------------------|--------------------|--------------|--------|
| 2013               | 2018               | Argentina    | 65     |
| 2014               | 2019               | Argentina    | 306    |
| 2015               | 2020               | Argentina    | 2,698  |
| 2016               | 2021               | Argentina    | 782    |
| 2017               | 2022               | Argentina    | 2,633  |
|                    |                    |              | 6,484  |

The following deferred tax assets have not been recorded since they do not meet the registration criteria under IFRS:

- As of December 31, 2017, there are no recorded significant deferred tax assets.
- As of December 31, 2016, the Group did not record 1,138, corresponding to tax loss carry forwards from subsidiaries, 1,090 of which matured from 2017 onwards and 48 of which had indeterminate maturity.
- As of December 31, 2015, the Group did not record 4,373, 2,041 of which corresponded to non-recoverable taxable temporary differences and 2,332 of which corresponded to tax loss carry forwards from subsidiaries.

As of December 31, 2017, 2016, and 2015, the Group has classified as deferred tax assets for 588, 564, and 954, respectively, and as deferred tax liability 37,645, 42,465, and 44,812, respectively, all of which arise from the net deferred tax balances of each of the separate companies included in these consolidated financial statements.

As of December 31, 2017, 2016, and 2015, the causes that generate allocations to other comprehensive income, did not create temporary differences for income tax.



### **16. LOANS**

|                       |               |        |           | 2017                  |               | 2016                  |                      | 2015       | 5                    |
|-----------------------|---------------|--------|-----------|-----------------------|---------------|-----------------------|----------------------|------------|----------------------|
|                       | Interest rate | (1)    | Maturity  | Noncurrent            | Current       | Noncurrent            | Current              | Noncurrent | Current              |
| Argentine pesos:      |               |        |           |                       |               |                       |                      |            |                      |
| Negotiable            |               |        |           |                       |               |                       |                      |            |                      |
| obligations           | 16.50% —      | 28.57% | 2018-2024 | 29,640 <sup>(7)</sup> | $5,753^{(7)}$ | 29,194 <sup>(7)</sup> | $4,400^{(7)}$        | 19,280     | 2,050                |
| Loans <sup>(3)</sup>  | 20.00% —      | 26.41% | 2018-2020 | 728                   | 2,794         | 2,416                 | 1,459                | 1,224      | 792                  |
| Account overdraft     | 29.50%        |        | 2018      |                       | 10            |                       | 4,037 <sup>(5)</sup> |            | 4,737 <sup>(5)</sup> |
|                       |               |        |           | 30,368                | 8,557         | 31,610                | 9,896                | 20,504     | 7,579                |
| Currencies other than |               |        |           |                       |               |                       |                      |            |                      |
| the Argentine peso:   |               |        |           |                       |               |                       |                      |            |                      |
| Negotiable            |               |        |           |                       |               |                       |                      |            |                      |
| obligations(2)(4)(6)  | 3.50% —       | 10.00% | 2018-2047 | 114,686               | 15,075        | 86,116                | 4,360                | 52,651     | 9,981                |
| Export pre-financing  | 1.50% —       | 8.22%  | 2018-2019 | 383                   | 6,521         | 1,908                 | 6,491                | 1,039      | 3,680                |
| Imports financing     | 1.60% —       | 3.26%  | 2018      | _                     | 4,595         | _                     | 2,439                |            | 4,736                |
| Loans <sup>(6)</sup>  | 1.80% —       | 6.13%  | 2018-2021 | 6,290                 | 4,588         | 7,934                 | 3,591                | 3,740      | 1,841                |
|                       |               |        |           | 121,359               | 30,779        | 95,958                | 16,881               | 57,430     | 20,238               |
|                       |               |        |           | 151,727               | 39,336        | 127,568               | 26,777               | 77,934     | 27,817               |

- (1) Annual interest rate in force as of December 31, 2017.
- (2) Disclosed net of 309, 672, 1,349 corresponding to YPF's own negotiable obligations repurchased through open market transactions, as of December 31, 2017, 2016, and 2015, respectively.
- (3) Includes loans granted by Banco Nación Argentina. As of December 31, 2017, it incudes 2,500, 1,500 of which accrues variable interest at a BADLAR plus a margin of 3.5 points and 1,000 at a fixed rate of 20%. As of December 31, 2016, it includes 2,105; 105 of which accrues interest at a BADLAR variable rate plus a spread of 4 percentage points and 2,000 of which accrues interest at a BADLAR variable rate plus a spread of 3.5 percentage points. As of December 31, 2015, it includes 460, 210 of which accrues interest at a fixed rate of 15% until December 2015 and then at a variable BADLAR rate plus a margin of 4 percentage points and 250 of which accrues interest at a variable BADLAR rate plus a spread of 4 percentage points with a maximum lending rate of the general portfolio of Banco Nación Argentina. See Note 31.
- (4) Includes 1,528, 3,253, and 9,970 as of December 31, 2017, 2016, and 2015, respectively, of nominal value of negotiable obligations that will be canceled in pesos at the applicable exchange rate in accordance with the terms of the series issued.
- (5) Includes 1,440 and 1,926 corresponding to overdrafts granted by Banco Nación Argentina as of December 31, 2016 and 2015, respectively. See Note 31.
- (6) Includes 492, 4,960, and 2,575 corresponding to financial loans and negotiable obligations secured by cash flows as of December 31, 2017, 2016, and 2015, respectively.
- (7) Includes 15,850 and 11,248 as of December 31, 2017 and 2016, respectively, of nominal value of NO that will be canceled in dollars at the applicable exchange rate according to the conditions of the issued series.

The breakdown of the Group's borrowings as of the year ended on December 31, 2017, 2016 and 2015 is as follows:

|  | 2017            | 2016     | 2015            |
|--|-----------------|----------|-----------------|
| Balance at beginning of the year         | 154,345         | 105,751  | 49,305          |
| Proceed from loans                       | 54,719          | 101,322  | 55,158          |
| Payments of loans                        | (36,346)        | (73,286) | (24,090)        |
| Payments of interest                     | (17,912)        | (16,330) | (6,780)         |
| Accrued interest <sup>(1)</sup>          | 17,995          | 16,623   | 8,342           |
| Net exchange differences and translation | 21,465          | 20,265   | 26,189          |
| Reclassifications and other movements    | $(3,203)^{(2)}$ | _        | $(2,373)^{(3)}$ |
| Balance at the end of the year           | 191,063         | 154,345  | 105,751         |

- (1) Includes capitalized financial costs. See Note 8.
- (2) Includes 3,130 of loans reclassified to the item "Liabilities associated with assets held for disposal". See Note 3.
- (3) Corresponds to settlement of loans by agreement "El Orejano". See Note 29.b).

On April 28, 2017, the General and Extraordinary Shareholders' Meeting approved an extension in the effective term of the Global Medium Term Notes ("MTN") Program of the Company for a term of 5 years.

The maximum nominal amount at any time outstanding of the Program of US\$ 10,000 million or its equivalent in other currencies.



## 16. LOANS (Cont.)

Details regarding the Negotiable Obligations of the Group are as follows:

| October     | December    | September and | September   | July     | April       | April         | February     | February                | September           | September           | June         | June        | March       | April, February and October | December, April,<br>February and<br>December | October                | July        | June                    | April       | April                   | December and March      | November and December | October and December |         | YPF                                     | Mark                         |
|-------------|-------------|---------------|-------------|----------|-------------|---------------|--------------|-------------------------|---------------------|---------------------|--------------|-------------|-------------|-----------------------------|--|------------------------|-------------|-------------------------|-------------|-------------------------|-------------------------|-----------------------|----------------------|---------|---|------------------------------|
| 2015        | 2015        | 2015          | 2015        | 2015     | 2015        | 2015          | 2015         | 2015                    | 2014                | 2014                | 2014         | 2014        | 2014        | 2014/5/6                    | 2013/4/5                                     | 2013                   | 2013        | 2013                    | 2013        | 2013                    | 2012/3                  | 2012                  | er 2012              | 1998    | , , , ,                                 | Year                         |
| ¥           | e 6         | A             | <b>∽</b>    | €9       | US\$        | <b>⇔</b>      | 8            | €                       | <del>\$</del>       | €9                  | US\$         | S           |             | US\$                        | US\$   | US\$                   | US\$        | €9                      | US\$        | €9                      | €9                      | S                     | US\$                 | US\$    |   | Principal<br>value           |
| 2,000       | 1,000       | 1 697         | 1,900       | 500      | 1,500       | 935           | 250          | 950                     | 750                 | 1,000               | 66           | 465         | 500         | 1,522                       | 862  | 150                    | 92          | 1,265                   | 89          | 2,250                   | 2,828                   | 2,110                 | 552                  | 15      |   | pal                          |
| (2) (6) (7) | (2) (7) (9) | (2) (4) (6)   | (2) (6) (7) | (2) (6)  | (2) (6)     | (2) (4) (6)   | (2)(6)       | (2) (6) (7)             | (2) (4) (6)         | (2) (6) (7)         | (2) (5) (6)  | (2) (6)     | (2) (6) (7) | (2) (4) (6)                 | (2) (6)                                      | (2) (6)                | (2) (5) (6) | (2) (4) (6)             | (2) (5) (6) | (2) (4) (6) (7)         | (2) (4) (6) (7)         | (2) (4) (6) (7)       | (2) (4) (5) (6) (7)  | (1) (6) | 2.002.0                                 | Ref                          |
| Class XLIII | Class ALII  | Class XI II   | Class XLI   | Class XL | Class XXXIX | Class XXXVIII | Class XXXVII | Class XXXVI             | Class XXXV          | Class XXXIV         | Class XXXIII | Class XXXII | Class XXIX  | Class XXVIII                | Class XXVI                                   | Class XXIV             | Class XXII  | Class XX                | Class XIX   | Class XVII              | Class XIII              | Class XI              | Class X              | 1       |   | Class                        |
| BADLAR      | pres 470    | BADLAR        | BADLAR      | I        |             | plus<br>4.75% |              | BADLAR<br>plus<br>4.74% | BADLAR<br>plus 3.5% | BADLAR<br>plus 0.1% |              |             | BADLAR      | Fixed                       | Fixed  | Libor<br>plus<br>7.50% | Fixed       | BADLAR<br>plus<br>2.25% |             | BADLAR<br>plus<br>2.25% | BADLAR<br>plus<br>4.75% | l                     |                      | Fixed   |   | Interest rate <sup>(3)</sup> |
| 20.30%      | 20.200/     | 23 98%        | 19.98%      | I        | 8.50%       | 24.89%        | 1            | 24.47%                  | 23.48%              | 20.08%              |              |             | 21.74%      | 8.75%                       | 8.88%  | 8.92%                  | 3.50%       | 24.20%                  |             | 24.82%                  | 26.77%                  |                       | 1                    | 10.00%  | ľ                                       | (3)                          |
| 2023        | 2020        | 2020          | 2020        |          | 2025        | 2020          | 1            | 2020                    | 2019                | 2024                |              |             | 2020        | 2024                        | 2018   | 2018                   | 2020        | 2020                    |             | 2020                    | 2018                    | I                     |                      | 2028    | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Principal<br>Maturity        |
| 2,000       | 1,007       | 1 697         | 1,267       |          | 27,731      | 626           | 1            | 950                     | 500                 | 1,000               |              |             | 350         | 28,311                      |  | I                      | 451         | 1,265                   | 1           | 2,250                   |                         | I                     |                      | 276     |   | 2017                         |
| 80          | 00          | 110           | 736         | I        | 1,002       | 362           | 1            | 92                      | 298                 | 54                  |              |             | 158         | 599                         | 8,422  | 498                    | 230         | 12                      | 1           | 96                      | 1,427                   |                       | 1                    | 5       |   | Current                      |
| 2,000       | 1,007       | 1 697         | 1,900       | 1        | 23,617      | 935           | 1            | 950                     | 750                 | 1,000               |              |             | 500         | 24,111                      | 13,410                                       | 419                    | 576         | 1,265                   | 1           | 2,250                   | 1,414                   | I                     | 1                    | 63      |   | 2016<br>Noncurrent           |
| 106         | 170         | 148           | 145         | 529      | 853         | 69            | 260          | 126                     | 64                  | 76                  | 350          |             | ∞           | 509                         | 40   | 570                    | 197         | 12                      | 1,413       | 101                     | 1,439                   | 260                   | 1                    | 4       |   | Current                      |
| 2,000       | 1,007       | 1 697         | 1,900       | 500      | 19,369      | 935           | 250          | 950                     | 750                 | 1,000               | 287          |             | 500         | 17,212                      | 11,057                                       | 802                    | 630         | 1,265                   | 1,156       | 2,250                   | 2,828                   | 1,055                 |                      | 49      |   | 2015                         |
| 83          | 62          | 119           | 112         | 26       | 1,111       | 55            | 9            | 95                      | 49                  | 56                  | 574          | 157         | 7           | 364                         | 33   | 471                    | 162         | 12                      | ယ           | 91                      | 25                      | 1,129                 | 7,258                | ယ       |   | Current                      |

|         | January    | January    | Metrogas | December  | July and December | May         | September |           | July   |            | Abril  | April        | March       |            | March  | March     |            | December |
|---------|------------|------------|----------|-----------|-------------------|-------------|-----------|-----------|--------|------------|--------|--------------|-------------|------------|--------|-----------|------------|----------|
|         | 2013       | 2013       |          | 2017      | 2017              | 2017        | 2016      | 2016      |        | 2016       |        | 2016         | 2016        | 2016       |        | 2016      | 2015       |          |
|         | US\$       | US\$       |          | US\$      | US\$              | S           | CHF       | S         |        | S          |        | US\$         | US\$        | S          |        | S         | <b>⇔</b>   |          |
|         | 18         | 177        |          | 750       | 1,000             | 4,602       | 300       | 11,248    |        | 535        |        | 46           | 1,000       | 1,350      |        | 150       | 1,400      |          |
|         |            |            |          | (2)       | (2)               | (2) (6) (8) | (2)       | (2)(6)(8) |        | (2)        |        | (2)(5)(6)    | (2) (6)     | (2)(4)(6)  |        | (2) (6)   | (2) (6)    |          |
|         | Series A-U | Series A-L |          | Clase LIV | Clase LIII        | Clase LII   | Class LI  | Class L   |        | Class XLIX |        | Class XLVIII | Class XLVII | Class XLVI |        | Class XLV | Class XLIV |          |
|         | Fixed      | Fixed      |          | Fixed     | Fixed             | Fixed       | Fixed     | plus 4%   | BADLAR | plus 6%    | BADLAR | Fixed        | Fixed       | plus 6%    | BADLAR |           | 4.75%      | BADLAR   |
|         | 8.88%      | 8.88%      |          | 7.00%     | 6.95%             | 16.50%      | 3.75%     | 25.46%    |        | 28.57%     |        | 8.25%        | 8.50%       | 25.83%     |        |           | 26.53%     |          |
|         | 2018       | 2018       |          | 2047      | 2027              | 2022        | 2019      | 2020      |        | 2020       |        | 2020         | 2021        | 2021       |        |           | 2018       |          |
| 144,326 |            | 1          |          | 13,846    | 18,889            | 4,602       | 5,731     | 11,248    |        | 535        |        | 852          | 18,599      | 1,350      |        |           | I          |          |
| 20,828  | 256        | 3,076      |          | 44        | 445               | 110         | 54        | 651       |        | 31         |        | 14           | 430         | 114        |        |           | 1,422      |          |
| 115,310 | 220        | 2,461      |          | 1         |                   | 1           | 4,673     | 11,248    |        | 535        |        | 726          | 15,840      | 1,350      |        |           | 1,400      |          |
| 8,760   |            |            |          |           |                   |             | 45        | 696       |        | 33         |        | 12           | 367         | 152        |        | 153       | 23         |          |
| 71,931  | 183        | 1,906      |          | 1         |                   | 1           |           |           |        | 1          |        |              |             |            |        |           | 1,400      |          |
| 12,031  |            | 2          |          |           |                   |             |           |           |        |            |        |              |             |            |        |           | 25         |          |

- Corresponds to the 1997 M.T.N. Program for US\$1,000 million. Corresponds to the 2008 M.T.N. Program for US\$ 10,000 million.
- Interest rate as of December 31, 2017.
- **300** The ANSES and/or the "Fondo Argentino de Hidrocarburos" have participated in the primary subscription of these negotiable obligations, which may at the discretion of the respective holders, be subsequently traded on the securities market where these negotiable obligations are authorized to be traded.

  The payment currency of these Negotiable Obligations is the Argentine Peso at the Exchange rate applicable under the terms of the series issued.

  As of the date of issuance of these financial statements, the Group has fully complied with the use of proceeds disclosed in the pricing supplements.

  Negotiable obligations classified as productive investments computable as such for the purposes of section 35.8.1, paragraph K of the General Regulations applicable to Insurance Activities issued by
- **365**
- the Argentine Insurance Supervisory Bureau.
- 8 The payment currency of this issue is the U.S. dollar at the exchange rate applicable in accordance with the conditions of the relevant issued series.



### 17. OTHER LIABILITIES

|  | 2017       | 7       | 2016       | 5       | 2015       | 5       |
|--|------------|---------|------------|---------|------------|---------|
|  | Noncurrent | Current | Noncurrent | Current | Noncurrent | Current |
| Liabilities for contractual claims <sup>(1)</sup>          | 90         | 2,008   |            | 950     |            | _       |
| Extension of concessions                                   | 179        | 342     | 336        | 508     | 340        | 412     |
| Maxus Entities' agreements <sup>(2)</sup>                  |            | _       | _          | 2,932   |            | _       |
| Investments in associates and joint ventures with negative |            |         |            |         |            |         |
| equity <sup>(3)</sup>                                      |            |         |            |         |            | 1       |
| Miscellaneous  | 8          | 33      |            |         |            |         |
|  | 277        | 2,383   | 336        | 4,390   | 340        | 413     |

- (1) See Note 14.
- (2) See Note 27.
- (3) See Note 9.

### 18. ACCOUNTS PAYABLE

|                               | 201        | 7       | 2016       |           | 201:       | 5       |
|-------------------------------|------------|---------|------------|-----------|------------|---------|
|                               | Noncurrent | Current | Noncurrent | Current   | Noncurrent | Current |
| Trade and related parties (1) | 168        | 44,655  | 2,145(2)   | 40,667(2) | 204        | 38,704  |
| Advances to customers         | 1,470      | 1,325   |            |           |            | _       |
| Guarantee deposits            | 17         | 441     | 13         | 482       | 8          | 467     |
| Payables with partners of JO  |            | 122     |            | 9         |            | 78      |
| Miscellaneous                 |            | 828     | 29         | 437       | 73         | 317     |
|                               | 1,655      | 47,371  | 2,187      | 41,595    | 285        | 39,566  |

- (1) For more information about related parties, see Note 31.
- (2) Includes debt with Petrobras Energía Argentina S.A. See Note 3.

### 19. REVENUES

|                                      | 2017    | 2016    | 2015    |
|--------------------------------------|---------|---------|---------|
| Sales (1)                            | 261,072 | 216,644 | 159,387 |
| Production incentive program (2)     |         |         | 1,988   |
| Revenues from construction contracts | 710     | 778     | 455     |
| Turnover tax                         | (8,969) | (7,322) | (5,694) |
|                                      | 252,813 | 210,100 | 156,136 |

- (1) Includes 12,840, 16,757 and 12,345 for the years ended December 2017, 2016 and 2015, respectively, associated with revenues related to the natural gas additional injection stimulus program created by Resolution No. 1/2013 of the Planning and Strategic Coordination Commission of the National Plan of Hydrocarbons Investment. See Note 31.
- (2) See Note 31.

### **20. COSTS**

|                                       | 2017     | 2016     | 2015     |
|---------------------------------------|----------|----------|----------|
| Inventories at beginning of year      | 21,820   | 19,258   | 13,001   |
| Purchases for the year                | 66,075   | 48,760   | 33,886   |
| Production costs <sup>(1)</sup>       | 147,423  | 127,075  | 85,550   |
| Translation effect                    | 3,877    | 4,031    | 6,358    |
| Reclassifications and other movements | (92)     |          |          |
| Inventories at end of year            | (27,291) | (21,820) | (19,258) |

(1) See Note 21.



### 21. EXPENSES BY NATURE

The Group presents the statement of comprehensive income by classifying expenses according to their function as part of the "Costs", "Administrative expenses", "Selling expenses" and "Exploration expenses" lines. The following additional information is disclosed as required, on the nature of the expenses and their relation to the function within the Group for the fiscal years ended December 31, 2017, 2016 and 2015:

|  |                     |                         | 2017                |                      |         |
|--|---------------------|-------------------------|---------------------|----------------------|---------|
|  | Production costs(3) | Administrative expenses | Selling<br>expenses | Exploration expenses | Total   |
| Salaries and social security taxes                   | 12,548              | 3,537                   | 1,988               | 330                  | 18,403  |
| Fees and compensation for services                   | 1,159               | $2,118^{(2)}$           | 544                 | 18                   | 3,839   |
| Other personnel expenses                             | 3,493               | 374                     | 194                 | 49                   | 4,110   |
| Taxes, charges and contributions                     | 2,215               | 255                     | $4,172^{(1)}$       |                      | 6,642   |
| Royalties, easements and canons                      | 17,630              | _                       | 31                  | 31                   | 17,692  |
| Insurance  | 840                 | 49                      | 85                  |                      | 974     |
| Rental of real estate and equipment                  | 5,710               | 15                      | 518                 | _                    | 6,243   |
| Survey expenses                                      | _                   |                         |                     | 214                  | 214     |
| Depreciation of property, plant and equipment        | 51,607              | 771                     | 1,134               | _                    | 53,512  |
| Amortization of intangible assets                    | 688                 | 125                     | 25                  |                      | 838     |
| Industrial inputs, consumable materials and supplies | 5,813               | 35                      | 83                  | 25                   | 5,956   |
| Operation services and other service contracts       | 12,033              | 268                     | 905                 | 243                  | 13,449  |
| Preservation, repair and maintenance                 | 20,204              | 382                     | 458                 | 82                   | 21,126  |
| Unproductive exploratory drillings                   | _                   |                         |                     | 1,400                | 1,400   |
| Transportation, products and charges                 | 8,724               | 17                      | 5,961               | _                    | 14,702  |
| Provision for doubtful trade receivables             | _                   | _                       | 28                  |                      | 28      |
| Publicity and advertising expenses                   | _                   | 545                     | 609                 | _                    | 1,154   |
| Fuel, gas, energy and miscellaneous                  | 4,759               | 245                     | 1,219               | 64                   | 6,287   |
|  | 147,423             | 8,736                   | 17,954              | 2,456                | 176,569 |

- (1) Includes approximately 1,612 corresponding to export withholdings.
- (2) Includes 48.8 corresponding to fees and remunerations of the Directors and Statutory Auditors of YPF's Board of Directors. On April 28, 2017, the General and Extraordinary Shareholders' Meeting of YPF resolved to ratify the fees corresponding to fiscal year 2016 of 127 and to approve as fees on account of such fees and remunerations for the fiscal year 2017, the approximate sum of 48.3.
- (3) The expense recognized in the consolidated statement of comprehensive income corresponding to research and development activities amounted to 449.

|  |                     |                         | 2016                |                      |        |
|--|---------------------|-------------------------|---------------------|----------------------|--------|
|  | Production costs(3) | Administrative expenses | Selling<br>expenses | Exploration expenses | Total  |
| Salaries and social security taxes                   | 10,228              | 2,642                   | 1,615               | 288                  | 14,773 |
| Fees and compensation for services                   | 1,037               | 1,686(2)                | 436                 | 53                   | 3,212  |
| Other personnel expenses                             | 2,773               | 347                     | 140                 | 39                   | 3,299  |
| Taxes, charges and contributions                     | 1,861               | 382                     | 3,399(1)            | _                    | 5,642  |
| Royalties, easements and canons                      | 17,114              | _                       | 25                  | 39                   | 17,178 |
| Insurance  | 1,037               | 41                      | 89                  | _                    | 1,167  |
| Rental of real estate and equipment                  | 5,097               | 32                      | 505                 | 2                    | 5,636  |
| Survey expenses                                      |                     | _                       | _                   | 501                  | 501    |
| Depreciation of property, plant and equipment        | 43,077              | 714                     | 961                 | _                    | 44,752 |
| Amortization of intangible assets                    | 499                 | 186                     | 32                  | _                    | 717    |
| Industrial inputs, consumable materials and supplies | 5,732               | 33                      | 76                  | 18                   | 5,859  |
| Operation services and other service contracts       | 10,494              | 242                     | 713                 | 125                  | 11,574 |
| Preservation, repair and maintenance                 | 16,710              | 343                     | 338                 | 32                   | 17,423 |
| Unproductive exploratory drillings                   |                     | _                       | _                   | 2,050                | 2,050  |
| Transportation, products and charges                 | 6,952               | 9                       | 4,964               | _                    | 11,925 |

| Provision for doubtful trade receivables | _            |       | 169    |       | 169     |
|--|--------------|-------|--------|-------|---------|
| Publicity and advertising expenses       | <del>-</del> | 344   | 855    | _     | 1,199   |
| Fuel, gas, energy and miscellaneous      | 4,464        | 125   | 895    | 8     | 5,492   |
|  | 127,075      | 7,126 | 15,212 | 3,155 | 152,568 |
|  |              |       |        |       |         |

- (1) Includes approximately 1,317 corresponding to export withholdings.
- (2) Includes 126 corresponding to fees and remunerations of the Directors and Statutory Auditors of YPF's Board of Directors. On April 29, 2016, the General and Extraordinary Shareholders' Meeting of YPF resolved to ratify the fees corresponding to fiscal year 2015 of 140 and to approve as fees on account of such fees and remunerations for the fiscal year 2016, the approximate sum of 127.
- (3) The expense recognized in the consolidated statement of comprehensive income corresponding to research and development activities amounted to 400.



### 21. EXPENSES BY NATURE (Cont.)

|  |                                 |                         | 2015                |                      |         |
|--|---------------------------------|-------------------------|---------------------|----------------------|---------|
|  | Production costs <sup>(3)</sup> | Administrative expenses | Selling<br>expenses | Exploration expenses | Total   |
| Salaries and social security taxes                   | 7,566                           | 2,065                   | 1,207               | 224                  | 11,062  |
| Fees and compensation for services                   | 775                             | 1,378(2)                | 280                 | 24                   | 2,457   |
| Other personnel expenses                             | 2,303                           | 277                     | 121                 | 42                   | 2,743   |
| Taxes, charges and contributions                     | 1,144                           | 259                     | 2,885(1)            |                      | 4,288   |
| Royalties, easements and canons                      | 11,932                          | _                       | 17                  | 28                   | 11,977  |
| Insurance  | 831                             | 38                      | 56                  |                      | 925     |
| Rental of real estate and equipment                  | 3,360                           | 33                      | 394                 | 2                    | 3,789   |
| Survey expenses                                      |                                 |                         |                     | 504                  | 504     |
| Depreciation of property, plant and equipment        | 25,706                          | 382                     | 597                 | _                    | 26,685  |
| Amortization of intangible assets                    | 185                             | 117                     | 21                  |                      | 323     |
| Industrial inputs, consumable materials and supplies | 3,801                           | 27                      | 88                  | 5                    | 3,921   |
| Operation services and other service contracts       | 6,261                           | 237                     | 546                 |                      | 7,044   |
| Preservation, repair and maintenance                 | 14,231                          | 248                     | 322                 | 24                   | 14,825  |
| Unproductive exploratory drillings                   |                                 | _                       |                     | 1,425                | 1,425   |
| Transportation, products and charges                 | 4,796                           | 25                      | 3,756               | _                    | 8,577   |
| Provision for doubtful trade receivables             |                                 | _                       | (99)                |                      | (99)    |
| Publicity and advertising expenses                   | _                               | 395                     | 292                 | _                    | 687     |
| Fuel, gas, energy and miscellaneous                  | 2,659                           | 105                     | 616                 | 195                  | 3,575   |
|  | 85,550                          | 5,586                   | 11,099              | 2,473                | 104,708 |

- (1) Includes approximately 1,220 corresponding to export withholdings.
- (2) Includes 140 corresponding to fees and remunerations of the Directors and Statutory Auditors of YPF's Board of Directors. On April 30, 2015, the General and Extraordinary Shareholders' Meetings of YPF resolved to ratify the fees corresponding to fiscal year 2014 for 123 and to approve as fees on account of such fees and remunerations for the fiscal year 2015 the approximate sum of 146.
- (3) The expense recognized in the consolidated statement of comprehensive income corresponding to research and development activities amounted to 270.

### 22. OTHER NET OPERATING RESULTS

|  | 2017    | 2016    | 2015    |
|--|---------|---------|---------|
| Lawsuits   | (1,240) | (1,253) | (1,188) |
| Construction incentive (1)   | 188     | 422     | 621     |
| Insurance  | 206     | _       | 371     |
| Results from deconsolidation of subsidiaries (2)                   | _       | 1,528   | _       |
| Income from extension of concession agreements with partners of JO |         | 1,407   | _       |
| Temporary economic assistance (3)                                  | _       | 759     | 711     |
| Miscellaneous  | 32      | 531     | 1,167   |
|  | (814)   | 3,394   | 1,682   |

- (1) Corresponds to the incentive for Argentine manufacturers of capital goods received by AESA. See Note 31.
- (2) See Note 27.b).
- (3) Corresponds to the temporary economic assistance received by Metrogas. See Note 31.

### 23. NET FINANCIAL RESULTS

|                  | 2017 | 2016 | 2015 |
|------------------|------|------|------|
| Financial income |      |      |      |

| Interest income   | 1,598    | 1,472    | 1,638    |
|---|----------|----------|----------|
| Exchange differences  | 16,025   | 15,287   | 25,625   |
| Total financial income  | 17,623   | 16,759   | 27,263   |
| <u>Financial loss</u>   |          |          |          |
| Interest loss   | (18,385) | (18,109) | (8,618)  |
| Exchange differences  | (7,075)  | (3,676)  | (5,411)  |
| Financial accretion   | (3,169)  | (3,159)  | (1,987)  |
| Total financial costs   | (28,629) | (24,944) | (16,016) |
| Other financial results   |          |          |          |
| Fair value gains on financial assets at fair value through profit or loss | 2,208    | 1,826    | 446      |
| Gains on derivative financial instruments                                 |          | 213      | 464      |
| Total other financial results   | 2,208    | 2,039    | 910      |
| Total net financial results   | (8,798)  | (6,146)  | 12,157   |



### 24. INVESTMENTS IN JOINT OPERATIONS

The Group participates in JO and other agreements that give to the Group a contractually established percentage over the rights of the assets and obligations that emerge from the contracts. Interest in such JO have been consolidated line by line on the basis of the mentioned interest over the assets, liabilities, income and expenses related to each contract. Interest in JO have been calculated based upon the latest available financial statements as of the end of each year, taking into consideration significant subsequent events and transactions as well as management information available.

The exploration and production JO and other agreements in which YPF participates allocate the hydrocarbon production to each partner based on the ownership interest; consequently, such hydrocarbons are commercialized directly by the partners recognizing each of them the corresponding economic effects.

The assets and liabilities as of December 31, 2017, 2016 and 2015, and expenses for the three fiscal years ended on December 31, 2017, 2016 and 2015 of the JO and other agreements are as follows:

|                                  | 2017   | 2016   | 2015   |
|----------------------------------|--------|--------|--------|
| Noncurrent assets <sup>(1)</sup> | 66,887 | 63,145 | 47,322 |
| Current assets                   | 2,417  | 2,602  | 944    |
| Total assets                     | 69,304 | 65,747 | 48,266 |
| Noncurrent liabilities           | 5,876  | 5,946  | 4,593  |
| Current liabilities              | 5,524  | 6,293  | 6,391  |
| Total liabilities                | 11,400 | 12,239 | 10,984 |
|                                  |        |        |        |
|                                  | 2017   | 2016   | 2015   |
| Production Cost                  | 24,471 | 21,624 | 12,959 |
| Exploration expenses             | 767    | 849    | 395    |

(1) It does not include charges for impairment of property, plant and equipment because they are recorded by the partners participating in the JO.

As of December 31, 2017, the main exploration and production JO in which the Group participates are the following:

| Name                         | Location                        | Participation | Operator                     |
|------------------------------|---------------------------------|---------------|------------------------------|
| Acambuco                     | Salta                           | 22.50%        | Pan American Energy LLC      |
| Aguada Pichana               | Neuquén                         | 27.27%        | Total Austral S.A.           |
| Aguaragüe                    | Salta                           | 53.00%        | Tecpetrol S.A.               |
| CAM-2/A SUR                  | Tierra del Fuego                | 50.00%        | Enap Sipetrol Argentina S.A. |
| Campamento Central / Cañadón |                                 |               |                              |
| Perdido                      | Chubut                          | 50.00%        | YPF                          |
| Consorcio CNQ 7/A            | La Pampa y Mendoza              | 50.00%        | Pluspetrol Energy S.A.       |
| El Tordillo                  | Chubut                          | 12.20%        | Tecpetrol S.A.               |
| La Tapera y Puesto Quiroga   | Chubut                          | 12.20%        | Tecpetrol S.A.               |
| Lindero Atravesado           | Neuquén                         | 37.50%        | Pan American Energy LLC      |
| Llancanelo                   | Mendoza                         | 61.00%        | YPF                          |
| Magallanes                   | Santa Cruz, Tierra del Fuego y  |               |                              |
|                              | Plataforma Continental Nacional | 50.00%        | Enap Sipetrol Argentina S.A. |
| Loma Campana                 | Neuquén y Mendoza               | 50.00%        | YPF                          |
| Ramos                        | Salta                           | 42.00%        | Pluspetrol Energy S.A.       |
| Rincón del Mangrullo         | Neuquén                         | 50.00%        | YPF                          |
| San Roque                    | Neuquén                         | 34.11%        | Total Austral S.A.           |
| Yacimiento La Ventana – Río  |                                 |               |                              |
| Tunuyán                      | Mendoza                         | 70.00%        | YPF                          |
| Zampal Oeste                 | Mendoza                         | 70.00%        | YPF                          |
| Narambuena                   | Neuquén                         | 50.00%        | YPF                          |

| La Amarga Chica | Neuquén | 50.00% | YPF |
|-----------------|---------|--------|-----|
| El Orejano      | Neuquén | 50.00% | YPF |
| Bajo del Toro   | Neuquén | 52.00% | YPF |
| Bandurria Sur   | Neuquén | 51.00% | YPF |



### 25. SHAREHOLDERS' EQUITY

The Company's subscribed capital as of December 31, 2017, is 3,924 and 9 own treasury shares represented by 393,312,793 book-entry shares of common stock and divided into four classes of shares (A, B, C and D), with a par value of Argentine pesos 10 and 1 vote per share. These shares are fully subscribed, paid-in and authorized for stock exchange listing.

As of December 31 2017, there are 3,764 Class A outstanding shares. As long as any Class A share remains outstanding, the affirmative vote of Argentine Government is required for: 1) mergers, 2) acquisitions of more than 50% of YPF shares in an agreed or hostile bid, 3) transfers of all the YPF's production and exploration rights, 4) the voluntary dissolution of YPF or 5) change of corporate and/or tax address outside the Argentine Republic. Items 3) and 4) will also require prior approval by the Argentine Congress.

Until the enactment of Law No. 26,741 detailed in the next paragraphs, Repsol S.A. had a participation in the Company, directly and indirectly, of approximately 57.43% shareholding while Petersen Energía S.A.U. and its affiliates exercised significant influence through a 25.46% shareholding of YPF's capital stock.

Law No. 26,741 enacted on May 4, 2012, changed YPF's shareholding structure. The mentioned Law declared as national public interest and subject to expropriation the Class D Shares of YPF owned by Repsol, its controlled or controlling entities, representing the 51% of YPF's equity. According to Law 26,741, achieving self-sufficiency in the supply of hydrocarbons as well as in the exploitation, industrialization, transportation and sale of hydrocarbons, is thereby declared of national public interest and a priority for Argentina, with the goal of guaranteeing socially equitable economic development, the creation of jobs, the increase of the competitiveness of various economic sectors and the equitable and sustainable growth of the provinces and regions. The shares subject to expropriation were distributed as follows: 51% for the Argentine federal government and 49% for certain Argentine Provinces.

On April 28, 2017, the General and Extraordinary General Shareholders' Meeting was held, which approved the financial statements of YPF for the fiscal year ended December 31, 2016 and, in addition, adopted the following resolution in relation to the distribution of profits: a) fully release the special reserve for initial adjustment due to the implementation of the IFRS in accordance with the provisions set forth in article 10 Chapter III Title IV of the CNV Regulations (TO 2013), the reserve for future dividends, the reserve for the purchase of own shares and the reserve for investments; b) fully absorb the accumulated losses in Unretained Results up to 28,231 against the amounts corresponding to the released reserves for up to such amount; and c) the remainder of the released reserves to be allocated as follows: (i)the sum of 100 to a reserve fund for the purchase of own shares, for the purpose of granting the Board of Directors the possibility of acquiring its own shares at the time they deem appropriate, and to fulfill, during the execution of the plans, the commitments made and to be made by them in the future; and (ii) the sum of 716 to create a reserve fund for investments, authorizing the Board of Directors to determine the time of payment within a term that may not exceed the closing date of the fiscal year ended December 31, 2017.

On June 8, 2017, the Board of Directors of the Company resolved the payment of a dividend of 1.82 per share for the sum of 716, which was overruled by the resolution of the Board of Directors adopted at the meeting held on July 9, 2017. Subsequently, on December 14, 2017, the Board of Directors of the Company decided to pay the aforementioned dividend, which was made available to the shareholders on December 27, 2017.

### 26. EARNINGS PER SHARE

The following table shows the net income and the number of shares that have been used for the calculation of the basic and diluted earnings per share:

|                                      | 2017        | 2016        | 2015        |
|--------------------------------------|-------------|-------------|-------------|
| Net income                           | 12,340      | (28,237)    | 4,579       |
| Average number of shares outstanding | 392,625,259 | 391,497,615 | 392,101,191 |
| Basic and diluted earnings per share | 31.43       | (72.13)     | 11.68       |

Basic and diluted earnings per share are calculated as shown in Note 2.b.13).



### 27. DECONSOLIDATION OF MAXUS ENTITIES 27.a) Legal proceedings

### 27.a.1) Introduction

Laws and regulations relating to health and environmental quality in the United States of America affect the majority of the operations of (a) Maxus Energy Corporation ("Maxus") and its subsidiaries Maxus International Energy Company, Maxus (US) Exploration Company and Gateway Coal Company and (b) Tierra Solutions Inc. ("TS") (collectively, the "Maxus Entities" or "Debtors"). These laws and regulations set various standards regulating certain aspects of health and environmental quality, provide for penalties and other liabilities for the violation of such standards and establish in certain circumstances remedial obligations. However, upon the Debtors filing voluntary petitions under Chapter 11 of the United States Bankruptcy Code (the "Bankruptcy Code"), actions to collect a monetary claim for such liabilities against the Debtors were generally stayed.

Maxus and TS could have certain potential liabilities associated with operations of Maxus' former chemical subsidiary with respect to the health and environmental regulations mentioned in the previous paragraph; the sole shareholder of both companies was YPF Holdings. Nevertheless, this circumstance must be analyzed in the context of the limitations indicated below.

### 27.a.2) Reorganization Process under Chapter 11 of the Bankruptcy Code of the United States (hereafter, "Chapter 11")

On June 17, 2016, voluntary petitions under Chapter 11 of the Bankruptcy Code were filed with the United States Bankruptcy Court of the District of Delaware (hereafter, the "Bankruptcy Court") by the Debtors, subsidiaries of YPF Holdings. Prior to the Debtors' bankruptcy filing, the Debtors entered into an agreement (the "Agreement") with YPF, jointly with its subsidiaries YPF Holdings, CLH Holdings Inc., YPF International and YPF Services USA Corp (jointly, the "YPF Entities"), subject to Bankruptcy Court Approval, to settle all of the Debtors' claims against the YPF Entities, including any alter ego claims which, in the YPF Entities' opinion, have no merit.

The Agreement provided for: i) the granting of a loan by YPF Holdings for an amount of up to US\$ 63.1 million (the "DIP Loan") to finance the Debtors' activities during a year-long bankruptcy case, and ii) a payment of US\$ 130 million to the Maxus Entities ("Settlement Payment") for a release of all claims that the Debtors might have against the YPF Entities.

The first hearing corresponding to the filing under Chapter 11 (the "Filing") took place on June 20, 2016. At that hearing, the Bankruptcy Court approved, among other things, the Debtors' motions regarding their day-to-day operations, including the Debtors' use of the system for fund management, administration, payment of salaries and benefits to retired employees.

On December 29, 2016, the Debtors filed with the Bankruptcy Court a proposed Chapter 11 Plan of Liquidation (the "Plan") and Disclosure Statement. The Plan was structured around the US\$ 130 million Settlement Payment under the Agreement. The Plan (as filed) provided that if the Agreement was approved, portions of the US\$ 130 million Settlement Payment would be deposited into (i) a liquidating trust for distribution to creditors and (ii) an Environmental Response Trust for use in remediation. Moreover, if the Agreement were approved, the Debtors' Plan would likely be confirmed and the claims against the YPF Entities, including the alter-ego claims, would be settled and released in exchange for the US\$ 130 million Settlement Payment.

The Plan, however, provided for certain contingencies should the Bankruptcy Court not approve the Agreement. In that scenario, the Debtors' claims against YPF Entities, including the alter-ego claims or piercing the corporate veil, would be transferred into a liquidating trust, which would likely pursue those claims for the creditors' benefit.

Subject to certain exceptions under the Bankruptcy Code, effective as of the date of the filing of the Chapter 11 petitions with the Bankruptcy Court, most decisions, as well as the issues related to creditors' claims and actions for the collection of their claims that arose prior to the filing date are automatically stayed (among others, those corresponding to claims against the Maxus Entities at the local court of New Jersey related to the Passaic River litigation, which are explained under a.4.i) of this note).



### 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

On March 28, 2017, the Maxus Entities and the Creditors Committee submitted an alternative restructuring plan (the "Alternative Plan") which does not include the Agreement with the YPF Entities.

Under the Alternative Plan, a Liquidating Trust may submit alter ego claims and any other claim belonging to the insolvent's estate against the Company and the YPF Entities. The liquidating trust would be financed by Occidental Chemical Corporation in its capacity as creditor of the Maxus Entities. As YPF did not approve such Alternative Plan and the Alternative Plan did not contemplate the implementation of the originally submitted Agreements, on April 10, 2017 YPF Holdings, Inc. sent a note giving notice that this situation constituted an event of default under the loan granted under the Agreement with YPF and the YPF Entities (the "DIP Loan"). By the approval of the financing offered by Occidental ("Pospetition DIP Facility") under the Alternative Plan, the Judge ordered the repayment of the outstanding amounts (approximately US\$ 12.2 million) under the terms of the DIP Loan, which were subsequently received.

On May 22, 2017, the Bankruptcy Court of the Delaware District issued an order confirming the Alternative Plan submitted by the Creditors Committee and the Maxus Entities. The effective date of the Alternative Plan was July 14, 2017, as the conditions set forth in Article XII.B of the Alternative Plan were met. On July 14, 2017, a liquidating trust was also created. The liquidating trust stated to the Bankruptcy Court that it intends to file claims in 2018.

Considering the preceding events, and that the originally submitted agreements have not been approved by the Judge, the Management of the Company, in consultation with its legal advisors, has re-evaluated the amounts accounted for, based on the existing uncertainties.

### 27.a.3) Background of Maxus and TS

In connection with the sale of Diamond Shamrock Chemicals Company ("Chemicals") to Occidental Petroleum Corporation ("Occidental") in 1986, Maxus agreed to indemnify Chemicals and Occidental from and against certain liabilities relating to the business or activities of Chemicals prior to September 4, 1986 (the "selling date"), including environmental liabilities relating to chemical plants and waste disposal sites used by Chemicals prior to the selling date. The indemnity obligation and other liabilities described under 27.a.4) determined that Maxus, TS and other related companies submit a reorganization petition under the Bankruptcy Law mentioned above.

### 27.a.4) Maxus and TS Matters

The following are the alleged liabilities borne by the Debtors in their reorganization petition, updated up to the date of filing, the date on which YPF Holdings ceased to have control over the relevant activities of the Debtors (see Note 27.b).

### 27.a.4.i) Environmental administrative issues relating to the lower 8 miles of the "Passaic River"

### Newark, New Jersey

A consent decree, previously agreed upon by the U.S. Environmental Protection Agency ("EPA"), the New Jersey Department of Environmental Protection and Energy ("DEP") and Occidental, as successor to Chemicals, was entered in 1990 by the United States District Court of New Jersey and requires implementation of a remedial action plan at Chemical's former Newark, New Jersey agricultural chemicals plant.

### • Passaic River, New Jersey

Maxus, complying with its contractual obligation to act on behalf of Occidental, negotiated an agreement with the EPA (the "1994 AOC") under which TS has conducted testing and studies near the Newark plant site, adjacent to the Passaic River.



### 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

In 2003, the DEP issued Directive No. 1 seeking to identify those responsible for the damages to natural resources resulting from almost 200 years of historic industrial and commercial development along a portion of the Passaic River and a part of its basin. Directive No. 1 asserts that the notified companies, including Maxus and Occidental, are jointly and severally liable for the mentioned environmental damage, despite all evidence to the contrary. Directive No.1 demanded compensation for the restoration, identification, and quantification of the damage and determination of its value. Despite negotiations between the said entities, no agreement was reached and the DEP assumed jurisdiction in this matter.

In 2004, the EPA and Occidental entered into an administrative order on consent (the "2004 AOC") pursuant to which TS (on behalf of Occidental) has agreed to conduct testing and studies to characterize contaminated sediment and biota and evaluate remedial alternatives in the Newark Bay and a portion of the Hackensack, the Arthur Kill and Kill van Kull rivers. The initial fieldwork on this study was substantially completed. Discussions with the EPA regarding additional work that might be required are underway. The EPA issued General Notice Letters to other companies concerning the contamination of Newark Bay and the works that were performed by TS under the 2004 AOC.

In December 2005, the DEP issued a directive to TS, Maxus and Occidental directing said parties to pay the State of New Jersey's cost of developing a Source Control Dredge Plan in the lower six-mile portion of the Passaic River. The development of this plan was estimated by the DEP to cost approximately US\$ 2 million.

While some works are underway, the works under the 1994 AOC was substantially subsumed by reason of an administrative arrangement dated 2007 (the "2007 AOC") with about 70 companies (including Occidental and TS) in the lower portion of the Passaic River due to an administrative agreement of 2007 ("the 2007 AOC").

Under the 2007 AOC, the lower 17 miles of the Passaic River, from the mouth at Newark Bay to Dundee Dam, should be subjected to a Remedial Investigation / Feasibility Study ("RI/FS"). The AOC 2007 participants discussed the possibility of carrying out additional remediation work with the EPA. The companies that accepted to fund the RI/FS have negotiated an interim allocation of RI/FS costs among themselves based on a number of considerations. This group is called the Cooperative Parties Group (the "CPG"). The AOC 2007 was coordinated in a federal, state, local and private sector cooperative effort called the Restoration Project for the lower reaches of the Passaic River ("PRRP").

EPA's conclusions regarding the 2007 AOC indicated that the discharges of the underwater sewage pipe are an active source of hazardous substances in the lower sections of the Passaic River under study. During the first semester of 2011, Maxus and TS, acting on behalf of Occidental, entered into an administrative agreement with the EPA (the "CSO AOC"), which establishes the implementation of studies of the underwater sewage pipe on the Passaic River, and confirms that there are no pending obligations under the AOC 1994. In the last semester of 2014, TS filed its report with the EPA (thus completing phase 1).TS estimated, as of December 31, 2015, that the total cost to implement the CSO AOC is approximately US\$ 5 million and will take approximately 2 years to be completed once EPA authorizes phase 2 (the work plan).

On May 29, 2012, Occidental, Maxus and TS withdrew from the CPG under protest and reserving all their rights. However, Occidental continues to be a member of the 2007 AOC and its withdrawal from the CPG has not changed its obligations under the 2007 AOC.

In addition, in August 2007, the National Oceanic Atmospheric Administration ("NOAA") sent a letter to a number of entities it alleged have a liability for natural resources damages, including TS and Occidental, requesting that the group enter into an agreement to conduct a cooperative assessment of natural resources damages in the Passaic River and Newark Bay. In November 2008, TS and Occidental entered into an agreement with the NOAA to fund a portion of the costs it has incurred and to conduct certain assessment activities during 2009. Approximately 20 other PRRP members have also entered into similar agreements. In November 2009, TS declined to extend this agreement.



### 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

### Feasibility Study for the environmental remediation of the lower 8.3 miles of the Passaic River – Record of Decision ("ROD")

On June 2007, the EPA released a draft Focused Feasibility Study (the "FFS 2007"). The FFS 2007 outlines several alternatives for remedial action in approximately the lower 8.3 miles of the Passaic River. On April 11, 2014, the EPA published a new FFS draft ("FFS 2014"). The FFS 2014 contains four remediation alternatives analyzed by the EPA, as well as the estimate of the cost of each alternative, which consist of: (i) no action; (ii) deep dredging with 9.7 million cubic yards of filling material; (iii) filling and dredging of 4.3 million cubic yards and the placement of a a physical barrier mainly built of sand and stone (tapa de ingeniería); and (iv) focused dredging with 1 million cubic yard of filling material. On March 4, 2016, the EPA issued the ROD choosing Alternative 3 as a remedy to remove the contaminated sediments. The estimated cost is US\$ 1,382 million (estimated present value at a rate of 7%).

The ROD requires the removal of 3.5 million cubic yards of sediment from the lower 8.3 miles of the Passaic River by bank-to-bank dredging, to a depth of approximately 5 to 30 feet in the federal navigation channel from mile 0 to mile 1.7, and approximately 2.5 feet in the remaining areas of the lower 8.3 miles of the Passaic River. A two-foot thick cap will be installed over the dredged areas. Contaminated segments would be transported to disposal sites outside the state. The EPA estimates the whole project will take approximately 11 years, including one year for negotiations among potentially responsible parties, three to four years for project design and six years for its implementation.

On March 31, 2016, the EPA notified to more than one hundred potentially responsible parties, including Occidental Chemical Corporation ("OCC"), of the liabilities relating to the 8.3 mile area of the Passaic River relating to the ROD. In the same notice the EPA stated that it expected OCC (against whom Maxus is litigating a dispute over indemnity) to prepare the remediation plan design and that it would send a second letter with an administrative proposal to this end, which was received by counsel to OCC, Maxus and TS on April 26, 2016.

As of the date of the Maxus Entities' bankruptcy filing, OCC under Chapter 11, Maxus and TS were holding discussions with EPA to define their participation in a potential negotiation aimed at taking part in the design of the EPA's proposed remediation plan, taking into account that the ROD has identified over one hundred potentially responsible parties and eight contaminants of concern ("contaminants of concern"), many of which have not been generated at the Lister Site. As of such date, Maxus was evaluating the situation resulting from the issuance of the ROD by the EPA, as well as its subsequent associated letters.

### Removal Action Next to Lister Avenue Site

During June 2008, the EPA, Occidental, and TS entered into an Administrative Order of Consent ("2008 Removal Agreement"), pursuant to which TS (on behalf of Occidental) will undertake a removal action of sediment from the Passaic River in the vicinity of the former Diamond Alkali facility. This action results in the removal of approximately 200,000 cubic yards of sediment, which will be carried out in two different phases. The first phase, which commenced in July 2011 and was substantially completed in the fourth quarter of 2012. The EPA conducted a site inspection in January 2013, and TS received written confirmation of completion in March 2013.

The term for compliance with the second phase began after the agreement entered into with EPA regarding certain aspects related to the development of the same. The Focused Feasibility Study ("FFS") published on April 11, 2014 provides that Phase II of the removal action was consistently implemented with the FFS. On September 18, 2014, the EPA requested that Tierra Solutions, Inc. ("TS") conducted an additional sampling of the Phase II area. The sampling was completed in the first quarter of 2015 and TS is expected to present the validated results to the EPA during 2016.



### 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

### 27.a.4.ii) Environmental administrative issues relating to the lower 17 miles of the "Passaic River" – feasibility study

### • Feasibility study for the lower 17 miles of the Passaic River

Notwithstanding what is discussed above, the lower 17-mile section of the Passaic River, (the area contemplated in AOC 2007), was subject to a RIF/FS study expected to be completed by 2015, after which EPA would choose a remediation action that will be made public in order to receive comments.

The CGP ("Cooperation Group Parties") submitted the draft of the RI/FS in which offers potential remediation alternatives, (which comprises the lower 8 miles of the Passaic River). The EPA may or may not consider this report.

### 27.a.4.iii) Other environmental proceedings

Other matters relating to the eventual liability of Maxus and TS include liabilities arising from: (a) a ferrous chromate processing plant in Kearny, New Jersey; (b) the Standard Chlorine Chemical Company Superfund Site; (c) a ferrous chromate processing plant in Painesville, Ohio; (d) certain removals of contaminants located in Greens Bayou; (e) the Milwaukee Solvay Coke & Gas site located in Milwaukee, Wisconsin; (f) the Black Leaf Chemical Site, Tuscaloosa Site, Malone Services Site and Central Chemical Company Superfund Site (Hagerstown, Maryland); (g) the remediation action in Mile 10.9.

### 27.a.5) Trial for the Passaic River

In relation to the alleged contamination related to dioxin and other "hazardous substances" in the lower stretch of the Passaic River, Newark Bay, other nearby waterways and surrounding areas in December 2005, the DEP sued YPF, YPF Holdings, TS, Maxus and several companies, including Occidental (the "DEP Litigation"). The DEP sought remediation of natural resources damages and punitive damages and other matters.

The defendants made responsive pleadings and filings. In March 2008, the Court denied motions to dismiss by Occidental, TS and Maxus. The DEP filed its Second Amended Complaint in April 2008. YPF filed a motion to dismiss for lack of jurisdiction of the New Jersey Court over YPF because it was a foreign company lacking the requirements to become a party to a lawsuit in such Courts. The previously mentioned motion filed by YPF was denied in August 2008, and the denial was confirmed by the Court of Appeal.

Without prejudice to the foregoing, the Court denied the plaintiffs' motion to bar third party practice and allowed defendants to file third-party complaints. Consequently, third party claims against approximately 300 companies and governmental entities (including certain municipalities) which could have responsibility in connection with the claim were filed in February 2009. DEP filed its Third Amended Complaint in August 2010, adding Maxus International Energy Company and YPF International as additional named defendants. During the course of the litigation, the third parties filed motions to sever and stay and motions to dismiss. The motions were rejected by the judge. Some of the entities appealed the court decision, but such appeals were dismissed in March 2011.

In May 2011, the judge issued Case Management Order No. XVII (CMO XVII), which contained the Trial Plan for the case. This Trial Plan divides the case into two phases, each with its own mini-trials ("Tracks "or procedural stages"") which totaled nine Tracks considered individual trials. Phase one would determine liability and phase two would determine damages. Regarding the sub-stages: (a) sub-stages I to III (Tracks I to III) correspond to damage claimed by Occidental and the State of New Jersey; (b) sub-stages IV to VII (Tracks IV to VII) correspond to liability for alter ego and fraudulent conveyance with respect to YPF, Maxus and Repsol and to the liability of third parties to Maxus; (c) sub-stage VIII (Track VIII) corresponds to damages claimed by the State of New Jersey; (d) sub-stage IX (Track IX) is the percentage of liability that would correspond to Maxus for the cleanup and remediation costs.



### 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

Specifically, sub-stage III (Track III) will determine the extent of Maxus' liability for the operation of the Lister Site; sub-stage IV (Track IV) will determine the possible scope of YPF and Repsol's liability for damages to the Lister Site (alter ego and fraudulent conveyance).

Following the issuance of CMO XVII, the State of New Jersey and Occidental filed motions for partial summary judgment. The State filed two motions: the first one against Occidental and Maxus on liability under the Spill Act, and against TS on liability under the Spill Act. In addition, Occidental filed a motion for partial summary judgment that Maxus owes a duty of contractual indemnity to Occidental for liabilities under the Spill Act. In July and August 2011, the judge ruled that, although the discharge of hazardous substances by Chemicals was proven, liability allegation could not be made if the nexus between any discharge and the alleged damage is not established. Additionally, the Court ruled that TS has Spill Act liability to the State based on (1) its current ownership of the site where the discharges were made (Lister Avenue); and (2) that Maxus has the obligation to indemnify Occidental (previously mentioned).

The Special Master called for and held a settlement conference in November 2011 between the State of New Jersey, on the one hand, and Repsol S.A., YPF and Maxus, on the other hand to discuss the parties' respective positions, but no agreement was reached.

In February 2012, the plaintiffs and Occidental filed motions for partial summary judgment, seeking summary adjudication that Maxus has liability under the Spill Act of New Jersey. The Judge held that Maxus and TS have direct liability for the contamination generated into the Passaic River. Volume, toxicity and cost of the contamination have not been verified yet.

On September 11, 2012, the Court issued the Track VIII order. The Track VIII order governs the process by which the Court would conduct the discovery and trial of the claim for damages of the State of New Jersey (the "Administration") against Occidental, Maxus and TS (caused by the Diamond Alkali Lister Avenue plant).

On September 27, 2012, Occidental filed its Amended Cross-Claims and the following day, the State of New Jersey (the "Administration") filed its fourth Amended Complaint. The principal changes to the Administration's pleading concern the State's allegations against YPF and Repsol, which were included in its cross-claim. In particular, based on the Moconi Report of the Argentine State, three new allegations against Repsol were included involving asset stripping from Maxus and YPF.

During the fourth quarter of 2012 and the first quarter of 2013, YPF, YPF Holdings, Maxus and TS together with certain other direct defendants in the litigation, have engaged in on-going mediation and negotiation seeking to settle Track VIII with the State of New Jersey. During this time, the Court has stayed the litigation. On March 26, 2013, the State advised the Court that a proposed settlement between the State and certain third party defendants had been approved by the requisite threshold number of private and public third party defendants. The respective Boards of Directors of YPF, YPF Holdings, Maxus and TS approved at their Board meetings the settlement agreement (the "Agreement"). The proposal of the Agreement, which did not imply endorsement of facts or rights and presented only for conciliatory purposes, was subject to an approval process, publication, comment period and court approval. According to the terms of the Agreement, the state of New Jersey would agree to release certain claims related with environmental liabilities within a geographic area of the Passaic River, New Jersey initiated against YPF and certain subsidiaries, recognizing to YPF and other participants in the litigation, a limited liability of up to US\$ 400 million, if they are found responsible. In return, Maxus would make cash payment of US\$ 65 million at the time of approval of the Agreement.

In September 2013, the Court published its Case Management Order XVIII ("CMO No. XVIII"), which provides a schedule for approval of the Agreement. Pursuant to the CMO XVIII, the Court rejected Occidental's claims and approved the Agreement. Occidental appealed the approval of the Agreement, which was dismissed. Notwithstanding the foregoing, on February 10, 2014, in compliance with the settlement agreement, Maxus made a deposit of US\$ 65 million in an escrow account. On April 11, 2014, Occidental notified the parties that it would not seek an additional revision of the approval of the Agreement.



### 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

On August 20, 2014, the lawyers of the State of New Jersey reported that Occidental and the State of New Jersey had entered into an agreement on the general terms and conditions of a settlement agreement that would end the Track VIII proceedings. On December 16, 2014, the Court approved the Settlement Agreement whereby the State of New Jersey agreed to settle all claims against Occidental related to the environmental liabilities within a specific geographical area of the Passaic River, New Jersey, in consideration for the payment of US\$ 190 million in three installments, the last payable on June 15, 2015; and a sum amounting up to US\$ 400 million if the State of New Jersey had to pay its percentage for future remedial actions.

On January 5, 2015, Maxus received a letter from Occidental requesting Maxus, pursuant to the purported contractual obligation to indemnify Occidental, to compensate Occidental for all the payments that Occidental agreed to pay to the Administration. Maxus holds that both the existence and the amount of such obligation to indemnify under the settlement agreement are pending issues that must wait for the Court decision on the Passaic River case.

In addition, on July 31, 2014 Occidental submitted its third amendment to the complaint YPF, Repsol and Maxus filed motions to limit Occidental's third amended complaint arguing that such claims were not included in the second. Occidental answered that the third amendment incorporated new facts, but not new claims. The Court rejected Occidental's arguments and dismissed the third amendment to the complaint.

Moreover, Repsol countersued Occidental alleging that the US\$ 65 million paid by Repsol as per the agreement between Repsol, YPF, YPF Holdings, Maxus and Tierra Solutions with the State of New Jersey was paid for damages caused by (a) Chemicals, for which Occidental is liable under the share purchase agreement of 1986 or (b) Occidental's individual conduct.

On April 15, 2015, Occidental sent Maxus a letter claiming indemnity protection under the share purchase agreement with respect to the counterclaim filed by Repsol against Occidental. On 28 April 2015, Maxus replied contesting the claims reserving all arguments and defenses regarding the SPA's indemnification provisions.

Furthermore, the scheduled dates were changed through Case Management Order XXVI Depositions of witnesses residing in the U.S. and abroad began in December 2014. Nearly forty witnesses deposed in the case, including the corporate representatives of all the parties. The issues being explored include Track IV (the alter ego and fraudulent transfers of assets) and Track III (indemnity claims filed by OCC against Maxus). Depositions of witnesses were completed in mid-October 2015.

Notwithstanding the above, the Special Master authorized the parties to file briefs specifying any issue in respect of which each party believed that the court should authorize early summary judgment motions. The motions filed by the parties and the non-binding opinions as issued by the Special Master on January 14, 2016, are summarized below:

(a) YPF filed for early summary judgment against OCC on four issues: i) dismissal of the portion of OCC's claims for alter ego liability, based on the financing of YPF's acquisition of Maxus shares in 1995; ii) dismissal of the portion of OCC's claims for alter ego liability, based on the transfer of Maxus' assets from 1995 through 1999; iii) dismissal of the portion of OCC's liability claims based on the alleged "control" by YPF of Maxus's Board of Directors' decision, in 1996, to sell its subsidiaries in Bolivia and Venezuela to YPF International; and iv) dismissal of the portion of OCC's claims for alter ego liability, based on the transfer of Maxus' environmental liabilities to Tierra in 1996.

The Special Master's Recommendation on YPF's motion recommended to deny the motion on the grounds that i) the statute of repose for fraudulent transfers is not applicable to the remedy of alter ego for breach of contract and ii) a finder of fact should be permitted to consider all portions of YPF actions when determining if there is alter ego liability so dismissal of portions of these claims is inappropriate.



### 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

(b) OCC filed a motion for early summary judgment against Maxus in relation to Occidental's claim to recover the amount of US\$ 190 million (plus expenses) under the settlement agreement.

The motion sought to establish that Maxus is liable for all obligations at the Lister Site, regardless of any actions taken by OCC (including the period of time that the OCC operated Lister Site). Therefore, the Special Master's Recommendation on OCC's motion against Maxus recommended to grant the motion on the grounds that (i) the language of the SPA was not ambiguous and required Maxus to indemnify OCC for its own conduct at the Lister Site and (ii) OCC was not estopped from seeking indemnity from Maxus for its own conduct at the Lister Site because it did not take inconsistent legal positions in prior litigations. Notwithstanding the foregoing, Occidental will have to prove the reasonableness of the US\$ 190 million amount settled with the State of New Jersey, for which Maxus may eventually be liable.

In addition, OCC filed for early summary judgment dismissing the cross-claims of Repsol against OCC, which seek to recover from OCC the US\$ 65 million payment made by Repsol to New Jersey State under the settlement agreement.

The Special Master's Recommendation on OCC's motion against Repsol recommended to deny the motion in part as to Repsol's contribution claim and to grant the motion in part as to Repsol's unjust enrichment claim, on the grounds that i) Repsol's contribution claims are permissible under the New Jersey Spill Act even if a settlement did not fully discharge liability to the State; ii) demonstrating Repsol's liability under the Spill Act is not a prerequisite for Repsol to receive contribution from OCC; iii) Repsol is not liable to OCC for indemnification as an alter ego of Maxus, and iv) OCC was not unjustly enriched when Repsol settled with the state.

- (c) Repsol filed for early summary judgment against OCC to dismiss OCC's cross-claims: i) to the extent that OCC's claims are based on prescribed claims for fraudulent transfers; ii) on the grounds that OCC cannot prove that it has suffered damages due to a failure to perform an agreement; iii) on the grounds that OCC cannot prove that Repsol has caused any damage even if a non-performance occurred, because OCC has alleged that Maxus became insolvent before Repsol acquired YPF in 1999; and iv) on the grounds that OCC has failed to pierce the corporate veil between YPF and Repsol.
  - The Special Master's Recommendation on Repsol's motion against OCC recommended granting the motion because the OCC failed to set out any basis to pierce the corporate veil between YPF and Repsol, which the Special Master held OCC was required to do, and because OCC did not allege that YPF was insolvent.
- (d) Maxus filed for early summary judgment against OCC to dismiss the claims for damages filed by OCC regarding costs not yet incurred by OCC (future remediation costs). YPF joined in this motion.
  - The Special Master's Recommendation on Maxus's motion against OCC was to grant the motion on the grounds that OCC's request for declaratory judgment has no basis due to the uncertainty regarding future costs.
- (e) Finally, related to the claims that OCC sought to add against YPF and Repsol for tortious interference with OCC's contractual rights under the Stock Purchase Agreement of 1986 (between Maxus and OCC), the Special Master recommended that the motion be denied on the grounds that OCC improperly delayed in seeking to supplement its claims despite having multiple earlier opportunities to do so.

The parties appealed the respective Special Master's Recommendations on February 16, 2016. On February 18, 2016, the parties sought leave from the Special Master to file additional motions for summary judgment. On March 7, 2016, the Special Master denied each of the parties' requests to file additional motions, while ruling that the parties could raise the factual issues raised in the motions at the time of trial as motions in limine. On April 5, 2016, the judge denied the motions and adopted the Special Master's Recommendations in their entirety.



## 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

On April 25, 2016, the parties moved to request permission to file interlocutory appeals and a stay of the litigation during the appellate proceedings. Maxus filed a motion requesting permission to appeal the ruling granting summary judgment to OCC against Maxus, which held that Maxus is liable under the stock purchase and sale agreement for all obligations under, or arising from, the Lister Site, even if attributable to OCC's own acts. YPF filed a motion requesting permission to appeal the ruling denying its motion for summary judgment and Occidental filed a motion, appealing the ruling that granted Repsol its motion for summary judgment, On May 24, 2016, the Superior Court of New Jersey - Appellate Division denied all interlocutory appeals.

On April 5, 2016, the Superior Court issued Case Management Order XXVIII establishing the trial date as June 20, 2016, and requiring that all pre-trial motions be filed with the Special Master by May 4, 2016. However, all litigation against Maxus and YPF has been stayed upon Maxus' filing under Chapter 11 of the Bankruptcy Code.

On June 20, 2016, Occidental filed a Notice of Removal of Claims and a motion to transfer venue of the remaining claims in the Passaic River Litigation from the New Jersey Bankruptcy Court to the Delaware Bankruptcy Court. On June 28, 2016, the New Jersey Bankruptcy Court granted Occidental's motion to transfer venue.

On July 20, 2016, Repsol filed a motion with the Delaware Bankruptcy Court to have its cross-claims seeking environmental contribution from Occidental under the Spill Act to be remanded to the New Jersey Superior Court. On November 15, 2016, the Bankruptcy Court granted Repsol's motion to remand. On November 29, 2016, Occidental filed a motion for clarification or, in the alternative, for reconsideration of the Bankruptcy Court's Order granting Repsol's motion to remand. At a hearing on January 25, 2017, the Delaware Bankruptcy Court denied Occidental's motion and allowed Repsol's cross-claims to go forward in the New Jersey Superior Court.

#### 27.b) Accounting matters

In connection with the petition that the Maxus Entities filed with the Bankruptcy Court on June 17, 2016, as described in detail in part a) of this Note, the Management of the Company considers this an event that required reconsideration of whether the consolidation of such entities remained appropriate. In order to carry out this analysis, the Company followed the guidelines established in IFRS 10 "Consolidated Financial Statements" to reassess whether it maintained control over the activities of the Maxus Entities. This analysis, in accordance with IAS 8, was complemented by the criteria set forth in the United States Standard ASC 810 published by the Financial Accounting Standards Board, the principles of which are consistent with IFRS 10, but addresses in more detail the issues related to the consolidation of entities that file a reorganization proceeding under Chapter 11.

Generally, when an entity files a petition under Chapter 11, shareholders do not generally maintain the ability to exercise the power to make decisions that have a significant impact on the economic performance of the business of entities because that power is subject to Bankruptcy Court approval.

The petition filed by the Maxus Entities under Chapter 11 has relevant effects on the rights that YPF Holdings has as a shareholder of these entities, because creditors generally replace the shareholders in their legal capacity to file derivative suits against the directors on behalf of the entities for breach of the Debtors' fiduciary obligations, since the creditors would be the main beneficiaries in any increase in value of these entities. However, it should be noted that YPF Holdings retains its right to designate directors of the Debtors through Shareholders' Meetings, unless the Bankruptcy Court orders otherwise. In addition, the bankruptcy cases also affect the responsibilities and functions of the board of directors and management of each of the respective Maxus Entities. Each of the Maxus Entities has become a "Debtor in Possession" and, in accordance with the Bankruptcy Code, remains in possession of its property and, subject to certain limitations, is authorized to carry out its normal operations, unless the Bankruptcy Court orders otherwise. Nevertheless, during the Chapter 11 cases, the directors of the Debtors do not have absolute discretion, since any transaction "outside the ordinary course of business" of the Debtors, such as the sale of a significant asset, the expansion of a line of business involving the use of significant funds (or the commitment to do so), or the provision of loans or other types of financing, will be subject to the approval of the Bankruptcy Court.



#### 27. DECONSOLIDATION OF MAXUS ENTITIES (Cont.)

Likewise, on November 8, 2016, the Maxus Entities amended their by-laws in order to give greater discretion to the independent directors.

As a result, due to the Chapter 11 filing, YPF Holdings is not empowered to make decisions unilaterally, which could significantly affect the Debtors' businesses, both operationally and economically. Likewise, the Debtors are required to seek the approval of the Bankruptcy Court for typical commercial activities, if such activities could have a significant effect on their operations or on any of their stakeholders.

In view of the foregoing, the Management of the Company understands that, it is no longer able to exercise its power over such entities to significantly influence on the Maxus Entities' operations and results, a necessary condition established by IFRS 10 to establish the existence of an effective financial control and therefore, it proceeded to deconsolidate the investments in the Maxus Entities from June 17, 2016.

According to ASC 810, this loss of control may involve a gain or loss for the controlling company, since the controlling company must reconcile its non-controlling interest at fair value after deconsolidating the assets and liabilities of the entities. The obligations related to the reorganization process undertaken as described in part a) of this Note have also been considered for purposes of this calculation. As a result, the Group has recorded a gain of 1,528 in "Other net operating results".

As a result of the deconsolidation, the consolidated statements of financial position as of December 31, 2017 and 2016 are not comparable to the one issued as of December 31, 2015. As of December 31, 2015, the following asset and liability balances were consolidated in relation to the Maxus Entities:

|  | Balances of the<br>Debtors as of |
|--|----------------------------------|
| <u>Item</u>                                | <b>December 31, 2015</b>         |
| Noncurrent assets                          | 732                              |
| Current assets                             | 416                              |
| Total assets                               | 1,148                            |
| Noncurrent liabilities                     | 3,966                            |
| Current liabilities                        | 669                              |
| Total liabilities                          | 4,635                            |
| Total liabilities and shareholders' equity | 1,148                            |
|  |                                  |

In addition, the statement of comprehensive income and cash flow statement as of December 31, 2017 and 2016 are not comparable with those issued as of December 31, 2015. As of December 31, 2015, the following results and cash flows were consolidated in relation to the Maxus Entities:

| Item                              | Results of the<br>Debtors as of<br>December 31, 2015 |
|-----------------------------------|--|
| Income                            | 197  |
| Costs                             | (287)  |
| Gross profit / (loss)             | (90)   |
| Operating profit / (loss)         | (555)  |
| Net financial results             | (15)   |
| Net results                       | (570)  |
| Other comprehensive income (loss) | (2)  |
| Total comprehensive income (loss) | (572)  |
|                                   | Cash Flow of the<br>Debtors as of                    |

|  | Debtors as of            |
|--|--------------------------|
| <u>Item</u>                                | <b>December 31, 2015</b> |
| Net cash flow used in operating activities | (186)                    |
| Net cash flow used in investments          | (85)                     |

| Net cash flow provided by financing activities |       |
|--|-------|
| Net decrease in cash and cash equivalents      | (271) |



# 28. CONTINGENT ASSETS AND LIABILITIES 28.a) Contingent assets

#### Cerro Divisadero

On March 21, 2014 a fire incident damaged the facilities of Crude Oil Treatment Plant of Cerro Divisadero in Mendoza, belonging to the North Mendoza business, located 59 kilometers south from Malargüe city. In the mentioned facilities located in North Malargüe and South Malargüe, crude oil production was treated. Because of the incident, the facilities were almost completely unusable with the corresponding production loss.

The pertinent insurers/reinsurers were notified of the event and after analyzing various technological options, in November 2015, all liquidated claims were settled for US\$ 122.5 million, of which US\$ 45.3 million corresponded to material damages and US\$ 77.2 million corresponded to loss of production, taking into account a US\$ 60 million advance.

In 2015, the Group recorded a gain of 1,165 in the consolidated statements of comprehensive income under "Other net operating results" and "Costs" in accordance with the nature of the claim (material damage and loss of production, respectively).

In 2016, the Group received a second and final payment of US\$ 62.5 million.

#### • La Plata Refinery

On April 2, 2013, YPF's facilities at the La Plata refinery were struck by unprecedented severe weather, which led to a fire that caused damage to the Coke A and Topping C units in the refinery. In operational terms, the incident temporarily affected the refinery's ability to process crude oil, which left the entire complex out of service for several days.

Based on the documentation provided to the liquidators appointed by the reinsurance companies, and following their analysis, the total indemnification amount as a result of the accident amounted to US\$ 615 million, of which US\$ 227 million corresponded to material damages and US\$ 388 million corresponded to loss of profits. The indemnity period for loss of earnings because of the accident was extended to January 16, 2015. Payments were received gradually, US\$ 300 million during the last quarter of 2013, US\$ 130 million during the third quarter of 2014 and the remaining balance of US\$ 185 million during the second quarter of 2015.

In 2015, the Group recorded a gain of 523 in the consolidated statements of comprehensive income under "Revenues" and "Costs" in accordance with the nature of the claims.

#### 28.b) Contingent liabilities

The Group has the following contingencies and claims, individually significant, that the Management of the Company, in consultation with its external counsels, believes have possible outcome. Based on the information available to the Group, including the amount of time remaining before trial among others, the results of discovery and the judgment of internal and external counsel, the Group is unable to estimate the reasonably possible loss or range of loss on certain matters referred to below:



#### 28. CONTINGENT ASSETS AND LIABILITIES (Cont.)

#### 28.b.1) Environmental claims

### • Asociación Superficiarios de la Patagonia ("ASSUPA")

In August 2003, ASSUPA sued 18 companies operating exploitation concessions and exploration permits in the Neuquén Basin, YPF being one of them, claiming the remediation of the general environmental damage purportedly caused in the execution of such activities, in addition to the establishment of an environmental restoration fund, and the implementation of measures to prevent environmental damages in the future. The plaintiff requested that the Argentine Government, the Federal Environmental Council (Consejo Federal de Medio Ambiente), the Provinces of Buenos Aires, La Pampa, Neuquén, Río Negro and Mendoza and the Ombudsman of the Nation be summoned. It requested, as a preliminary injunction, that the defendants refrain from carrying out activities affecting the environment. Both the Ombudsman's summons as well as the requested preliminary injunction were rejected by the CSJN. YPF has answered the demand requesting its rejection, opposing failure of the plaintiff and requiring the summons of the Argentine Government, due to its obligation to indemnify YPF for events and claims before January 1, 1991, according to Law No. 24,145 and Decree No. 546/1993. The CSJN gave the plaintiffs a term to correct the defects in the complaint. On August 26, 2008, the CSJN decided that such defects had already been corrected and on February 23, 2009, ordered that certain provinces, the Argentine Government and the Federal Environmental Council be summoned. Therefore, pending issues were deferred until all third parties impleaded appear before the court. As of the date of issuance of these consolidated financial statements, the provinces of Río Negro, Buenos Aires, Neuquén, Mendoza, and the Argentine government have made their presentations, which are not available to the Company yet. The Provinces of Neuquén and La Pampa have claimed lack of jurisdiction, which was answered by the plaintiff.

On December 30, 2014, the CSJN issued two interlocutory judgments. By the first, it supported the claim of the Provinces of Neuquén and La Pampa, and declared that all environmental damages related to local and provincial situations were outside the scope of his original competence, and that only "inter-jurisdictional situations" (such as the Colorado River basin) would fall under his venue.

By the second judgment, the Court rejected the petition filed by ASSUPA to incorporate Repsol and the directors who served in YPF until April 2012 as a necessary third party. The Court also rejected precautionary measures and other proceedings related to such request.

In addition, it should be highlighted that YPF learned about other three court complaints filed by ASSUPA against:

- (i) Concessionary companies in the San Jorge Gulf basin areas: On December 28, 2016, YPF received notice of the complaint. The deadline set for preliminary defenses was May 31, 2017, and the deadline to respond to the complaint was June 30, 2017. YPF has timely filed a defense for a legal flaw and the court ordered the suspension of the terms to answer the complaint. The terms will continue to be suspended until a final decision is entered thereon asserted by the company.
- (ii) Concessionary companies in the Austral basin areas: A highly summarized action has been ordered. In addition, an interim relief has been issued by the Lower Court to notify several companies of the existence of the suit, and for the defendants to contribute certain information. YPF appealed this decision, and the Court of Appeals partially upheld the appeal, reversing the lower court ruling ordering various entities to provide notification of this claim. In the same decision, the Court of Appeals confirmed that the defendants had an obligation to provide certain information but stated that YPF and the other defendants had already complied with such obligation. On November 2, 2015, YPF was notified of the lawsuit. Following YPF's request, the court ordered on November 4, 2015 to suspend the procedural time limits. On November 23, 2017, the plaintiff requested the Court to decide on its motion requesting the National Government and the Provinces of Santa Cruz and Tierra del Fuego to be summoned to appear as third parties in compliance with the ruling dated December 6, 2017 whereby the court ordered the issuance of such summons, so that the National Government—and the provinces mentioned above —enter an appearance in the case within the term of 60 days. The court ordered the suspension of deadlines until their appearance or expiration of the deadline. As of the date of issuance of these consolidated financial statements, the terms continue to be suspended as the plaintiff has not enforced the summons of the National Government;



#### 28. CONTINGENT ASSETS AND LIABILITIES (Cont.)

(iii) Concessionary companies in the Northwest basin areas: The action was submitted to ordinary proceedings. On December 1, 2014, the Company was notified about the complaint. The procedural deadlines were suspended at the Company's request. Subsequently, on May 3, 2016, YPF was once again notified of the complaint, and the deadlines were reinstated. Consequently, the Company filed a motion requesting that the deadlines be suspended until the plaintiff clarifies whether or not it will annex certain documentary evidence referred to in the complaint. The Judge sustained the Company's motion and suspended again the deadlines to answer the complaint. On April 19, 2017, YPF was served with notice of the ruling of the Court ordering to resume the procedural time limits against which YPF has timely filed a defense for a legal flaw. The court has not decided upon it yet and ordered the suspension of the terms to answer the complaint. The terms will continue to be suspended until a final decision is entered on such defense asserted by YPF.

#### Dock Sud, Río Matanza, Riachuelo, Quilmes and Refinería Luján de Cuyo

A group of neighbors of Dock Sud, Province of Buenos Aires, have sued 44 companies, among which YPF is included, the Argentine Government, the Province of Buenos Aires, the City of Buenos Aires and 14 municipalities, before the CSJN, seeking the remediation and the indemnification of the environmental collective damage produced in the basin of the Matanza and Riachuelo rivers. Additionally, another group of neighbors of the Dock Sud area, have filed two other environmental lawsuits, one of them desisted in relation to YPF, claiming several companies located in that area, among which YPF is included, the Province of Buenos Aires and several municipalities, for the remediation and the indemnification of the environmental collective damage of the Dock Sud area and for the individual damage they claim to have suffered. Currently, it is not possible to reasonably estimate the outcome of these claims, as long as, if applicable, the corresponding legal fees and expenses that might result. YPF has the right of indemnity by the Argentine Government for events and claims prior to January 1, 1991, according to Law No. 24,145 and Decree No. 546/1993.

By means of judgment dated July 8, 2008, the CSJN:

- (i) Determined that the Basin Matanza Riachuelo Authority ("ACUMAR") (Law No. 26,168) should be in charge of the execution of the program of environmental remediation of the basin, being the Argentine Government, the Province of Buenos Aires and the City of Buenos Aires responsible of its development; delegated in the Federal Lower Court of Quilmes the knowledge of all the matters concerning the execution of the remediation and reparation; declared that all the litigations related to the execution of the remediation plan will accumulate and will proceed before this court and established that this process produces that other collective actions that have for object the environmental remediation of the basin be dismissed ("littispendentia"). YPF has been notified of certain resolutions issued by ACUMAR, by virtue of which YPF has been requested to present an Industrial Reconversion Program, in connection with certain installations of YPF. The Program has been presented although the Resolutions had been appealed by the Company;
- (ii) Decided that the proceedings related to the determination of the responsibilities derived from past behaviors for the reparation of the environmental damage will continue before that Court.

In addition to the claims discussed under 14.a.4), which discusses environmental claims in Quilmes, the Company has other legal and non-judicial claims against it, based on similar arguments.

On the other hand, the monitoring tasks carried out routinely by YPF have allowed YPF to warn against degrees of affectation in the subsoil within the vicinity of the Luján de Cuyo refinery, which led to the creation of a program for surveying, evaluating and remedying liabilities that the Company is in the process of implementing with agencies in the Province of Mendoza, the costs of which have been provisioned in the remediation program of environmental issues of the Group.



#### 28. CONTINGENT ASSETS AND LIABILITIES (Cont.)

#### 28.b.2) Contentious claims

#### • Petersen Energía Inversora, S.A.U and Petersen Energía, S.A.U. (collectively, "Petersen")

On April 8, 2015, Petersen, former YPF Class D shareholders, filed a lawsuit against the Republic of Argentina and YPF in the Federal District Court for the Southern District of New York. The litigation is being conducted by the bankruptcy trustee of the previously mentioned companies due to a liquidation process pending in a Commercial Court in Spain. The complaint contains claims related to the expropriation of the controlling interest of Repsol in YPF by the Argentine Republic in 2012, asserting that the obligation by the Argentine Republic to make a purchase offer to the remaining shareholders would have been triggered. Claims seem to be mainly grounded on allegations that the expropriation breached contract obligations contained in the initial public offering and bylaws of YPF and seeks unspecified compensation. The Company filed a motion to dismiss on September 8, 2015, the date which was set as a result of the extension of the term provided for by the Court. On the other hand, Petersen filed an objection against YPF's motion to dismiss.

On July 20, 2016, the Court held a hearing during which the parties made their arguments regarding the motion to dismiss, and responded to questions asked by the Judge. On September 9, 2016, the United States District Court for the Southern District of New York issued a decision partially dismissing the complaint filed by Petersen against YPF at this preliminary stage. The Company appealed this decision, requesting a complete dismissal of the complaint at this preliminary stage.

On June 15, 2017, a hearing was held so that the parties could orally present their arguments. Currently, the matter is pending the resolution of the Court of Appeals.

As of the date of issuance of these consolidated financial statements, there are no elements in YPF's possession that allow quantifying the possible impact that this claim could have on the Company.

The Company categorically rejects the claims asserted in the complaint for being inadmissible and will file all necessary legal remedies and take all defensive measures in accordance with the applicable legal procedure in order to defend its rights.

# • Eton Park Capital Management, L.P., Eton Park Master Fund, LTD. y Eton Park Fund, L.P. (jointly referred to as "Eton Park")

On June 2, 2017, Eton Park, a former YPF shareholder, filed a complaint against the Argentine Republic and YPF in the United States District Court for the Southern District of New York, for alleged damages that it would have suffered during the process of expropriation of shares that the Argentine Republic took over the majority stake of Repsol in YPF in 2012. The complaint, which seeks unspecified compensation, states that the alleged obligations assumed in the bylaws and in the initial public offering of YPF shares were violated, which imposed obligations related to a public offering made to the rest of the shareholders.

Currently, the proceedings are temporarily stayed, pending the decision of the Court of Appeals in the Petersen case.

As of the date of these financial statements, there are no factors that YPF can use to quantify the possible impact that this claim might have on the Company.

The Company categorically rejects the claims asserted in the complaint for being inadmissible and will file all necessary legal remedies and take all defensive measures in accordance with the applicable legal procedure in order to defend its rights.



## 28. CONTINGENT ASSETS AND LIABILITIES (Cont.)

#### 28.b.3) Claims before the CNDC

#### • Claims against natural gas producers

On November 17, 2003, the CNDC requested explanations, within the framework of an official investigation pursuant to Article 29 of Law No. 25,156 of Antitrust Protection, from a group of almost thirty natural gas production companies, YPF among them, with respect to the following items: (i) the inclusion of clauses purportedly restraining trade in natural gas purchase/sale contracts; and (ii) observations on gas imports from Bolivia, in particular (a) old expired contract signed by YPF, when it was state-owned, and YPFB (the Bolivian state-owned oil company), under which YPF allegedly sold Bolivian gas in Argentina at prices below the purchase price; and (b) the unsuccessful attempts in 2001 by Duke and Distribuidora de Gas del Centro to import gas into Argentina from Bolivia. On January 12, 2004, YPF submitted explanations in accordance with article 29 of the Antitrust Law, contending that no antitrust violations had been committed and that there had been no price discrimination between natural gas sales in the Argentine market and the export market. On January 20, 2006, YPF received a notification of resolution dated December 2, 2005, whereby the Antitrust Board (i) rejected the "non bis in idem" petition filed by YPF, on the grounds that ENARGAS was not empowered to resolve the issue when ENARGAS Resolution No. 1,289 was enacted; and (ii) ordered that the opening of the proceedings be undertaken pursuant to the provisions of Section 30 of the Antitrust Law. On January 15, 2007, the Antitrust Board charged YPF and eight other producers with violations of the Antitrust Law. YPF has contested the complaint on the basis that no violation of the law took place and that the charges are barred by the applicable statute of limitations and has presented evidence in support of its position. On June 22, 2007, YPF presented to the Antitrust Board, without acknowledging any conduct in violation of the Antitrust Law, a commitment consistent with article 36 of the Antitrust Law, requiring to the Antitrust Board to approve the commitment, to suspend the investigation and to file the proceedings, On December 14, 2007, the Antitrust Board decided to transfer the motion to the Court of Appeals because of the appeal presented by YPF against the rejection of the application of the statute of limitations. The file was filed by the CNDC, without consequences for YPF.

#### • Claims for fuel sale prices

In addition, the Group was subject to other claims before the Antitrust Board, which are related to alleged price discrimination in sale of fuels. And which were timely answered by YPF.

#### 28.b.4) Tax claims

## • Dispute over the cost deduction for abandoning wells

The Company has consistently recorded the cost of abandoning wells in accordance with the criteria detailed in Note 2.b.6) and, in the absence of a specific treatment of that subject in the income tax law and its Regulatory Decree, has deducted the charge for well plugging costs in the calculation of this tax, based on the general criteria of the standard for deduction of expenses (accrual criteria). Nevertheless, this interpretation has been objected to by the AFIP, which would allow for deductions once the expense has been done.

Although both consider it a deductible expense, the disagreement between YPF and the AFIP stems from the criteria that each of them uses to decide when the obligation to plug arises which, in turn, is the one that determines when the deduction from the income tax should be taken.

The AFIP understands that the deduction of costs due to the abandonment of wells should be deferred until the taxpayer has the opportunity to proceed with plugging the well, once the wells have been exhausted, considering the abandonment of the well to be the event generating the charge for well plugging costs.

On the other hand, the Company, as well as other companies in the oil industry, understands that the event that generates the well plugging costs in connection with the abandonment of wells is the act of drilling, as the drilling constitutes environmental impact and, consequently, the obligation to repair such impact through well plugging arises from that moment. This obligation is not subject to any condition since there is no uncertainty as to whether well exhaustion will inevitably occur. The Company has learned that similar disputes have been raised by the AFIP with other companies in the oil industry.



## 28. CONTINGENT ASSETS AND LIABILITIES (Cont.)

In June 2016, the Ministry of Hydrocarbons Resources of MINEM (*Secretaria de Recursos Hidrocarburíferos del MINEM*), the competent body to clarify the origin of the legal obligation in the matter, and in response to a consultation of the Chamber of Oil Exploration and Production, ruled in favor of the position of the oil companies and concluded that the substantial event generating the charge for the abandonment of wells is the drilling.

This response of the Chamber has been reported to the AFIP by both the Ministry of Hydrocarbon Resources and by YPF but, with respect to different questions the AFIP disregarded this position and, on December 29, 2016, notified the Company of two resolutions, adjusting the income tax for the fiscal periods 2005 to 2009 and questioning the criteria followed by the Company. On February 20, 2017, YPF filed the corresponding appeal to the Fiscal Tribunal of the Nation (*Tribunal Fiscal de la Nación*) for such unilateral determinations.

The disputed amount for the years claimed by AFIP amounts to a total of 3,997 considering principal and interest.

On June 28, 2017, the Company was served with notice of an information request by AFIP through which it initiates a verification process regarding the deduction of the settlement costs corresponding to the fiscal periods 2011 to 2016 inclusive.

On October 10, 2017, the Company was served with a notice sent by the AFIP, through which it reports an adjustment for the 2010 fiscal period. On November 23, 2017, the corresponding discharge was filed.

On October 13, 2017, the Company was notified of the closing of the inspection and the planned adjustment for the fiscal periods 2011 to 2016 inclusive, which was rejected by means of a note submitted on October 23, 2017.

Notwithstanding the progress of these proceedings and ongoing investigations (and prosecution of other companies in the industry), the Company, based on its opinion and that of its external advisors, considers its arguments defending the criteria adopted to be strong.

# • Dispute over customs duties

Between 2006 and 2009, the Customs General Administrations in Neuquén, Comodoro Rivadavia and Puerto Deseado informed the Company that certain summary proceedings had been brought against YPF based on alleged formal misstatements on future commitments of crude oil deliveries in the loading permits submitted before these agencies, for periods prior to and subsequent to the existence of export duties, for which they calculated the difference between the contractual price declared and the price in force at the time of export to determine fines under the terms of the Customs Code.

The Customs General Administration may question whether the contractual price agreed to by the Company and declared in loading permits is an appropriate amount when calculating export duties. However, the Company understands that there is no violation for declaring the contractual price of a transaction. In addition, YPF has paid export duties on the market value of crude oil since its existence.

The summaries ended the administrative reviews before the Customs General Administration and are in full appeal before the Argentine Tax Court. On March 3, 2017, the Company was notified of an adverse judgment handed down by the Argentine Tax Court regarding the criteria employed for crude oil delivery operations after 1998 and for which fines were determined in accordance with Article 954 (c) of the Customs Code for approximately 11 exports that occurred prior to the existence of export duties. The Company appealed the adverse judgment of the Tax Court in a timely fashion before the Court of Appeals, which has the power to grant staying effects on sanctions, which may only be requested under a final judgment, if applicable, and in the event the CSJN rules in favor of the Customs General Administration.



#### 28. CONTINGENT ASSETS AND LIABILITIES (Cont.)

On March 31, 2017, the Company resolved to pay differences in export duties that had been objected to by several Customs, arising from future deliveries of crude oil commitments, by adhering to the anticipated moratorium provided for in Law 27,260. This action allowed the abatement of interest and cancellation of the applied fines underlying the substantial obligation. For this purpose, presentations were file in all pending administrative and judicial cases evidencing the payment of the export duties and, where appropriate, the request for remission of the fines applied under the provisions set forth in Law 27,260. The summary proceedings and other proceedings in which the application of a fine is the matter at issue when there were no export duties are still pending, applying in that case the fine contemplated in article 954 clause c), which amounts to 450 as of the date of this consolidated financial statements.

Notwithstanding the progression of this process, the Company, based on its opinion and that of its external advisors, believes the claim has no legal merit and that it has a strong case in defense of the approach adopted in the dispute mentioned above.

## 28.b.5) Other claims

Additionally, the Group has received other labor, civil and commercial claims and several claims from the AFIP and from provincial and municipal fiscal authorities, not individually significant, which have not been accrued since Management, based on the evidence available as of the date of issuance of these consolidated financial statements, has assessed them to be possible contingencies.

#### 29. CONTRACTUAL COMMITMENTS

#### 29.a) Agreements of extension of concessions

#### Neuquén

#### Loma La Lata—Sierra Barrosa Areas

On December 28, 2000, through Decree No. 1,252/2000, the Argentine Federal Executive Branch (the "Federal Executive") extended for an additional term of 10 years (until November 2027) the concession for the exploitation of Loma La Lata – Sierra Barrosa area granted to YPF. The extension was granted under the terms and conditions of the Extension Agreement executed between the Argentine Government, the Province of Neuquén and YPF on December 5, 2000. Under this agreement, YPF paid US\$ 300 million to the Argentine Government for the extension of the concession mentioned above and committed, among other things, to define a disbursement and investment program of US\$ 8,000 million in the Province of Neuquén from 2000 to 2017 and to pay to the Province of Neuquén 5% of the net cash flows arising out of the concession during each year of the extension term. The previously mentioned commitments have been affected by the changes in economic rules established by the Public Emergency Law.

On July 24, 2013, in order to make feasible the implementation of a non-conventional hydrocarbons project, YPF and the Province of Neuquén signed an Agreement under which the Province of Neuquén agreed to (i) separate from the Loma La Lata – Sierra Barrosa exploitation concession a surface area of 327.5 km2; (ii) incorporate such separated surface area into the surface area of the Loma Campana exploitation concession, forming a surface area of 395 km2 and (iii) extend the Loma Campana exploitation concession for a term of 22 years starting from the date of its expiration (until November 11, 2048).

The commitments made by the Company are as follows: (i) payment of US\$ 20 million in consideration for the effect that the separation of surface from the Area Loma Lata—Loma Campana has on the conventional production, payable within 15 days of the legislative ratification of the Agreement; (ii) payment of US\$ 45 million on the Corporate Social Responsibility concept, payable during the years 2013, 2014 and 2015; (iii) payment of 5% on the investment project profits after taxes, applicable as from December 2027; (iv) 50% reduction, as from August 2012, of the subsidy applicable to the price of natural gas for the Methanol Plant according to the terms of the Commitment Act of 1998 signed between the Company and the Province of Neuquén; (v) make an investment of US\$ 1 billion within a period of 18 months beginning on July 16, 2013; and vi) prioritize the recruitment of labor, suppliers and services based in Neuquén.



# 29. CONTRACTUAL COMMITMENTS (Cont.)

#### Rincón del Mangrullo Block

On August 1, 2017, YPF and the Province of Neuquén Agreement entered into an Agreement whereby they agreed the terms for obtaining an Unconventional Exploitation Concession in the Rincón del Mangrullo block (the "Block"), which will result in an increase of the current activity of the Block and an extension of the current effective term, which expires in 2022. As of the granting of the new concession, YPF may exploit the Block until 2052, with the possibility of re-extending this term.

Through this agreement, YPF is committed to investing US\$150 million to carry out a pilot program consisting of the drilling of 13 wells to continue the development of the Mulichinco formation and investigate other formations such as Vaca Muerta and Lajas.

On August 11, 2017, the unconventional exploitation concession of the Block was granted in favor of YPF by Provincial Decree No. 1,316/17, as of that date, the Agreement entered into force.

YPF currently has subscribed an Investment Agreement with Petrolera Pampa S.A. ("Pampa"), through which the Company operates the area and Pampa participates in the production arising from certain formations of the Block, and YPF maintains 100% of the rights to Vaca Muerta and Quintuco. Within this framework, YPF will hold 100% of the new Concession of Unconventional Exploitation and the current concession of the Block, continuing with the Investment Agreement with Pampa.

#### Other concessions

Additionally, in 2008 and 2009, YPF entered into a series of agreements with the Province of Neuquén, to extend for ten additional years the term of the production concessions on several areas located in that province, which, as result of the above mentioned agreement, will expire between 2026 and 2027. As a condition for the extension of these concessions, YPF undertook the following commitments, among others, upon the execution of the agreements: (i) to make to the Province total initial payments of US\$ 204 million; (ii) to pay in cash to the Province an "Extraordinary Production Royalty" of 3% of the production of the areas involved. In addition, the parties agreed to make adjustments of up to an additional 3% in the event of an extraordinary income according to the mechanisms and reference values established in each signed agreement and (iii) to carry out exploration activities in the remaining exploration areas and make certain investments and expenditures in the production concessions that are the purpose of the agreements in a total amount of US\$ 3,512 million until the expiring date of the concessions.

## Mendoza

In April 2011, YPF entered into an agreement with the Province of Mendoza to extend for 10 years the term of certain exploitation concessions (one of which is "La Ventana"), and the transportation concessions located in the province, from the expiration of the original terms of the grant.

By signing the memorandum of agreement, YPF assumed certain commitments within which includes: (i) to make initial payments to the province of Mendoza in an aggregate amount of approximately US\$ 135 million, on the date specified in the agreement; (ii) to pay the province of Mendoza an "Extraordinary Production Royalty" of 3% of the production of the areas included in the agreement. In addition, the parties agreed to make additional adjustments in the event of extraordinary income due to lower export duties or a higher monthly average price of crude oil and/or natural gas according to a mechanism and reference values established in the memorandum of agreement; (iii) to carry out exploration activities and make certain investments and expenditures in a total amount of US\$ 4,113 million until the expiration of the extended term, as stipulated in the agreement; and; (iv) to make payments equal to 0.3% of the annual amount paid as "Extraordinary Production Royalty" intended for the Institutional Strengthening Fund, in order to purchase equipment and finance training activities, logistics and operational expenses in certain government agencies of the province of Mendoza specified in the agreement, among others.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

#### Santa Cruz

During November 2012, YPF entered into an agreement with the Province of Santa Cruz to extend for 25 years the term of certain exploitation concessions, from the expiration of their original terms.

By signing the memorandum of agreement, YPF assumed certain commitments which include: (i) to make initial payments to the province of Santa Cruz in an aggregate amount of approximately of US\$ 200 million, on the date specified in the agreement; (ii) to pay the province of Santa Cruz a Production Royalty of 12% plus an additional of 3% over the production of conventional hydrocarbons; (iii) to pay the province of Santa Cruz a Production Royalty of 10% over the production of unconventional hydrocarbons; (iv) to make certain investments on the exploitation concessions, as stipulated in the agreement; (v) to carry out exploration activities in the remaining exploration areas; (vi) to contribute with social infrastructure investments within the province of Santa Cruz in an amount equivalent to 20% of the amount of the extension royalty; and (vii) to define and prioritize a remediation plan of environmental liabilities with reasonable technical criteria and the extent of remediation tasks within the term of the concessions.

Moreover, on September 1, 2017, by Decree 773/17 issued by the Government of the Province of Santa Cruz, YPF received the award of the El Turbio area that had been offered by the province through the National and International Public Tender No. 03/IESC/17. On September 25, 2017, YPF subscribed the contract for the exploration and potential exploitation of the area.

#### Salta

On October 23, 2012, YPF entered into an agreement with the province of Salta to extend for 10 years the original term of certain exploitation concessions from the expiration of their original terms. YPF and associated signatory companies (Tecpetrol S.A., Petrobras Argentina S.A., Compañía General de Combustibles S.A. and Ledesma SAAI) by signing the memorandum of agreement made, among others, the following commitments: (i) conducting in the Aguaragüe area, on the dates indicated in the agreement and during the first two years, the following investments: a minimum amount in development plans, involving the drilling of development wells (at least 3) and expansion of production facilities and treatment of hydrocarbons of US\$ 36 million, (ii) YPF and each of the associated signatory companies will recognize for the province a special extraordinary contribution equal to 25% of the amount corresponding to royalties of 12% referred to in art. 59 and 62 of Law 17,319, (iii) YPF and each of the associated signatory companies will recognize for the province an additional payment to the special extraordinary contribution, only when conditions of extraordinary income are verified in the marketing of oil crude production and natural gas from the concessions, under price increase obtained by each party, from the sum of US\$ 90/bbl in the case of crude oil production and the sum equivalent to 70% of import gas prices, (iv) YPF and each of the associated signatory companies will pay to the province, and in the proportion that corresponds to each one, a one-time sum of US\$ 5 million in the concept of bonus extension, (v) YPF and the associated signatory companies undertake to make investments for a minimum amount of US\$ 30 million in additional exploration work to be implemented in the concessions.

On April 3, 2017, YPF subscribed an Amendment Agreement with the Province of Salta for purpose of amending the agreement entered into on October 23, 2012. The signatories are the same in both Agreements. The Amendment Agreement establishes that the obligations described in paragraphs (i), (ii) and (iv) have been met, and with respect to the obligations referred to in paragraph (v), it establishes that they will be replaced by the drilling of 2 development wells for a minimum amount of US\$ 26 million. In the event that the development wells yield satisfactory productive results for YPF and the associated companies, contingent on such results, the parties agreed to drill an additional development well. The parties have begun to fulfill this commitment and will finalize it within 365 calendar days of the effective date of such agreement. Furthermore, YPF and the signatory associated companies must drill an exploration well for an amount of US\$4 million within the term of 365 days of the effective date of the Amendment Agreement.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

#### Chubut

On October 2, 2013, the Province of Chubut published the law for the approval of the Agreement to Extend the Exploitation Concessions El Tordillo, La Tapera and Puesto Quiroga, located in the Province of Chubut. YPF holds 12.196% of the concessions, while Petrobras Argentina S.A. holds 35.67% and Tecpetrol S.A. holds the remaining 52.133%. The Concessions were extended for a 30-year period counted as from the year 2017. The main terms and conditions agreed by the Province of Chubut comprise the commitment of the companies belonging to the JO to make the following payments and contributions: (i) paying US\$ 18 million as Historical Remediation Bonus; (ii) paying a Compensation Bonus amounting to a fixed 4% over the production of gas and oil since 2013 (this is calculated as an additional royalty); (iii) covering expenses and investments related to the protection and conservation of the environment; (iv) maintaining a minimum amount of equipment for drilling and work-overs in operation; (v) after the first ten years of extension, Petrominera S.E. will acquire a 10% interest in the exploitation concessions.

Furthermore, on December 26, 2013, YPF and the Province of Chubut signed an Agreement for the extension of the original term of the Concessions for the Exploitation of Restinga Alí, Sarmiento, Campamento Central – Cañadón Perdido, Manantiales Behr and El Trébol. The Extension Agreement was ratified by the Legislature of the Province of Chubut on January 17, 2014, and by the Company's Board of Directors on February 24, 2014; thus complying with the conditions precedent established in the Extension Agreement. The following are the main terms and conditions agreed with the Province of Chubut: YPF holds 100% of the exploitation concessions, except for the concession Campamento Central – Cañadón Perdido, where ENAP SIPETROL S.A. holds 50%. A 30-year extension was established for the terms of the exploitation concessions that expire in the years 2017 (Campamento Central – Cañadón Perdido and El Trébol – Escalante), 2015 (Restinga Alí) and 2016 (Manantiales Behr). YPF undertook, among others, the following obligations: (i) to pay a Historical Compensation Bonus of US\$ 30 million; (ii) to pay to the Province of Chubut the Hydrocarbons Compensation Bonus amounting to 3% of the oil and gas production (calculated as an additional royalty); (iii) to meet a minimum level of investment; (iv) to maintain a minimum amount of equipment for drilling and work-over under hire and in operation; and (v) to assign to Petrominera S.E. 41% of YPF's interest in the exploitation concessions of El Tordillo, La Tapera and Puesto Quiroga (amounting to 5% of the total concessions) and in the related JO.

# Rio Negro

In December 2014, YPF, YSUR Energía Argentina S.R.L., YSUR Petrolera Argentina S.A. (companies merged with YPF) entered into a Renegotiation Agreement with the Province of Rio Negro to extending for 10 years the original term of the following exploitation concessions as from maturity of their original granting terms: (i) "El Medanito", "Barranca de los Loros", "Señal Picada-Punta Barda", "Bajo del Piche" where YPF holds 100%, up to November 14, 2027; (ii) "Los Caldenes" where YPF holds 100%, up to September 19, 2036; (iii) "Estación Fernández Oro", where YSUR Energía Argentina S.R.L. holds 100%, up to August 16, 2026; and (iv) "El Santiagueño" where YSUR Petrolera Argentina S.A. holds 100%, up to September 6, 2025.

The Renegotiation Agreement was confirmed by the legislature of the Province of Rio Negro by the issuance of Provincial Law No. 5027 dated December 30, 2014. The companies signing the Renegotiation Agreement assumed the following commitments, among others: (i) payment of US\$ 46 million as Fixed Bonus, (ii) contributions to social development and institutional strengthening amounting to US\$ 9.2 million, (iii) supplementary contributions equivalent to 3% of the monthly oil production and 3% of the monthly gas production, (iv) annual contributions for training, research and development, (v) compliance with a minimal development and investment plan, and (vi) investment for the execution of environmental remediation plans.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

### Tierra del Fuego

# Concessions of Tierra del Fuego, Los Chorrillos and Lago Fuego

The Company has negotiated with the Executive Office of the province of Tierra del Fuego the terms in order to extend their concessions in such province, having signed, on December 18, 2013, the Agreement of Extension of concessions of Tierra del Fuego (until November 14, 2027), Los Chorrillos (until April 18, 2026) and Lago Fuego (until November 6, 2027). On October 10, 2014, Act No. 998 and Act No. 997 approving the extension agreements were enacted.

#### Magallanes Area

On August 25, 2017, YPF signed an Extension Agreement with the province of Tierra del Fuego (hereinafter the "Memorandum of Agreement") to extend the original term of the concession for the exploitation of hydrocarbons on the Magallanes Area owned by YPF, in the fraction corresponding to the granting jurisdiction of the Province of Tierra del Fuego for a period of ten years until November 14, 2027 under the terms set forth in Article 35 of the Hydrocarbons Law No. 17,319.

Moreover, the Memorandum of Agreement executed between YPF and the Province of Tierra del Fuego establishes, among others, the following points: (i) the payment of the sum of US\$7.9 million as an extension bonus, (ii) a commitment to invest in the Area until the end of the extension period; and (iii) the payment to the Province of Tierra del Fuego as royalties of 15% of the computable production of crude oil and natural gas from the Area, in the portion located within the jurisdiction, in accordance with the provisions set forth in Article 59 of Law No. 17,319.

The Memorandum of Agreement was ratified by Provincial Decree N° 2.406/17 dated September 5, 2017 and provincial law N° 1.178 promulgated on September 19, 2017.

#### • National Executive Branch

The National Executive Branch by Administrative Decision No. 1/2016, published on January 8, 2016, extended the term of the exploitation concession in the Magallanes area for the National Government's portion, as from November 14, 2017 for a period of 10 years, in accordance with Section 35 of Law No. 17,319.

The Administrative Decision No. 1/2016 establishes the following terms and conditions: (i) approval of the investment plan (ii) the payment of US\$ 12.5 million as an extension bonus, which has been appealed by YPF as to its calculation which has not been defined to date, and (iii) the payment of 15% of royalties on the production of hydrocarbons pursuant to Article 59 of Law No. 27,007.

#### 29.b) Project investment agreements

#### Agreements for the development of Loma La Lata Norte and Loma Campana areas

On July 16, 2013, the Company and subsidiaries of Chevron Corporation ("Chevron") subscribed a Project Investment Agreement (the "LC Agreement") with the objective of the joint exploitation of unconventional hydrocarbons in the province of Neuquén. The LC Agreement contemplates an expenditure, subject to certain conditions, of US\$ 1,240 million by Chevron for the first phase of work to develop about 20 km2 (the "pilot project") (4,942 acres) of the 395 km2 (97,607 acres) corresponding to the area dedicated to the project, located in the aforementioned province and includes Loma La Lata Norte and Loma Campana areas. This first pilot project includes the drilling of more than 100 wells.

During September 2013, and upon the fulfillment of certain conditions precedent (which included the granting of an extension of the Loma Campana concession maturity until 2048 and the unitization of that area with the sub-area Loma La Lata Norte), Chevron made the initial payment of US\$ 300 million.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

On December 10, 2013, the Company and some of its subsidiaries and subsidiaries of Chevron successfully completed the pending documents for the closing of the Investment Project Agreement, which enables the disbursement by Chevron of US\$ 940 million, in addition to the US\$ 300 million that such company has already disbursed. For such purposes, the Company and Chevron made the necessary contracts for the assignment in favor of Compañía de Hidrocarburo No Convencional S.R.L. ("CHNC") of 50% of the exploitation concession Loma Campana, and supplementary agreements including the contract for the organization of the JO and the Joint Operating Agreement for the operation of Loma Campana, where YPF participates as area operator.

The Company indirectly holds 100% of the capital stock of CHNC, but under the existing contractual arrangements, it does not make financial or operative decisions relevant to CHNC and does not fund its activities either. Therefore, the Company is not exposed to any risk or rewards due to its interest in CHNC. Thus, as required by IFRS, the Company has valued its interest in CHNC at cost, which is not significant, and has not recorded any profit or loss for such interest for the years ended December 31, 2017, 2016 and 2015.

Considering the rights that Chevron could exercise in the future over CHNC to access to the 50% of the concession and supplementary rights, and as a guarantee for such rights and other obligations under the LC Agreement, a pledge over the shares of YPF's affiliate, which is an indirect holder of YPF's interest in CHNC, has been made in favor of Chevron.

In this context, and considering that YPF is the Loma Campana area operator, the parties have executed a Project Obligations, Indemnities and Guarantee Agreement, by virtue of which the Company makes certain representations and guarantees in relation to the LC Agreement. This guarantee on the operation and management of the Project does not include the project's performance or return on investment, both at the exclusive risk of Chevron.

Finally, other supplementary agreements and documents related to the LC Agreement have been signed, including: (a) the agreement for the allocation of certain benefits deriving from Decree No. 929/2013 from YPF to CHNC; (b) terms and conditions for YPF's acquisition of natural gas and crude oil pertaining to CHNC for 50% of the interest in the Loma Campana area; and (c) certain agreements for the technical assistance of Chevron to YPF.

During April 2014, YPF and certain of its subsidiaries and subsidiaries of Chevron, successfully completed the second phase of the LC Agreement and Chevron has confirmed its decision to continue with the investment project in unconventional hydrocarbons in the Loma Campana area, thereby commencing the third phase of such project. The duration of this third phase will encompass the life of the project, until the expiration of the Loma Campana concession.

During fiscal years 2017, 2016 and 2015, YPF and CHNC carried out transactions, among others, the purchases of gas and crude oil by YPF for 5,672, 5,912 and 3,556, respectively. These transactions will be consummated in accordance with the general and regulatory conditions of the market. The net balance payable to CHNC as of December 31, 2017, 2016 and 2015 amounts to 654, 544 and 553, respectively.

#### • Agreements for the development of the Chihuído de la Sierra NegraSudeste- Narambuena area

During April 2014, YPF and Chevron signed a new project investment agreement with the objective of the joint exploration of unconventional hydrocarbons in the Province of Neuquén, within the area Chihuido de la Sierra Negra Sudeste – Narambuena. The investment will be undertaken exclusively by, and at the sole risk of, Chevron. The investment will be disbursed in two stages.

To this end, the Company and Chevron entered into the necessary agreements to implement the assignment to Compañía de Desarrollo No Convencional S.R.L ("CDNC") of (a) a 50% interest in the Narambuena Exploration Project Area and (b) a 7% legal interest in the Exploitation Concession of Chihuido de la Sierra Negra in Neuquén and Mendoza. However, contractual rights of Chevron are limited to Narambuena Area, as YPF will hold 100% ownership of the conventional production and reserves outside the Project Area and Desfiladero Bayo field. On May 29, 2015, the first phase of the agreement was closed with the perfection of the relevant assignments.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

In October 2017, Chevron decided to go ahead with the second phase of the project that consists of the drilling and completion of 43 horizontal wells in the period 2018 – 2019. The Company indirectly holds a 100% interest in the capital stock of CDNC; however, as pursuant to effective contractual agreements, the Company neither exercises CDNC's relevant financial and operating decision-making rights nor funds its activities, the Company is not exposed to risks and benefits for its interest in CDNC. Therefore, according to IFRS, the Company has valued its interest in CDNC at cost, which is not significant, and has not recorded any income (loss) for the said interest for the fiscal years ended December 31, 2017, 2016 and 2015.

#### Agreements for the development of El Orejano area

On September 23, 2013, the Company, Dow Europe Holding B.V. and PBB Polisur S.A., (hereinafter, collectively, "Dow") signed an agreement (the "Dow Agreement"), which contemplates an expenditure by both parties of up to US\$ 188 million which will be directed towards the joint exploitation of an unconventional gas pilot project in the Province of Neuquén, in the area of "El Orejano. Dow contributed US\$120 million out of the US\$188 million provided by means of a financing agreement convertible into a participation in the project, which includes a first phase of work during which 16 wells would be drilled.

On October 22, 2015, both parties agreed to an addendum to the Dow Agreement which provides, among other things, for: (i) an increase in the amount to be disbursed by Dow, by US\$ 60 million, totaling US\$ 180 million, through a convertible financing in an interest in the project, for the same purposes and effects than those of the previous disbursements, and (ii) the extension of the time period during which Dow may exercise the conversion option, up to December 18, 2015. On October 30, 2015, the Company received the additional amounts committed.

On December 15, 2015, Dow exercised the option provided for in the Dow Agreement, whereby YPF has assigned 50% of its interest in the exploitation concession of "El Orejano" area, which amounts to a total area of 45km2, in the Province of Neuquén.

In addition, the parties have formed a JO for the exploration, evaluation, exploitation and development of hydrocarbons in "El Orejano" area, which became effective on January 1, 2016 and in which Dow and YPF each have a 50% interest.

#### • Agreements for the development of Rincón del Mangrullo area

On November 6, 2013, the Company and Petrolera Pampa S.A. (hereinafter "Petrolera Pampa") signed an investment agreement under which Petrolera Pampa undertakes to invest US\$ 151.5 million in exchange for 50% of the interest in the production of hydrocarbons in the area of Rincón del Mangrullo in the Province of Neuquén, pertaining to the formation "Formación Mulichinco" (hereinafter the "Area"), where YPF will be area operator.

During this first stage, Petrolera Pampa has committed to invest US\$ 81.5 million for the drilling of 17 wells and the acquisition and analysis of about 40 km2 of 3D seismic data.

The second phase investment includes an investment of US\$ 70 million to drill 15 wells.

As of December 31, 2015, the two stages were completed.

On May 26, 2015, a supplementary agreement (the "Amendment") to the investment agreement dated November 6, 2013 was signed. The Amendment established an interest of 50% of each of the parties in the entire production, costs and investments for the development of the Area with retroactive effect from January 1, 2015, excluding from the agreement only the formations of Vaca Muerta and Quintuco. It should be noted that on July 14, 2015, the necessary requirements for the effectiveness of the said Amendment were met.

Such investments include surface facilities in the area of US\$ 150 million, which include the first expansion stage of the treatment facilities, bringing the current capacity of 2 to 4 million cubic meters per day to allow the conditioning and evacuation of future production from the block. The Amendment also includes the expansion of the investment commitment of Petrolera Pampa in a third investment phase of US\$ 22.5 million, for the drilling of additional wells targeting the Mulichinco Formation. This third phase began on

July 1, 2016, and the disbursement of US\$ 15 million was completed by December 31, 2016. The remaining a balance of US\$ 7.5 million was completed during the fiscal year ended December 31, 2017.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

In addition, the Amendment includes an exploratory program for the Lajas formation as a goal, for the period 2015-2016. As of December 31, 2017, the exploratory well drilled in 2015 is undergoing production. As of the date of issuance of these consolidated financial statements, YPF and Petrolera Pampa are defining the coordinates of the second exploratory well of stage 1 to be drilled in 2018. According to the results, Pampa may choose to continue with a second investment stage with the same goal.

#### • Agreements for the development of La Amarga Chica area

On August 28, 2014, the Company subscribed a preliminary agreement with Petronas (E&P) Overseas Ventures Sdn. Bhd, (hereinafter, "Petronas"), whereby YPF and Petronas agreed on the main terms and conditions to jointly develop a shale oil pilot project in three annual phases involving a jointly investment of up to US\$ 550 million in the La Amarga Chica area, province of Neuquén. Petronas will invest US\$ 475 million and YPF will invest US\$ 75 million. YPF will be the operator of the area and will assign a 50% interest in the concession to Petronas E&P Argentina S.A. (hereinafter "PEPASA"), a Petronas affiliate. Dated December 10, 2014 the Company and PEPASA, entered into the Investment Project Agreement based on the terms established in the preliminary agreement executed with Petronas.

Likewise, the parties signed the following supplementary agreements to the Investment Project Agreement: (a) Assignment Agreement for the assignment of 50% of the concession of the La Amarga Chica area; (b) JO formation contract; (c) JO Agreement; (d) Assignment Guarantee Agreement; (e) First Option Agreement for trading crude oil; and (f) Assignment of Rights on Hydrocarbon Export Agreement.

Additionally, Petronas granted a payment guarantee for certain financial obligations assumed by PEPASA under the Investment Agreement.

Once contributions of each annual phase of the Pilot Plan have been made, PEPASA will be entitled to excercise a right of exit from the Investment Project Agreement upon surrender of its participation in the concession and the settlement of liabilities as of the date of opt-out (without access to the 50% of the net production value of drilled wells until exercise of the opt-out options).

Upon full compliance with the parties' commitments during the Pilot Plan, each party will contribute 50% to the work schedule and cost budget based on the JO Agreement. The Investment Project Agreement provides that during the three phases of the Pilot Plan, a 3D seismic acquisition and processing program will be completed, covering the whole concession area, 35 wells will be drilled with the Vaca Muerta formation as the objective (including vertical and horizontal wells), and a series of surface installations will be built with the purpose of evacuating the area production.

As of December 31, 2017, phase II was completed and phase III began. For this third and last stage of the Pilot in la Amarga Chica, both companies are contemplating the drilling of 10 horizontal wells and the construction of new works and facilities to transport the production of shale oil obtained in the site. The joint investment commitment in this third phase amounts to US\$ 192.5 million. It is estimated that this phase will end in the third quarter of 2018. After the completion of this last phase, the Parties will be able to decide on the start of the full development of the area.

# • Granting of exploitation concession for Lindero Atravesado block - Neuquén

On July 10, 2015, the Province of Neuquén agreed to award to both partners, Pan American Energy LLC (Sucursal Argentina) and YPF, pro rata in accordance with their respective interests (62.5% and 37.5%, respectively) in the "Lindero Atravesado" joint venture, the right to an Unconventional Hydrocarbons Exploitation Concession for a 35-year term, pursuant to the provisions of sections 27 bis, 35(b) and related sections of Law No. 17,319, as amended by Law No. 27,007. As a condition to the award of the above mentioned concession rights, concession holders agreed to carry out an Unconventional Tight Gas Pilot program within 4 years, beginning on January 1, 2015, with an investment of US\$ 590 million. On July 16, 2015, an agreement in this respect was approved by Decree No. 1540/2015 of the Province of Neuquén.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

### • Extension of the JO Agreement for the Magallanes Area

On November 17, 2014, Enap Sipetrol Argentina ("ENAP") made to YPF, and YPF accepted, an offer whereby ENAP's rights and obligations under the Magallanes area JO Agreement were extended until the concession termination, with ENAP keeping 50% interest and continuing as Operator. The area concession includes three jurisdictions: Santa Cruz, Estado Nacional and Tierra del Fuego. In consideration for such extension, ENAP agreed to pay to YPF, or invest in the Joint Venture on behalf and on account of YPF, US\$ 100 million. The Agreement further provides for the obligation to agree on a so-called "Incremental Project" by September 15, 2015. An operating committee approved the Incremental Project on September 10, 2015, and its approval was ratified by YPF on October 20, 2015. Notwithstanding the foregoing, ENAP is entitled to withdraw at any time from the Incremental Project, without right to compensation or reimbursement therefor, including the Consideration and any royalties as may have been paid until termination.

## Agreement between YPF and the merged company YSUR Energía Argentina S.R.L., the Province of Neuquén and Gas y Petróleo del Neuquén S.A. ("GyP")

On October 17, 2016, YPF and YSUR Energía Argentina SRL, (the company merged with YPF), the Province of Neuquén and GyP, entered into an agreement whereby, under Laws No. 17,319, 24,145, 26,197, 26,741 and 27,007 and other applicable legislation, they have agreed as follows, with the subsequent approval of the Agreement by Decree No. 1431/2016 of the Executive Branch of the Province of Neuquén and the ratification by Provincial Law No. 3030/2016:

- i. With regard to "Pampa de las Yeguas I" and "La Ribera I and II" areas, the reconversion of the contracts with GyP into non-conventional operating concessions without GyP participation, for an associated 35-year term, under the terms of Law No. 27,007. The total investment commitment of YPF and its partners associated with the granting of the aforementioned concessions amounts to US\$ 220 million, US\$ 170 million of which corresponds to YPF's equity interests.
- ii. With regard to the "La Amarga Chica", "Bajada de Añelo" and "Bandurria Sur" areas, the terms for the execution of the pilot plans were extended up to a maximum term of 5 years under Law No. 27,007.
- iii. With regard to the "Aguada de Castro", "Bajo del Toro", "Cerro Arena", "Cerro Las Minas", "Chasquivil", "Las Tacanas", "Loma del Molle", "Pampa de las Yeguas II" and "Salinas del Huitrín" areas, the conversion of the contracts with GyP into exploration permits for non-conventional purposes without participation of GyP, for the associated term of 4 years, under the terms of Law No. 27,007, partially restoring the surface in some of the areas mentioned above. The total commitment of activity associated with the granting of the aforementioned permits will involve an estimated investment by YPF and its partners of US\$ 232 million, US\$ 155 million of which correspond to YPF's equity interest.
- iv. Finally, the total equity interest of GyP in the "Cerro Avispa", "Cerro Partido", "Loma del Mojón", "Los Candeleros", "Santo Domingo I", "Santo Domingo II", "Cortadera", "Huacalera", "Buta Ranquil I", "Buta Ranquil II", "RioBarrancas", "Chapua Este", "Corralera" and "Mata Mora" areas has been restored to it.
- v. That, in consideration of the granting of permits, concessions and extension of the deadlines for the execution of the pilot plans, YPF will pay the Province the sum of US\$ 30 million, which amount will be partially repaid to YPF by the partners.

On November 25, 2016, Decrees No. 1732/2016 and 1733/2016 were enacted, granting the exploration permits, operating concessions and extension of the periods contemplated in the Agreement.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

### Agreement for the development the Bajada de Añelo Area

On February 23, 2017, YPF and O&G Developments Ltd. S.A. (hereinafter "O&G"), an affiliate of Shell Compañía Argentina de Petróleo S.A., executed a preliminary agreement through which YPF and O&G agreed on the principal terms and conditions for the joint development of a shale oil and shale gas pilot in two phases, for a joint investment amount of US\$ 305.8 million plus VAT, in the Bajada de Añelo area in the province of Neuquén, of which O&G will contribute 97.6% and YPF will contribute 2.4%. O&G will be the operator of the area.

On May 12, 2017, and once the preceding conditions have been fulfilled, YPF and O&G have entered into the Assignment Agreement of 50% of the concession that contemplates the joint development of a work program (the "Work Program") in two phases with the joint investment mentioned above. During the first phase of the Work Program, which will have a maximum duration of 30 months, O&G will contribute a total of US\$ 222.6 million and YPF will contribute US\$ 7.4 million. The remaining US\$ 75.8 million will be contributed by O&G during the second phase of the Work Program.

On August 18, 2017, Provincial Decree 1360/17 approved the transfer of YPF's interest in favor of O&G and the transfer in escrow to YPF. This guarantee will be valid until O&G fulfills all of its obligations under the Assignment Agreement.

Once the first phase of the Work Program has been completed, O&G will have the option to leave the aforementioned program by returning its participating interest in the concession and the payment of accrued liabilities until the exit date. After the total commitments assumed by the Parties have been met at the stage of the Work Program, each of them will contribute 50% of the budget for the development of the area as provided for in the operation agreement.

### • Subdivision of Bandurria Block - Neuquén

On July 16, 2015, the Province of Neuquén, pursuant to decrees No. 1536/2015 and 1541/2015, approved the subdivision of the Bandurria block (465.5 km2) and awarded 100% of the area known as "Bandurria Norte" (107 km2) to Wintershall Energía S.A., 100% of the area known as "Bandurria Centro" (130 km2) to Pan American Energy LLC (Sucursal Argentina) and 100% of the area known as "Bandurria Sur" (228.5 km2) to YPF, awarding to YPF an Unconventional Hydrocarbons Exploitation Concession in Bandurria Sur area, for a 35-year term, with a commitment to develop a pilot plan to be completed in 3 years with a related investment of US\$ 360 million.

# • Agreement for the development of the Bandurria Sur Area

On April 12, 2017, YPF entered into a preliminary agreement with Schlumberger Oilfield Eastern Ltd. (hereinafter "SPM"), an affiliate of Schlumberger Argentina S.A., through which YPF and SPM agreed the main terms and conditions for joint development of a shale oil pilot in two phases, with a total investment of US\$390 million in the Bandurria Sur area (hereinafter the "Area"), located in the Province of Neuquén, of which SPM will provide 100%. On October 11, 2017, YPF entered into the definitive agreements with SPM. YPF continues to be the operator of the Area and SPM acquired the right to a 49% participating interest, with YPF retaining the right to the remaining 51%.

#### • Agreement for the assignment of interest in the Llancanelo block

On April 18, 2017, YPF entered into a preliminary agreement of non-binding terms and conditions with Patagonia Oil Corp. ("Patagonia"), an affiliate of PentaNova Energy Corp., whereby Patagonia will acquire an 11% participating interest of YPF in the Llancanelo Block, located in the Province of Mendoza, for the total price of US\$ 40 million, maintaining YPF a 50% participating interest in such Block. Also, both companies agreed on the main terms and conditions for the development of a heavy crude pilot project in the same Block with a total investment of US\$ 54 million during the next 36 months (hereinafter, the "Project"), whereby YPF will be the operator and Patagonia will contribute its expertise in heavy crude oils.

On November 22, 2017, YPF and Alianza Petrolera Argentina S.A., an affiliate of Patagonia and PentaNova Energy Corp ("Alianza"), subscribed the assignment agreement in the terms described above (the "Assignment Agreement"). The investment of the Project corresponding to the participation of YPF will be paid by Alianza as part payment of the price.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

Once the above conditions precedent to the entry into force of the Assignment Agreement have been met, among them, the pertinent regulatory approval by the authorities of the Province of Mendoza, the Project will begin.

After the total investment commitments assumed by the Alliance in the Assignment Agreement have been met, the budget for the development of the area will be contributed by both parties according to their participation percentage in the exploitation concession, in accordance with the provisions set forth in the joint operation agreement of the area.

#### • Exploration agreement in the Charagua block (Bolivia)

On July 26, 2017, the agreement with Yacimientos Petrolíferos Fiscales Bolivianos ("YPFB") originally signed in January of 2017 was notarized, to begin the exploration work in Charagua, Bolivia, in a block that has a potential in natural gas resources, estimated at 2.7 TCF (trillion cubic feet). Moreover, the plan of exploration and exploitation activities in Bolivian territory was presented.

During the month of October 2017, the terms for the assignment in favor of YPFB Chaco S.A. were agreed upon of 40% on the Services Contract subscribed with YPFB for the exploration of the block. On December 20, 2017, YPFB approved the Work Program and Budget for the period 2017-2018 for the Charagua Block. Moreover, the assignment agreement was entered into on January 25, 2018. The formal approval of the Legislative Assembly of the Plurinational State of Bolivia is still pending for it to become effective.

Should the expected commercial discovery be made, a Mixed Economy Company (Sociedad de Economía Mixta) will be created by YPFB, YPF E&P (indirect subsidiary of YPF) and Chaco, with a shareholding of 51%, 29.4% and 19.6%, respectively.

#### Agreement for the exploitation of the Aguada Pichana and Aguada de Castro Areas

On July 17, 2017, the agreements executed on July 13, 2017 between YPF, Pan American Energy LLC (Argentine Branch) ("PAE"), Total Austral S.A. (Argentine Branch) ("TOTAL"), Wintershall Energía S.A. ("WIAR") and the Province of Neuquén, entered into force by means of Decree No.1178/17 of the Provincial Executive Branch, whereby it was agreed:

- (i) the division of the Aguada Pichana area into two new areas "Aguada Pichana Este" ("APE") and "Aguada Pichana Oeste" ("APO"); with an area of 761 km2 (629 km2 net drillable area) and 605 km2 (443 km2 net drillable area), respectively and the granting of two Concessions of Non Conventional Exploitation of Hydrocarbons; the Parties committing to carry out a pilot program of 20 wells for the approximate amount of US\$ 300 million in APE and 11 wells for the approximate amount of US\$ 150 million in APO; and
- (ii) the granting of a Concession of Unconventional Exploitation of Hydrocarbons in the Aguada de Castro area ("ACA"), with an area of 163 km2; The Parties committed themselves to carry out a 3-well pilot program for an approximate amount of US\$ 50 million

Based on the technical-economic results of the pilot programs and the granting of the benefits of the Stimulus Program provided for by MINEM Resolution No. 46-E / 2017, the total estimated amount of the investments under the Agreements, including the investments which were already disbursed and those which have been committed, would reach an approximate sum of US\$ 1,200 million.

The operation in APE will be in charge of TOTAL and the operation in APO and ACA will be in charge of PAE.

Once the Agreements mentioned above have become in full force and effect and the conditions precedent have been complied with, the modifications of the equity interests of YPE will be as follows:

- (i) In the APE area, the interest of YPF will be 22.50%, which implies, with respect to the current interest, the sale of a 4.77% stake.
- (ii) In the APO area, the interest of YPF will be 30%, which implies, with respect to the current interest, the purchase of a 2.73% stake.
- (iii) In the ACA area, the interest of YPF will be 30%, which implies with respect to the current participation, the sale of a 20% stake in ACA.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

In relation to ii) and iii), on November 15, 2017, the UT "Aguada de Castro and Aguada Pichana Oeste" was established, which will unify the APO and ACA areas, where YPF will hold a 30% stake once the conditions precedent have been fulfilled.

Notwithstanding the changes in the aforementioned participations, all existing assets, including the production of the existing wells and any future development that is not associated with the Vaca Muerta formation, will not be modified as regards the participation of the Parties.

The execution of the Agreements implies an exchange of participations in the areas for which YPF will receive US\$ 52.3 million through investment contributions.

## • Agreement for the exploitation of the Bajo del Toro Area

On August 25, 2017, YPF entered into a preliminary agreement) with Statoil Holding Netherlands B.V. (hereinafter "Statoil"), whereby the parties agreed upon the main terms and conditions for exploration and potential joint development in two phases of the Bajo del Toro area (hereinafter the "Area") located in the Province of Neuquén.

On January 17, 2018, YPF and Statoil have entered into the definitive agreements (hereinafter the "Definitive Agreements") for the exploration and potential joint development of the Area. Such Definitive Agreement implemented the transfer of 50% of the exploration permit on the Area in favor of Statoil. YPF will continue to be the operator of the Area and will retain, directly and indirectly, the remaining 50% stake in the permit.

The Definitive Agreements contemplate the joint development of a work program in two phases (the "Work Program"). During the first phase, the Parties will drill two horizontal wells and during the second phase, they will drill six horizontal wells and the corresponding infrastructure associated with the wells. Statoil will pay YPF the price of US\$ 30 million at the time of compliance with the conditions precedent established in the Definitive Agreements and then, additionally, it will contribute 100% of the costs and investments required by the Work Program and the potential development of the Area up to the sum of US\$ 270 million.

Upon completion of the activities corresponding to the first phase of the Work Program, Statoil will have the option to withdraw from the project by returning its share in the permit and the payment of the accrued liabilities through its exit date. In the event that Statoil does not exercise such exit right, once the activities corresponding to the second phase of the Work Program have been completed, it will again have the option to leave the project in the same conditions as described above.

The entry into force of the Definitive Agreements is subject to compliance with certain conditions precedent, which refers mainly to the authorization of the assignment of participation provided for in such agreements.



## 29. CONTRACTUAL COMMITMENTS (Cont.)

## 29.c) Contractual commitments

The Group has signed contracts by means of which it has committed to buy certain products and services, and to sell natural gas, liquefied petroleum gas and other products. Some of the mentioned contracts include penalty clauses that stipulate compensations for a breach of the obligation to receive, deliver or transport the product object of the contract. The anticipated estimated losses for contracts in progress, if any, considering the compensations mentioned above, have been charged to the income for the year in which they were identified.

In this order, the Group has renegotiated certain natural gas export contracts, and has agreed, between others, to limit compensations only in case of interruptions and/or suspension of deliveries from any cause, except physical force majeure. Also, the Group has agreed to make investments and export gas to temporarily import certain final products. As of the date of issuance of these financial statements, the Group is fulfilling the agreed commitments mentioned above. To the extent that the Group does not comply with such agreements, we could be subject to significant claims, subject to the defenses that the Group might have.

The Group under certain trade agreements has undertaken the obligation with third parties to buy goods and services (such as liquefied petroleum gas, electricity, gas, oil and steam) that as of December 31, 2017 amounted to about 54,466. In addition, it has exploratory, investment and expense commitments until the termination of some of its concessions for 228.860 as of December 31, 2017, including commitments for the extension of concessions mentioned in previous paragraphs.

### 29.d) Operating lease commitments

As of December 31, 2017, the main lease agreements to which the Group is a lessee correspond to:

- Lease agreements of equipment for installations and production equipment in reservoirs, and natural gas compression equipment, for an average term of 3 years with the option to be renewed for one 1 additional year and for which the contingent quotas are calculated from a rate per unit of use (pesos per hour / day of use).
- Lease agreements of vessels and crafts for the transportation of hydrocarbons, for an average term of 5 years and for which the contingent quotas are calculated from a rate per unit of use (pesos per hour / day of use).
- Lease agreement of land for the installation and operation of service stations, for an average term of approximately 10 years and for which the contingent quotas are calculated from a rate per unit of estimated fuel sales.

The charges for the contracts mentioned above for the fiscal years ended December 31, 2017, 2016 and 2015 amounted to approximately 7,667, 7,612 and 7,364, respectively, corresponding to 2,306, 1,698 and 746 of minimum payments and 5,361, 5,914 and 6,618 of contingent installments, and have been charged to "Rental of real estate and equipment" and "Contracts of work and other services" in the integrated consolidated statement of comprehensive income.

As of December 31, 2017, the estimated future payments related to these contracts are as follows:

|                           | Up to 1 year | From 1 to 5 years | After 6 years |
|---------------------------|--------------|-------------------|---------------|
| Estimated future payments | 5,480        | 4,265             | 504           |

#### 29.e) Granted Guarantees

As of December 31, 2017, in relation to compliance with obligations of subsidiaries, YPF has issued bank guarantees for an approximate amount of US\$ 26 million and has assumed other commitments for an approximate value of US\$ 42 million.

Additionally, see Note 29.b) for a description of the Chevron transaction and see Note 16 for a description of the financial loans and NO secured by cash flows.



#### 30. MAIN REGULATIONS AND OTHER

#### 30.a) New Hydrocarbon Law

On October 31, 2014, the Argentine Republic Official Gazette published the text of Law No. 27,007, amending the Hydrocarbon Law No. 17,319. The most relevant aspects of the new law are as follows:

- As regards exploration permits, it distinguishes between those with conventional and unconventional objectives, and between explorations in the continental shelf and in territorial waters, establishing the respective terms for each type.
- As regards concessions, three types of concessions are provided, namely, conventional exploitation, unconventional exploitation, and exploitation in the continental shelf and territorial waters, establishing the respective terms for each type.
- The terms for hydrocarbon transportation concessions were adjusted in order to comply with the exploitation concessions terms.
- As regards royalties, a maximum of 12% is established, which may reach 18% in the case of granted extensions, where the law also establishes the payment of an extension bond for a maximum amount equal to the amount resulting from multiplying the remaining proven reserves at the end of effective term of the concession by 2% of the average basin price applicable to the respective hydrocarbons over the 2 years preceding the time on which the extension was granted.
- The extension of the Investment Promotion Regime for the Exploitation of Hydrocarbons (Decree No. 929/2013) is established for projects representing a direct investment in foreign currency of at least US\$ 250 million, increasing the benefits for other type of projects.
- Reversion and transfer of hydrocarbon exploitation permits and concessions in national offshore areas is established when no association contracts subscribed with ENARSA to the National Secretariat of Energy exist.

#### 30.b) Hydrocarbon Sovereignty Regime – Decree No. 1,277/2012

On July 25, 2012, the executive decree of Law No. 26,741, Decree No. 1,277/2012, was published, creating the "Regulation of the Hydrocarbons Sovereignty Regime in the Argentine Republic". Among other matters, the mentioned decree establishes: the creation of the National Plan of Investment in Hydrocarbons; the creation of the Commission for Planning and Coordination of the Strategy for the National Plan of Investment in Hydrocarbons (the "Commission"), which will elaborate on an annual basis, within the framework of the National Hydrocarbon Policy, the National Plan of Investment in Hydrocarbons; the National Registry of Investments in Hydrocarbons in which the companies undertaking activities of exploration, exploitation, refining, transport and commercialization of hydrocarbons and fuels will have to register; and the obligation for the registered companies to provide their Plan of Investments every year before September 30, including a detail of quantitative information in relation to the activities of exploration, exploitation, refining, transport and commercialization of hydrocarbons and fuels according to each company.

Additionally, the mentioned companies will have to provide their plans in relation to the maintenance and increase of hydrocarbons reserves, including: a) an investment in exploration plan; b) an investment plan in primary hydrocarbons reserves recovery techniques; and c) an investment plan in secondary hydrocarbons reserves recovery techniques, which will be analyzed by the Commission; the Commission will adopt the promotion and coordination measures that may consider necessary for the development of new refineries in the National Territory, that may allow the growth in the local processing capacity in accordance with the aims and requirements of the National Plan of Investment in Hydrocarbons; in relation to prices, and accordingly to the Decree, for the purpose of granting reasonable commercial prices, the Commission will determine the criteria that will govern the operations in the domestic market. In addition, the Commission will publish reference prices of each of the components of the costs and the reference prices for the sale of hydrocarbons and fuels, which will allow to cover the production costs attributable to the activity and to reach a reasonable margin of profit.



## 30. MAIN REGULATIONS AND OTHER (Cont.)

Not complying with the dispositions included in the Decree and supplementary rules may result in the following penalties: fine, admonition, suspension or deregistration from the registry included in section 50 of Law No. 17,319 or the nullity or expiration of the concessions or permits. Moreover, the mentioned decree abrogates the dispositions of the Decrees No. 1,055/1989, 1,212/1989 and 1,589/1989 which set, among other matters, the right to the free disposition of hydrocarbon production.

On December 29, 2015, the Executive Branch issued Decree No. 272/2015, resolving for the dissolution of the Commission and its Regulations, and also providing that the powers vested on the Commission were to be exercised by the MINEM.

## 30.c) Investment Promotion Regime for the Exploitation of Hydrocarbons - Decree No. 929/2013

Decree No. 929/2013 provides for the creation of an Investment Promotion Regime for the Exploitation of Hydrocarbons (the "Promotional Regime"), both conventional and unconventional, which will apply throughout the territory of the Republic of Argentina. Inclusion in the Promotional Regime may be applied for by subjects registered with the Hydrocarbon Investments National Register and holding hydrocarbon exploration permits and/or exploitation concessions and/or any third party associated and together with, such holders, provided they file with the Strategic Planning and Coordination Commission of the Hydrocarbon Investments Nation Plan created by Decree No.1,277/2012 a "Hydrocarbon Exploitation Investment Project" entailing a direct investment in foreign currency of at least US\$ 1,000 million, computed as of the filing of the Hydrocarbon Exploitation Investment Project to be invested during the first five years of the Project (this amount was amended by the subsequent Law No. 27,007 to US\$ 250 million). Among the benefits to subjects comprised by the Promotional Regime, the following are highlighted: i) they will be entitled, subject to the terms of Law No. 17,319 and as from the fifth successive year of actual execution of their respective "Hydrocarbon Exploitation Investment Projects", to freely sell to foreign markets 20% of their production of liquid and gaseous hydrocarbons produced under the said Projects, with a 0% rate for export duties, should these be otherwise applicable; ii) they will be entitled to free availability of 100% of any foreign currency obtained from export of the hydrocarbons mentioned in the preceding item, provided that the approved "Hydrocarbon Exploitation Investment Project "implies the entry of foreign currency to the Argentine market of at least US\$ 1,000 million and as mentioned hereinabove; iii) it is provided that, during periods where national production is not enough to meet domestic supply needs under the terms of section 6 of Law No. 17,319, subjects included In the Promotional Regime will be entitled, as from the fifth year from approval and execution of their respective "Hydrocarbon Exploitation Investment Projects", to obtain, in compensation for the percentage of liquid and gaseous hydrocarbons produced under such Projects available for export as mentioned herein above, an export price of not less than the reference export price, for whose determination the incidence of export duties otherwise applicable will not be computed.

In addition, the Decree creates the institute of "Unconventional Hydrocarbon Exploitation", consisting of the extraction of liquid and/or gaseous hydrocarbons through unconventional stimulation techniques applied in fields located in shale gas or shale oil, tight sands, tight gas and tight oil, and coal bed methane geological rock formations and/or characterized, generally, by the presence of low permeability rocks. In connection therewith, it has been provided that subjects holding hydrocarbon exploration permits and/or exploitation concessions included in the Promotional Regime will be entitled to apply for an "Unconventional Hydrocarbon Exploitation Concession". In addition, holders of "Unconventional Hydrocarbon Exploitation Concessions" who in turn are holders of an adjacent pre-existing exploitation concession, may apply for the merging of both areas into a sole unconventional area, provided that due evidence is given of the geological continuity of the relevant areas.



#### 30. MAIN REGULATIONS AND OTHER (Cont.)

#### 30.d) Withholding rates of hydrocarbon exports

Law No. 25,561 on Public Emergency and Exchange System Reform ("Public emergency law"), issued in January 2002, established duties for hydrocarbon exports for a five-year period. In January 2007, Law No. 26,217 extended this export withholding system for an additional five-year period and established specifically that this regime is also applicable to exports from the Province of Tierra del Fuego, which were previously exempt. In addition, Law No. 26,732 published in the Official Gazette in December 2011 extended for an additional 5 years the mentioned regime. On November 16, 2007, the Ministry of Economy and Production ("MEP") published Resolution No. 394/2007, modifying the withholding regime on exports of crude oil and other refined products.

In addition, Resolution No. 1/2013, published on January 3, 2013, and Resolution No. 803/2014, published on October 21, 2014, by the Ministry of Economy and Public Finance modified the reference and floor prices. Resolution No. 1,077/2014, dated December 29, 2014, repealed Resolution No. 394/2007 and amended and established a new withholding system based on the International Price of crude oil ("IP"), calculated on the basis of the "Brent value" applicable to the export month minus eight dollars per barrel (US\$ 8.00/bbl). The new regime establishes a general nominal rate of 1% while IP is below US\$ 71/bbl. Additionally, the resolution establishes an increasing variable rate for export of crude oil while IP is above US\$ 71/bbl; therefore, the producer will collect a maximum value of about US\$ 70 per exported barrel, depending on the quality of crude oil sold. Likewise, the resolution establishes a variable increasing withholding rates for exports of diesel, gasoline, lubricants and other petroleum derivatives when IP exceeds US\$ 71/bbl by using formulas allowing the producer to collect a portion of such higher price.

Furthermore, in March 2008, Resolution No. 127/2008 of the MEP increased the natural gas export withholding rate to 100% of the highest price from any natural gas import contract. This resolution has also established a variable withholding system applicable to liquefied petroleum gas, similar to the one established by the Resolution No. 394/2007. In February 2015, Ministry of Economy and Public Finance Resolution No. 60/2015 modified the reference values of Resolution No. 127/2008 and reduced the export duty rate from 45% to 1% when IP was lower than the reference value.

Notwithstanding the above, upon the expiration of the 5-year extension established by Law No. 26,732, which was in effect on January 7, 2017, the right to export hydrocarbons created by Article 6 of Law No. 25,561 was not extended.

## 30.e) Liquid hydrocarbons regulatory requirements

Resolution No. 1,679/2004 of the Secretariat of Energy reinstalled the registry of diesel and crude oil export transactions created by Executive Decree No. 645/2002, and mandated that producers, sellers, refining companies and any other market agent that wishes to export diesel or crude oil to register such transaction and to demonstrate that domestic demand has been satisfied and that they have offered the product to be exported to the domestic market. In addition, Resolution No. 1,338/2006 of the Secretariat of Energy added other petroleum products to the registration regime created by Executive Decree No. 645/2002, including gasoline, fuel oil and its derivatives, diesel, aviation fuel, asphalts, certain petrochemicals, certain lubricants, coke and petrochemical derivatives. Resolution No. 715/2007 of the Secretariat of Energy empowered the National Refining and Marketing Director to determine the amounts of diesel to be imported by each company, in specific periods of the year, to compensate for exports of products included under the regime of Resolution No. 1,679/2004; the fulfillment of this obligation to import diesel is necessary to obtain authorization to export the products included under Decree No. 645/2002.



#### 30. MAIN REGULATIONS AND OTHER (Cont.)

In addition, certain regulations establish that exports are subordinate to supplying the domestic market. In this way, Resolution No. 25/2006 of the Secretariat of Domestic Commerce, issued on October 11, 2006, imposes on each Argentine refining and/or retail company the obligation to supply all reasonable diesel fuel demand, by supplying certain minimum volumes (which at minimum should be volumes supplied the year before plus the positive correlation between diesel demand and GDP accumulated from the month reference). The mentioned commercialization should be done without altering or affecting the normal operation of the diesel market.

Additionally, Rule No.168/2004 requires companies intending to export LPG to first obtain an authorization from the Secretariat of Energy, by demonstrating that local demand was satisfied or that an offer to sell LPG to local demand has been made and rejected.

In January 2008, the Secretariat of Domestic Commerce issued Resolution No.14/2008, whereby the refining companies were instructed to optimize their production in order to obtain maximum volumes according to their capacity.

Decree No. 1,189/2012 of the National Executive Branch, dated July 17, 2012, established that the jurisdictions and entities of the National public Sector included in section 8, subsection a) of Law No. 24,156 (National Administration, formed by the central administration and the decentralized agencies including the social insurance institutions) must contract with YPF the provision of fuels and lubricants for the fleet of official cars, boats and aircrafts, except in those cases which have the prior authorization of the Chief of the Cabinet of Ministers.

#### • Price agreement between crude oil producers and refiners

In January 2017, oil producers and refiners reached an agreement for the transition to international prices of the Argentine hydrocarbon industry, which established proposed prices for the commercialization of oil on the domestic market in order to achieve parity with international markets during the course of 2017. Notwithstanding the foregoing, the agreement provided for the power of either party to abandon the agreement during its term, which was also subject to compliance with certain variables such as the exchange rate or price of Brent crude oil within certain established parameters. During the last quarter of 2017, the price agreement was suspended because it considered this suspension in case the average international price of 10 days exceeds the local price, but it also states that it may be restored if the average price of Brent crude is positioned below the local price for more than 10 days.

Since then, the market players - producers and refiners - began to freely agree on domestic oil prices, generally valid on a calendar-month basis and linked to the Brent international benchmark, while maintaining limits on the exchange rate. US\$/\$ and Brent's own value, depending on the capacity to transfer its price (expressed in US\$/Bbl) to the prices of the products obtained from it- basically fuels (expressed in Peso/unit) - for their market sale.

#### 30.f) Programs for the production and refining of liquid hydrocarbons

#### • Refining and Petroleum Plus Programs

Decree No. 2,014/2008 of the Department of Federal Planning, Public Investment and Services of November 25, 2008, created the "Refining Plus" and the "Petroleum Plus" programs to encourage (a) the production of diesel fuel and gasoline and (b) the production of crude oil and the increase of reserves through new investments in exploration and production. The programs entitle refining companies that undertake the construction of a new refinery or the expansion of their refining and/or conversion capacity and production companies that increase their production and reserves within the scope of the program to receive export duty credits to be applied to exports withholdings. In order to be eligible for the benefits of both programs, companies' plans must be approved by the Argentine Secretariat of Energy.



#### 30. MAIN REGULATIONS AND OTHER (Cont.)

During February 2012, through Note No. 707/2012, supplemented by Note No. 800/2012, both issued by the Secretariat of Energy, YPF was notified that the benefits granted under the "Refining and Petroleum Plus" programs had been temporarily suspended. The effects of the suspension also apply to benefits accrued and not yet redeemed by YPF at the time of the issuance of the Notes. The reasons alleged for such suspension are that the programs had been created in a context where domestic prices were lower than prevailing prices and that the objectives of those programs had already been achieved. On March 16, 2012, YPF has challenged this temporary suspension.

Pursuant to Decree No. 1,330/15 of July 6, 2015, the Government resolved to render ineffective the "Petroleum Plus" program, which had been created by Decree No. 2,014 of November 25, 2008.

#### • Stimulus program for the production of crude oil

On February 3, 2015, the Argentine Republic Official Gazette published the text of Resolution No. 14/2015 passed by the Commission for Planning and Coordination of the Strategy for the National Plan of Investment in Hydrocarbons that created the Crude Oil Production Promotion Program for 2015 under which beneficiary companies are awarded economic compensation, payable in pesos, for an amount equivalent to up to US\$ 3.00/bbl for the total production of each beneficiary company, provided that its quarterly production of crude oil is higher or equal to the production taken as basis for such program. Basis production is defined as the total production of crude oil by beneficiary companies corresponding to the fourth quarter of 2014, expressed in barrels per day. The beneficiary companies that have met the demands of all refineries authorized to operate in the country and direct part of their production to the foreign market may receive an additional economic compensation of US\$ 2.00 or US\$ 3.00 for each barrel of exported crude oil, depending on the level of exported volume achieved.

#### 30.g) Regulatory requirements for natural gas

## • Mechanisms for allocating the demand for natural gas

#### SE Resolution No. 599/2007 - ENARGAS Resolution No. 1410/2010

SE Resolution No. 599/2007 (the "Resolution") stands out which was issued on June 14, 2007. This Resolution approved an agreement with natural gas producers regarding the natural gas supply to the domestic market during the period 2007 through 2011 (the "Agreement 2007-2011") which guaranteed the normal supply of the natural gas domestic market during the period 2007- through 2011, considering the domestic market demand registered during 2006 plus the growth of residential and small commercial customer consumption (the "Priority Demand"). According to the Resolution, the Producers had to supply a part of the Priority Demand according to certain percentage determined for each producer based upon its share of production of the previous years. Considering that the Resolution provided for the continuity of the regulatory mechanisms that affect the exports, YPF filed an appeal against the resolution and expressly stated that the execution of the Agreement 2007-2011 did not mean any recognition by YPF of the validity thereof.

Additionally, on October 4, 2010, the Official Gazette published ENARGAS Resolution No. 1,410/2010 that approved the procedure which set out new rules for natural gas dispatch applicable to all participants in the natural gas industry, imposing new and more severe regulations to the producers' availability of natural gas (Procedimiento para Solicitudes, Confirmaciones y Control de Gas). By virtue of these procedures, distributors were authorized to request all the natural gas necessary to cover the Priority Demand even in the case of natural gas volumes that exceed those that the Secretariat of Energy would have allocated by virtue of the Agreement ratified by the Resolution No. 599/07. The Company's appeal against Resolution No. 1410/2010 was rejected. As of the date of issuance of these consolidated financial statements, this Resolution has not been repealed.

### MINEM Resolution No. 89/2016 - ENARGAS Resolution I - 3833 /16 - ENARGAS Resolution No. 4.502/17

On June 1, 2016, the MINEM published Resolution No. 89 whereby:

a) ENARGAS was instructed to develop a procedure that modifies and supplements the one established in ENARGAS Resolutions No. 716/1998 and 1,410/2010 and establishes daily operation conditions of the Transportation and Distribution Systems.



## 30. MAIN REGULATIONS AND OTHER (Cont.)

b) It was decided that the volumes that may be requested by the Distributors to supply the priority and fixed demand which in case of contracting the natural gas to such destination with a natural gas producer, will reduce the requirement of natural gas to said producer as set forth in Resolution 1,410 / 2010 to the extent of the contracted volume.

According to this Resolution, ENARGAS Resolution I/ 3,833 was issued on June 5, 2016, which approves the "Supplementary Procedure for Gas Requests, Confirmations and Control".

The purpose of the Procedure is to establish the transition mechanism and application criteria for the administration of the natural gas dispatch to preserve the operation of the transportation and distribution systems giving priority to the consumption of the Priority Demand in cases of supply crisis and / or emergencies which may put at risk the normal provision of the natural gas public service or which may affect the provision of another public service.

The new Procedure establishes that each day the Distribution Service Providers will request in the programming computer systems of the Transport Companies for the operational day n+1, with first priority, the natural gas necessary to supply the Priority Demand, based on their consumption estimate and in accordance with the contracted transport capacity and its supply agreements.

The confirmation of natural gas in the TSEP for Priority Demand will have priority over other segments. The confirmation of gas for segments other than the Priority Demand will maintain the confirmation priority established by the Producer in the respective contracts with direct consumers (or Marketers), which will be informed to Transportation and Distribution Service Providers.

The transportation nomination of each Distribution Service Provider will give priority to the supply of their Priority Demand over any other user of that Provider.

The Providers of the Transportation and Distribution Service that verify that the transportation capacity is not sufficient to supply the Priority Demand must summon the Emergency Committee, chaired by the president of ENERGAS, who will procure the means to allocate the volumes in the emergency situation.

On June 6, 2017 ENARGAS Resolution No 4,502/17 was issued which approved the Procedure for the administration of the office in the Emergency Executive Committee ("EEC"), modifying the procedure for the delivery request and gas confirmations which were approved by ENARGAS Resolution No. 3,833/16 and provided for measures and criteria to be adopted in a supply crisis of the Priority Demand for Natural Gas declared by the Transportation Companies, Distribution Companies or the ENARGAS.

Among such measures, it was provided that the EEC or (if the EEC disagrees to it) the ENARGAS, will define the way in which the Priority Demand will be supplied considering the quantities of natural gas available in each basin for each producer and discounting the amounts contracted to supply the Priority Demand.

# Terms and Conditions for the Distribution of Natural Gas through Networks

Under the energy sector normalization process, the MINEM called on natural gas producers (including YPF) and ENARSA to establish the basic conditions that will constitute the framework for the supply agreements to be executed for Natural Gas distribution as of January 1, 2018. In the meeting, MINEM informed that stated in the notice of call that given the expiration of the the extension period established in Law No. 27,200 regarding the public emergency that began in 2002, Law No. 24,076 regained effectiveness, which sets forth that the price of natural gas supply agreements will be the price resulting from the free interaction of supply and demand.

In this context, on November 29, 2017, natural gas producers (including YPF) and ENARSA, at the request of the MINEM, subscribed the "Terms and Conditions for the Provision of Natural Gas to Gas Distributors through Networks" (the "Terms and Conditions").

The Terms and Conditions establish the basic guidelines to assure the adequate supply of natural gas to the Distributors, and consequently to residential and commercial final consumers. Moreover, they establish the continuity of the gradual and progressive path of reduction of subsidies, all within the framework of the process of normalization of the natural gas market, which occurs within the period of validity of such Terms and Conditions until December 31, 2019 considered as the "transition period" until the normalization indicated above.



#### 30. MAIN REGULATIONS AND OTHER (Cont.)

The guidelines established in the Terms and Conditions include, among others, the recognition of the right to transfer to the gas tariff the cost of gas acquisition paid by users and consumers; establishes the available volumes that each producer and each basin must make available daily to the distributors for each month, who may express their lack of interest before a certain date set forth in the Terms and Conditions; establishes penalties for non-compliance for any of the parties regarding their obligation to deliver or take gas; establishes gas prices for each basin for the next two years, in US dollars, the parties being able to set prices lower than those established under the applicable free negotiations; establishes payment guidelines for the purchases made by the Distributors to producers; ENARSA assumes the obligation to supply the demand corresponding to areas reached by the subsidies of residential gas consumption contemplated in article 75 of Law 25,565 (corresponding to the areas of lower price of residential gas charged to users and consumers), during the period of transition.

The Terms and Conditions constitute the terms and conditions to consider in the negotiations of their respective individual agreements, without this being construed as an obligation. Additionally, the Terms and Conditions establish guidelines for early termination in the event of non-compliance by the parties.

## • New natural gas exports

National Decree No. 893/2016, dated July 25, 2016, determined that the MINEM is empowered to regulate the awarding of export permits for the following purposes: (i) provide assistance in natural gas emergency cases from foreign countries; and (ii) replace the natural restrictions of local transportation through the use of external transportation infrastructure to facilitate natural gas transportation within the Argentine market and allow an increase in local production.

On January 8, 2017, the export duties on hydrocarbon exports established by Law No. 26,732 ceased to be applicable. Thereafter, there are no export duties on natural gas exports.

On January 13, 2017, MINEM Resolution No. 8/2017 was published, which regulated Decree No. 893/2016, establishing a special procedure for granting natural gas export permits subject to re-import commitments. The resolution is applicable for two types of exports; (i) those aimed at providing assistance in emergency cases ("Exports for Assistance"); and (ii) Exports required to make up for internal transport restrictions in order to allow both the use of infrastructure from neighboring countries to facilitate natural gas transportation to Argentine domestic market and the increase of domestic production ("Exports for Transportation Restriction"). The beneficiaries of both types of permits will be liable for the damages that might be caused to the Argentine natural gas supply system in the event of non-compliance with their re-import obligations as and when agreed and the costs of the import that the National Government must make to replace the exported gas which was not re-entered, with a penalty of 50% of such costs. Such permits would be extended for a maximum period of two years and will be subject to a possible termination if the public interest makes it advisable for the domestic market offer in accordance with MINEM criteria.

On November 27, 2017 Decree 962/2017 was published which, among other aspects, modifies Art. 3 of the Regulatory Decree of the Law No. 24,076, establishing the following principles for export authorizations: 1) will be issued by the MINEM once the applications have been evaluated; 2) the export agreements that involve the construction of new facilities and / or new connections to the gas pipelines, or the use of any of the existing systems, or other transportation alternatives, will be approved by the MINEM with the intervention of ENARGAS; 3) The authorizations issued by the MINEM may provide for the export of surplus gas up to the amounts established therein, provided they are subject to interruption when there are internal supply problems. In this case, it will be unnecessary to obtain the approval of each surplus export in the authorization, it will only be required to submit to the ENARGAS, for informative purposes only, the respective contract from which the interruptibility condition should arise and the absence of compensation in case of such interruption.

The modifications introduced by Decree No. 962/2017 do not modify the regime of temporary export permits, provided for in Decree No. 893/2016.



#### 30. MAIN REGULATIONS AND OTHER (Cont.)

## Trust Fund to finance natural gas imports

On November 27, 2008 through Executive Decree No. 2,067/08, a trust fund was created to finance imports of natural gas for its injection in the national gas pipeline system when necessary to satisfy the domestic demand. The trust fund is financed through the following mechanisms: (i) diverse tariff charges paid by users of transportation services and regularly distributed, gas consumers receiving gas directly from producers, and companies processing natural gas; (ii) special credit programs that may be agreed upon with national or international organizations; and (iii) specific contributions assessed by the Secretariat of Energy on the participants in the natural gas industry. This Decree has been object of diverse judiciary claims, and judges from all over the country have issued precautionary measures for suspension of its effects, grounded on the violation of the principle of legality on tax matters. On November 8, 2009, ENARGAS published Resolution No. 1,982/11 that adjusted the tariff charges established by Executive Decree No. 2,067/08 to be paid by users as from December 1, 2011.

On November 24, 2011, ENARGAS passed Resolution No. 1991/2011, enlarging the number of users obliged to pay tariff charges, including residential services, natural gas processing, industrial premises and electric power plants, among others; this has affected the operations of the Company, and has had a significant impact on our joint subsidiary companies, all of which have filed appeals against the mentioned resolution. For its part, YPF has challenged these resolutions and rejected the charge invoice made by Nación Fideicomiso. On April 13, 2012, YPF obtained a precautionary measure related to the El Portón processing plant, suspending the effects of these resolutions in relation to that plant until a decision on the administrative appeals filed by YPF had been reached.

In November 2012, Law No. 26,784 was passed which granted legal hierarchy, since such date, to the decisions enacted by the Executive Branch and ENARGAS, in relation to the charge. Dated December 11, 2014, the CSJN pronounced the "Alliance" judgment, deciding that the charge created by decree 2,067/2008 a tariff charge and not a tax, and thus not subjected to the principle of tax legality. However, the Court left open the possibility of eventual claims or defenses in cases different from the claims raised in the "Alliance" judgment.

In particular, the application of the above mentioned tariff charge produces an impact so significant in Mega operations that, if not favorably resolved, Mega could have in the future serious difficulties continuing its business. On October 27, 2015, the CSJN issued a resolution on the motion for protection of constitutional rights filed by Mega S.A. (for the period until the enactment of the 2013 Budget Enactment Law No. 26,784) providing that the charge under "Decree 2067/08" was unconstitutional and not applicable to Mega.

On April 1, 2016 the MINEM issued Resolution No. 28/2016, which, among others, revoked resolutions passed by the former Ministry of Federal Planning, Public Investment and Services under Section 6 of Decree No. 2,067/2008 and Section 7 of Resolution No. 1,451/2008 of the aforementioned Ministry related to the assessment of tariff charges, which instructs the ENARGAS to take the necessary measures to cease applying those charges in the bills issued to users.

#### 30.h) Natural gas production incentive programs

## Natural Gas Additional Injection Stimulus Programs

On December 2012, YPF and other gas producing companies of Argentina agreed with the Planning and Strategic Coordination Commission of the National Plan of Hydrocarbon Investments (the "Commission") to establish an incentive scheme for the Additional Injection (all gas injected by the companies above certain threshold) of natural gas. On February 14, 2013 Resolution No. 1/2013 of the Commission was published in the Official Gazette. This resolution formally creates the "Natural Gas Additional Injection Stimulus Program".



#### 30. MAIN REGULATIONS AND OTHER (Cont.)

Under this regulation, gas producing companies were invited to file projects for increasing total natural gas injection ("the projects") to the Commission, in order to receive a price of US\$ 7.50/MMBtu for all gas injected in excess (above the base injection level of each company). The Projects will comply with minimum requirements established in Resolution No. 1/2013, and will be subject to approval consideration by the Commission. The Projects have a maximum term of five (5) years, renewable at the request of the beneficiary, and subject to the decision of the Commission. If the beneficiary company, for a certain month, does not reach the compromised production increase of its project, approved by the Commission, it will have to compensate its failure to achieve the minimum total injection committed in such Project. Resolution No. 60/2013, regulated by Resolution No. 83/2013, called Natural Gas Additional Injection Stimulus for Companies with Reduced Injection" established a similar program for the companies that failed to comply with the requirements of Resolution No. 1/2013 and those that had failed to register in time under such Resolution. The price to be paid under the program established in Resolution No. 60/2013 varies between US\$ 4.00/MMBtu and US\$ 7.50/MMBtu, according to the highest production curve reached by the beneficiary company under the program.

On September 29, 2015, Resolution No. 185/2015 was published in the Official Gazette regulating the so-called Natural Gas Injection Stimulus for Companies without Injection in favor of those corporate producers which do not have a previous record of natural gas injection companies will receive a compensation resulting from the difference between US\$ 7.50/MMBtu and the price received for the sale of the natural gas in the market. Such compensation will be received only for natural gas originating in areas whose production rights will have been acquired from companies registered with any of the two previous programs and provided that during the period in which the transferor will have calculated its "base injection", according to its program, the injection of the area operated by the current beneficiary –transferee– will have been null.

These programs had a maximum duration of 5 years, and terminated on December 31, 2017, without having been renewed.

#### • Stimulus Program for New Natural Gas Projects

On May 18, 2016, MINEM Resolution No. 74/2016 created the "Natural Gas New Projects Stimulus Program" in order to foster natural gas production for those companies submitting new natural gas projects, provided they are not beneficiaries of the "Natural Gas Additional Injection Stimulus Program" or the "Natural Gas Injection Stimulus for Companies with Reduced Injection", created by Resolutions No. 1/2013 and 60/2013, respectively, of the former Strategic Planning and Coordination Commission of the Hydrocarbon Investments National Plan.

The submission of new projects, which must be approved by the Hydrocarbon Resources Secretariat, may obtain a stimulus price of US\$ 7.50/MMBtu.

Moreover, the "Natural Gas Injection Stimulus for Companies without Injection", created by Resolution No. 185/2015 of the former Strategic Planning and Coordination Commission of the Hydrocarbon Investments National Plan has been abolished, but any projects submitted under such program which are pending approval must be evaluated under the "Natural Gas New Projects Program".

The "Natural Gas New Projects Program" will be effective as from the publication of the relevant resolution in the Official Gazette (May 19, 2016) until December 31, 2018.

Following this Resolution, no new projects may be submitted under the natural gas production incentive Program known as "Gas Plus", created by Resolution No. 24/2008 of the former Energy Secretariat of the former Ministry of Federal Planning, Public Investment and Services, as amended. Notwithstanding the foregoing, any projects approved under said Program would remain in full force according to the terms of their respective approvals.



#### 30. MAIN REGULATIONS AND OTHER (Cont.)

The requirements that gas must meet in order to be involved in a new natural gas project are the following: a) it must come from an exploitation concession granted as a result of a discovery reported after the effective date of Resolution No. 1/2013 of the former Strategic Planning and Coordination Commission of the Hydrocarbon Investments National Plan; or b) come from an exploitation concession of areas classified as "Tight Gas" or "Shale Gas"; or c) belong to companies without natural gas injection registers which acquire an interest in areas belonging to companies registered in the "Natural Gas Additional Injection Stimulus Program" or the "Natural Gas Injection Stimulus for Companies with Reduced Injection", created by Resolutions No. 1/2013 and 60/2013, respectively, of the former Strategic Planning and Coordination Commission of the Hydrocarbon Investments National Plan, but for which the total injection coming from the areas in question, including the acquired areas, would have been zero during the period in which the selling company would have calculated its base injection.

#### Stimulus Program for Investments in Natural Gas Production Developments from non-conventional Reservoirs

On March 6, 2017, MINEM Resolution No. 46-E/2017 was published in the Official Gazette, which created the "Investment in Natural Gas Production from Non-Conventional Reservoirs Stimulus Program" (hereinafter the "Program"), established in order to stimulate investments in natural gas from non-conventional reservoirs in the Neuquina basin, and in effect as of its publication until December 31, 2021.

The Resolution establishes compensation for the volume of non-conventional gas production from concessions located in the Neuquina Basin included in the Program, for which such concessions must first have a specific investment plan approved by the province's application authority and the Secretariat of Hydrocarbon Resources.

The compensation will be determined by deducting from the effective sales price obtained from sales to the internal market, including conventional and non-conventional natural gas, the minimum sales prices established by the Resolution each year, multiplied by the volumes of production of non-conventional natural gas. The minimum prices established by the Resolution are US\$ 7.50/MMBtu for 2018, US\$ 7.00/MMBtu for 2019, US\$ 6.50/MMBtu for 2020 and US\$ 6.00/MMBtu for 2021.

The compensation from the Program will be distributed, for each concession included in the Program, as follows: 88% to the companies and 12% to the province corresponding to each concession included in the Program.

On November 2, 2017, MINEM Resolution 419-E/2017 was published and its Annex replaces the similar Annex of Resolution 46-E/2017. The new resolution modifies the previous one in the following aspects:

- a) It defines that the Initial Production to be calculated will be the "monthly mean Non-Conventional Gas production assessed for the period between July 2016 and June 2017". It also states that the Production Included, to the effect of the compensation, will be i) for the concessions with Initial Production lower than 500,000 m3/day, the total monthly production of Non-Conventional Gas coming from such Included Concession, to which the requesting company is entitled, and ii) for the concessions with Initial Production higher than 500,000 m3/day, the total monthly production of Non-Conventional Gas coming from such Included Concession, to which the requesting party is entitled, discounting the Initial Production.
- b) It modifies the definition of Effective Price, previously defined as "the average price weighted by volume of total natural gas sales of each company in the domestic market", to "the average price weighted by volume of total natural gas sales in the Argentine Republic that will be published by the Secretariat of Hydrocarbon Resources", regulating the guidelines to be followed for such calculation.
- c) A requirement to qualify for the Program is included, that is, that the investment plan submitted for each concession reaches a yearly mean production, in any consecutive period of twelve months before December 31, 2019, equal to or higher than 500,000 m3/day, and the obligation to reimburse the amounts of the compensation received (updated to reflect interest) corresponding to the concessions that do not reach the above mentioned production level, with the possibility that the Secretariat of Hydrocarbon Resources may require filing a surety bond to guarantee the eventual reimbursement of the compensations received by the participating companies, and retaining the power to suspend payments if such bond is not submitted.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

There have not been amendments to the definitions of included Non-Conventional Gas and Included Concessions, Price, or the Payment Conditions and Dates and Production Control, among other aspects initially included in the annex approved by Resolution 46-E/2017.

On November 17, 2017, MINEM Resolution No. 447-E/2017 was published, which extends the application of the "Program to Encourage Investment in Development of Natural Gas Production from Unconventional Reservoirs" (applicable to the Neuquén Basin, created by MINEM Resolution No. 46-E/2017 and amended by MINEM Resolution No. 419-E/2017) to the production of natural gas from unconventional reservoirs located in the Austral Basin.

### 30.i) Regulatory requirements applicable to Natural Gas distribution

The Group participates in natural gas distribution through its subsidiary Metrogas.

The natural gas distribution system is regulated by Law No. 24,076 (the "Gas Act") that, together with Decree No. 1,738/1992, issued by the Executive Power, other regulatory decrees, the specific bidding rules (Pliego), the Transfer Agreement and the License, establishes the Regulatory Framework for Metrogas' business.

The License, the Transfer Agreement and the regulations issued pursuant to the Gas Act establish requirements regarding the quality of service, capital investment, restrictions on transfer and encumbrance on assets, cross-ownership restrictions among producers, transporters and distributors, and Metrogas stock transfer.

The Gas Act and the License created ENARGAS as the regulatory entity to administer and enforce the Gas Act and the applicable regulations. In this order, the tariffs for the gas distribution service were established by the License and are regulated by ENARGAS. ENARGAS' jurisdiction extends to gas transportation, sale, storage and distribution. Its mandate under the Gas Act includes consumer protection, competition protection in gas supply and demand, and the promotion of long-term investments in the gas industry.

Gas distribution tariffs have been established in the License and are regulated by ENARGAS.

### • Distribution License

The License authorizes Metrogas to provide the public distribution service for a term of 35 years. The Gas Law provides that Metrogas may request from ENARGAS a License renewal for an addition term of ten years upon the expiration of the original 35 year-term. The ENARGAS will then evaluate Metrogas' performance and make a recommendation to the Argentine Executive Branch. Metrogas is entitled to the renewal of its License unless the ENARGAS proves that it has not substantially performed all of its obligations under the Gas Law, the respective regulations and decrees and the License.

At the end of the 35 or 45-year period, as the case may be, the Gas Law requires a new competitive bidding to grant the license, for which, if it has performed its obligations, Metrogas will have the option to equal the best bid made to the Government by a third party.

Generally, upon the termination of a License due to completion of its time-period, Metrogas will be entitled to a consideration equal to the value of the designated assets or to the amount paid by the successful bidder in a new call for tenders, whichever is lower.

Metrogas has various obligations under the Gas Law, including the obligation to comply with all reasonable requests within its service area. A service request will not be deemed reasonable if it were uneconomic for a distribution company to undertake the requested service. Metrogas is obliged to operate and maintain its facilities in a safe manner, which may require certain investments to replace or upgrade its facilities pursuant to the License.

The License specifies other obligations of Metrogas, including the obligation to provide a distribution service, to maintain continuous service, to operate the system in a prudent manner, to maintain the distribution network, to make the Mandatory Investments, to keep certain accounting records and to provide certain regular reports to the ENARGAS.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

The License may be revoked by the Argentine Government, upon recommendation from the ENARGAS, in the following cases:

- Serious and repeated failure by the Metrogas to meet its obligations.
- Total or partial interruption in the uninterruptible service for reasons attributable to Metrogas for a term exceeding the periods set forth in the License in one calendar year.
- Sale, disposition, transfer and encumbrance of Metrogas Core Assets, without the prior authorization of the ENARGAS, except where the said encumbrance is used to finance extensions and improvements to the gas pipeline system.
- Bankruptcy, dissolution or liquidation of Metrogas. The bankruptcy proceedings did not affect the normal course of Metrogas operations, and therefore, could not be the reason for the revocation of the Metrogas License.
- Ceasing the provision of the services provided for in the License, or the attempt to unilaterally assign or transfer, in whole or in part (without the previous authorization of the ENARGAS), or the waiver of, other than as permitted.
- Transfer of the Technical Assistance Contract or the delegation of the duties specified in the Contract, without the previous authorization of the ENARGAS, during the first ten years from License granting.

In relation to restrictions, the License provides that Metrogas will not assume its parent company's debts or grant credits or encumber assets to secure debt of, or award any other benefit to, its parent company's creditors.

### • Tariff renegotiation

The Emergency Law published in the Official Gazette on January 7, 2002 affected the legal framework for license contracts of public utility companies.

The main provisions of the Emergency Law that affected the License granted to Metrogas by the Argentine Government are: The "pesification" of the tariffs established in dollars convertible at the exchange rate specified in the Convertibility Law (Law No. 23,928), the prohibition of tariff adjustment based on any foreign index, thereby preventing the application of the international index fixed in the Regulatory Framework (Producer Price Index -PPI- of the United States) and the renegotiation of the License granted to Metrogas in 1992.

In addition, the Emergency Law ordered the renegotiation of public services contracts awarded by the Argentine Executive Branch, and that public utility companies were bound to continue performing all their duties.

The Emergency Law, which originally expired in December 2003, was successively extended to December 31, 2017. The terms for license renegotiation and public services concessions were also progressively extended.

Within the framework of the renegotiation process, Metrogas executed a number of agreements with the various entities on behalf of the Argentine Government.

The agreements entered into and in force as of December 31, 2017 are described below:

### i. 2017 Transitional Agreement

In this regard, on March 30, 2017, Metrogas executed a Transitional Agreement with the MINEM and the Ministry of Finance providing for the temporary adjustment of prices and tariffs for the Natural Gas Distribution Public Service, the specific impact of the amounts provided therein until the subscription of the Memorandum of Agreement for Comprehensive Contractual Renegotiation and the entry into force of the definitive tariff schemes resulting from the Comprehensive Tariff Review (the "CRT"). The 2017 Transitional Agreement is supplementary to the 2008 Transitional Agreement and amends the 2017 Transitional Agreement and the 2016 Transitional Agreement previously executed.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

The 2017 Transitional Agreement, which is not subject to ratification by the PEN establishes a transitional tariff regime as of April 1, 2017, consisting of the readjustment of tariffs based on the guidelines necessary to maintain the continuity of the service for the purpose of allowing Metrogas to meet its operating and maintenance, administration and marketing expenses, those expenses corresponding to the execution of the mandatory investment plan determined by the ENARGAS and to comply with the respective payment obligations, maintaining its chain of payments for the purpose of ensuring the continuity of the regular provision of the public service under their charge until the entry into force of the tariff regime resulting from the Memorandum of Agreement for a Contractual Renegotiation.

Likewise, the 2017 Transitional Agreement provides for the transfer of the impact of changes in tax regulations pending resolution, except for the, and incorporates a Mandatory Investment Plan to which Metrogas is committed.

Lastly, Metrogas will not be authorized to distribute dividends without previously proving to ENARGAS the full compliance with the Mandatory Investment Plan.

On March 30, 2017, the MINEM instructed the ENARGAS, through Resolution No. 74 - E/2017, to put into effect the tariff schemes resulting from the CRT process.

In this regard, it set forth that for the gradual and progressive implementation of this measure, the ENARGAS should apply on a progressive basis, the rate increases resulting from the CRT as follows: 30% of the increase, from April 1, 2017, 40% of the increase, as of December 1, 2017, and the remaining 30%, as of April 1, 2018.

Moreover, and for cases in which the corresponding Comprehensive Contractual Renegotiation Memorandum of Agreement had not entered into force, it instructed the ENARGAS to apply to the Licensees (including Metrogas) a transitory tariff adjustment because of the CRT.

On March 31, 2017, ENARGAS Resolution No. 4,356/2017 was published in the Official Gazette through which the tariff schemes resulting from the Metrogas CRT, effective as of April 1, 2017 and the temporary tariff schemes applicable to Metrogas users were approved. Through differentiated tariffs, ENARGAS Resolution No. 4,356 / 2017 determined tariff schemes for residential users who recorded savings in their consumption equal to or greater than 15% with respect to the same period of 2015, as well as those that would apply to the beneficiaries of the "Social Tariff" (Resolutions No. 28/2016 of the MINEM and ENARGAS No. I-2,905/2014 and No. 3,784/2016) and the Entidades de Bien Público (Public Welfare Entities) (Law No. 27,218).

The tariff schemes corresponding to beneficiaries of the "Social Tariff" were rectified by ENARGAS Resolution No. 4,369 2017. The billing resulting from the application of the new transitory tariff shames must respect the limits established in Article 10 of MINEM Resolution No. 212/2016, and therefore the criteria of ENARGAS Resolution No. I-4,044/2016 are maintained.

Likewise, ENARGAS Resolution No. 4,356/2017 overruled ENARGAS Resolutions No. I-2,407/12 and No. I-3,249/15 that enabled the collection of a fixed amount per invoice under the operation of the Fund for Gas Distribution Consolidation and Expansion Works ("FOCEGAS").

In addition, ENARGAS Resolution No. 4,356/2017 approved: (i) the technical economic studies of the Company's CTR, (ii) the non-automatic Semi-Annual Adjustment Methodology to become effective jointly with the License Readjustment Memorandum of Agreement and (iii) the Metrogas Investment Plan for the next five-year term.

On October 24, 2017, and through ENARGAS Resolution No. 74/2017, a public hearing was called for November 15, 2017 in order to consider the transitory tariff adjustment effective as of December 1, 2017, corresponding to Metrogas.

On December 1, 2017, the Official Gazette published: (i) ENARGAS Resolution No. 131/2017 that ordered (a) to declare the validity of the Public Hearing called by ENARGAS Resolution No. 74/2017, (b) approve Metrogas temporary tariff scheme applicable as of December 1, 2017; and (c) approve new values for the Rates and Charges received by Metrogas for Additional Services; and (ii) ENARGAS Resolution N° 132/2017 that provides for a bonus to be implemented by Metrogas in favor of certain users who (a) record savings in their consumption; or (b) are beneficiaries of the Social Tariff.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

On January 31, 2018, ENARGAS Resolution No. 249/2018 was published in the Official Gazette, which called for a public hearing to be held on February 22, 2018 to consider (i) the application of the Semi-Annual Tariff Adjustment Methodology, if applicable, for the adjustment of Metrogas tariffs; (ii) the application of the transfer to tariffs of the price of the purchased gas; and (iii) methodological alternatives for a more predictable billing of residential users' consumption.

## ii. Memorandum of Understanding for the Natural Gas Distribution License Contract (also known as "Memorandum of Understanding for the Comprehensive Contractual Renegotiation")

On March 30, 2017, and within the framework of the renegotiation process of the public service contracts established by the Emergency Law, its extensions and Decrees No. 367/2016 and N° 2/2017, Metrogas subscribed with the MINEM and with the Ministry of Finance, a Memorandum of Agreement for the Adaptation of the Natural Gas Distribution License Agreement (which contains the terms of the comprehensive renegotiation and conditions for the adjustment of the License Agreement. The Memorandum of Agreement is based on the 2008 Transitional Agreement, the 2014 Transitional Agreement, the 2016 Transitional Agreement and the 2017 Transitional Agreement.

The provisions contained in the Memorandum of Agreement, once it has entered into full force and effect after being ratified by the PEN, will be applied during the contractual period ranging from January 6, 2002 and the termination of the License Agreement.

A series of guidelines to be contemplated by the CRT process are established in the terms provided for therein.

The Metrogas tariff scheme resulting from the Integral Tariff Review according to the indicated guidelines will be applicable once all the procedures provided for the entry into force of the Memorandum of Agreement has been fulfilled. The CTR will become in full force and effect not later than December 31, 2017. In the event that ENARGAS provides for the phased and progressive application of the tariff increase resulting from the Comprehensive Tariff Review, the application of the last step may not exceed April 1, 2018.

As a condition prior to ratification, the Memorandum of Agreement for the Comprehensive Contractual Renegotiation provides for the suspension and withdrawal of all claims, appeals and complaints filed, pending or in the process of being executed, whether administrative, arbitral or judicial, in the Argentine Republic or abroad, which are founded or linked to the facts or provided measures, with respect to the License Agreement, as of the Emergency Law and/or in the annulment of the PPI Index (Producer Price Index of the United States of America). Moreover, the Memorandum of Agreement must be ratified by the Shareholders' Meeting of Metrogas, so that the PEN issues the Decree ratifying the terms of the Memorandum of Agreement. On April 27, 2017, the Shareholders' Meeting of Metrogas ratified the Memorandum of Agreement for the Adaptation of the Natural Gas Distribution License Agreement.

Finally, the Memorandum of Agreement provides for the Company's commitment to make, during the effective term of the License, plus its potential ten-year extension and within the area of its License, additional sustainable investments equivalent to the amount of the award rendered in the arbitration proceedings in re: "BG Group Plc. vs. The Argentine Republic (UNC 54 KGA)" with the proportional abatement percentage that would have been established in the payment agreement and excluding the amounts corresponding to the default interest on the payment of the award. The amount and the plan for additional investments will be determined by ENARGAS at the proposal of the Company and they will not be included in the rate base.

To date, the Memorandum of Agreement is subject to the controls established by the Emergency Law in order for the PEN to issue the ratification Decree.

With respect to those Licensees whose Memorandum of Agreement had not entered into force, the ENARGAS was instructed to apply to them a temporary adjustment of tariffs on account of the CTR, taking into consideration, to such effects, the studies carried out under such CTR in compliance with the provisions set forth in Article 1 of MINEM Resolution No. 31/2016.

### iii. Temporary economic assistance

MINEM Resolution No. 312 - E/2016 was published in the Official Gazette, on December 30, 2016, which ordered a new temporary economic assistance to the Licensees of the Natural Gas Distribution Service through Networks for the period April-September 2016,

for the purpose of funding the mandatory investments established (with respect to Metrogas) in ENARGAS Resolutions No. 3,726/2016 and No. 4,044/2016, and the payment to gas producers; all of which is on account of the CTR.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

Under the terms of the Resolution, the transfer of the amounts assigned to Metrogas of 759 was applicable as long as, at the discretion of the ENARGAS, the financial situation of Metrogas that gave rise to the assistance was maintained taking into account the availability of funds to meet its investment obligations and payments to gas producers.

For the release of the funds corresponding to the temporary financial assistance, Metrogas had to file a sworn statement with the ENARGAS, in the terms of ENARGAS Note No. 106/2017, on the allocation to be given to the amounts required. In accordance with the ENARGAS criteria, if the sworn statements meet the requirements of MINEM Resolution No. 312 - E/2016, they would be sent to the MINEM Hydrocarbons Secretariat in order to arrange for the transfer of the assistance. Likewise, the Resolution set forth that the Licensees could not distribute dividends under the terms of Resolution No. 31/2016 of the MINEM.

On March 31, 2017, Metrogas received the amount of 759 corresponding to MINEM Resolution No. 312 - E/2016.

### iv. New gas prices at the TSEP and Metrogas transition tariff schemes

Through Resolution No. 74 - E/2017, the MINEM determined the new natural gas prices at the TSEP applicable from April 1, 2017 to the categories of users indicated therein. Moreover, it determined the new prices at the TSEP, subsidized for natural gas Residential users who register a saving in their consumption equal or superior to fifteen percent (15%) with respect to the same period in 2015. These new prices in the TSEP have been contemplated in ENARGAS Resolution No. 4,356/2017.

MINEM Resolution No. 474-E/2017 determined the new Gas prices at the TSEP as of December 1, 2017. In addition, a 10% discount is established on the Gas price for all categories of Residential users who register a saving in their consumption equal to or greater than 20% with respect to the same period in 2015, and it establishes that the bonus corresponding to the Social Tariff beneficiaries will be equivalent to: i) 100% of the Natural Gas price on the consumption block base determined by Resolution; and ii) 75% of the price of Natural Gas on a surplus consumption block of equal volume to that determined in paragraph i). Consumptions over and above the block indicated in paragraph ii) will be paid by 100%. It also establishes that the billing resulting from the application of the new tariff schedules must respect the limits established in Article 10 of Resolution No. 212 dated October 6, 2016 of the MINEM. These new prices in the TSEP have been contemplated in the ENARGAS Resolution No. 131/2017, which approved the Metrogas temporary tariff scheme, applicable as of December 1, 2017.

# v. <u>Procedure for the compensation of the lower revenues that the Distributors receive from their users for benefits and / or bonuses and for higher costs of unaccounted gas.</u>

MINEM Resolution No. 508-E/2017, published on December 29, 2017, established the procedure for the compensation of the lower revenues that the Licensees of the Natural Gas Distribution Service through Networks receive from their users, as a product of: (i) the application of benefits and/or discounts to users arising from the regulations in force in the tariff area of the distribution service of natural gas through networks, and (ii) the higher UNG costs compared to those established for its recognition in the rates, applicable as of January 1, 2018.

### • Note of ENARGAS relating to the equity interest of YPF in Metrogas

The Company has received from Metrogas a copy of the note received by it from ENARGAS, requesting it to adjust Metrogas' equity structure in line with the term provided for in Emergency Law No. 25,561 and in compliance with Section 34 of Law 24,076. In this regard, it should be noted that YPF indirectly acquired 70% of Metrogas equity, which transaction was approved by ENARGAS Resolution No. I/2,566 dated April 19, 2013; and, following the merger with YPF Inversora Energética S.A. and Gas Argentino S.A., is the holder of 70% of Metrogas shares.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

On March 30, 2017, YPF filed an appeal for reconsideration requesting to overrule the ENARGAS Note and render a new decision setting a reasonable timeframe consistent with the current reality of the gas market to comply with the provisions set forth article 34 of Law 24,076.

On June 15, 2017, YPF submitted to ENARGAS a tentative schedule for the process of adapting its equity interests in Metrogas, which was expanded in detail on July 3, 2017. As of the date of issuance of these consolidated financial statements, ENARGAS has not issued any decision regarding the appeal or the submitted tentative schedule.

Such presentation does not imply withdrawal of the aforementioned appeal.

### Note from the ENARGAS on deferred collection to residential users

On August 25, 2017, the ENARGAS issued some Notes instructing the Licensees of the Gas Distribution Service ("Distributors"), by virtue of the presentation received from the MINEM, and in relation to the invoices to be issued from August 25, 2017 and until October 31, 2017 for residential users, to contemplate a fifty percent (50%) payment deferral of the total amount of the settlement corresponding to the billing period, without any interest. According to this instruction, the amounts subject to deferral must be included in the first invoice issued after October 31, 2017 in accordance with the guidelines related to the issuance of Public Service Settlement receipts for bimonthly invoicing with monthly payment obligations currently in force, i.e., in two equal and consecutive monthly installments. Such deferral is not applicable to residential users who are beneficiaries of the Social Tariff.

The Notes sent by the ENARGAS also contemplate that, if there is a financial impact on the Distributors' income by virtue of such deferral, such impact will be timely evaluated and assumed by the Argentine Government through the corresponding budgetary management.

On September 20, 2017, YPF submitted a note to the MINEM (with a copy to ENARGAS), requesting the intervention of the MINEM so that it adopts the necessary measures to prevent the instruction given by the ENARGAS from being misinterpreted by some Distributors to place on the Producers, such as YPF, the financial impact that such a measure could cause, through the unilateral postponement of the payment obligations by the Distributors. As of the date hereof, the note submitted by YPF is yet to be answered.

As a result of the changes introduced through MINEM Resolution No. 474—E/2017 and ENARGAS Resolutions No. 131/2017 and No. 132/2017, and the guidelines established in the Terms and Conditions MINEM, Resolution No. 508-E / 2017 was published on December 29, 2017, which establishes the procedure for the compensation of the lower revenues that the Licensees of the Natural Gas Distribution Service through Networks receive from their users, as a result of: (i) the application of benefits and / or discounts to users resulting from the regulations in force regarding the tariffs applicable to the natural gas distribution service through networks; and (ii) the higher costs of the Unaccounted Natural Gas ("UNG") with respect to those established for its recognition in the tariffs.

In accordance with the compensation procedure, the Distribution Licensees must inform to the ENARGAS within the terms established therein and based on the annualized monthly consumption and as a sworn statement, the amounts required to compensate the aforementioned differences. The same information regime is adopted in relation to UNG.

Thus, in order to calculate compensations for the amount that they do not receive for the discounts in billing as well as for the UNG differences, compensation is established resulting from the difference between the purchase price to the natural gas producer and the sale to its customers.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

### 30.j) Regulatory requirements applicable to the petroleum liquid gas industry

### • Benchmark prices for the butane commercialization chain

On April 5, 2017, the Secretariat of Hydrocarbon Resources published Resolution No. 56-E/2017 in the Official Gazette, establishing new maximum benchmark prices for the different segments of the butane commercialization chain to be bottled in 10, 12 and 15 kg bottles under the Household Program (Decree No. 470/2015 and former Energy Secretariat Resolution No. 49/2015), and modifying the benchmark prices established in former Energy Secretariat Resolution No. 70/2015. The new maximum benchmark prices for the Company are Ps. 2,568/TN for butane and Ps. 2,410/TN for propane. For fractionators such as YPF GAS S.A., the prices established by Resolution No. 56-E/2017 are Ps. 63.89 for 10 kg bottles, Ps. 76.67 for 12 kg bottles and Ps. 95.84 for 15 kg bottles.

On June 7, 2017, the Secretariat of Hydrocarbon Resources published Resolution No. 75/2017 in the Official Gazette, which modifies the regulations applicable to the Household Program (former Energy Secretariat Resolution No. 49/2015) and provides that the adjustment of benchmark prices applicable to the different segments of the butane commercialization chain to be bottled in 10 and 12 kg bottles will not be implemented automatically in quarterly periods. Instead, those adjustments will be made at the discretion of the Secretariat of Hydrocarbon Resources in its capacity as enforcement authority of the Household Program. In addition, the resolution establishes that the adjustment of benchmark prices for LPG producers and fractionators on account of the Comprehensive Tariff Review established by the Household Program in its regulations will take place only after the prior analysis of cost variations and their incidence, and taking into account regional, distribution and logistical factors.

MINEM Resolution No. 287-E/2017, published on December 1, 2017, established new maximum benchmark prices and compensations for butane and propane producers effective from December 1, 2017, and introduced amendments to the Annex to the Regulation of the Bottle-to-Bottle Program approved by Resolution No. 49/2015, among which, it is prohibited to charge the distributors for any additional service whatever its denomination, if in doing so the maximum benchmark prices and the maximum allowed deviations are exceeded.

### 30.k) Regulatory framework for the electric energy industry

### Legal Framework

Law No. 24,065, passed in 1992 and governed by Decree No. 1,398/92, has established the current basic regulatory framework for the electricity sector (the "Regulatory Framework"). This Regulatory Framework is supplemented by the regulations of the Secretariat of Energy ("SE") for the generation and marketing of electric power, including the Resolution of the former Secretariat of Electric Energy No. 61/1992, "Procedures for the Scheduling of Operations, Load Dispatch and Price Calculation", with its supplementary and amending regulations.

The ENRE is the agency that regulates, oversees and controls the electric power industry and, in such capacity, it is responsible for the enforcement of Law No. 24,065.

The technical dispatch, operation and economic organization of the Argentine Interconnection System (*Sistema Argentino de Interconexion*, or "SADI") and the MEM is under the responsibility of CAMMESA. CAMMESA also acts as a collection agency for all MEM agents.

It is possible to underscore the following main supplementary and amending resolutions of the sector, taking into consideration the power generation business of YPF EE:

• SE Resolution No. 146/2003: this resolution established the framework within which generators may request funding for major or extraordinary maintenance works with the goal of maintaining their units available. This funding may be repaid out of the future profits of the generation business, and it may be repaid in advance. Against this backdrop, YPF Energía Eléctrica, as the successor of the operations of the Power Plants of Tucumán and San Miguel de Tucumán, has requested funding for its plan for the maintenance and availability improvement of the plants in Tucumán, and has offered its Sale Settlements with No Expiration Date to Define (*Liquidaciones de Venta sin Fecha de Vencimiento a Definir*, or "LVFVD") for the advanced repayment of the funded amounts.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

- SE Resolution No. 406/2003: this resolution established the mechanism to set collection priorities among various remunerative items of the power generation plants. This set priorities for the collection of items related to variable costs and the collection of the power made available to the system, and finally, of amounts related to generation margins for the sales made in the Spot market as per the curve of contracts with Large Users registered between May and August 2004.
- 2008-2011 Generators Agreement: On November 25, 2010, the SE and the main electricity generator companies signed the "Agreement for the Management and Operation of Projects, Increase of Power Generation Availability and Adjustment of Remuneration for 2008-2011 Generation" (hereinafter, the "Generators Agreement"). This Generators Agreement was aimed at establishing the framework, conditions and undertakings that the parties should make to continue with the MEM adjustment process, to enable the entry of new generation to cover the increase in the demand for energy and power in such market, to determine a mechanism for the repayment of the consolidated debts of generators incurred between January 1, 2008, and December 31, 2011, and the acknowledgment of global remuneration for MEM Generator Agents adhering to the Generators Agreement. YPF Energía Eléctrica, as a company continuing with the operation of the power plants of El Bracho Generation Complex, has debts with CAMMESA, arising from this agreement.
- SE Resolution No. 95/2013: this resolution establishes a new remuneration scheme based on the items described below and classified in terms of size and type of generation technology used. The defined remunerative items pertain to: a) remuneration for fixed costs; b) remuneration for variable costs other than fuel; c) direct additional remuneration; and d) indirect additional remuneration, which will be allocated to a trust for the development of electric power infrastructure works. It is necessary to accept the terms and conditions of the resolution to access such remunerations. YPF Energía Eléctrica has adhered to this system in August 9, 2013, backdated to February 1, 2013. Among other matters governed by this resolution, it should be noted that it established that until the SE decides otherwise, generators and large users will refrain from making new contracts and/or renewing existing contracts (except for contracts under the framework of SE Resolution No. 1,281/2006 "Energy Plus" and SE Resolution No. 220/2007, among others) as of the entry into force of the resolution. Furthermore, it establishes that as from the date of termination of existing contracts, large users will begin to make their power purchases through the agency in charge of dispatch (CAMMESA). Similarly, it establishes that fuel supply contracts will only be acknowledged as long as they are in force, and no new contracts may be made and existing contracts may not be renewed as from their termination dates. Similarly, it provides that fuel supply contracts will only be recognized while they are in force, and new ones may not be entered into or the current ones renewed as from their expiration date.
- SE Resolution No. 529/2014: this resolution replaces the remuneration scheme established by SE Resolution No. 95/2013, increasing the tariff schedule of the 4 remunerative concepts included by that resolution. In relation to the Fixed Costs, this resolution establishes an increase related to the availability of each Generator Agent and incorporates a new remuneration scheme of non-recurring maintenance, which aims to the funding of major maintenance subject to the approval of the SE. This resolution will be applicable to economic transactions from February 2014 for generators that had adhered to SE Resolution No. 95/2013.
- SE Resolution No. 482/2015: this resolution provides adjustments to the compensation scheme set forth in SE Resolution No. 529/2014, by increasing the tariff schedule of the five concepts provided for therein. In addition, it introduces a new specific contribution scheme known as "Resources for 2015-2018 FONINVEMEM Investments" to be allocated to generators participating in the investment projects approved or to be approved by the Secretariat of Energy, and a new incentive scheme for the Production of Energy and Operating Efficiency for the relevant generator agents therein included. The provisions of this resolution are retroactively applied to financial transactions made as of February 2015 for those generators who have adhered to SE Resolution No. 95/2013.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

- Decree No. 134/2015: in the light of the current electrical system condition, the National Executive has declared a Federal Electric Sector Emergency until December 31, 2017. This executive order instructs the Ministry of Energy and Mining to prepare and implement an action plan relative to the electric energy generation, transportation and distribution segments in order to adjust the quality and safety of energy supply and warrant the provision of the electricity in appropriate technical and economic conditions.
- Law No. 27,191, amending Law No. 26,190 of Argentina's Scheme for Promotion of Use of Energy Renewable Sources intended for Electricity Production. This law binds Large Users to incorporate at least 8% of energy from renewable sources into their electric power usage by December 31, 2017.
- Resolution No. 22/2016 issued by the Secretariat of Energy, dated March 30, 2016. Pursuant to this resolution, the Secretariat of Energy amended SE Resolution No. 482/2015 and adjusted tariff components collected by generators who have adhered to SE Resolutions Nos. 95/2013, 529/14 and 482/2015. The resolution modifies remunerative components of financial transactions retroactively to February 2016.
- Resolution No. 21/2016 issued by the Secretariat of Energy published on March 22, 2016. This resolution calls generators, self-generators and joint generators interested in bidding on a new capacity of thermal power generation and associated electricity production, undertaking to be available in the MEM during summer (2016/2017 and 2017/2018) and winter 2017. Through this resolution, YPFEE was awarded two new generation projects, one in Loma Campana of 105MW and the other in Tucumán of 270 MW. These projects are paid by means of contracts in U.S. dollars for ten-year terms. Payment is based on availability.
- MINEM Resolution No. 71/2016, dated May 18, 2016. This resolution provides for the commencement of the open competitive bidding process for contracting, in the MEM, electric energy from renewable generation sources in order to achieve the contribution goals from renewable energy sources scheduled by December 31, 2017, in Sections 2 of Law No. 26,190 and 8 of Law No. 27,191 ("Renovar Program (Round 1)").
- SE Resolution No. 155/2016, dated June 15, 2016. This resolution informs the first projects awarded under the call for bids set forth by SEE Resolution No. 21/2016, including, among others, Thermal Power Plant El Bracho (Province of Tucumán) awarded to Y-GEN II, in which YPF Energía Eléctrica S.A. has a 66.67% interest. See Note 9.
- SE Resolution No.216/2016, dated July 15, 2016. This resolution informs the new projects awarded under the call for bids set forth by SE Resolution No. 21/2016, including, among others, Thermal Power Plant Loma Campana (Province of Neuquén) awarded to Y-GEN, in which YPF Energía Eléctrica S.A. has a 66.67% interest. See Note 9.
- MINEM Resolution No. 136, dated July 26, 2016, whereby interested parties are invited to tender in the National and International Open Bidding Process to contract in the MEM electric energy from renewable generation sources through -the "Renovar Program (Round 1)"- in order to execute Forward Contracts known as Contracts for the Supply of Renewable Electric Energy, with CAMMESA on behalf of the Distributors and MEM Large Users, in accordance with the terms and conditions approved by the same resolution.
- MINEM Resolution No. 307/2016. YPF EE is licensed to act as MEM Distributed Self Generator Agent for its Loma Campana Thermal Power Plant, with a nominal power of 105 MW, located in the District of Añelo, Province of Neuquén, and connected to SADI through a 132 KV line from the new Loma Campana power station, within the jurisdiction of the Province of Neuquén electric utility company (Ente Provincial de Energía de Neuquén, or "EPEN").



### 30. MAIN REGULATIONS AND OTHER (Cont.)

- SE Resolution No. 420/2016. Stakeholders are called on to submit draft infrastructure projects that contribute to reduce MEM costs and increase power system reliability. Presentations are filed with CAMMESA, which will evaluate and prepare a report for the Secretariat of Energy. Thereafter the Secretariat of Energy will call for public bids. Successful bidders will sign a sales contract with CAMMESA for a ten year-term. The following project categories and features are recommended:
  - New Combined Cycles,
  - combined cycles based on existing generators,
  - Conventional and unconventional thermal power plants (potential use of heat); and
  - Alternative fuel supply facilities and storage designed to feed units located close to distribution points.
- MINEM Resolution No. 468/2016. YPF EE is licensed to act as MEM Generator Agent for its 99-MW nominal power
  Manantiales Behr Wind Power Plant located in the District of Escalante, Province of Chubut, connected to SADI through a
  132 kV line from the new Escalante Transformer Station, and linked to Diadema-Pampa del Castillo High Voltage Line (132
  KV), within the jurisdiction of Empresa de Transporte de Energía Eléctrica por Distribución Troncal de la Patagonia
  Sociedad Anónima ("TRANSPA S.A."), which is operated and maintained by Transacue Sociedad Anónima.
- MINEM Resolution No. 19/2017. The Agents (Generators, Co-Generators, Self-Generators) of the MEM may state Guaranteed Availability Offers with a view to executing Guaranteed Availability Commitments for the rated power and energy of installed generation units, as provided in this Resolution. The electric power stated in Guaranteed Availability Offers will be paid as follows: a payment for monthly available power (subdivided into actual available power, offered guaranteed power, and assigned power) and another payment for generated and distributed power. The amount payable will be calculated in U.S. dollars converted to Argentine pesos, and Sale Statements will include an expiry date. Furthermore, an Operating Efficiency Incentive mechanism is created for power plants, based on the attainment of fuel consumption targets.
- MINEM Resolution No. 1,091/2017. This Resolution establishes the application, during the period between December 1, 2017 and January 31, 2018, for the demand of electric power declared by the Distributors and / or Providers of the MEM Public Distribution Service, intended to supply its users with electricity, or those of other providers of the electric power distribution public service within the area of influence or concession of the Distributor Agent of the Power Reference Prices ("POTREF"), Stabilized Energy Price ("PEE") and Stabilized Transportation Price ("PET") that is an integral part of this measure.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

### 30.l) Tax Regulations

### • Tax Reform Laws No. 27,430 and No. 27,432

Laws No. 27,430 and 27,432 were published in the Official Gazette on December 29, 2017, and significantly modified several taxes. The main modifications are the following:

### Income tax

• Corporate tax rate and withholdings on dividends

The general income tax rate applicable to limited companies (*sociedades de capital*) is reduced from the current 35% to 30% for fiscal years beginning January 1, 2018 and ending December 31, 2019 inclusive, and to 25% for those fiscal years beginning January 1, 2020 onwards.

Moreover, a new withholding on dividends is established, which will be 7% for those fiscal years beginning on January 1, 2018 and ending on December 31, 2019, and 13% for those fiscal years beginning on or after January 1, 2020 onwards.

Finally, the tax equalization (a 35% withholding is applicable when dividends exceed the amount of the taxable income) is no longer applied on the income accrued as of January 1, 2018.

• Capital gains for foreign beneficiaries

The new law establishes a 15% withholding on capital gains derived from the sale of shares or other similar securities (calculated on the actual or presumed gains equivalent to 90% of the sale price). The law establishes an exemption applicable to foreign beneficiaries who sell listed shares under the supervision of the CNV. Furthermore, an exemption is established for the interest and sale results of government bonds, NO and ADRs. These exemptions will only apply to non-resident foreign beneficiaries whose funds do not derive from non-cooperating jurisdictions. Finally, such exemption does not apply to those benefits derived from the securities known as Lebacs.

In the case of ADRs, the law defines that the source thereof is given by the residence of the issuer of the respective shares.

Indirect transfers made by the Foreign Beneficiaries

The law establishes a tax on the indirect sale of assets located in Argentina. In particular, such tax will be levied on sales or transfers made by foreigners who own a company also abroad who owns assets in the country, when such assets are significant, i.e., when the following conditions are met: (i) at least 30% of the value of the shares in the foreign company derives from assets located in Argentina; and (ii) the transferred shares represent at least 10% of the assets of the foreign company.

The applicable rate will be 15% (calculated on real net profit or presumed net profit equivalent to 90% of the sale price) in the proportion corresponding to Argentine assets.

• Costs for the abandonment of hydrocarbon wells

It is considered as an integral part of the computable cost of the investments in wells, those costs intended to satisfy the technical and environmental requirements by the concessionaire and/or permit holder required by the enforcement authority. They will be included from the date on which such obligations arise in accordance with current regulations, regardless of the period in which the effective disbursement is made.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

### Other modifications

It replaces the tax transparency rules contemplating broader situations and introduces the presumed dividend concept.

Moreover, it ratifies the taxability of the sales of shares of Argentine companies made by non-residents as of the effectiveness of Law 26,983, although it establishes the taxation of results in the cases of sales made through stock exchanges or similar markets, when the stockbroker did not withhold the tax.

### <u>Tax on Fuels</u>

The main modifications are the following:

- The tax modifies its name (formerly "Tax on Liquid Fuels and Natural Gas", and now "Tax on liquid fuels").
- A new tax is introduced: Tax on carbon dioxide.
- Both taxes (on fuels and carbon dioxide) are levied based on a fixed amount per liter adjusted for IPIM on a quarterly basis. In the case of carbon dioxide, two new products are incorporated: petroleum coke and mineral coal.

### • Tax on bank debit and credits

The PEN may fix the tax percentage to be computed as payment on account of the income tax, which will be progressively increased by up to 20% per year as of January 1, 2018, and it may also establish that this tax will be fully computed as payment on account of the income tax in 2022.

### Value added tax

A system of refund of tax paid for investments in fixed assets is established, subject to the future generation of tax debits, in order to reduce the financial cost generated by the accumulation of tax credits of new investments.

### Social Security

There will be a minimum monthly salary exempt from employer contributions, while the rate of the same will be unified around 19.5%, although VAT tax credits will be eliminated for employment in secondary areas. These changes will occur by 2022, gradually converging from the current situation.

Other than as mentioned in Note 15 with respect to taxes on gains, the mentioned modifications do not have a significant effect on the financial statements of the Group.

### 30.m) Other regulatory requirements

### Repatriation of foreign exchange

In October, 2011, Decree No. 1,722/2011 was published and became effective as from such date. The mentioned decree provides that total export collections from operations by producers of crude oil or its derivatives, natural gas and liquefied gas, and companies which aim to develop mining projects, must be liquidated in the single and free-exchange market in accordance with the provisions of Article No. 1 of Decree No. 2,581 of April 10, 1964.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

### • CNV Regulatory Framework (N.T. 2013)

Through Resolution No. 622/2013 dated September 5, 2013, CNV approved the Regulations (N.T. 2013) applicable to companies subject to this agency control, as provided for by the Capital Market Act No. 26,831, and Regulatory Decree No. 1,023 dated August 1, 2013. This Resolution superseded the former CNV Regulations (N.T. 2001 as amended) and the General Resolutions No. 615/2013 and No. 621/2013, as from the effective date of the Regulations (N.T. 2013).

The following sets forth certain requirements of the CNV:

### a) CNV General Resolution No. 622

i. Pursuant to section 1, Chapter III, Title IV of such Resolution, a description of the notes to the consolidated financial statements containing information required under the Resolution in the form of exhibits follows.

Exhibit A – Fixed Assets Note 8 Property, plant and equipment

Exhibit B – Intangible assets

Note 7 Intangible assets

Exhibit C – Investments in companies Note 9 Investments in associates and joint ventures

Exhibit D – Other investments Note 6 Financial instruments by category

Exhibit E – Provisions Note 12 Trade receivables

Note 11 Other receivables

Note 9 Investments in associates and joint ventures

Note 33 Assets and liabilities in currencies other than the Argentine peso

Note 8 Property, plant and equipment

Note 14 Provisions

Exhibit F – Cost of goods sold and services

rendered Note 20 Costs

Exhibit G – Assets and liabilities in foreign

currency

ii. On March 18, 2015, the Company was registered with the CNV under the category "Settlement and Clearing Agent and Trading Agent - Own account", record No. 549. Considering the Company's business, and the CNV Rules and its Interpretative Criterion No. 55, the Company will not, under any circumstance, offer brokerage services to third parties for transactions in markets under the jurisdiction of the CNV, and it will also not open operating accounts to third parties to issue orders and trade in markets under the jurisdiction of the CNV.

Likewise, in accordance with Section VI, Chapter II, Title VII of the CNV Rules and its Interpretative Criterion No. 55, the Company's equity exceeds the minimum required equity under such rules, which is 15, while the minimum required counterparty capital, which is 3, is comprised of 16,498,351 Units of Compass Ahorro - Class B Mutual Fund with 24-hour settlement upon redemption, the total value of the Company's Units as of December 31, 2017, being 44.

### b) CNV General Resolution No. 629

Due to General Resolution No. 629 of the CNV, the Company informs that supporting documentation of YPF's operations, which is not in YPF's headquarters, is stored in the following companies:

- Adea S.A. located in Barn 3 Route 36, Km. 31.5 Florencio Varela Province of Buenos Aires.
- File S.R.L., located in Panamericana and R.S. Peña Blanco Encalada Luján de Cuyo Province of Mendoza.

Additionally, it is placed on record that the detail of the documentation given in custody is available at the registered office, as well as the documents mentioned in section 5, subsection a.3), Section I, Chapter V, Title II of the CNV Rules.



### 30. MAIN REGULATIONS AND OTHER (Cont.)

### New Argentine Civil and Commercial Code

On August 1, 2015, the new Federal Civil and Commercial Code became effective. These new regulations, in addition to merging the Civil and Commercial Codes introduce details several news and amendments relative to Capacity, Obligations, Contracts, Contractual and Precontractual Civil Liability, Ownership, Co-ownership, Business Companies and Lapsing, among other legal institutes.

### • Law No. 27,275 and Decree No. 79/2017 – Access to Public Information

On September 29, 2016, Law No. 27,275, entitled "Right of access to public information", was published in the Official Gazette. This law guarantees a right of access to public information, including the ability to freely seek, access, request, receive, copy, analyze, process, use and distribute information in possession of the bound parties as defined under Article 7 of the law. State-owned companies, companies with majority state-owned capital, mixed-economy companies and all other business organizations where the National State has a majority interest in capital or in the formation of corporate decisions are deemed bound parties, except for companies authorized to make public offerings of their securities. Law No. 27,275 will come into effect one year after its publication in the Official Gazette.

On January 31, 2017, Decree No. 79/2016 was published in the Official Gazette, modifying the General Regulation of Access to Public Information for the National Executive Office. The decree established that exceptions to the definition of bound parties, as described in Law No. 27,275, would come into effect the day after their publication in the Official Gazette.

### 31. BALANCES AND TRANSACTIONS WITH RELATED PARTIES

The information detailed in the tables below shows the balances with associates and joint ventures as of December 31, 2017, 2016, and 2015 and transactions with the mentioned parties for the years ended on such dates.



# 31. BALANCES AND TRANSACTIONS WITH RELATED PARTIES (Cont.)

|                | Gas Austral<br>S.A. | Oiltanking. | Gasoducto del Pacífico (Argentina) S.A. | OTA | Termap |
|----------------|---------------------|-------------|---|-----|--------|
| 1,044<br>6,955 | 78                  | _           | 1                                       | I   |        |
| 1,669<br>3,667 | 1                   | 428         | 202                                     | 25  | 366    |
| 61             |                     | 1           | I                                       | 1   |        |
| 1,340<br>5,974 |                     | 1           | I                                       | 1   |        |
| 1,303<br>2,393 |                     | 350         | 170                                     | 25  | 309    |
| 38<br>41       |                     | 1           | I                                       | 1   |        |
| 3,59 <u>6</u>  |                     | 1           | I                                       | 1   |        |
| 803<br>1,773   |                     | 200         | 113                                     | 20  | 215    |
| $ \infty $     |                     | 1           | I                                       | 1   | I      |

(1) Disclosed balances and transactions since the date of the acquisition of associates. See Note 3.

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### 31. BALANCES AND TRANSACTIONS WITH RELATED PARTIES (Cont.)

Additionally, in the normal course of business, and considering being the main energy group in Argentina, the Group's client/suppliers portfolio encompasses both private sector entities as well as national public sector entities. As required by IAS 24 "Related party disclosures", among the major transactions above mentioned the most important are:

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|   |      | Balances                |         |       | Transactions |         |         |  |
|---|------|-------------------------|---------|-------|--------------|---------|---------|--|
|   |      | Credits / (Liabilities) |         |       | Inc          | s)      |         |  |
| Customers / Suppliers   | Ref. | 2017                    | 2016    | 2015  | 2017         | 2016    | 2015    |  |
| MINEM   | (1)  | 13,417                  | 10,881  | 9,859 | 12,840       | 16,757  | 12,345  |  |
| MINEM   | (2)  |                         |         | 1,988 |              |         | 1,988   |  |
| MINEM   | (3)  | 190                     | 129     | 207   | 191          | 93      | 84      |  |
| MINEM   | (4)  | 162                     | 142     | 91    | 119          | 132     | 123     |  |
| MINEM   | (5)  | _                       | 759     | 149   |              | 759     | 711     |  |
| Ministry of Transport   | (6)  | 840                     | 1,152   | 412   | 5,402        | 5,658   | 3,746   |  |
| Secretariat of Industry   | (7)  | 24                      | 378     | 27    | 188          | 422     | 621     |  |
| CAMMESA   | (8)  | 4,444                   | 3,782   | 2,156 | 17,569       | 20,934  | 12,079  |  |
| CAMMESA   | (9)  | (316)                   | (170)   | (196) | (2,090)      | (2,189) | (1,460) |  |
| ENARSA  | (10) | 698                     | 727     | 758   | 2,920        | 2,541   | 1,635   |  |
| ENARSA  | (11) | (1,591)                 | (1,357) | (893) | (214)        | (955)   | (1,141) |  |
| Aerolíneas Argentinas S.A. and Austral Líneas Aéreas Cielos del Sur |      |                         |         |       |              |         |         |  |
| S.A.  | (12) | 946                     | 364     | 255   | 4,300        | 3,066   | 2,178   |  |
| Aerolíneas Argentinas S.A. and Austral Líneas Aéreas Cielos del Sur |      |                         |         |       |              |         |         |  |
| S.A.  | (13) | _                       | (2)     | _     | (28)         | (14)    | (1)     |  |

- (1) The benefits of the incentive scheme for the Additional Injection of natural gas.
- (2) Benefits for the crude oil production incentive program.
- (3) Benefits for the propane gas supply agreement for undiluted propane gas distribution networks.
- (4) Benefits for the bottle-to-bottle program.
- (5) Temporary economic assistance to Metrogas.
- (6) The compensation for providing gas oil to public transport of passengers at a differential price.
- (7) Incentive for domestic manufacturing of capital goods, for the benefit of AESA.
- (8) The provision of fuel oil and natural gas, and electric power generation.
- (9) Purchases of energy.
- (10) Rendering of regasification service in the regasification projects of liquefied natural gas in Escobar and Bahía Blanca.
- (11) The purchase of natural gas and crude oil.
- (12) The provision of jet fuel.
- (13) The purchase of miles for the YPF Serviclub program

Additionally, the Group has entered into certain financing and insurance transactions with entities related to the national public sector. Such transactions consist of certain financial transactions that are described in Note 16 and transactions with Nación Seguros S.A. related to certain insurance policies contracts, and in connection therewith, to the reimbursement from the insurance coverage for the incidents mentioned in Note 28.a.

On the other hand, the Group holds BONAR 2020 (see Note 6) and 2021, classified as "Investments in financial assets".

Furthermore, in relation to the investment agreement signed between YPF and Chevron subsidiaries, YPF has an indirect non-controlling interest in CHNC with which YPF carries out transactions in connection with the mentioned investment agreement. See Note 29.b.

The table below discloses the compensation for the YPF's key management personnel, including members of the Board of Directors and Vice presidents (managers with executive functions appointed by the Board of Directors), for the years ended December 31, 2017, 2016 and 2015:

| Short-term employee benefits (2) | 221 | 182 | 158 |
|----------------------------------|-----|-----|-----|
| Share-based benefits             | 34  | 26  | 40  |
| Post-retirement benefits         | 10  | 9   | 6   |
| Termination benefits             | 109 | 94  | 5   |
|                                  | 374 | 311 | 209 |

- Includes the compensation for YPF's key management personnel, which developed their functions during the mentioned years.
   Does not include Social Security contributions of 50, 45 and 55 for the years ended December 31, 2017, 2016 and 2015, respectively.



### 32. EMPLOYEE BENEFIT PLANS AND SIMILAR OBLIGATIONS

Note 2.b.10 describes the main characteristics and accounting treatment for benefit plans implemented by the Group.

### i. Retirement plan

The total charges recognized under the Retirement Plan amounted to approximately 80, 80 and 50 for the years ended December 31, 2017, 2016 and 2015, respectively.

### ii. Performance Bonus Programs and Performance evaluation

The amount charged to expense related to the Performance Bonus Programs was 1,650, 1,272 and 1,020 for the years ended December 31, 2017, 2016 and 2015, respectively.

### iii. Share-based benefit plan

Consistent with share-based benefit plans approved in previous years, the Board of Directors at its meeting held on June 11, 2014, approved the creation of a new share-based benefit plan 2014-2017 effective for 3 years from July 1, 2014 (grant date), with similar characteristics to those of the 2013-2015 plan.

Likewise, the Board of Directors at its meeting held on June 8, 2015, approved the creation of a new share-based benefit plan 2015-2018 effective for 3 years from July 1, 2015 (grant date), with similar characteristics to existing plans.

Also, the Board of Directors at its meeting held on May 10, 2016, approved the creation of a new share-based benefit plan 2016-2019 effective for 3 years from July 1, 2016 (grant date), with similar characteristics to the previously implemented schemes.

Lastly, the Board of Directors of the Company, at its meeting held on May 9, 2017, resolved to approve the creation of a new shared-based compensation plan for 2017-2020 effective for 3 years as from July 1, 2017 (grant date), with similar characteristics to the previously implemented schemes.

The amount charged to expense in relation with the share-based plans, which are disclosed according to their nature, amounted to 162, 153 and 124 for the fiscal years ended December 31, 2017, 2016 and 2015, respectively.

During the fiscal years ended December 31, 2017, 2016 and 2015, the Company has repurchased 263,298, 171,330 and 382,985 own shares issued for an amount of 100, 50 and 120, respectively, and has delivered to the beneficiaries of the plan 502,996, 520,031 and 623,350 shares, respectively, for purposes of compliance with the share-based benefit plans. The cost of such repurchases is disclosed in the shareholders' equity under the name of "Cost of acquisition of own shares", while the nominal value and its adjustment derived from the monetary restatement made under the Prior Accounting Principles have been reclassified from the accounts "Subscribed capital" and "Adjustment to contribution" to the "Treasury shares" and "Adjustment to treasury shares" accounts, respectively.

Information related to the evolution of the quantity of shares, of the plans at the end of the years ended December 31, 2017, 2016 and 2015, is as follows:

### Plan 2013-2015

|   | 2017 | 2016      | 2015      |
|---|------|-----------|-----------|
| Amount at the beginning of the year             | _    | 188,493   | 695,015   |
| - Granted                                       | _    | 9,130     | _         |
| - Settled                                       | _    | (193,878) | (503,535) |
| - Expired                                       |      | (3,745)   | (2,987)   |
| Amount at end of year <sup>(1)</sup>            | _    | _         | 188,493   |
| Expense recognized during the year              |      | 6         | 34        |
| Fair value of shares on grant date (in dollars) | _    | 14.75     | 14.75     |

(1) The life of the plan in 2016 was 7 months and between 10 and 19 months as of December 2015.



### 32. EMPLOYEE BENEFIT PLANS AND SIMILAR OBLIGATIONS (Cont.)

### Plan 2014-2017

|   | 2017      | 2016      | 2015      |
|---|-----------|-----------|-----------|
| Amount at the beginning of the year             | 99,278    | 234,130   | 356,054   |
| - Granted                                       | 6,269     | 6,978     | _         |
| - Settled                                       | (105,201) | (123,926) | (118,927) |
| - Expired                                       | (346)     | (17,904)  | (2,997)   |
| Amount at end of year <sup>(1)</sup>            | _         | 99,278    | 234,130   |
| Expense recognized during the year              | 8         | 28        | 53        |
| Fair value of shares on grant date (in dollars) | 33.41     | 33.41     | 33.41     |

(1) The life of the plan in 2017 was 7 months, whereas the remaining life as of December 31, 2016 was 7 months, and between 7 and 19 months as of December 2015.

### Plan 2015-2018

|   | 2017      | 2016      | 2015     |
|---|-----------|-----------|----------|
| Amount at the beginning of the year             | 339,459   | 602,079   |          |
| - Granted                                       | 2,682     |           | 619,060  |
| - Settled                                       | (168,814) | (202,227) | (888)    |
| - Expired                                       | (11,276)  | (60,393)  | (16,093) |
| Amount at end of year <sup>(1)</sup>            | 162,051   | 339,459   | 602,079  |
| Expense recognized during the year              | 26        | 63        | 37       |
| Fair value of shares on grant date (in dollars) | 19.31     | 19.31     | 19.31    |

(1) The average remaining life of the plan was 7 months as of December 31, 2017, between 7 and 31 months as of December 31, 2016 and between 7 and 31 months as of December 2015.

### Plan 2016-2019

|   | 2017        | 2016    |
|---|-------------|---------|
| Amount at the beginning of the year             | 682,307     | _       |
| - Granted                                       | <del></del> | 682,307 |
| - Settled                                       | (228,981)   | _       |
| - Expired                                       | (59,354)    |         |
| Amount at end of year <sup>(1)</sup>            | 393,972     | 682,307 |
| Expense recognized during the year              | 59          | 56      |
| Fair value of shares on grant date (in dollars) | 16.99       | 16.99   |

(1) The average remaining life of the plan is between 7 and 19 months as of December 2017 and between 7 and 31 months as of December 31, 2016.

### Plan 2017-2020

|                                     | 2017     |
|-------------------------------------|----------|
| Amount at the beginning of the year |          |
| - Granted                           | 646,149  |
| - Settled                           | <u> </u> |
| - Expired                           | (1,200)  |
| Amount at end of year(1)            | 644,949  |

| Expense recognized during the year              | 69    |
|---|-------|
| Fair value of shares on grant date (in dollars) | 20.26 |

(1) The average remaining life of the plan is between 7 and 31 months as of December 31, 2017.



### 33. ASSETS AND LIABILITIES IN CURRENCIES OTHER THAN THE ARGENTINE PESO

|                                 |   | 2017                                  |          | 2016  |                                       |         | 2015  |                                       |        |  |
|---------------------------------|---|---------------------------------------|----------|---|---------------------------------------|---------|---|---------------------------------------|--------|--|
|                                 | Amount in<br>currencies<br>other than<br>the<br>Argentine<br>peso | Exchange rate in force <sup>(1)</sup> | Total    | Amount in<br>currencies<br>other than<br>the<br>Argentine<br>peso | Exchange rate in force <sup>(1)</sup> | Total   | Amount in<br>currencies<br>other than<br>the<br>Argentine<br>peso | Exchange rate in force <sup>(1)</sup> | Total  |  |
| Noncurrent assets               |   |                                       |          |   |                                       |         |   |                                       |        |  |
| Other receivables               |   |                                       |          |   |                                       |         |   |                                       |        |  |
| U.S. Dollar                     | 2   | 18.55                                 | 37       | 169   | 15.79                                 | 2,669   | 46  | 12.94                                 | 595    |  |
| Real                            | _   | _                                     | _        | 10  | 4.84                                  | 48      | 10  | 3.31                                  | 33     |  |
| <u>Trade receivables</u>        |   |                                       |          |   |                                       |         |   |                                       |        |  |
| Real                            | 2   | 18.55                                 | 37       | _   |                                       |         |   |                                       | _      |  |
| Investments in financial assets |   |                                       |          |   |                                       |         |   |                                       |        |  |
| U.S. Dollar                     | _   | _                                     |          | 490   | 15.79                                 | 7,737   | _   | _                                     |        |  |
| Total noncurrent assets         |   |                                       | 74       |   |                                       | 10,454  |   |                                       | 628    |  |
| Current assets                  |   |                                       |          |   |                                       |         |   |                                       |        |  |
| <u>Trade receivables</u>        |   |                                       |          |   |                                       |         |   |                                       |        |  |
| U.S. Dollar                     | 380   | 18.55                                 | 7,049    | 397   | 15.79                                 | 6,269   | 307   | 12.94                                 | 3,973  |  |
| Chilean peso                    | 9,836   | 0.03                                  | 295      | 10,542  | 0.02                                  | 211     | 16,971  | 0.02                                  | 339    |  |
| Real                            | _   | _                                     | _        | 23  | 4.84                                  | 111     | 15  | 3.31                                  | 50     |  |
| Other receivables               | 1.65  | 10.55                                 | 2.061    | 2.40  | 1.5.50                                | 5 511   | 407   | 12.04                                 | 5.065  |  |
| U.S. Dollar                     | 165   | 18.55                                 | 3,061    | 349   | 15.79                                 | 5,511   | 407   | 12.94                                 | 5,267  |  |
| Euro                            | 5   | 22.28                                 | 111      | 15  | 16.63                                 | 249     | 6   | 14.07                                 | 84     |  |
| Real<br>Children maga           | 4,303   | 0.03                                  | —<br>129 | 4   | 4.84                                  | 19      | 7<br>27   | 3.31<br>0.02                          | 23     |  |
| Chilean peso<br>Yen             | 4,303   | 0.03                                  | 129      |   |                                       |         | 119   | 0.02                                  | 1 13   |  |
| Swiss franc                     | 3   | 19.04                                 | 57       | _   | _                                     |         | 119   | 0.11                                  | 13     |  |
| Investments in financial assets | 3   | 19.04                                 | 31       |   |                                       |         |   |                                       |        |  |
| U.S. Dollar                     | 697   | 18.55                                 | 12,936   | 478   | 15.79                                 | 7,548   | _   | _                                     | —      |  |
| Cash and cash equivalents       |   |                                       |          |   |                                       |         |   |                                       |        |  |
| U.S. Dollar                     | 526   | 18.55                                 | 9,757    | 414   | 15.79                                 | 6,537   | 1,009   | 12.94                                 | 13,056 |  |
| Chilean peso                    | 898   | 0.03                                  | 27       | 240   | 0.02                                  | 5       | 502   | 0.02                                  | 10     |  |
| Real                            | _   | _                                     | _        | 2   | 4.84                                  | 10      | 4   | 3.31                                  | 13     |  |
| Swiss franc                     | _   | _                                     |          | (2)   | 15.52                                 | 6       | _   | _                                     |        |  |
| Total current assets            |   |                                       | 33,422   |   |                                       | 26,476  |   |                                       | 22,829 |  |
| Total assets                    |   |                                       | 33,496   |   |                                       | 36,930  |   |                                       | 23,457 |  |
| Noncurrent liabilities          |   |                                       |          |   |                                       |         |   |                                       |        |  |
| <u>Provisions</u>               |   |                                       |          |   |                                       |         |   |                                       |        |  |
| U.S. Dollar                     | 2,909   | 18.65                                 | 54,253   | 2,675   | 15.89                                 | 42,506  | 2,774   | 13.04                                 | 36,173 |  |
| <u>Loans</u>                    |   |                                       |          |   |                                       |         |   |                                       |        |  |
| U.S. Dollar                     | 6,200   | 18.65                                 | 115,628  | 5,741   | 15.89                                 | 91,222  | 4,403   | 13.04                                 | 57,417 |  |
| Real                            | _   |                                       | _        | 13  | 4.88                                  | 63      | 4   | 3.35                                  | 13     |  |
| Swiss franc                     | 300   | 19.13                                 | 5,731    | 300   | 15.57                                 | 4,673   | _   | _                                     | _      |  |
| Other liabilities               | 1.4   | 10.65                                 | 260      | 21  | 1.7.00                                | 22.4    | 2.4   | 12.04                                 | 216    |  |
| U.S. Dollar                     | 14  | 18.65                                 | 269      | 21  | 15.89                                 | 334     | 24  | 13.04                                 | 316    |  |
| Accounts payable                | 1   | 10 65                                 | 75       | 122   | 15 90                                 | 2 112   | 12  | 12.04                                 | 166    |  |
| U.S. Dollar                     | 4   | 18.65                                 | 75       | 133   | 15.89                                 | 2,113   | 13  | 13.04                                 | 166    |  |
| Total noncurrent liabilities    |   |                                       | 175,956  |   |                                       | 140,911 |   |                                       | 94,085 |  |
| Current liabilities             |   |                                       |          |   |                                       |         |   |                                       |        |  |
| Provisions                      |   | 10.65                                 | 1.062    | 15  | 15.00                                 | 715     | 0.0   | 12.04                                 | 1.042  |  |
| U.S. Dollar                     | 57  | 18.65                                 | 1,063    | 45  | 15.89                                 | 715     | 80  | 13.04                                 | 1,043  |  |
| Taxes payable                   |   |                                       |          |   |                                       |         |   |                                       |        |  |

| Real                         | _     | _     | _       | 5     | 4.88  | 24      | 6     | 3.31  | 20      |
|------------------------------|-------|-------|---------|-------|-------|---------|-------|-------|---------|
| Chilean peso                 | 1,524 | 0.03  | 46      | 1,055 | 0.02  | 21      | 1,077 | 0.02  | 22      |
| Loans                        |       |       |         |       |       |         |       |       |         |
| U.S. Dollar                  | 1,647 | 18.65 | 30,725  | 1,054 | 15.89 | 16,754  | 1,543 | 13.04 | 20,121  |
| Real                         |       | _     | _       | 17    | 4.88  | 82      | 35    | 3.35  | 117     |
| Swiss franc                  | 3     | 19.13 | 54      | 3     | 15.57 | 45      |       |       |         |
| Salaries and social security |       |       |         |       |       |         |       |       |         |
| U.S. Dollar                  | 6     | 18.65 | 112     | 6     | 15.89 | 96      | 7     | 13.04 | 91      |
| Real                         |       | _     |         | 2     | 4.88  | 10      | 2     | 3.35  | 7       |
| Chilean peso                 | 247   | 0.03  | 7       | 501   | 0.02  | 10      | 423   | 0.02  | 8       |
| Other liabilities            |       |       |         |       |       |         |       |       |         |
| U.S. Dollar                  | 125   | 18.65 | 2,331   | 275   | 15.89 | 4,371   | 32    | 13.04 | 412     |
| Accounts payable             |       |       |         |       |       |         |       |       |         |
| U.S. Dollar                  | 1,149 | 18.65 | 21,429  | 1,197 | 15.89 | 19,020  | 1,845 | 13.04 | 24,064  |
| Euro                         | 18    | 22.45 | 404     | 15    | 16.77 | 252     | 26    | 14.21 | 369     |
| Chilean peso                 | 1,826 | 0.03  | 55      | 4,915 | 0.02  | 98      | 1,283 | 0.02  | 26      |
| Real                         |       | _     |         | 9     | 4.88  | 44      | 14    | 3.35  | 47      |
| Swiss franc                  | 3     | 19.13 | 57      | (2)   | 15.57 | 3       |       | _     |         |
| Yen                          | 19    | 0.17  | 3       | _     |       | _       | 29    | 0.11  | 3       |
| Total current liabilities    |       |       | 56,286  |       |       | 41,545  |       |       | 46,350  |
| Total liabilities            |       |       | 232,242 |       |       | 182,456 |       |       | 140,435 |

Exchange rate in force at December 31, 2017, 2016 and 2015 according to Banco Nación Argentina.
 Registered value less than 1.



### 34. SUBSEQUENT EVENTS

- On February 8, 2018, our subsidiary Metrogas entered into an unsecured loan with (i) Industrial and Commercial Bank of China Limited Dubai Branch and (ii) Itaú Unibanco New York Branch, in an amount of US\$ 250 million for a term of 36 months. The loan is repayable in 9 quarterly installments as from the 12 months anniversary of the disbursement date. This loan will accrue interest (payable quarterly) at a rate of LIBOR plus an annual nominal margin of (a) 3.00% during the first 12 months, (b) 3.50% from month 13th to month 18th, (c) 3.75% from month19th to month 24th and (d) 4.00% from month 25th to the maturity date. Metrogas used the funds mainly to redeem, on February 27, 2018, all its NOs at a redemption price equal to 100% of the principal amount of the NOs to be redeemed, plus any accrued and unpaid interest thereon, and all the other amounts that were due and payable up to the redemption date.
- Regarding the agreement for the capitalization of YPF EE mentioned in Note 3, on March 20, 2018 GE EFS Power Investments B.V., a subsidiary of EFS Global Energy B.V (both companies indirectly controlled by GE Energy Financial Services, Inc.), subscribed YPF EE shares representing 24.99% of its capital stock, undertaking to such end to contribute US\$ 275 million plus a contingent payment of up to US\$ 35 million. Since then, GE EFS Power Investments and YPF jointly control YPF EE.
- On April 3, 2018, the MINEM published Resolution N° 97/2018 in the Official Gazette that approves the procedure for cancelation of the pending compensations under the "Natural Gas Additional Injection Stimulus Program", the "Natural Gas Injection Stimulus Program for Companies with Reduced Injection" and the "Natural Gas New Projects Program" corresponding to 2017 natural gas injections (the "Procedure").

Gas producing companies are invited to join the Procedure by filing a Form during 20 business days following the publication in the Official Gazette of the Resolution.

In order to determine the amount of the compensation, the Secretariat of Hydrocarbon Resources shall issue a "Resolution of Compensation", calculated as follows:

- 1. 85%: the amount in USD calculated using the exchange rate at the time of injection of the natural gas.
- 2. 15%: the amounts in USD calculated using the exchange rate between the time of injection and the time of payment due or the exchange rate as of the date of the Resolution, as per corresponds.

The compensation shall be monthly paid in 30 equal and consecutive payments as from January 2019 using the exchange rate "Comunicacion A 3500 Mayorista" corresponding to each payment of each month.

Gas producing companies joining the Procedure shall waive all claims, legal actions and measures as well as accept the terms and conditions of payment compensations under the Procedure during the maximum period of 20 working days since the publication of the Resolution in the Official Gazette of the Republic of Argentina. As of the date of this annual report we are analyzing the necessary steps to comply with said Resolution.

- On March 28, 2018 Decree No. 252/2018 was published in the Official Gazette by which the PEN ratified the Memorandum of Agreement, mentioned in Note 30.i). Also, Resolution ENARGAS No. 300/2018 was published on that day, with the new tariffs scheme applicable as from April 1, 2018
- On April 5, 2018, the Company was notified that the ENARGAS rejected the motion for reconsideration submitted by YPF on March 30, 2017, mentioned in Note 30.i). As of the date of this annual report, we are discussing the following legal steps as a result of the previously mentioned rejection.

As of the date of issuance of these consolidated financial statements, there are no other significant subsequent events that require adjustments or disclosure in the financial statements of the Group as of December 31, 2017, which were not already considered in such consolidated financial statements according to IFRS.

The consolidated financial statements as of December 31, 2017, presented for regulatory purposes before the CNV, have been approved by the Board of Director's meeting and authorized to be issued on March 2, 2018, and will be considered in the shareholders' meeting. These consolidated financial statements, which comprise those presented before the CNV on March 2, 2018, an update of Note 34 – "Subsequent events" and the inclusion of Note 35 – "Supplemental information on oil and gas producing activities (unaudited)", have been approved by Management on April 23, 2018.



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED)

The following information is presented in accordance with Accounting Standards Codification ("ASC") No. 932 "Extractive Activities – Oil and Gas", as amended by Accounting Standards Update ("ASU") No. 2010 – 03 "Oil and Gas Reserves. Estimation and Disclosures", issued by Financial Accounting Standards Board ("FASB") in January 2010.

### Oil and gas reserves

Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible (from a given date forward, from known reservoirs, and under existing economic conditions, operating methods and government regulations) prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within reasonable time. In some cases, substantial investments in new wells and related facilities may be required to recover proved reserves.

Information on net proved reserves as of December 31, 2017, 2016 and 2015 was calculated in accordance with the SEC rules and ASC 932, as amended. Accordingly, crude oil prices used to determine reserves were calculated at the beginning of each month, for crude oils of different quality produced by the Group. Consequently, for calculation of our net proved reserves as of December 31, 2017, the Group considered the realized prices for crude oil in the domestic market (which are higher than those that had prevailed in the international market), taking into account the unweighted average price for each month within the twelve-month period ended December 31, 2017. Additionally, since there are no benchmark market natural gas prices available in Argentina, the Group used average realized gas prices during the year to determine its gas reserves.

Notwithstanding the foregoing, commodity prices have declined significantly since 2014. See "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Our oil and natural gas reserves are estimates" and "Item 3. Key Information—Risk Factors—Risks Relating to the Argentine Oil and Gas Business and Our Business—Our reserves and production are likely to decline".

Net reserves are defined as that portion of the gross reserves attributable to the interest of YPF after deducting interests owned by third parties. In determining net reserves, the Group excludes from its reported reserves royalties due to others, whether payable in cash or in kind, where the royalty owner has a direct interest in the underlying production and is able to make lifting and sales arrangements independently. By contrast, to the extent that royalty payments required to be made to a third party, whether payable in cash or in kind, are a financial obligation, or are substantially equivalent to a production or severance tax, the related reserves are not excluded from the reported reserves despite the fact that such payments are referred to as "royalties" under local rules. The same methodology is followed in reporting our production amounts.

Gas reserves exclude the gaseous equivalent of liquids expected to be removed from the gas on concessions and leases, at field facilities and at gas processing plants. These liquids are included in net proved reserves of natural gas liquids.



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

### Technology used in establishing proved reserves additions in 2017

YPF's estimated proved reserves are based on estimates generated through the integration of available and appropriate data, utilizing well-established technologies that have been demonstrated in the field to yield repeatable and consistent results. Data used in these integrated assessments include information obtained directly from the subsurface via wellbore, such as well logs, reservoir core samples, fluid samples, static and dynamic pressure information, production test data, and surveillance and performance information. The data utilized also include subsurface information obtained through indirect measurements, including high quality 2-D and 3-D-seismic data, calibrated with available well control. Where applicable, geological outcrops information was also utilized. The tools used to interpret and integrate all these data included both proprietary and commercial software for reservoir modeling, simulation and data analysis. In some circumstances, where appropriate analog reservoir models are available, reservoir parameters from these analog models were used to increase the reliability of our reserves estimates.

### **Changes in YPF's Estimated Net Proved Reserves**

The table below sets forth information regarding changes in YPF's net proved reserves during 2017, 2016 and 2015, by hydrocarbon product.

|                                  |             | 2017      |                  |                    | 2016                         |                  |           | 2015         |                  |
|----------------------------------|-------------|-----------|------------------|--------------------|------------------------------|------------------|-----------|--------------|------------------|
| Oil and Condensate               | Worldwide   | Argentina | Other<br>foreign | Worldwide<br>(Mill | Argentina<br>ions of barrels | Other<br>foreign | Worldwide | Argentina    | Other<br>foreign |
| Consolidated entities            |             |           |                  |                    |                              |                  |           |              |                  |
| At January 1,                    | 525         | 525       | _                | 608                | 607                          | 1                | 601       | 600          | 1                |
| Developed                        | 380         | 380       | _                | 440                | 439                          | 1                | 447       | 446          | 1                |
| Undeveloped                      | 145         | 145       | _                | 168                | 168                          | _                | 154       | 154          |                  |
| Revisions of previous            |             |           |                  |                    |                              |                  |           |              |                  |
| estimates (1)                    | (71)        | (72)      | _                | (75)               | (74)                         | (1)              | 31        | 31           | (*)              |
| Extensions and discoveries       | 19          | 19        | _                | 45                 | 45                           | _                | 44        | 44           |                  |
| Improved recovery                | 32          | 33        | _                | 35                 | 35                           | _                | 23        | 23           |                  |
| Purchase of minerals in place    | _           | _         | _                | 2                  | 2                            | _                | _         | _            |                  |
| Sale of minerals in place        | _           | _         | _                | (*)                | (*)                          | _                | (*)       | (*)          |                  |
| Production for the year (2)      | (83)        | (83)      |                  | (90)               | (90)                         | (*)              | (91)      | (91)         | <u>(*</u> )      |
| At December 31, (3)              | 422         | 422       |                  | 525                | 525                          |                  | 608       | 607          | 1                |
| Developed                        | 286         | 286       | _                | 380                | 380                          | _                | 440       | 439          | 1                |
| Undeveloped                      | 136         | 136       | _                | 145                | 145                          | _                | 168       | 168          | _                |
| <b>Equity-accounted entities</b> |             |           |                  |                    |                              |                  |           |              |                  |
| At January 1,                    | _           | _         | _                | _                  | _                            | _                | _         | _            |                  |
| Developed                        |             |           |                  |                    |                              | _                |           |              |                  |
| Undeveloped                      | —           |           | _                | _                  |                              | _                | _         | —            |                  |
| Revisions of previous            |             |           |                  |                    |                              |                  |           |              |                  |
| estimates (1)                    |             |           |                  |                    | _                            | _                | _         |              |                  |
| Extensions and discoveries       | _           | _         | _                | <del>_</del>       | _                            | _                | _         | <del>-</del> | _                |
| Improved recovery                | _           | _         | _                |                    | _                            | _                | _         | _            |                  |
| Purchase of minerals in place    | <del></del> | _         | _                | _                  | _                            | _                | _         | _            | —                |
| Sale of minerals in place        |             |           | _                |                    |                              | _                |           |              |                  |
| Production for the year (2)      |             |           |                  |                    |                              |                  |           |              |                  |
| At December 31, (3)              |             |           |                  |                    |                              |                  |           |              |                  |
| Developed                        |             |           |                  |                    |                              |                  |           |              |                  |
| Undeveloped                      | _           | _         | _                | _                  | _                            | _                | _         | _            | _                |



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

|   |           | 2017      |                  |                    | 2016                         |               |           | 2015      |                  |
|---|-----------|-----------|------------------|--------------------|------------------------------|---------------|-----------|-----------|------------------|
| Oil and Condensate                            | Worldwide | Argentina | Other<br>foreign | Worldwide<br>(Mill | Argentina<br>ions of barrels | Other foreign | Worldwide | Argentina | Other<br>foreign |
| Consolidated and<br>Equity-accounted entities |           |           |                  |                    |                              |               |           |           |                  |
| At January 1,                                 |           |           |                  |                    |                              |               |           |           |                  |
| Developed                                     | 380       | 380       | _                | 440                | 439                          | 1             | 447       | 446       | 1                |
| Undeveloped                                   | 145       | 145       |                  | 168                | 168                          |               | 154       | 154       |                  |
| Total   | 525       | 525       |                  | 608                | 607                          | 1             | 601       | 600       | 1                |
| At December 31,                               |           |           | <del></del>      |                    |                              | <del></del>   |           |           |                  |
| Developed                                     | 286       | 286       | _                | 380                | 380                          | _             | 440       | 439       | 1                |
| Undeveloped                                   | 136       | 136       |                  | 145                | 145                          |               | 168       | 168       |                  |
| Total   | 422       | 422       |                  | 525                | 525                          |               | 608       | 607       | 1                |

- \* Not material (less than 1)
- (1) Revisions in estimates of reserves are performed at least once a year. Revision of oil and gas reserves is considered prospectively in the calculation of depreciation.
- (2) Crude oil production for the years 2017, 2016 and 2015 includes an estimated approximately 12, 13 and 13 mmbbl, respectively, in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax. Equity-accounted entities production of crude oil in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax, is not material.
- (3) Proved crude oil reserves of consolidated entities as of December 31, 2017, 2016 and 2015 include an estimated approximately 61, 76 and 88 mmbbl, respectively, in respect of royalty payments which, as described above, are a financial obligation, or are substantially equivalent to a production or similar tax. Proved crude oil reserves of equity—accounted entities in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax, are not material.

|                                  | 2017      |           |                  |                    | 2016                          |                  | 2015      |           |                  |  |
|----------------------------------|-----------|-----------|------------------|--------------------|-------------------------------|------------------|-----------|-----------|------------------|--|
| Natural Gas Liquids              | Worldwide | Argentina | Other<br>foreign | Worldwide<br>(Mill | Argentina<br>ions of barrels) | Other<br>foreign | Worldwide | Argentina | Other<br>foreign |  |
| Consolidated entities            |           |           |                  |                    |                               |                  |           |           |                  |  |
| At January 1,                    | 68        | 68        | _                | 71                 | 71                            | _                | 73        | 73        | _                |  |
| Developed                        | 53        | 53        |                  | 56                 | 56                            | _                | 53        | 53        | —                |  |
| Undeveloped                      | 15        | 15        |                  | 15                 | 15                            |                  | 20        | 20        |                  |  |
| Revisions of previous            |           |           |                  |                    |                               |                  |           |           |                  |  |
| estimates (1)                    | 4         | 4         | _                | 5                  | 5                             | _                | 9         | 9         | —                |  |
| Extensions and discoveries       | 5         | 5         |                  | 11                 | 11                            |                  | 10        | 10        |                  |  |
| Improved recovery                | _         |           |                  | _                  | _                             | —                | _         | —         | —                |  |
| Purchase of minerals in place    |           |           |                  |                    |                               |                  |           |           | _                |  |
| Sale of minerals in place        | _         | _         | _                | —                  | _                             | _                | (3)       | (3)       | —                |  |
| Production for the year (2)      | (19)      | (19)      |                  | (19)               | (19)                          |                  | (18)      | (18)      |                  |  |
| At December 31, (3)              | 58        | 58        |                  | 68                 | 68                            |                  | 71        | 71        | _                |  |
| Developed                        | 47        | 47        |                  | 53                 | 53                            |                  | 56        | 56        |                  |  |
| Undeveloped                      | 11        | 11        | _                | 15                 | 15                            | _                | 15        | 15        | —                |  |
| <b>Equity-accounted entities</b> |           |           |                  |                    |                               |                  |           |           |                  |  |
| At January 1,                    | _         |           | —                | _                  | _                             | _                | _         |           | —                |  |
| Developed                        |           |           |                  |                    |                               |                  |           |           |                  |  |
| Undeveloped                      | _         |           | _                | _                  | _                             | _                | _         |           | _                |  |
| Revisions of previous            |           |           |                  |                    |                               |                  |           |           |                  |  |
| estimates (1)                    |           |           |                  |                    |                               |                  |           |           |                  |  |
| Extensions and discoveries       | _         | _         | _                |                    | _                             | _                | _         |           | —                |  |
| Improved recovery                |           |           |                  |                    |                               |                  |           |           | _                |  |
| Purchase of minerals in place    | _         |           | _                | _                  | _                             | _                | _         |           | _                |  |

| Sale of minerals in place   |   |   |   |   |   |   |             |   |   |
|-----------------------------|---|---|---|---|---|---|-------------|---|---|
| Production for the year (2) | _ | _ | _ | _ | _ | _ | <del></del> | _ |   |
| At December 31, (3)         |   |   |   |   |   |   |             |   |   |
| Developed                   | _ | _ | _ | _ |   | _ | <del></del> | _ | — |
| Undeveloped                 |   |   | _ |   |   |   |             |   |   |



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

|   |           | 2017      |                  |                    | 2016                         |               |           | 2015      |                  |
|---|-----------|-----------|------------------|--------------------|------------------------------|---------------|-----------|-----------|------------------|
| Natural Gas Liquids                           | Worldwide | Argentina | Other<br>foreign | Worldwide<br>(Mill | Argentina<br>ions of barrels | Other foreign | Worldwide | Argentina | Other<br>foreign |
| Consolidated and<br>Equity-accounted entities |           |           |                  | ·                  |                              |               |           |           |                  |
| At January 1,                                 |           |           |                  |                    |                              |               |           |           |                  |
| Developed                                     | 53        | 53        |                  | 56                 | 56                           |               | 53        | 53        | _                |
| Undeveloped                                   | 15        | 15        |                  | 15                 | 15                           |               | 20        | 20        |                  |
| Total   | 68        | 68        |                  | 71                 | 71                           |               | 73        | 73        |                  |
| At December 31,                               |           |           |                  |                    |                              | <del></del>   |           |           |                  |
| Developed                                     | 47        | 47        | _                | 53                 | 53                           | _             | 56        | 56        | _                |
| Undeveloped                                   | 11        | 11        |                  | 15                 | 15                           |               | 15        | 15        |                  |
| Total   | 58        | 58        |                  | 68                 | 68                           |               | 71        | 71        |                  |

- \* Not material (less than 1)
- (1) Revisions in estimates of reserves are performed at least once a year. Revision of oil and gas reserves is considered prospectively in the calculation of depreciation.
- (2) Natural gas liquids production for the years 2017, 2016 and 2015 includes an estimated approximately 2, 2 and 2 mmbbl, respectively, in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax. Equity-accounted entities production of natural gas liquids in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax, is not material.
- (3) Proved natural gas liquids reserves of consolidated entities as of December 31, 2017, 2016 and 2015 include an estimated approximately 6, 8 and 14 mmbbl, respectively, in respect of royalty payments which, as described above, are a financial obligation, or are substantially equivalent to a production or similar tax. Proved natural gas liquids reserves of equity—accounted entities in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax, are not material.

|                                     |           | 2017      |                  | 201                       | 16                          |                              | 2015      |           |                  |
|-------------------------------------|-----------|-----------|------------------|---------------------------|-----------------------------|------------------------------|-----------|-----------|------------------|
| Natural gas                         | Worldwide | Argentina | Other<br>foreign | Worldwide<br>(Billions of | Argentina<br>f standard cub | Other<br>foreign<br>ic feet) | Worldwide | Argentina | Other<br>foreign |
| Consolidated entities               |           |           |                  |                           |                             |                              |           |           |                  |
| At January 1,                       | 2,923     | 2,923     | _                | 3,072                     | 3,067                       | 5                            | 3,016     | 3,011     | 5                |
| Developed                           | 2,143     | 2,143     |                  | 2,210                     | 2,205                       | 5                            | 2,267     | 2,262     | 5                |
| Undeveloped                         | 780       | 780       |                  | 862                       | 862                         |                              | 749       | 749       |                  |
| Revisions of previous estimates (1) | (161)     | (161)     |                  | (110)                     | (105)                       | (5)                          | 174       | 174       | (*)              |
| Extensions and discoveries          | 313       | 313       | _                | 371                       | 371                         | _                            | 520       | 520       | _                |
| Improved recovery                   | _         | —         |                  | 1                         | 1                           | _                            | 1         | 1         | _                |
| Purchase of minerals in place       | 12        | 12        |                  | 165                       | 165                         |                              |           |           | _                |
| Sale of minerals in place           | _         | _         | _                | (*)                       | (*)                         | _                            | (70)      | (70)      | _                |
| Production for the year (2)         | (567)     | (567)     |                  | (576)                     | (576)                       | (*)                          | (569)     | (569)     | (*)              |
| At December 31, (3) (4)             | 2,520     | 2,520     | _                | 2,923                     | 2,923                       |                              | 3,072     | 3,067     | 5                |
| Developed                           | 1,850     | 1,850     |                  | 2,143                     | 2,143                       |                              | 2,210     | 2,205     | 5                |
| Undeveloped                         | 670       | 670       | _                | 780                       | 780                         | _                            | 862       | 862       | _                |
| <b>Equity-accounted entities</b>    |           |           |                  |                           |                             |                              |           |           |                  |
| At January 1,                       | _         | _         | _                | _                         | _                           | _                            | _         | _         | _                |
| Developed                           |           |           | _                |                           |                             | _                            |           |           | _                |
| Undeveloped                         | _         | _         | _                | _                         | _                           | _                            |           |           | _                |
| Revisions of previous estimates (1) |           | _         |                  |                           |                             |                              |           |           |                  |
| Extensions and discoveries          | _         | _         | _                | _                         | _                           | _                            | _         | _         | _                |
| Improved recovery                   | _         | _         | _                |                           | _                           | _                            |           |           |                  |
| Purchase of minerals in place       | _         | _         | _                | _                         | _                           | _                            | _         | _         | —                |

| Sale of minerals in place   | _ |   |   | <br>  | _ |   |   |   |
|-----------------------------|---|---|---|-------|---|---|---|---|
| Production for the year (2) | _ | _ | _ | <br>_ | _ | _ | _ | — |
| At December 31, (3)         |   |   |   | <br>  |   |   |   |   |
| Developed                   | _ | _ | _ | <br>_ | _ | _ | _ | — |
| Undeveloped                 |   |   |   | <br>  |   |   |   |   |



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

|                                  |           | 2017      |         |              | 2016         |           | 2015      |           |         |
|----------------------------------|-----------|-----------|---------|--------------|--------------|-----------|-----------|-----------|---------|
|                                  | ·         |           | Other   |              |              | Other     |           |           | Other   |
| Natural gas                      | Worldwide | Argentina | foreign | Worldwide    | Argentina    | foreign   | Worldwide | Argentina | foreign |
|                                  |           |           |         | (Billions of | standard cub | oic feet) |           |           |         |
| Consolidated and                 |           |           |         |              |              |           |           |           |         |
| <b>Equity-accounted entities</b> |           |           |         |              |              |           |           |           |         |
| At January 1,                    |           |           |         |              |              |           |           |           |         |
| Developed                        | 2,143     | 2,143     | _       | 2,210        | 2,205        | 5         | 2,267     | 2,262     | 5       |
| Undeveloped                      | 780       | 780       |         | 862          | 862          |           | 749       | 749       |         |
| Total                            | 2,923     | 2,923     | _       | 3,072        | 3,067        | 5         | 3,016     | 3,011     | 5       |
| At December 31,                  |           |           |         | ·            |              |           |           |           |         |
| Developed                        | 1,850     | 1,850     | _       | 2,143        | 2,143        |           | 2,210     | 2,205     | 5       |
| Undeveloped                      | 670       | 670       |         | 780          | 780          |           | 862       | 862       |         |
| Total                            | 2,520     | 2,520     |         | 2,923        | 2,923        |           | 3,072     | 3,067     | 5       |
|                                  |           |           |         |              |              |           |           |           |         |

- \* Not material (less than 1)
- (1) Revisions in estimates of reserves are performed at least once a year. Revision of natural gas reserves is considered prospectively in the calculation of depreciation.
- (2) Natural gas production for the years 2017, 2016 and 2015 includes an estimated approximately 64, 60 and 58 bcf, respectively, in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax. Equity-accounted entities production of natural gas in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax, is not material.
- (3) Proved natural gas reserves of consolidated entities as of December 31, 2017, 2016 and 2015 include an estimated approximately 289, 337 and 329 bcf, respectively, in respect of royalty payments which, as described above, are a financial obligation, or are substantially equivalent to a production or similar tax. Proved natural gas reserves of equity-accounted entities in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax, are not material.
- (4) Proved natural gas reserves of consolidated entities and equity-accounted entities as of December 31, 2017, 2016 and 2015 include an estimated approximately 364, 467 and 635 bcf, respectively, which is consumed as fuel at the field.

|                                     |              | 2017      | 2016             |                             |                               |                          |             | 2015      |                  |
|-------------------------------------|--------------|-----------|------------------|-----------------------------|-------------------------------|--------------------------|-------------|-----------|------------------|
| Oil equivalent (1)                  | Worldwide    | Argentina | Other<br>foreign | Worldwide<br>(Millions of b | Argentina<br>arrels of oil ed | Other foreign quivalent) | Worldwide   | Argentina | Other<br>foreign |
| Consolidated entities               |              |           |                  |                             |                               | •                        |             |           |                  |
| At January 1,                       | 1,113        | 1,113     | _                | 1,226                       | 1,224                         | 2                        | 1,212       | 1,210     | 2                |
| Developed                           | 815          | 815       |                  | 889                         | 887                           | 2                        | 905         | 903       | 2                |
| Undeveloped                         | 298          | 298       |                  | 337                         | 337                           |                          | 307         | 307       |                  |
| Revisions of previous estimates (2) | (96)         | (96)      | _                | (89)                        | (87)                          | (2)                      | 71          | 70        | 1                |
| Extensions and discoveries          | 80           | 80        |                  | 122                         | 122                           | _                        | 147         | 147       |                  |
| Improved recovery                   | 32           | 32        | —                | 35                          | 35                            | —                        | 23          | 23        | —                |
| Purchase of minerals in place       | 2            | 2         |                  | 31                          | 31                            |                          |             |           | _                |
| Sale of minerals in place           | _            | _         | _                | (1)                         | (1)                           | _                        | (16)        | (16)      | —                |
| Production for the year (3)         | (202)        | (202)     |                  | (211)                       | (211)                         |                          | (211)       | (210)     | (1)              |
| At December 31, (4)                 | 929          | 929       |                  | 1,113                       | 1,113                         |                          | 1,226       | 1,224     | 2                |
| Developed                           | 663          | 663       |                  | 815                         | 815                           |                          | 889         | 887       | 2                |
| Undeveloped                         | 266          | 266       |                  | 298                         | 298                           | _                        | 337         | 337       | —                |
| <b>Equity-accounted entities</b>    |              |           |                  |                             |                               |                          |             |           |                  |
| At January 1,                       |              |           | _                | _                           |                               | _                        | _           |           | _                |
| Developed                           | _            |           | _                | _                           |                               | _                        |             |           | _                |
| Undeveloped                         |              |           | _                | _                           |                               | _                        | _           | —         | —                |
| Revisions of previous estimates (2) |              |           |                  |                             |                               |                          |             |           | _                |
| Extensions and discoveries          | _            | _         | _                | _                           | _                             | _                        | _           |           | —                |
| Improved recovery                   | _            | _         | _                | _                           | _                             | _                        |             | _         |                  |
| Purchase of minerals in place       | <del>_</del> | _         | _                | <u> </u>                    | _                             | _                        | <del></del> | _         | _                |

| Sale of minerals in place   |   | _ |   |          |   |   |   |   |   |
|-----------------------------|---|---|---|----------|---|---|---|---|---|
| Production for the year (3) |   |   |   | <u> </u> |   |   |   |   |   |
| At December 31, (4)         |   |   |   |          |   |   |   |   |   |
| Developed                   | _ | _ | _ |          | _ | _ | _ | _ | _ |
| Undeveloped                 | _ |   |   | _        |   | _ | _ |   |   |



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

|   |             | 2017      |         |                 |                           | 2016                  |           |           |                |
|---|-------------|-----------|---------|-----------------|---------------------------|-----------------------|-----------|-----------|----------------|
| 0:1   | Worldwide   | Augontino | Other   | Worldwide       | Augontino                 | Other                 | Worldwide | Augontina | Other          |
| Oil equivalent (1)                            | worldwide   | Argentina | foreign | (Millions of ba | Argentina arrels of oil e | foreign<br>quivalent) |           | Argentina | <u>foreign</u> |
| Consolidated and<br>Equity-accounted entities |             |           |         |                 |                           |                       |           |           |                |
| At January 1,                                 |             |           |         |                 |                           |                       |           |           |                |
| Developed                                     | 815         | 815       | _       | 889             | 887                       | 2                     | 905       | 903       | 2              |
| Undeveloped                                   | 298         | 298       |         | 337             | 337                       |                       | 307       | 307       |                |
| Total   | 1,113       | 1,113     |         | 1,226           | 1,224                     | 2                     | 1,212     | 1,210     | 2              |
| At December 31,                               | <del></del> |           |         |                 |                           |                       |           |           |                |
| Developed                                     | 663         | 663       | _       | 815             | 815                       | _                     | 889       | 887       | 2              |
| Undeveloped                                   | 266         | 266       |         | 298             | 298                       |                       | 337       | 337       |                |
| Total   | 929         | 929       |         | 1,113           | 1,113                     |                       | 1,226     | 1,224     | 2              |

- \* Not material (less than 1)
- (1) Volumes of natural gas have been converted to barrels of oil equivalent at 5,615 cubic feet per barrel.
- (2) Revisions in estimates of reserves are performed at least once a year. Revision of crude oil, natural gas liquids and natural gas reserves are considered prospectively in the calculation of depreciation.
- (3) Barrel of oil equivalent production of consolidated entities for the years 2017, 2016 and 2015 includes an estimated approximately 25, 27 and 26 mmboe, respectively, in respect of royalty payments which, as described above, are a financial obligation, or are substantially equivalent to a production or similar tax. Barrel of oil equivalent production of equity-accounted entities in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax, are not material.
- (4) Proved oil equivalent reserves of consolidated entities as of December 31, 2017, 2016 and 2015 include an estimated approximately 119, 144 and 176 mmboe, respectively, in respect of royalty payments which, as described above, are a financial obligation, or are substantially equivalent to a production or similar tax. Proved oil equivalent reserves of equity-accounted entities in respect of royalty payments which are a financial obligation, or are substantially equivalent to a production or similar tax, are not material.

The paragraphs below explain in further detail the most significant changes in our proved reserves during 2017, 2016 and 2015.

### Changes in our estimated proved reserves during 2017

### • Extensions and Discoveries

As a result of wells drilled in unproved reserves and resources areas approximately 26 mmboe of proved developed reserves (7.4 mmbbl of crude oil, 1.9 mmbbl of NGL and 94 bcf of natural gas), and 54 mmboe of proved undeveloped reserves (11.7 mmbbl of crude oil, 3.4 mmbbl of NGL and 219 bcf of natural gas) were added.

Main proved undeveloped reserves additions are related to Unconventional and Tight Gas activities in the Neuquina basin, while proved developed reserves contributions come in most cases from the Neuquina and San Jorge basin projects.

### Improved Recovery

A total of approximately 32 mmboe of proved reserves were added mainly due to new projects and positive production response. Main contributions come from Neuquina basin (5.4 mmboe of proved developed and 10 mmboe of proved undeveloped reserves) while Golfo San Jorge basin addition was 5.6 mmboe of proved developed and 9.6 mmboe of proved undeveloped secondary recovery reserves.

### Sales and Acquisitions

As a net result of Sales and Acquisitions, 2.3 mmboe of proved developed reserves were added. These reserves increase is related to the change in participation for Aguada de la Arena field.

### • Revisions of Previous Estimates

During 2017, the Company's proved reserves were revised downwards by 96 mmboe (71 mmbbl of crude oil and 161 bcf of natural gas and an increase of 4 mmbbl of NGL).

The main revisions to proved reserves have been due to the following:

• As a result of 2017 lower average oil and gas prices and higher operating costs, its impact on incomes, and on fields economic limit, 105 mmboe of Proved Developed Reserves were deducted. Changes occurred mainly in fields of Neuquina basin (-60 mmboe), Golfo San Jorge Basin (-25 mmboe) and Cuyana Basin (-14 mmboe).



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

- New economic scenario also affected scheduled projects economics, resulting in a 20 mmboe Proved Undeveloped Reserves reduction mainly from oil fields of Neuquina basin (-15 mmboe) and Golfo San Jorge Basin (-3 mmboe).
- Total liquids and gas production performance from existing wells was better than expected, resulting in an addition of 25 mmboe to proved developed reserves, according to new reserves estimates. Upward revisions of 48 mmboe are primarily due to better than expected well performance mainly in the Neuquina basin (31 mmboe) and Golfo San Jorge basin (14 mmboe). Downward revisions of approximately 23 mmboe are mainly related to performance updates in certain wells in the Neuquina basin.
- A total volume of 5.6 mmboe of proved reserved was added due to feasibility studies performed to include new projects to field development plans, mainly in Golfo San Jorge basin (3.5 mmboe) and Neuquina basin (2.1 mmboe).
- Net production results and forecasts from some new wells were lower than expected, resulting in a 7 mmboe reduction of proved reserves. Main differences were found in Nequina and Golfo San Jorge basins.
- As a better than expected WO jobs performance, 4.2 mmboe of Proved Reserves were added, mainly in Golfo San Jorge and Neuquina basins.

### Changes in our estimated proved reserves during 2016

### Extensions and Discoveries

As a result of wells drilled in unproved reserves and resources areas, approximately 42 mmboe of proved developed reserves (15.5 mmbbl of crude oil, 3.8 mmbbl of NGL and 128.8 bcf of natural gas), and 79 mmboe of proved undeveloped reserves (29 mmbbl of crude oil, 7 mmbbl of NGL and 242 bcf of natural gas) were added.

The main proved undeveloped reserves additions are related to non-conventional and tight gas activities in the Neuquina basin, while proved developed reserves contributions are mainly from projects in the Neuquina and Golfo San Jorge basins.

### Improved Recovery

A total of approximately 35 mmboe of proved reserves were added, mainly due to new projects and positive production response. The main contributions come from the Golfo San Jorge basin (8 mmboe of proved developed and 17 mmboe of proved undeveloped reserves), while 7 mmboe of proved developed reserves and 2 mmboe of proved undeveloped secondary recovery reserves were added in the Neuquina basin.

### Sales and Acquisitions

As a net result of sales and acquisitions, 30.7 mmboe of proved reserves (19.5 mmboe of proved developed reserves and 11.2 mmboe of proved undeveloped reserves) were added. These reserves increases are related mainly to the acquisition of interests in the Río Neuquén and Aguada de la Arena fields.

### Revisions of Previous Estimates

During 2016, the Company's proved reserves were revised downwards by 89 mmboe (75 mmbbl of crude oil and 110 bcf of natural gas and an increase of 5 mmbbl of NGL).

The main revisions to proved reserves were due to the following:

As a result of a lower average oil price in 2016, its impact on incomes, and on the economic limit of fields, 105 mmboe of proved developed reserves were deducted mainly from oil fields. Changes occurred mainly in the fields of the Golfo San Jorge basin (-40 mmboe), the Neuquina basin (-43 mmboe), the Austral basin (-14 mmboe) and the Cuyana basin (-8 mmboe).

- New economic conditions also affected the economics of scheduled projects, resulting in a 45 mmboe reduction of proved undeveloped reserves, mainly from oil fields of the Golfo San Jorge basin (-16 mmboe), the Neuquina basin (-15 mmboe), the Austral basin (-12 mmboe) and the Cuyana basin (-2 mmboe).
- Total liquids and gas production performance from existing wells was better than expected, resulting in an addition of 68 mmboe to proved developed reserves, according to new reserves estimates. Upward revisions of 80 mmboe are primarily due to better than expected well performance mainly in the Neuquina basin (27 mmboe) and the Golfo San Jorge basin (42 mmboe). Downward revisions of approximately 12 mmboe are mainly related to performance updates in certain wells in the Neuquina basin.

### YPF SOCIEDAD ANONIMA NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2017, 2016 AND 2015



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

- A total volume of 12 mmboe of proved reserves was added due to feasibility studies performed to include new field development projects, mainly in the Neuquina basin (10 mmboe) and the Golfo San Jorge basin (2 mmboe).
- Net production and forecasts from some new wells were lower than expected, resulting in a 10 mmboe reduction of proved reserves. The main differences were found in the Neuquina, Golfo San Jorge and Austral basins.

### Changes in our estimated proved reserves during 2015

### • Extensions and Discoveries

Wells drilled in unproved reserves and resource areas added approximately 54 mmboe of proved developed reserves (20 mmbbl of crude oil, 2 mmbbl of NGL and 178 bcf of natural gas), and 93 mmboe of proved undeveloped reserves (24 mmbbl of crude oil, 8 mmbbl of NGL and 342 bcf of natural gas).

The main proved undeveloped reserves additions are related to unconventional and tight gas activities in the Neuquina basin, while proved developed reserves contributions come in most cases from the Neuquina and San Jorge basin projects.

### Improved Recovery

Approximately 23 mmboe of proved reserves were added mainly due to new projects and positive production response. The main contributions came from the Golfo San Jorge basin (8 mmboe proved developed reserves and 5 mmboe proved undeveloped reserves) and the Neuquina basin (5 mmboe proved developed reserves and 3 mmboe proved undeveloped reserves). Minor additions came from the Cuyana and Austral basins.

### • Sales and Acquisitions

As a result of sales and acquisitions, proved reserves declined by 16.3 mmboe (-8.2 mmboe proved developed reserves and -8.1 mmboe proved undeveloped reserves). This reduction in reserves was mainly related to a modification in the joint venture agreement in the Rincón del Mangrullo field. Additionally, in the El Orejano field, a new joint venture resulted in a reduction of proved developed reserves.

### • Revisions of Previous Estimates

During 2015, the Company's proved reserves were revised upwards by 71 mmboe (31 mmbbl of crude oil, 9 mmbbl of NGL and 175 bcf of natural gas).

The main revisions to proved reserves were due to the following:

- Total liquids and gas production performance was better than expected, resulting in a 56 mmboe (29.3 mmbbl of crude oil, 5.7 mmbbl of NGL and 117 bcf of natural gas) addition to proved developed reserves. The most significant additions came from the Neuquina and Golfo San Jorge basins. The main fields which performed below expectations were in the Austral basin, resulting in these cases in a reduction of proved reserves.
- Scheduled compression projects and corresponding production forecasts were reviewed according to the reservoir's current
  performance and the available compression technology. This revision resulted in a 21 mmboe addition to proved reserves in
  the Neuquina basin.
- Approximately 17 mmboe (8.8 mmbbl of crude oil and 47.4 bcf of natural gas) of proved reserves were added as a result of
  feasibility studies performed to include new projects pursuant to field development plans, mainly in the Golfo San Jorge
  basin. Proved reserves were also added in the Austral and Neuquina basins.

This was partially offset by:

- Mainly as a result of the impact of lower average oil prices in 2015 on economics, 21 mmboe (9.4 mmbbl of crude oil and 64.6 bcf of natural gas) of proved reserves were removed. This price reduction primarily affected reserves in the Austral, Golfo San Jorge and Neuquina basins.
- Net production and forecasts from some new wells were lower than expected, resulting in a 10 mmboe reduction of proved reserves. The main differences were found in the Neuquina and Golfo San Jorge basins.



# 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

### Capitalized costs

The following tables set forth capitalized costs, along with the related accumulated depreciation and allowances as of December 31, 2017, 2016 and 2015:

| Net capitalized costs | Accumulated depreciation and valuation allowances | Total capitalized costs | Unproved oil and gas properties | Drilling and work in progress | Support equipment and facilities | Mineral property, wells and related equipment | Proved oil and gas properties | Consolidated capitalized costs |       |      |
|-----------------------|---|-------------------------|---------------------------------|-------------------------------|----------------------------------|---|-------------------------------|--------------------------------|-------|------|
| 239,302               | (600,086)   | 839,388                 | 6,189                           | 40,567                        | 22,171                           | 770,461                                       |                               | Argentina                      |       |      |
| 558                   |   | 558                     | 558                             |                               |                                  |   |                               | foreign                        | Other | 2017 |
| 239,860               | (600,086)   | 839,946                 | 6,747                           | 40,567                        | 22,171                           | 770,461                                       |                               | Worldwide                      |       |      |
| 207,920               | (473,814)   | 681,734                 | 4,788                           | 36,966                        |                                  | 621,717                                       |                               | Argentina                      |       |      |
| 526                   |   | 526                     | 526                             |                               |                                  |   |                               | foreign                        | Other | 2016 |
| 526 208,446           | (473,814)   | 682,260                 | 5,314                           | 36,966                        | 18,263                           | 621,717                                       |                               | Worldwide                      |       |      |
| 193,429               | (327,579)   | 521,008                 | 6,473                           | 45,715                        | 16,920                           | 451,900                                       |                               | Argentina                      |       |      |
| 952                   | (3,811)   | 4,763                   | 451                             |                               |                                  | 4,312   |                               | foreign                        | Other | 2015 |
| 9 952 194,381         | (331,390)   | 525,771                 | 6,924                           | 45,715                        | 16,920                           | 456,212                                       |                               | Worldwide                      |       |      |

There is no Group's share in equity method investees' capitalized costs during the years ended December 31, 2017, 2016 and 2015.

### Costs incurred

The following tables set forth the costs incurred for oil and gas producing activities during the years ended December 31, 2017, 2016 and 2015:

There is no Group's share in equity method investees' costs incurred during the years ended December 31, 2017, 2016 and 2015.



# 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

## Results of operations from oil and gas producing activities

costs or corporate overhead and, therefore, is not necessarily indicative of the contribution to net earnings of the oil and gas operations The following tables include only the revenues and expenses directly associated with oil and gas producing activities. It does not include any allocation of the interest

operations that do not arise from those properties held by the Group. Differences between these tables and the amounts shown in Note 5 "Segment information", for the exploration and production business unit, relate to additional

|   |           | 2017    |           |               | 2016    |           |       | 2015    |           |
|---|-----------|---------|-----------|---------------|---------|-----------|-------|---------|-----------|
|   |           | Other   |           |               | Other   |           |       | Other   |           |
| Consolidated results of operations                | Argentina | foreign | Worldwide | Argentina     | foreign | Worldwide |       | foreign | Worldwide |
| Net sales to unaffiliated parties                 | 521       |         | 521       | 18,489        | 98      | 18,587    |       | 197     | 14,009    |
| Net intersegment sales                            | 115,955   |         | 115,955   | 95,496        |         | 95,496    |       |         | 64,191    |
| Total net revenues                                | 116,476   |         | 116,476   | 113,985       | 98      | 114,083   |       | 197     | 78,200    |
| Production costs                                  | (69,944)  |         | (69,944)  | (65,823)      | (39)    | (65,862)  | _     | (89)    | (44,044)  |
| Exploration expenses                              | (2,279)   | (168)   | (2,447)   | $\overline{}$ | (17)    | (3,157)   | _     | (127)   | (2,469)   |
| Depreciation and expense for valuation allowances | (45,277)  |         | (45,277)  | (38,036)      | (90)    | (38,126)  | _     | (148)   | (23,009)  |
| Impairment of Property, plan and equipment        | 5,032     | 1       | 5,032     | (34,943)      |         | (34,943)  | _     | (174)   | (2,535)   |
| Other   | (2,706)   |         | (2,706)   | (836)         |         | (836)     | _     | (56)    | (457)     |
| Pre-tax income (loss) from producing activities   | 1,302     | (168)   | 1,134     | (28,793)      | (48)    | (28,841)  |       | (397)   | 5,686     |
| Income tax expense / benefit                      | (456)     | 59      | (397)     | 10,434        | 16      | 10,450    | _     | 79      | (2,035)   |
| Results of oil and gas producing activities       | 846       | (109)   | 737       | (18,359)      | (32)    | (18,391)  | 3,969 | (318)   | 3,651     |
|   |           |         |           |               |         |           |       |         |           |

There is no Group's share in equity method investees' results of operations during the years ended December 31, 2017, 2016 and 2015.

### Standardized measure of discounted future net cash flows

determine reserves were calculated each month, for crude oils of different quality produced by the Group. assuming the future production would be sold at the prices used for reserves estimates as of year-end (the "average price"). Accordingly, crude oil prices used to income taxes and a discount factor. Future cash inflows represent the revenues that would be received from production of year-end proved reserve quantities The standardized measure is calculated as the excess of future cash inflows from proved reserves less future costs of producing and developing the reserves, future

in the international market), taking into account the unweighted average price for each month within the twelve-month period ended December 31, 2017 For the year ended December 31, 2017, the Group considered the realized prices for crude oil in the domestic market (which are higher than those that had prevailed

December 31, 2017. Additionally, since there are no benchmark market natural gas prices available in Argentina, the Group used average realized gas prices during the year ended



# 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

applying a discount rate of 10% per year to the annual future net cash flows. applying statutory rates to future cash inflows less future production costs and less tax depreciation of the properties involved. The present value was determined by with dismantling and abandonment of wells, assuming year-end costs continue without consideration of future inflation. Future income taxes were determined by inflation. Future development costs include the estimated costs of drilling development wells and installation of production facilities, plus the net costs associated Future production costs include the estimated expenditures related to production of the proved reserves, plus any production taxes without consideration of future

The future cash inflows and outflows in foreign currency have been remeasured at the selling exchange rate of Argentine pesos 18.599 as of December 31, 2017.

representative of the time value of money and the risks inherent in producing oil and gas. account, among other things, the expected recovery of reserves in excess of proved reserves, anticipated changes in future prices and costs and a discount factor The standardized measure does not purport to be an estimate of the fair market value of the Group's proved reserves. An estimate of fair value would also take into

| Total standardized measure of discounted future net cash flows | 10% annual discount for estimated timing of cash flows | Future income tax expenses | Future development costs | Future production costs | Future cash inflows (1) | discounted future net cash flows | Consolidated standardized measure of |      |
|--|--|----------------------------|--------------------------|-------------------------|-------------------------|----------------------------------|--------------------------------------|------|
| 66,433   | (16,935)   | (2,324)                    | (128,885)                | (349,819)               | 564,396                 | Argentina                        |                                      |      |
|  |  |                            |                          | I                       |                         | foreign                          | Other                                | 2017 |
| 66,433   |  | (2,324)                    | (128,885)                | (349,819)               | 564,396                 | Worldwide                        |                                      |      |
| 106,411  | (32,805)   | (29,956)                   | (120,862)                | (379,757)               | 669,791                 |                                  |                                      |      |
|  |  |                            |                          |                         |                         | foreign                          | Other                                | 2016 |
| 106,411  | (32,805)   | (29,956)                   | (120,862)                | (379,757)               | 669,791                 | Worldwide                        |                                      |      |
| 97,643   | (30,075)   | (30,724)                   | (116,524)                | (395,119)               | 670,085                 | Argentina                        |                                      |      |
| 122  | (56)   | (70)                       | (10)                     | (331)                   | 589                     | foreign                          | Other                                | 2015 |
| 97,765   | (30,131)   | (30,794)                   | (116,534)                | (395,450)               | 670,674                 | Worldwide                        |                                      |      |

 $\Xi$ For the years ended December 31, 2017, 2016 and 2015, future cash inflows are stated net of the effect of withholdings on exports until 2017 in accordance

There is no Group's share in equity method investees' standardized measure of discounted future net cash flows during the years ended December 31, 2017, 2016

### YPF SOCIEDAD ANONIMA NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS OF DECEMBER 31, 2017, 2016 AND 2015



### 35. SUPPLEMENTAL INFORMATION ON OIL AND GAS PRODUCING ACTIVITIES (UNAUDITED) (Cont.)

### Changes in the standardized measure of discounted future net cash flows

The following table reflects the changes in standardized measure of discounted future net cash flows for the years ended December 31, 2017, 2016 and 2015:

|  | 2017     | 2016     | 2015     |
|--|----------|----------|----------|
| Beginning of year  | 106,412  | 97,765   | 99,383   |
| Sales and transfers, net of production costs                                     | (53,759) | (52,025) | (52,321) |
| Net change in sales and transfer prices, net of future production costs          | (74,046) | (37,336) | (80,809) |
| Changes in reserves and production rates (timing)                                | 15,495   | 4,385    | 3,748    |
| Net changes for extensions, discoveries and improved recovery                    | 28,489   | 40,565   | 30,956   |
| Net change due to purchases and sales of minerals in place                       |          | 3,234    | _        |
| Changes in estimated future development and abandonment costs                    | (32,052) | (19,356) | (28,225) |
| Development costs incurred during the year that reduced future development costs | 22,475   | 28,689   | 24,475   |
| Accretion of discount  | 9,724    | 10,652   | 13,646   |
| Net change in income taxes   | 25,920   | 8,522    | 35,409   |
| Others   | 17,775   | 21,316   | 51,503   |
| End of year  | 66,433   | 106,411  | 97,765   |

There is no Group's share in equity method investees' changes in the standardized measure of discounted future net cash flows during the years ended December 31, 2017, 2016 and 2015.



### **CODE OF ETHICS AND CONDUCT**

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### Introduction

YPF S.A. is a company widely recognized for its high quality standards relative to the values and principles it promotes. Ethics is embedded in all its activities, focusing not only on the results but also on how they are achieved. YPF S.A. expects integrity across the Organization and shall not tolerate the accomplishment of goals in violation of the laws or ethical principles.

This Code of Ethics and Conduct demands the commitment of all those to whom it is addressed.

### 1. Considerations

These Regulations as well as any amendments thereto and any compliance exemption require the approval of the Board of Directors of YPF S.A. Besides, the Board of Directors of YPF S.A. may decide to extend its scope of application to other individuals whenever required by regulations applicable to YPF S.A.

The compliance of this Code of Ethics and Conduct (hereinafter the "Code of Ethics and Conduct" or the "Code") shall be the sole and personal responsibility of each and every Subject Person (as defined below). Upon publication of the application of this Code, no infringement based on lack of awareness or obedience to a superior officer shall be admitted.

All Subject Persons are expected to adopt a proactive attitude towards potential breaches, acting either on their own initiative or upon detection of incidents in breach of the Code of Ethics and Conduct.

Non-compliance of this Code shall result in disciplinary actions proportional to the breach involved, which may even lead to the termination of the employment or contractual relationship, as appropriate, and give rise to the initiation of the relevant legal proceedings.

This Code of Ethics and Conduct provides a wide guideline relative to the acceptable individual or corporate behavior. However, it cannot cover all potential situations. Consequently this Code does not relieve any of the Subject Persons from the responsibility or duty to exercise their sound judgment reflecting the values and principles outlined in this Code.

These Regulations together with other internal documents and instruments support YPF S.A. commitment to good corporate governance, transparency and social responsibility.

### 2. Purpose

The purpose of this Code is to establish the general guidelines that should rule the conduct of the Subject Persons at YPF S.A. and its subsidiaries (jointly "YPF").

### 3. Scope of Application. Subject Persons.

These Regulations are applicable to the Directors and employees of YPF (hereinafter "the Directors and Employees"), regardless of their geographical location, as well as its contractors, sub-contractors, vendors and business partners carrying on business with YPF (hereinafter, jointly with the Directors and Employees, the "Subject Persons").

### 4. Related Rules and Regulations

The contents of this Code, as well as any other related policy and internal rules are in line with the international and national laws, rules and regulations governing the Company's activity.

Upon the publication of this Code, references to the specific rules and standards issued by the Company will be included in each case.

### 5. Ethics Committee and Ethics Line

The "Ethics Line" is a system for reporting, among other things, situations and/or acts that might constitute an actual or potential breach of this Code.

YPF shall encourage the use of this Line and ensure that the good faith reports informed through it shall not be subject to reprisals affecting the employment and/or contractual relationship and professional development of the reporting party.

The "Ethics Line" shall be supervised by YPF's Ethics Committee, which is in charge of implementing the Code of Ethics and Conduct of YPF, and assessing and establishing the actions required to address the reported situations.

The Committee will be composed of five members, three of which shall serve as Internal Auditor, Legal Affairs Corporate Vice-President and Human Resources Vice-President, while the other two will be appointed by the Chairman of the Board of Directors of YPF S.A. from among the employees discharging functions in operative or business areas. The presence of an absolute majority of its members shall be required at Committee meetings and decisions shall be adopted by a simple majority. Investigations shall be conducted by an Ethics and Compliance Officer reporting to the Legal Affairs Vice-Presidency.

Any situation contrary to this Code informed by, or related to the behavior of the members of the Company's Board of Directors shall be reported to the Audit Committee. The following situations shall also be reported forthwith to the Audit Committee: i) any situation that might have an impact on the supervision of the financial information or material events submitted to the National Securities Commission (*Comisión Nacional de Valores*) and the markets; and ii) any report related to the operation of YPF's internal control, administrative-accounting and audit systems.

### 6. Contents

### 6.1. Corporate Ethical Values

All the activities undertaken by the Directors and Employees shall be based on ethical values and basic principles that guide our corporate ethical conduct. These values are:

**Integrity**: Maintaining an irreproachable behavior aligned with rectitude and honesty. Promoting strict coherence between corporate practices and corporate ethical values.

**Transparency**: Disclosing true, proven, adequate and faithful information about our management and establishing clear internal and external communications.

**Responsibility:** Assuming responsibilities and acting accordingly, making every effort to achieve these goals.

**Safety:** Providing optimum working conditions in terms of health and safety. Demanding high safety standards for processes, facilities and services, focusing on the protection of our employees, contractors, clients and the local environment, and conveying this principle to the entire Organization.

Sustainability: Developing our activities based on the principles of environmental protection and sustainable development.

**Human Rights:** Respecting human rights constitutes a cornerstone to develop the activities of YPF, and it is committed to safeguarding such respect.

**Gender Equality:** YPF guarantees that both women and men shall receive the same treatment and opportunities to grow within the company, with identical conditions and possibilities, including those of economic nature, for persons holding the same offices. In addition, YPF will ensure equal access to institutional programs and benefits for both genders.

The violation of this Corporate Ethical Value by Directors and/or Managers and/or Senior Staff will be considered a serious fault and will be subject to the disciplinary actions set forth in this Code of Ethics and Conduct.

The Board's Compliance Committee will receive and investigate all reports related to this issue, and will submit its conclusions, opinions and recommendations to the Board, the Ethics Committee and the Ethics Line, or otherwise to the Human Resources Vice President, when and as appropriate.

An e-mail address will be made available for the sole purpose or receiving reports on this issue, which shall be treated confidentially by the Compliance Committee.

The remaining Subject Persons are bound to respect this Corporate Ethical values and to act in strict compliance thereof.

### 6.2. Code of Ethics and Conduct

The Corporate Ethical Values constitute the basic guidelines that should inspire the behavior of Directors and Employees in the performance of their duties in compliance with the principles of loyalty to the Company, good faith, integrity, respect for the law and ethical values. Besides, they enable to define the rules of conduct that should be observed by all Subject Persons in their professional performance.

Although these regulations are not meant to cover all the potential situations that may arise in the professional sphere, it sets the minimum behavioral standards that should guide the actions of the Subject Persons in the performance of their professional duties.

### 6.2.1. Commitment to the highest ethical standards of business conduct

YPF expects all Subject Persons to conduct themselves in full compliance with the provisions of this Code, which implies:

- Abiding by all municipal, provincial, national and international rules and regulations in force applicable to, and binding upon YPF, its staff and third parties.
- Complying with the general conduct guidelines laid down in this Code.
- Assuming responsibilities for their acts.
- Following all of YPF existing policies and procedures.
- Making adequate use of YPF property, time frames, equipment and other resources.

The appropriate application of this Code demands that Subject Persons are familiarized with its contents, its supplementary regulations and the relevant legal provisions that may become applicable to the activities undertaken as a consequence of their performance in the Company or arising from their relationship with YPF, as appropriate.

Any doubt regarding the interpretation of this Code or about how to proceed when faced with situations not specifically covered herein shall be submitted to the Ethics Committee for its consideration and clarification.

Notwithstanding any other responsibility that may arise, the violation of the guidelines and rules of conduct set forth in these Regulations by the Directors and Employees shall be subject to the disciplinary actions established under the applicable labor legislation and/or any other applicable regulations. It may also result in the imposition of the penalties and other disciplinary measures specified in the documents ruling the relationship of YPF with the remaining Subject Persons.

### 6.2.2. Equal opportunities and non-discrimination

The Directors and Employees shall treat each other with respect and promote a comfortable, healthy and safe environment. Subject Persons shall refrain from any type of offensive behavior or discrimination on the grounds of religious beliefs, political opinions, trade union membership, nationality, language, gender, marital status, age or disability or any other personal distinction.

Under no circumstances shall Subject Persons engage in any harassment, abuse of authority, threats, pressures, psychological harassment, or any other insulting, aggressive and hostile behavior contributing to a climate of intimidation.

### 6.2.3. Use and protection of assets

Subject Persons are responsible for the protection of the resources of YPF entrusted to them for the performance of their work, as well as YPF's assets.

Assets (including YPF intangible property rights, facilities, systems, communication tools and applications) shall not be used for purposes that are not directly related to the work at YPF, unless an express exception is granted by YPF.

Particularly, regarding assigned IT resources, Subject Persons shall refrain from using such assets for personal purposes, including but not limited to the use of e-mail or any other form of IT communication, as well access to the Internet.

YPF reserves the right to control and monitor the use of the assets assigned in accordance with the regulations in force.

Subject Persons expressly acknowledge that the use of information, systems, and in particular, the Internet services shall be based on YPF's needs and not on personal interests, and that the information they may generate or send by means of the tools and networks provided by YPF shall not be deemed confidential.

The information produced and stored in YPF systems is deemed the property of YPF and therefore, YPF reserves the right to its access.

Any information that may be deemed illegal, abusive or inadequate shall by no means be processed, downloaded, stored and/or disclosed. It is forbidden to download, store, copy and/or disclose, by any means, information and/or contents of any kind whatsoever in violation of intellectual property laws. Also, it is forbidden to download, install, transmit and/or use software in breach of any copyright or service.

### 6.2.4. Conflict of interests

Directors and Employees may engage in financial and business activities other than those carried out by YPF provided they are legal and their performance does not generate any conflict of interests with their responsibilities as employees and/or officers of YPF.

Directors and Employees shall avoid any situation that might give rise to a conflict between their personal interests and those of YPF, and will abstain from representing YPF, getting involved or influencing decisions, in any situation in which they may have a direct or indirect personal interest. They shall always act in accordance with their duties, with loyalty, defending the interest of YPF, and in compliance with the applicable regulations.

Furthermore, Directors and Employees may not undertake any tasks, jobs of render services to the benefit of companies in the industry or carrying on activities that are likely to compete, directly or indirectly, with those of YPF.

Directors and Employees shall:

- Inform their direct or indirect ownership interest, whether held by themselves or through third parties and/or family
  members, in supplier companies, clients, competitors, contractors and/or sub-contractors of YPF.
- Avoid making recommendations for YPF to engage in business activities with a company in which the employee may have a
  direct or indirect personal interest.
- Refrain from granting to other companies, organizations or individuals undue advantages in any business transaction, being bound to adopt an impartial position.
- Avoid getting involved in relations that might give rise to an actual or potential conflict with YPF, or that might otherwise have a negative impact on their own freedom of action or on the freedom of action of Director or employee of YPF.
- Refrain from using YPF's property or information by virtue of their office in the company for their own or third parties' personal benefit or to compete with YPF.

Directors and Employees who might be affected by a conflict of interests shall report this situation to the Ethics or Audit Committee, as appropriate, before carrying out the transaction or closing the relevant deal, for the respective committee to assess if the impartial performance thereof could be compromised.

In the event of a suspected conflict of interests, the same is to be reported to the Ethics Committee through the Ethics Line.

The Ethics Committee may delegate the reports management process, ensuring that the ethics line principle of non-retaliation will be applied in order to protect the employment and/or contractual relationship or professional development of those reporting suspected situations in good faith.

### 6.2.5. Gifts, courtesies and promises

Directors and Employees shall not accept, by reason of their office, any kind of gifts, courtesies, services or favors from an individual or entity that might affect their objectivity or influence a commercial, professional or administrative relationship.

Moreover, they shall not, directly or indirectly, make gifts or promises to any individual or entity that has or could have a commercial, professional or administrative relationship with YPF, when these might be deemed improper in the normal course of business, and in any case, they shall be made in compliance with the law, the beneficiary's regulations and procedures and the procedures in place at the relevant unit. The offering of gifts, incentives or benefits of any kind with the purpose of influencing the decisions made by the beneficiary is strictly forbidden.

Directors and Employees shall not request or receive personal gifts from third parties who do or intend to do business with YPF.

### Receipt of gifts:

- Any gift with a market value in excess of USD 100 (one hundred United States Dollars) or its equivalent in local currency, or
  any items other than promotional products bearing the company's logo or name (such as pens, watches, T-shirts with logos,
  small basket for Christmas, etc.) shall be returned.
- The receipt of any other kind of gift (such as trips, loans, training courses, personal courtesies, etc.) and/or promises of such gifts, shall be reported to the immediate superior who shall be responsible for the custody of the said items and taking the following steps:
  - Return it immediately to the third party.
  - If no return were possible, refer it to Fundación YPF.
- All invitations received to take part in business events, conventions, conferences, commercial presentations or technical courses, shall be authorized by the immediate superior.

### **Delivery of gifts:**

Corporate or business gifts need to be previously authorized in accordance with the relevant Company's process. They require the authorization of the area manager when the gift's market value exceeds USD 100 (one hundred United States Dollars) or its equivalent in local currency.

Giving or receiving money in cash, cash equivalents or assets readily convertible into cash is not allowed under any circumstance. YPF and its employees are responsible for making these criteria timely known to its clients and vendors.

The provisions set forth in this paragraph shall be applicable to all the other Subject Persons.

### **6.2.6.** Information transparency

Subject Persons shall take the necessary precautions to ensure the transparent management of information.

This commitment to transparent and genuine information is also applicable to the Company's internal communication.

All YPF's transactions should be clearly and accurately reflected in its files, records and books.

Subject Persons shall maintain the strictest confidentiality of any information they may become aware of and which could affect the prices of YPF securities or their trading process. If appropriate, YPF will be responsible for disclosing the relevant information.

The rules applicable to information transparency in the stock markets are provided for in the Exhibit to this Code entitled "YPF S.A. Internal Regulations for Conduct in the Securities Market".

### Reserved and confidential information

YPF is aware that information is one of its key assets and that it is essential for the management of its activities. The Company has, therefore, developed an information security policy applicable to the Subject Persons designed to safeguard the integrity, availability and confidentiality of information by means of its correct identification and classification in order to prevent its dissemination, loss and/or corruption. Any information owned or entrusted to YPF that is not of public nature is considered confidential.

Disclosing, disseminating and using confidential information for personal or unauthorized purposes constitutes a breach of the duty of loyalty to YPF and may give rise to liability actions and/or the application of the respective sanctions.

In consideration of the above, the Subject Persons undertake the following duties:

- To safeguard and refrain from disclosing the information to which they have access in the performance of their professional
  activities.
- No to disclose to third parties any information, technical or IT knowledge, data, study results and statistics of any kind, save upon the prior express and written approval of YPF in accordance with the standards and regulations in place.
- The Directors and Employees shall refrain from deriving personal benefits from the use of confidential information or from the knowledge of business opportunities available thereto due to their position in YPF.
- To meet the requirements relative to the access to confidential information, unless its disclosure were required by the law.
- The Directors and Employees who, by reason of their position or professional activity have access to information from YPF clients, vendors, directors and/or employees, shall be responsible for its protection and appropriate use.
- Not to use confidential information for fraudulent purposes. The restriction on use and non-disclosing duty shall survive the termination of the employment, business or any other type of relationship with YPF.

In case of doubt, any information shall be presumed to be confidential.

### 6.2.7. Use of privileged information

The trading of YPF securities based on material non-public information, or furnishing this information to third parties is illegal and may lead to legal actions.

The Subject Persons under this Code shall take the strictest care to protect the confidentiality of, and may not disclose, directly or indirectly, any relevant non-public information, including highly sensitive information that could affect the price of YPF securities or their trading process in the markets. Any breach of the existing policy for the management of this type of information may derive in legal actions against the person involved.

The Subject Persons investing in YPF securities acknowledge being sufficiently informed about the rules that restrict their capacity to trade the same or to provide sensitive information to third parties, as well as their duty to abide by the policies and trading abstention periods that might be applicable to the circumstances being faced by YPF.

### 6.2.8. Prohibited periods for trading YPF securities

Subject Persons who possess material non-public information of YPF relative to the Company's financial results, i.e. privileged information, may not trade in YPF securities during the period starting fifteen (15) calendar days prior to the presentation of the Company's (annual or quarterly) financial results and ending two (2) trading days following their publication. Also, they shall abstain from trading in YPF securities if they possess any other privileged information until it is made public.

### 6.2.9. Commitment to fair and free competition

Subject Persons shall not engage in any deceitful advertising of YPF's business activity and shall avoid any behavior that is or could be considered an unlawful abuse or a restriction to free competition.

### 6.2.10. Termination of the relationship with YPF and its subsidiaries

Upon termination of the Subject Persons' relationship with YPF, they shall refrain from using any information obtained during the performance of their duties at YPF, including client lists and relationships.

Subject Persons acknowledge and accept that any work developed for YPF, whether considered intellectual property or not, is exclusively and fully owned by YPF. Reports, proposals, studies, programs and any other product resulting from the professional activity discharged at YPF shall remain in the possession of YPF. Moreover the Subject Person no longer serving the Company shall not copy, reproduce or disclose the same without the written approval from YPF.

Subject Persons further undertake to return all materials owned by YPF which are in their possession upon the termination of their activity at YPF.

### 6.2.11. Anti-bribery and anti-corruption measures

Subject Persons shall not directly or indirectly make or offer any payment in cash, in kind or any other benefit to any person at the service of a public or private entity, political party or candidates to public offices with the intention of unlawfully procuring, gaining or maintaining a given business or any other advantage.

Furthermore, Subject Persons shall not directly or indirectly make or offer any payment in cash, in kind or any other benefit to any person with the intention of causing the latter to abuse its actual of presumed influence to conclude a deal or derive another advantage from a public or private entity.

Likewise, they shall not directly or indirectly make or offer any payment in cash, in kind or any other benefits to any person if they are aware that all or part of the payment in cash or in kind will be offered or handed over directly or indirectly to a private or public entity, political party or candidates to public offices for any of the purposes mentioned in the preceding paragraphs.

Subject Persons shall not make any payments in cash or deliver any items of value, regardless of their amount, to facilitate or speed up processes or to ensure the course of a procedure or action before any judicial authority, public administration or official body in which YPF is involved for the benefit or in the interest of YPF.

In addition to the consequences of violating these Regulations provided in the specific paragraph hereof, and other consequences not related to employment/contractual issues, Subject Persons acknowledge that the breach of the provisions of this paragraph may cause a considerable damage to the reputation and good name of YPF.

In order to prevent and avoid the laundering of money from criminal or illegal activities, the Directors and Employees shall devote special attention to cases where there are signs of lack of integrity of the individuals or entities with whom business is carried out, as well as observing their duty to comply with the applicable legal provisions.

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### **EXHIBIT** to the Code of Ethics and Conduct of YPF S.A.:

### YPF S.A. INTERNAL REGULATIONS FOR CONDUCT IN THE SECURITIES MARKET

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### 1. PURPOSE

- 1.1. The purpose of these YPF S.A. Internal Regulations for Conduct in the Securities Market is to define the principles and framework for action in the securities market, for directors and employees of YPF S.A. (hereinafter, "YPF" or "the Company"), as well as its statutory auditors and external advisers.
- **1.2.** The wording of these Regulations complies —to the extent applicable— with current regulations governing the securities markets where YPF is authorized for public offering.
- **1.3.** These Regulations also incorporate the best practices on the matter, in order to foster the transparency and proper operation of markets and to preserve investors' legitimate interests.

### 2. SCOPE OF APPLICATION

### 2.1. Subjective Scope:

Without prejudice to YPF S.A.'s obligations as a legal entity in matters pertaining to these Regulations, the following persons are bound to comply with these Regulations (hereinafter, the "Subject Persons"):

- a) The members of YPF's governing body (the "Directors").
- b) YPF's employees.
- c) External advisers, for the purposes provided in Section 4. The term "external adviser" refers to any individual or legal entity rendering consulting, financial, legal or any other kind of services to YPF or its subsidiaries and, therefore, with access to Privileged Information.
- d) Members of YPF's supervisory committee (the "Statutory Auditors").

### 2.2. Objective Scope

These Regulations apply to the following marketable securities or financial instruments:

- Securities issued by YPF and its subsidiaries, which are traded or whose admission to trading has been requested, on Argentine or overseas securities markets.
- b) The financial instruments conferring the right to purchase or sell the aforementioned securities.
- c) The financial instruments whose underlying assets are securities or instruments issued by YPF or its subsidiaries.

d) Securities issued by other companies controlled by YPF, which are traded or whose admission to trading has been requested, on Argentine or overseas securities markets.

### 3. RULES OF CONDUCT REGARDING THE PURCHASE AND SALE OF SECURITIES AND FINANCIAL INSTRUMENTS ISSUED BY YPF S.A. AND ITS SUBSIDIARIES

### 3.1. Initial notice

Any Subject Persons that have subscribed for, purchased or sold —whether in cash or credit—any of the securities or instruments referred to in Section 2.2 for their own account, shall notify the Vice-Presidency of Human Resources within two (2) days subsequent to such operation. The notice shall describe the pertinent operation and specify the date, quantity and price involved.

Any non-employee Directors of the Company as well as the Statutory Auditors shall address such notice to the Board of Directors' Secretary.

The External Advisers shall address the notice to the Finance Vice-Presidency.

The obligation to send this notice is without prejudice to any other obligations set forth in current regulations governing the markets where the securities and instruments mentioned in Section 2.2 are traded.

### 3.2. Related Persons

Any transactions made by the following individuals/legal entities related to the Subject Persons (hereinafter referred to as "Related Persons") shall be deemed equivalent to the own-account trading by the Subject Persons:

- a) The Subject Person's spouse.
- b) The Subject Person's minor children under parental authority.
- c) Any legal entities controlled by the Subject Persons.
- d) Any other individual or legal entity acting on behalf or in the interest of Subject Persons.

### Prohibited trading period

The provisions set forth in Clause 6.2.8 "Prohibited periods for trading of YPF's securities" in the Code of Ethics and Conduct of YPF S.A. shall apply to the Subject Persons, with regard to the period of prohibition for trading in the securities or instruments referred to in Section 2.2., that is, the period starting fifteen (15) consecutive days prior to the Company's reporting of its annual and quarterly financial results and ending two (2) trading days after their publication, when the Subject Persons are in possession of YPF's non-public and material information about its results, i.e. Privileged Information. If the Subject Persons are in possession of any other Privileged Information, they shall refrain from trading in YPF's securities as soon as they become acquainted with such information, until it is officially in the public domain.

### 4. PRIVILEGED INFORMATION

### **4.1.** Privileged Information: Concept

"Privileged Information" means any specific information about the securities and instruments mentioned in Section 2.2 which is not in the public domain yet.

For illustrative purposes, the following is regarded as Privileged Information:

- The financial results of YPF S.A. or of any Group companies, or unreleased financial statements.
- Extraordinary changes in said financial results, or modifications of result estimates formerly disclosed to the public.
- Any forthcoming operations by the Company, such as capital increase, issuance of securities, or dividend distribution proposals.
- Mergers, or significant acquisitions or divestments of any kind of assets.
- Any events giving rise to litigation, disputes or penalties with a potential material impact on the financial statements.
- Decisions by authorities prior to their becoming public knowledge.
- Other similar facts, events or situations.

### **4.2.** Loss of Privileged Information status

Any Privileged Information shall be no longer regarded as such immediately after it is made public.

### **4.3.** Prohibitions

Subject Persons in possession of any kind of Privileged Information and who are aware or should have been aware of such Privileged Information status, shall refrain from directly or indirectly engaging in the following practices, either for their own account or on behalf of third parties:

a) Preparing, facilitating, participating in or performing any kind of market transaction in respect of the securities or instruments specified in Section 2.2., with reference to or based on Privileged Information, for their own benefit or for the benefit of Related Persons or third parties.

- b) Disclosing said Privileged Information to third parties, except in the normal course of their work, profession, position or office, subject to the requirements stated herein.
- c) Recommending third parties to purchase, sell or transfer the securities and instruments mentioned in Section 2.2, or causing other persons to purchase, sell, or transfer them, on the basis of Privileged Information.

### **4.4.** Obligation to safeguard the Privileged Information

- a) Any persons in possession of Privileged Information have the obligation to safeguard it, without prejudice to their duty to report to and cooperate with judicial and administrative authorities under the terms stipulated in the applicable legislation.
- b) Any persons in possession of Privileged Information shall also take adequate measures to prevent the misuse or unfair use of that information.
- c) Furthermore, in the event of misuse or unfair use of Privileged Information, anyone aware of this fact shall immediately report it to the responsible officer.

### 4.5. Actions during the evaluation or negotiation of operations regarded as Privileged Information

### **4.5.1.** Monitoring of market prices

The Finance Vice-Presidency shall oversee the market performance of the securities and instruments mentioned in Section 2.2., as well as the news published or broadcast by professional reporters of economic information and the media, and which might affect said securities and instruments during the evaluation or negotiation of any kind of legal or financial operation regarded as Privileged Information (hereinafter, the "operation").

### **4.5.2.** Public announcement in case of breach of secrecy

In the event of abnormal behavior of trading prices or volumes of the securities and instruments indicated in Section 2.2., the Finance Vice-Presidency shall immediately report to the Board Chairman who shall, if necessary and if there are reasonable signs that such behavior is due to premature, partial, or distorted disclosure of the operation in question, take any pertinent measures to promptly issue a public statement clearly and precisely indicating the status of this ongoing operation or giving a preview of the information to be released in due course.

### **4.5.3.** Safeguard measures

Subject Persons shall:

- a) Limit the access of Privileged Information to the strictly necessary number of persons within the organization or external advisers.
- b) Expressly warn the recipients of the confidential nature of such information and their prohibition to use it.

 Implement security measures for the safekeeping, filing, access, reproduction, and distribution of Privileged Information.

### **4.6.** Compliance with securities market regulations

The Subject Persons in possession of Privileged Information shall strictly comply with current Securities Market regulations where YPF is authorized for public offering, as well as with these Regulations and any other applicable provisions in effect.

### 5. RELEVANT INFORMATION

### 5.1. Relevant Information: Concept

The term "Relevant Information" refers to every fact or situation that, in view of its significance, might materially affect the placement of securities, their trading or the conduct of the Subject Person's business. The concept of Relevant Information equally includes any information whose knowledge might reasonably influence an investor to acquire or transfer securities or other financial instruments, with the consequent material effect on their trading on a secondary market.

### **5.2.** Duty to report Relevant Information

YPF hereby undertakes to immediately inform the market through a notice addressed to the National Securities Commission (*Comisión Nacional de Valores – CNV*) as well as to any pertinent entities according to the markets where YPF's securities are traded, of any Relevant Information concerning the Company, in compliance with applicable regulations. Where appropriate, YPF's Internal Transparency Committee —created by the Board of Directors and composed by the Company's senior executives—shall take cognizance of this situation and proceed accordingly.

### 5.3. Content of Relevant Information

Any Relevant Information conveyed to the market shall be accurate, clear, quantified and complete, and shall not be confusing, misleading or deceptive.

### **5.4.** Confidential Relevant Information

When the Company believes that any Relevant Information should not be made public because its disclosure might impair the corporate interest, it shall immediately request the CNV to relieve the Company of its reporting obligation to investors, pursuant to the Capital Markets Law No. 26,831, the CNV's rules and any other applicable legislation.

### 6. TRANSACTIONS IN OWN SECURITIES

### **6.1.** Applicable legislation

The determination and execution of specific plans for the acquisition or sale of YPF S.A.'s shares shall conform to the provisions of Law 26,831, the CNV'S Rules, the Business Companies' Act and any other amending, supplementary or regulatory provisions on the matter and any other rules governing the markets where the Company is admitted to public offering.

### **6.2.** Notices

YPF's Investor Relations Management – Finance Vice-Presidency shall issue the pertinent official notices about the Company's transactions in its own securities, as required by current provisions, and shall keep an adequate control and record of such transactions.

### 7. MANIPULATION OF SECURITY PRICES

### 7.1. Prohibition

Subject Persons shall refrain from preparing or conducting practices that falsify free pricing, and from those stipulated in Section 117, subsection b) of Law 26,831 and Section 2, Chapter III, Title XII (Listing Transparency) of CNV's Rules (as amended in 2013), and any regulatory or superseding provisions thereof.

### **7.2.** Prohibited practices

This term encompasses practices and behaviors aimed at or allowing for the manipulation of prices or trading volume of securities, thereby altering the normal development of the supply and demand, and any other practices capable of misleading market participants, in respect of the purchase or sale of any listed securities, whether by means of artifices, false or inaccurate statements omitting basic facts or any act, practice or course of action with deceptive and detrimental effects on any person operating in the market.

### 8. CONFLICTS OF INTEREST

### **8.1.** Prior communication

In order to control any potential conflicts of interest, all Subject Persons shall inform the Ethics Committee and/or the Audit Committee (in the case of Board members), before conducting any transaction or concluding any business, with sufficient time in advance to enable the timely implementation of adequate measures, regarding situations that might potentially, and in each specific circumstance, give rise to a conflict of interest with YPF or any subsidiary and/or affiliate, by virtue of said Subject Persons' activities outside YPF, or those of their relatives or acquaintances, their assets, or for any other reason, and that might compromise their impartial performance.

### **8.2.** Duty of abstention

The Subject Persons shall refrain from participating in situations that might give rise to a conflict between their personal interests—and/or the interest of Related Persons—and YPF's interests. The Subject Persons shall also abstain from participating in or exerting influence over decisions regarding situations where a personal interest is at stake, whether directly or indirectly; in all cases, the Subject Persons shall act loyally toward YPF.

### 9. EFFECTIVE TERM

These Regulations shall become effective upon the entry into force of the Code of Ethics and Conduct of YPF S.A., to which these Regulations are appended. The Regulations shall be periodically reviewed and updated in order to take account of all current legal and regulatory provisions as well as the best practices on the matter.

The Vice-Presidency of Human Resources undertakes to distribute these Regulations among the Subject Persons; to this end, each Subject Person shall sign a document whose content will be identical to the model attached hereto as Appendix I.

### 10. MANDATORY OBSERVANCE

Observance of these Regulations is mandatory for Subject Persons.

### 11. BREACH

Failure to comply with the provisions of these Regulations shall be deemed a labor violation or contractual breach (as appropriate), whose seriousness will be determined in the proceedings to be pursued in accordance with current legal provisions.

The foregoing shall be without prejudice to any other penalties for violation of Law 26,831, the CNV's Rules and any other applicable provisions, as well as the pertinent civil and/or criminal liability to which the breaching party may be subject.

### 12. SUPERVISION

The performance of the obligations hereunder shall be supervised by YPF's Ethics Committee, Audit Committee or Internal Transparency Committee, as the case may be.

### APPENDIX I

Statement of acknowledgment and acceptance of YPF S.A. Internal Regulations for Conduct in the Securities Market

| Affirmant                | •                          |   |
|--------------------------|----------------------------|---|
|                          |                            | (Name and Surname)  |
| C.U.I.L.<br>Tax<br>No.]: | [Employee's Identification | E-mail address:   |
|                          |                            | 7.  |
| the Board o              | of Directors on Aug        | owledges and accepts YPF S.A. Internal Regulations for Conduct in the Securities Market, approved by gust 7, 2014, and that he/she has received a copy of such document, undertaking to duly observe its cable to his/her position. |
|                          |                            | Signature:  |
|                          |                            | Print Name:   |
| In                       | , on this                  | _ day of, 20  |
|                          |                            |   |

### **302 CERTIFICATION**

- I, Daniel González, certify that:
- 1. I have reviewed this annual report on Form 20-F of YPF S.A.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 23, 2018.

/s/ Daniel González

Daniel González Chief Executive Officer

### 302 CERTIFICATION

- I, Diego Martín Pando, certify that:
- 1. I have reviewed this annual report on Form 20-F of YPF S.A.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 23, 2018.

/s/ Diego Martín Pando

Diego Martín Pando Controller (Principal Financial Officer)

### 906 CERTIFICATION

The certification set forth below is being submitted in connection with the Annual Report on Form 20-F for the year ended December 31, 2017 (the "report") for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Daniel González, the Chief Executive Officer and, Diego Martín Pando, the Controller (Principal Financial Officer) of YPF S.A., each certifies that, to the best of their knowledge:

- 1. the report fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
- 2. the information contained in the report fairly presents, in all material respects, the financial condition and results of operations of YPF S.A.

Date: April 23, 2018.

/s/ Daniel González

Daniel González Chief Executive Officer

/s/ Diego Martín Pando

Diego Martín Pando Controller (Principal Financial Officer)

### Gaffney, Cline & Associates

Gaffney, Cline & Associates, Inc.

5555 San Felipe St., Suite 550 Houston, TX 77056 Telephone: +1 713 850 9955

www.gaffney-cline.com

April 23, 2018

YPF Sociedad Anónima Macacha Güemes 515 C1106BKK Buenos Aires Argentina

### Ladies and Gentlemen:

We hereby consent to the references to Gaffney, Cline & Associates and to the inclusion of our third-party letter report dated February 21, 2018, as set forth under the sections "Item 4 Information on the Company–Exploration and Production Overview–Oil and Gas Reserves," "Item 19 Exhibits," and as Exhibit 99.1 in YPF Sociedad Anónima's (YPF S.A.) report on Form 20-F for the year ended December 31, 2017, to be filed with the United States Securities and Exchange Commission (SEC).

Our third-party letter report dated February 21, 2018, contains our independent audit of the proved crude oil, condensate, natural gas liquids, gasoline and marketable gas reserves as of December 31, 2017, of certain selected properties in Argentina in which YPF S.A. holds interests.

Yours sincerely, Gaffney, Cline & Associates

> Daniel Amitrano Principal Advisor

### Gaffney, Cline & Associates

Gaffney, Cline & Associates, Inc.

5555 San Felipe St., Suite 550 Houston, TX 77056 Telephone: +1 713 850 9955

www.gaffney-cline.com

February 21, 2018

Mr. Carlos Colo Auditor de Reservas **YPF S.A.** Macacha Guemes 515 C1106BKK Buenos Aires Argentina

carlos.colo@ypf.com

Dear Mr. Carlos Colo,

### Proved Hydrocarbon Reserves Statement for YPF S.A. for Certain Argentine Properties as of December 31, 2017

This Proved reserves statement has been prepared by Gaffney, Cline & Associates (GCA) and issued on February 21, 2018 at the request of YPF S.A. (YPF or "the Client"), in respect of certain assets in Argentina where YPF has a participating interest. YPF's participating interest in each asset is shown in Appendix V. This report is intended for inclusion in YPF's filings (20-F, F-3) with the United States Securities and Exchange Commission.

GCA has conducted an independent audit examination as of December 31, 2017, of the hydrocarbon liquid and natural gas proved reserves of 50 units. On the basis of technical and other information made available to GCA concerning these property units, GCA hereby provides the reserves statement in the following table:

### Statement of Remaining Hydrocarbon Volumes YPF S.A. Certain Properties in Argentina as of December 31, 2017

|                         | Gross (100° | %) Field |           |          |
|-------------------------|-------------|----------|-----------|----------|
|                         | Volum       | nes      | YPF Net F | Reserves |
|                         | Liquids     | Gas      | Liquids   | Gas      |
| Reserves                | (MMm3)      | (Bm3)    | (MMm3)    | (Bm3)    |
| Proved                  |             |          |           |          |
| Developed Producing     | 21.1        | 23.5     | 13.5      | 13.4     |
| Developed Non Producing | 0.2         | 0.6      | 0.1       | 0.3      |
| Undeveloped             | 9.5         | 10.7     | 6.8       | 7.7      |
| Total Proved            | 30.8        | 34.8     | 20.3      | 21.4     |

### Notes:

- 1. Gross Field (100%) Volumes represents 100 working interest.
- 2. YPF Net Reserves represent YPF's working interest volumes and therefore include volumes related to royalties payable to the relevant Argentine provinces. According to YPF's accounting procedures, royalties are accounted for as a cost of production and are not deducted in determining reserves.
- 3. Hydrocarbon liquid volumes represent crude oil, condensate, gasoline and NGL estimated to be recovered during field separation and plant processing and are reported in millions of stock tank cubic meters (MMm<sup>3</sup>).
- 4. Natural gas volumes represent expected gas sales plus produced gas used for consumption and are reported in billion (10<sup>9</sup>) standard cubic meters (Bm<sup>3</sup>) at standard condition of 15 degrees Celsius and 1 atmosphere. The total YPF Net Proved reserves gas volume estimate of 21.4 Bm<sup>3</sup> includes 1.6 Bm<sup>3</sup> used for fuel.
- 5. Totals may not exactly equal the sum of the individual entries because of rounding.

This report relates specifically and solely to the subject matter as defined in the scope of work in the Proposal for Services and is conditional upon the assumptions described herein. The report must be considered in its entirety and must only be used for the purpose for which it was intended.

Gas reserves sales volumes are based on firm and existing gas contracts, or on the reasonable expectation of a contract or on the reasonable expectation that any such existing gas sales contracts will be renewed on similar terms in the future.

Appendices II and III provide the Gross Field (100%) and YPF Net Reserves for each basin.

YPF has advised GCA that the YPF reserves estimated in this report constitute approximately 28.2% percent of YPF's Proved reserves and that the Proved Undeveloped Reserves estimated in this report constitute approximately 34.1% percent of all of YPF's Proved Undeveloped Reserves as of December 31, 2017. These proportions are on a barrel oil equivalent (BOE) basis. GCA is not in a position to verify these statements because it was not requested to review YPF's other oil and gas assets. Our study was completed on February 6, 2018.

### **Reserves Assessment**

GCA's audit of the YPF reserves estimates was based on decline curve analysis to extrapolate the production of existing wells or elaborate type curves to estimate future production from the locations proposed by YPF. Geological information, material balance, fluid laboratory tests and other pertinent information was used to assess the reserves estimates and the classification/categorization of the proposed development plan.

This audit examination was based on reserves estimates and other information provided by YPF to GCA from September 2017 to February 2018 and included such tests, procedures and adjustments as were considered necessary under the circumstances to prepare the report. All questions that arose during the course of the audit process were resolved to our satisfaction.

The economic tests for the December 31, 2017 Proved Reserves volumes were based on realized crude oil, condensate, NGL and average gas sales prices as shown in the Appendix IV, as advised by YPF. YPF is subject to extensive regulations relating to the oil and gas industry in Argentina, which include specific natural gas market regulations.

Information on net proved reserves as of December 31, 2017 was calculated in accordance with the SEC regulations¹ and Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 932, as amended. Accordingly, oil prices used to determine volumes and reserves were calculated each month, for crude oils of different quality produced by YPF. Consequently, for calculation of volumes and reserves as of December 31, 2017 YPF considered the realized price for crude oil in the domestic market taking into account the unweighted average price for each month within the twelve-month period ended December 31, 2017. There were no published benchmark crude oil prices during 2017 in Argentina that relate to YPF's oil production from which first-day-of-month prices could be obtained. Additionally, since there are no benchmark market natural gas prices available in Argentina, YPF used average realized gas prices during the year to determine its reserves. GCA reviewed and accepted the methodology and prices used by YPF in estimating the reserves in Argentina.

Future capital costs were derived from development program forecasts prepared by YPF for the fields. Recent historical operating expense data were utilized as the basis for operating cost projections. GCA has found that YPF has projected sufficient capital investments and operating expenses to produce economically the projected volumes.

It is GCA's opinion that the estimates of total remaining recoverable hydrocarbon liquid and gas volumes at December 31, 2017, are, in the aggregate, reasonable and the reserves categorization is appropriate and consistent with the definitions for reserves set out in 17-CFR Part 210 Rule 4-10(a) of Regulation S-X of the United States Securities and Exchange Commission (as set out in Appendix VII). GCA concludes that the methodologies employed by YPF in the derivation of the volume estimates are appropriate and that the quality of the data relied upon, the depth and thoroughness of the estimation process is adequate.

Modernization of Oil and Gas Reporting, Release Nos 33-8995; 34-59192, 17 CFR Part 210, Rule 4-10

### **Basis of Opinion**

This document reflects GCA's informed professional judgment based on accepted standards of professional investigation and, as applicable, the data and information provided by the Client, the limited scope of engagement, and the time permitted to conduct the evaluation.

In line with those accepted standards, this document does not in any way constitute or make a guarantee or prediction of results, and no warranty is implied or expressed that actual outcome will conform to the outcomes presented herein. GCA has not independently verified any information provided by, or at the direction of, the Client, and has accepted the accuracy and completeness of this data. GCA has no reason to believe that any material facts have been withheld, but does not warrant that its inquiries have revealed all of the matters that a more extensive examination might otherwise disclose.

The opinions expressed herein are subject to and fully qualified by the generally accepted uncertainties associated with the interpretation of geoscience and engineering data and do not reflect the totality of circumstances, scenarios and information that could potentially affect decisions made by the report's recipients and/or actual results. The opinions and statements contained in this report are made in good faith and in the belief that such opinions and statements are representative of prevailing physical and economic circumstances.

There are numerous uncertainties inherent in estimating reserves and resources, and in projecting future production, development expenditures, operating expenses and cash flows. Oil and gas resources assessments must be recognized as a subjective process of estimating subsurface accumulations of oil and gas that cannot be measured in an exact way. Estimates of oil and gas resources prepared by other parties may differ, perhaps materially, from those contained within this report.

The accuracy of any resources estimate is a function of the quality of the available data and of engineering and geological interpretation. Results of drilling, testing and production that post-date the preparation of the estimates may justify revisions, some or all of which may be material.

Accordingly, resources estimates are often different from the quantities of oil and gas that are ultimately recovered, and the timing and cost of those volumes that are recovered may vary from that assumed.

GCA's review and audit involved reviewing pertinent facts, interpretations and assumptions made by YPF in preparing estimates of reserves. GCA performed procedures necessary to enable it to render an opinion on the appropriateness of the methodologies employed, adequacy and quality of the data relied on, depth and thoroughness of the reserves and resources estimation process, classification and categorization of reserves and resources appropriate to the relevant definitions used, and reasonableness of the estimates.

### **Definition of Reserves**

Reserves are estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations. In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce, or a revenue interest in, the production, installed means of delivering oil and gas or related substances to market, and all permits and financing required to implement the project.

Reserves are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by development and production status. All categories of reserves volumes quoted herein have been derived within the context of an economic limit test (ELT) assessment (pre-tax and exclusive of accumulated depreciation amounts).

GCA has not undertaken a site visit and inspection because it was not part of the scope of work. As such, GCA is not in a position to comment on the operations or facilities in place, their appropriateness and condition, or whether they are in compliance with the regulations pertaining to such operations. Further, GCA is not in a position to comment on any aspect of health, safety, or environment of such operation.

This report has been prepared based on GCA's understanding of the effects of petroleum legislation and other regulations that currently apply to these properties. However, GCA is not in a position to attest to property title or rights, conditions of these rights (including environmental and abandonment obligations), or any necessary licenses and consents (including planning permission, financial interest relationships, or encumbrances thereon for any part of the appraised properties).

### Qualifications

In performing this study, GCA is not aware that any conflict of interest has existed. As an independent consultancy, GCA is providing impartial technical, commercial, and strategic advice within the energy sector. GCA's remuneration was not in any way contingent on the contents of this report.

In the preparation of this document, GCA has maintained, and continues to maintain, a strict independent consultant-client relationship with the Client. Furthermore, the management and employees of GCA have no interest in any of the assets evaluated or related with the analysis performed, as part of this report.

Staff members who prepared this report hold appropriate professional and educational qualifications and have the necessary levels of experience and expertise to perform the work. The technical qualification of the person primarily responsible for the preparation of the reserves estimates presented in this report are given in Appendix I.

### Notice

This report is intended for inclusion in its entirety in YPF's filings (20-F, F-3) with the United States Securities and Exchange Commission (SEC) in accordance with the disclosure requirements set forth in the SEC regulations. YPF S.A. will obtain GCA's prior written approval for any other use of any results, statements or opinions expressed to YPF S.A. in this report, which are attributed to GCA.

Yours sincerely, Gaffney, Cline & Associates

/s/ Daniel Amitrano
Project Manager
Daniel Amitrano, Principal Advisor

/s/ Rawdon Seager Reviewed by Rawdon Seager, Technical Director

### **Appendices**

Appendix I: Statement of Qualifications

Appendix II: Statement of Gross Field (100%) Volumes per Basin

Appendix III: YPF Net Reserves per Basin

Appendix IV: Hydrocarbon Prices

Appendix V: YPF's Participating Interest in each Area

Appendix VI: SEC Reserves Definitions

Appendix VII: Glossary

### Appendix I Statement of Qualifications

## **Statement of Qualifications**

### D. A. Amitrano

D. A. Amitrano is one of GCA's Principal Advisors and was the person primarily responsible for the preparation of the audit. Mr. Amitrano has over 28 years of diversified international industry experience mainly in reservoir engineering, geology, reserves estimates, project development, including classification and reporting of reserves and resources. He is a member of the Society of Petroleum Engineers (SPE) and holds a BS degree in Civil Engineering and a Master's Degree in Field Exploitation from Buenos Aires University, Argentina.

# Appendix II Gross Field (100%) Volumes per Basin

## Statement of 100% Gross Field Volumes per Basin YPF S.A. Certain Properties in Argentina as of December 31, 2017

## **Liquid Hydrocarbon Volumes**

|                 | Proved          |                  |                 |        |
|-----------------|-----------------|------------------|-----------------|--------|
|                 | Developed       |                  | Undeveloped     | Total  |
|                 | Producing       | Non<br>Producing |                 |        |
| Basin           | Mm <sup>3</sup> | Mm <sup>3</sup>  | Mm <sup>3</sup> | $Mm^3$ |
| Cuyana          | 1,581           | 31               | 609             | 2,220  |
| Golfo San Jorge | 8               |                  |                 | 8      |
| Neuquina        | 18,780          | 216              | 8,648           | 27,643 |
| Austral         | 692             |                  | 242             | 934    |
| Total           | 21,060          | 246              | 9,499           | 30,805 |

### Notes:

- 1. Hydrocarbon liquid volumes represent crude oil, condensate, gasoline and NGL estimated to be recovered during field separation and plant processing and are reported in thousands of cubic meters.
- 2. Totals may not exactly equal the sum of the individual entries because of rounding.

#### **Natural Gas**

|                 | Proved           |                  |                  |                  |
|-----------------|------------------|------------------|------------------|------------------|
|                 | Developed        |                  | Undeveloped      | Total            |
|                 | Producing Non    |                  |                  |                  |
|                 |                  | Producing        |                  |                  |
| Area            | MMm <sup>3</sup> | MMm <sup>3</sup> | MMm <sup>3</sup> | MMm <sup>3</sup> |
| Cuyana          | 25               | 1                | 9                | 34               |
| Golfo San Jorge | 1                |                  | _                | 1                |
| Neuquina        | 19,094           | 599              | 8,594            | 28,286           |
| Austral         | 4,417            |                  | 2,102            | 6,520            |
| Total           | 23,537           | 599              | 10,705           | 34,841           |

### Notes:

- 1. Natural gas volumes represent expected gas sales plus produced gas used for consumption and are reported in millions of cubic meters at standard conditions of 15 degrees Celsius and 1 atmosphere.
- 2. Totals may not exactly equal the sum of the individual entries because of rounding.

# Appendix III YPF Net Reserves per Basin

## Statement of Reserves Net to YPF per Basin Certain Properties in Argentina as of December 31, 2017

## **Liquid Hydrocarbon Volumes**

|                 | Proved                    |                                     |                 |                 |
|-----------------|---------------------------|-------------------------------------|-----------------|-----------------|
|                 | Developed                 |                                     | Undeveloped     | Total           |
|                 | Producing Mm <sup>3</sup> | Non<br>Producing<br>Mm <sup>3</sup> | Mm <sup>3</sup> | Mm3             |
| Basin           |                           |                                     |                 | Mm <sup>3</sup> |
| Cuyana          | 1,581                     | 31                                  | 609             | 2,220           |
| Golfo San Jorge | 1                         |                                     |                 | 1               |
| Neuquina        | 11,397                    | 71                                  | 5,876           | 17,344          |
| Austral         | 485                       |                                     | 242             | 727             |
| Total           | 13,464                    | 101                                 | 6,727           | 20,292          |

### Notes:

- 1. YPF Net Reserves represent YPF's working interest volumes and therefore include volumes related to royalties payable to the relevant Argentine provinces, which, according to reporting in YPF's 20-F filings with the SEC, are treated as financial obligations.
- 2. Hydrocarbon liquid volumes represent crude oil, condensate, gasoline and NGL estimated to be recovered during field separation and plant processing and are reported in thousands of cubic meters.
- 3. Totals may not exactly equal the sum of the individual entries because of rounding.

## Statement of YPF Net Reserves per Basin Certain Properties in Argentina as of December 31, 2017

#### **Natural Gas**

|                 |                             | Proved                               |                  |                  |  |
|-----------------|-----------------------------|--------------------------------------|------------------|------------------|--|
|                 | Deve                        | Developed                            |                  | Total            |  |
| Area            | Producing  MMm <sup>3</sup> | Non<br>Producing<br>MMm <sup>3</sup> | MMm <sup>3</sup> | MMm <sup>3</sup> |  |
| Cuyana          | 25                          | 1                                    | 9                | 34               |  |
| Golfo San Jorge | 0                           | _                                    | _                | 0                |  |
| Neuquina        | 10,311                      | 254                                  | 5,602            | 16,167           |  |
| Austral         | 3,073                       |                                      | 2,102            | 5,175            |  |
| Total           | 13,409                      | 255                                  | 7,713            | 21,376           |  |

### Notes:

- 1. YPF Net Reserves represent YPF's working interest volumes and therefore include volumes related to royalties payable to the relevant Argentine provinces, which according to reporting in YPF's 20-F filings with the SEC, are treated as financial obligations.
- 2. Natural gas volumes represent expected gas sales plus produced gas used for consumption and are reported in millions of cubic meters at standard conditions of 15 degrees Celsius and 1 atmosphere.
- 3. Totals may not exactly equal the sum of the individual entries because of rounding.

# Appendix IV Hydrocarbon Prices

# **Hydrocarbon Prices**

| Área                               | Crude Oil<br>Condensate<br>Gasoline<br>(US\$/Bbl) | Natural<br>Gas<br>(US\$/Mcf) | NGL<br>(US\$/Bbl) |
|------------------------------------|---|------------------------------|-------------------|
| ANTICLINAL CAMPAMENTO              | 57.47   | 3.71                         | 20.13             |
| LA CALERA                          | 57.47   | 3.71                         | 20.13             |
| CHACHAHUEN SUR                     | 55.92   |                              |                   |
| CH. LA SALINA                      | 55.92   | 3.60                         | 16.50             |
| CH. LA SALINA<br>CH. LA SALINA SUR | 55.92   | 3.60                         | 16.50             |
| CNQ 7 A                            | 55.92   | 3.00<br>—                    | 10.50             |
| CNQ7                               | 55.92   | <u> </u>                     | _                 |
| CONFLUENCIA SUR                    | 55.92   | 3.70                         | _                 |
| DESFILADERO BAYO                   | 55.92   | 3.70                         | _                 |
|                                    |   |                              |                   |
| EL PORTON                          | 55.92   | 3.59                         | 16.50             |
| FILO MORADO                        | 55.92   | 4.40                         | 16.50             |
| LAS HERAS                          | 51.60   | 3.14                         | 16.50             |
| LA VENTANA CIENTRAL                | 51.63   | 4.09                         | 16.50             |
| LA VENTANA CENTRAL                 | 51.63   | 4.09                         | 16.50             |
| PASO BARDAS NORTE                  | 55.92   | 3.91                         | 16.50             |
| DADIN                              | 57.47   | 3.71                         | 20.13             |
| AGUADA PICHANA ESTE                | 57.05   | 3.60                         | 16.50             |
| AGUADA PICHANA OESTE               | 57.05   | 3.60                         | 16.50             |
| VIZCACHERAS                        | 51.63   | 4.09                         | 16.50             |
| VIZCACHERA CAÑADA DURA             | 51.63   | 4.09                         | 16.50             |
| AGUA SALADA                        | 57.47   | 3.70                         | _                 |
| CHIHUIDO SIERRA NEGRA              | 55.92   | 3.60                         | _                 |
| DOS HERMANAS                       | 57.47   | 3.60                         | _                 |
| ESTACION FERNANDEZ ORO             | 57.47   | 4.17                         | 20.13             |
| EL SANTIAGUEÑO                     | 57.47   | 3.70                         | _                 |
| JAGÜEL DE LOS MILICOS              | 57.47   | _                            |                   |
| LOS CHORRILLOS                     | 54.89   | 2.46                         | _                 |
| LAGO FUEGO                         | 54.89   | 2.62                         | _                 |
| LA YESERA                          | 57.47   | 4.83                         | _                 |
| AL NORTE DE LA DORSAL              | 57.47   | 3.71                         | 20.13             |
| PUESTO HERNANDEZ                   | 55.92   | 3.60                         | _                 |
| RIO NEGRO NORTE                    | 57.47   | 4.24                         |                   |
| AL SUR DE LA DORSAL                | 57.47   | 3.71                         | 20.13             |
| SEÑAL PICADA                       | 57.47   | 3.51                         | _                 |
| SAN ROQUE                          | 57.05   | 3.60                         | 16.50             |
| TIERRA DEL FUEGO A                 | 54.89   | 2.54                         |                   |
| TIERRA DEL FUEGO B                 | 54.89   | 2.47                         | 25.76             |
| TIERRA DEL FUEGO C                 | _   | _                            |                   |
| TIERRA DEL FUEGO D                 | 54.89   | 2.46                         | _                 |
| TIERRA DEL FUEGO E                 | _   |                              |                   |
| EL TORDILLO                        | 50.53   | 3.00                         | _                 |
| LA TAPERA-PUESTO QUIROGA           | 50.53   |                              |                   |
| MAGALLANES                         | 54.89   | 2.55                         | _                 |
| PAYUN OESTE                        | _   |                              |                   |
| AGUADA VILLANUEVA                  | _   | _                            |                   |
| JAGUEL DE BARA                     | _   | _                            | _                 |
| MESETA BUENA ESPERANZA             | _   | _                            | _                 |
| GUANACO BLANCO                     | _   | _                            |                   |
| LOBO                               | _   | _                            |                   |
| POSEIDON                           | _   | _                            | _                 |
|                                    |   |                              |                   |

# Appendix V YPF's Participating Interest in Each Area

# YPF's Participant Interest in each Area

| AREA                                | WI       |
|-------------------------------------|----------|
| Agua Salada                         | 30.00%   |
| Aguada Pichana Este Mulichinco      | 27.27%   |
| Aguada Pichana Este - Vaca Muerta 1 | 27.27%   |
| Aguada Pichana Este - Vaca Muerta 2 | 22.50%   |
| Aguada Pichana Oeste                | 30.00%   |
| Aguada Villanueva                   | 50.00%   |
| Al Norte de la Dorsal               | 100.00%  |
| Al Sur de la Dorsal                 | 100.00%  |
| Anticlinal Campamento 1             | 100.00%  |
| Anticlinal Campamento 2             | 85.00%   |
| Chachahuen Sur                      | 70.00%   |
| Chihuido La Salina                  | 100.00%  |
| Chihuido La Salina Sur              | 100.00%  |
| Chihuido Sierra Negra               | 100.00%  |
| CNQ 7                               | 30.01%   |
| CNQ 7A                              | 50.00%   |
| Confluencia Sur                     | 14.42%   |
| Dadin                               | 100.00%  |
| Desfiladero Bayo                    | 100.00%  |
| Dos Hermanas                        | 100.00%  |
| El Portón                           | 100.00%  |
| El Santiagueño                      | 100.00%  |
| El Tordillo                         | 7.20%    |
| Estación Fernández Oro              | 100.00%  |
| Estación Fernández Oro              | 85.00%   |
| Filo Morado                         | 100.00%  |
| Guanaco Blanco                      | 70.00%   |
| Jagüel de Bara                      | 100.00%  |
| Jagüel de los Milicos               | 100.00%  |
| La Calera                           | 50.00%   |
| La Tapera - P.Quiroga               | 7.20%    |
| La Ventana                          | 70.00%   |
| La Ventana Central                  | 70.00%   |
| La Yesera                           | 35.00%   |
| Lago Fuego                          | 100.00%  |
| Las Heras                           | 100.00%  |
| Lobo                                | 100.00%  |
| Los Chorrillos                      | 100.00%  |
| Magallanes                          | 50.00%   |
| Meseta Buena Esperanza              | 50.00%   |
| Paso Bardas Norte                   | 100.00%  |
| Payún Oeste                         | 100.00%  |
| Poseidón                            | 50.00%   |
| Puesto Hernández                    | 100.00%  |
| Río Negro Norte                     | 35.00%   |
| San Roque                           | 34.11%   |
| Señal Picada                        | 100.00%  |
| Tierra del Fuego - Fracción A       | 100.00%  |
| Tierra del Fuego - Fracción B       | 100.00%  |
| Tierra del Fuego - Fracción C       | 100.00%  |
| Tierra del Fuego - Fracción D       | 100.00%  |
| Tierra del Fuego - Fracción E       | 100.00%  |
| V-Cañada Dura                       | 100.00%  |
| Vizcacheras                         | 100.00%  |
| v izedeneras                        | 100.00/0 |

## Appendix VI SEC Reserves Definitions

# U.S. SECURITIES AND EXCHANGE COMMISSION (SEC) MODERNIZATION OF OIL AND GAS REPORTING<sup>1</sup>

#### Oil and Gas Reserves Definitions and Reporting

#### (a) Definitions

- (1) <u>Acquisition of properties.</u> Costs incurred to purchase, lease or otherwise acquire a property, including costs of lease bonuses and options to purchase or lease properties, the portion of costs applicable to minerals when land including mineral rights is purchased in fee, brokers' fees, recording fees, legal costs, and other costs incurred in acquiring properties.
- (2) <u>Analogous reservoir</u>. Analogous reservoirs, as used in resources assessments, have similar rock and fluid properties, reservoir conditions (depth, temperature, and pressure) and drive mechanisms, but are typically at a more advanced stage of development than the reservoir of interest and thus may provide concepts to assist in the interpretation of more limited data and estimation of recovery. When used to support proved reserves, an "analogous reservoir" refers to a reservoir that shares the following characteristics with the reservoir of interest:
  - (i) Same geological formation (but not necessarily in pressure communication with the reservoir of interest);
  - (ii) Same environment of deposition;
  - (iii) Similar geological structure; and
  - (iv) Same drive mechanism.

<u>Instruction to paragraph (a)(2):</u> Reservoir properties must, in the aggregate, be no more favorable in the analog than in the reservoir of interest.

- (3) <u>Bitumen.</u> Bitumen, sometimes referred to as natural bitumen, is petroleum in a solid or semi-solid state in natural deposits with a viscosity greater than 10,000 centipoise measured at original temperature in the deposit and atmospheric pressure, on a gas free basis. In its natural state it usually contains sulfur, metals, and other non-hydrocarbons.
- (4) <u>Condensate</u>. Condensate is a mixture of hydrocarbons that exists in the gaseous phase at original reservoir temperature and pressure, but that, when produced, is in the liquid phase at surface pressure and temperature.
- (5) <u>Deterministic estimate.</u> The method of estimating reserves or resources is called deterministic when a single value for each parameter (from the geoscience, engineering, or economic data) in the reserves calculation is used in the reserves estimation procedure.
- (6) Developed oil and gas reserves. Developed oil and gas reserves are reserves of any category that can be expected to be recovered:
  - (i) Through existing wells with existing equipment and operating methods or in which the cost of the required equipment is relatively minor compared to the cost of a new well; and
  - (ii) Through installed extraction equipment and infrastructure operational at the time of the reserves estimate if the extraction is by means not involving a well.

Extracted from 17 CFR Parts 210, 211, 229, and 249 [Release Nos. 33-8995; 34-59192; FR-78; File No. S7-15-08] RIN 3235-AK00].

- (7) <u>Development costs.</u> Costs incurred to obtain access to proved reserves and to provide facilities for extracting, treating, gathering and storing the oil and gas. More specifically, development costs, including depreciation and applicable operating costs of support equipment and facilities and other costs of development activities, are costs incurred to:
  - (i) Gain access to and prepare well locations for drilling, including surveying well locations for the purpose of determining specific development drilling sites, clearing ground, draining, road building, and relocating public roads, gas lines, and power lines, to the extent necessary in developing the proved reserves.
  - (ii) Drill and equip development wells, development-type stratigraphic test wells, and service wells, including the costs of platforms and of well equipment such as casing, tubing, pumping equipment, and the wellhead assembly.
  - (iii) Acquire, construct, and install production facilities such as lease flow lines, separators, treaters, heaters, manifolds, measuring devices, and production storage tanks, natural gas cycling and processing plants, and central utility and waste disposal systems.
  - (iv) Provide improved recovery systems.
- (8) <u>Development project.</u> A development project is the means by which petroleum resources are brought to the status of economically producible. As examples, the development of a single reservoir or field, an incremental development in a producing field, or the integrated development of a group of several fields and associated facilities with a common ownership may constitute a development project.
- (9) <u>Development well.</u> A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.
- (10) <u>Economically producible</u>. The term economically producible, as it relates to a resource, means a resource which generates revenue that exceeds, or is reasonably expected to exceed, the costs of the operation. The value of the products that generate revenue shall be determined at the terminal point of oil and gas producing activities as defined in paragraph (a)(16) of this section.
- (11) <u>Estimated ultimate recovery (EUR).</u> Estimated ultimate recovery is the sum of reserves remaining as of a given date and cumulative production as of that date.
- (12) Exploration costs. Costs incurred in identifying areas that may warrant examination and in examining specific areas that are considered to have prospects of containing oil and gas reserves, including costs of drilling exploratory wells and exploratory-type stratigraphic test wells. Exploration costs may be incurred both before acquiring the related property (sometimes referred to in pail as prospecting costs) and after acquiring the property. Principal types of exploration costs, which include depreciation and applicable operating costs of support equipment and facilities and other costs of exploration activities, are:
  - (i) Costs of topographical, geographical and geophysical studies, rights of access to properties to conduct those studies, and salaries and other expenses of geologists, geophysical crews, and others conducting those studies. Collectively, these are sometimes referred to as geological and geophysical or "G&G" costs.
  - (ii) Costs of carrying and retaining undeveloped properties, such as delay rentals, ad valorem taxes on properties, legal costs for title defense, and the maintenance of land and lease records.
  - (iii) Dry hole contributions and bottom hole contributions.
  - (iv) Costs of drilling and equipping exploratory wells.
  - (v) Costs of drilling exploratory-type stratigraphic test wells.

(13) Exploratory well. An exploratory well is a well drilled to find a new field or to find a new reservoir in a field previously found to be productive of oil or gas in another reservoir. Generally, an exploratory

well is any well that is not a development well, an extension well, a service well, or a stratigraphic test well as those items are defined in this section.

(14) Extension well. An extension well is a well drilled to extend the limits of a known reservoir.

(15) Field. An area consisting of a single reservoir or multiple reservoirs all grouped on or related to the same individual geological structural feature and/or stratigraphic condition. There may be two or more reservoirs in a field which are separated vertically by intervening impervious strata, or laterally by local geologic barriers, or by both. Reservoirs that are associated by being in overlapping or adjacent fields may be treated as a single or common operational field. The geological terms "structural feature" and "stratigraphic condition" are intended to identify localized geological features as opposed to the broader terms of basins, trends, provinces, plays, areas-of-interest, etc.

#### (16) Oil and gas producing activities.

- (i) Oil and gas producing activities include:
  - (A) The search for crude oil, including condensate and natural gas liquids, or natural gas ("oil and gas") in their natural states and original locations;
  - (B) The acquisition of property rights or properties for the purpose of further exploration or for the purpose of removing the oil or gas from such properties;
  - (C) The construction, drilling, and production activities necessary to retrieve oil and gas from their natural reservoirs, including the acquisition, construction, installation, and maintenance of field gathering and storage systems, such as:
    - (1) Lifting the oil and gas to the surface; and
    - (2) Gathering, treating, and field processing (as in the case of processing gas to extract liquid hydrocarbons); and
  - (D) Extraction of saleable hydrocarbons, in the solid, liquid, or gaseous state, from oil sands, shale, coalbeds, or other nonrenewable natural resources which are intended to be upgraded into synthetic oil or gas, and activities undertaken with a view to such extraction.

<u>Instruction 1 to paragraph (a)(16)(i):</u> The oil and gas production function shall be regarded as ending at a "terminal point", which is the outlet valve on the lease or field storage tank. If unusual physical or operational circumstances exist, it may be appropriate to regard the terminal point for the production function as:

- a. The first point at which oil, gas, or gas liquids, natural or synthetic, are delivered to a main pipeline, a common carrier, a refinery, or a marine terminal; and
- b. In the case of natural resources that are intended to be upgraded into synthetic oil or gas, if those natural resources are delivered to a purchaser prior to upgrading, the first point at which the natural resources are delivered to a main pipeline, a common carrier, a refinery, a marine terminal, or a facility which upgrades such natural resources into synthetic oil or gas.

<u>Instruction 2 to paragraph (a)(16)(i):</u> For purposes of this paragraph (a)(16), the term <u>saleable hydrocarbons</u> means hydrocarbons that are saleable in the state in which the hydrocarbons are delivered.

- (ii) Oil and gas producing activities do not include:
  - (A) Transporting, refining, or marketing oil and gas;

- (B) Processing of produced oil, gas or natural resources that can be upgraded into synthetic oil or gas by a registrant that does not have the legal right to produce or a revenue interest in such production;
- (C) Activities relating to the production of natural resources other than oil, gas, or natural resources from which synthetic oil and gas can be extracted; or
- (D) Production of geothermal steam.
- (17) Possible reserves. Possible reserves are those additional reserves that are less certain to be recovered than probable reserves.
  - (i) When deterministic methods are used, the total quantities ultimately recovered from a project have a low probability of exceeding proved plus probable plus possible reserves. When probabilistic methods are used, there should be at least a 10% probability that the total quantities ultimately recovered will equal or exceed the proved plus probable plus possible reserves estimates.
  - (ii) Possible reserves may be assigned to areas of a reservoir adjacent to probable reserves where data control and interpretations of available data are progressively less certain. Frequently, this will be in areas where geoscience and engineering data are unable to define clearly the area and vertical limits of commercial production from the reservoir by a defined project.
  - (iii) Possible reserves also include incremental quantities associated with a greater percentage recovery of the hydrocarbons in place than the recovery quantities assumed for probable reserves.
  - (iv) The proved plus probable and proved plus probable plus possible reserves estimates must be based on reasonable alternative technical and commercial interpretations within the reservoir or subject project that are clearly documented, including comparisons to results in successful similar projects.
  - (v) Possible reserves may be assigned where geoscience and engineering data identify directly adjacent portions of a reservoir within the same accumulation that may be separated from proved areas by faults with displacement less than formation thickness or other geological discontinuities and that have not been penetrated by a wellbore, and the registrant believes that such adjacent portions are in communication with the known (proved) reservoir. Possible reserves may be assigned to areas that are structurally higher or lower than the proved area if these areas are in communication with the proved reservoir.
  - (vi) Pursuant to paragraph (a)(22)(iii) of this section, where direct observation has defined a highest known oil (HKO) elevation and the potential exists for an associated gas cap, proved oil reserves should be assigned in the structurally higher portions of the reservoir above the HKO only if the higher contact can be established with reasonable certainty through reliable technology. Portions of the reservoir that do not meet this reasonable certainty criterion may be assigned as probable and possible oil or gas based on reservoir fluid properties and pressure gradient interpretations.
- (18) <u>Probable reserves</u>. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves but which, together with proved reserves, are as likely as not to be recovered.
  - (i) When deterministic methods are used, it is as likely as not that actual remaining quantities recovered will exceed the sum of estimated proved plus probable reserves. When probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the proved plus probable reserves estimates.

- (ii) Probable reserves may be assigned to areas of a reservoir adjacent to proved reserves where data control or interpretations of available data are less certain, even if the interpreted reservoir continuity of structure or productivity does not meet the reasonable certainty criterion. Probable reserves may be assigned to areas that are structurally higher than the proved area if these areas are in communication with the proved reservoir.
- (iii) Probable reserves estimates also include potential incremental quantities associated with a greater percentage recovery of the hydrocarbons in place than assumed for proved reserves.
- (iv) See also guidelines in paragraphs (a)(17)(iv) and (a)(17)(vi) of this section.
- (19) <u>Probabilistic estimate.</u> The method of estimation of reserves or resources is called probabilistic when the full range of values that could reasonably occur for each unknown parameter (from the geoscience and engineering data) is used to generate a full range of possible outcomes and their associated probabilities of occurrence.

#### (20) Production costs.

- (i) Costs incurred to operate and maintain wells and related equipment and facilities, including depreciation and applicable operating costs of support equipment and facilities and other costs of operating and maintaining those wells and related equipment and facilities, they become part of the cost of oil and gas produced. Examples of production costs (sometimes called lifting costs) are:
  - (A) Costs of labor to operate the wells and related equipment and facilities.
  - (B) Repairs and maintenance.
  - (C) Materials, supplies, arid fuel consumed and supplies utilized in operating the wells and related equipment and facilities.
  - (D) Property taxes and insurance applicable to proved properties and wells and related equipment and facilities.
  - (E) Severance taxes.
- (ii) Some support equipment or facilities may serve two or more oil and gas producing activities and may also serve transportation, refining, and marketing activities. To the extent that the support equipment and facilities are used in oil and gas producing activities, their depreciation and applicable operating costs become exploration, development or production costs, as appropriate. Depreciation, depletion, and amortization of capitalized acquisition, exploration, and development costs are not production costs but also become part of the cost of oil and gas produced along with production (lifting) costs identified above.
- (21) Proved area. The part of a property to which proved reserves have been specifically attributed.
- (22) <u>Proved oil and gas reserves</u>. Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible—from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations—prior to the time at which contracts providing the right to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time.

- (i) The area of the reservoir considered as proved includes:
  - (A) The area identified by drilling and limited by fluid contacts, if any, and
  - (B) Adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or gas on the basis of available geoscience and engineering data.
- (ii) In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons (LKH) as seen in a well penetration unless geoscience, engineering, or performance data and reliable technology establishes a lower contact with reasonable certainty.
- (iii) Where direct observation from well penetrations has defined a highest known oil (HKO) elevation and the potential exists for an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering, or performance data and reliable technology establish the higher contact with reasonable certainty.
- (iv) Reserves which can be produced economically through application of improved recovery techniques (including, but not limited to, fluid injection) are included in the proved classification when:
  - (A) Successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and
  - (B) The project has been approved for development by all necessary parties and entities, including governmental entities.
- (v) Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the average price during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions.
- (23) Proved properties. Properties with proved reserves.
- (24) Reasonable certainty. If deterministic methods are used, reasonable certainty means a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate. A high degree of confidence exists if the quantity is much more likely to be achieved than not, and, as changes due to increased availability of geoscience (geological, geophysical, and geochemical), engineering, and economic data are made to estimated ultimate recovery (EUR) with time, reasonably certain EUR is much more likely to increase or remain constant than to decrease.
- (25) Reliable technology. Reliable technology is a grouping of one or more technologies (including computational methods) that has been field tested and has been demonstrated to provide reasonably certain results with consistency and repeatability in the formation being evaluated or in an analogous formation.
- (26) Reserves. Reserves are estimated remaining quantities of oil and gas and related substances anticipated to be economically producible, as of a given date, by application of development projects to known accumulations. In addition, there must exist, or there must be a reasonable expectation that there will exist, the legal right to produce or a revenue interest in the production, installed means of delivering oil and gas or related substances to market, and all permits and financing required to implement the project.

Note to paragraph (a)(26): Reserves should not be assigned to adjacent reservoirs isolated by major, potentially sealing, faults until those reservoirs are penetrated and evaluated as economically producible. Reserves should not be assigned to areas that are clearly separated from a known accumulation by a non-productive reservoir (i.e., absence of reservoir, structurally low reservoir, or negative test results). Such areas may contain prospective resources (i.e., potentially recoverable resources from undiscovered accumulations).

- (27) <u>Reservoir</u>. A porous and permeable underground formation containing a natural accumulation of producible oil and/or gas that is confined by impermeable rock or water barriers and is individual and separate from other reservoirs.
- (28) <u>Resources.</u> Resources are quantities of oil and gas estimated to exist in naturally occurring accumulations. A portion of the resources may be estimated to be recoverable, and another portion may be considered to be unrecoverable. Resources include both discovered and undiscovered accumulations.
- (29) <u>Service well.</u> A well drilled or completed for the purpose of supporting production in an existing field. Specific purposes of service wells include gas injection, water injection, steam injection, air injection, salt-water disposal, water supply for injection, observation, or injection for in-situ combustion.
- (30) <u>Stratigraphic test well.</u> A stratigraphic test well is a drilling effort, geologically directed, to obtain information pertaining to a specific geologic condition. Such wells customarily are drilled without the intent of being completed for hydrocarbon production. The classification also includes tests identified as core tests and all types of expendable holes related to hydrocarbon exploration. Stratigraphic tests are classified as "exploratory type" if not drilled in a known area or "development type" if drilled in a known area.
- (31) <u>Undeveloped oil and gas reserves.</u> Undeveloped oil and gas reserves are reserves of any category that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion.
  - (i) Reserves on undrilled acreage shall be limited to those directly offsetting development spacing areas that are reasonably certain of production when drilled, unless evidence using reliable technology exists that establishes reasonable certainty of economic producibility at greater distances.
  - (ii) Undrilled locations can be classified as having undeveloped reserves only if a development plan has been adopted indicating that they are scheduled to be drilled within five years, unless the specific circumstances, justify a longer time.
  - (iii) Under no circumstances shall estimates for undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless such techniques have been proved effective by actual projects in the same reservoir or an analogous reservoir, as defined in paragraph (a)(2) of this section, or by other evidence using reliable technology establishing reasonable certainty.
- (32) <u>Unproved properties.</u> Properties with no proved reserves.

Appendix VII Glossary

# **Glossary – Standard Oil Industry Terms and Abbreviations**

| 0.4         | _  |        |   |
|-------------|--|--------|---|
| %           | Percentage                                   | bpd    | Barrels per day                                 |
| 1H05        | First half (6 months) of 2005 (example)      | boe    | Barrels of oil equivalent @ xxx mcf/Bbl         |
| 2Q06        | Second quarter (3 months) of 2006 (example)  | boepd  | Barrels of oil equivalent per day @ xxx mcf/Bbl |
| 2D          | Two dimensional                              | BOP    | Blow Out Preventer                              |
| 3D          | Three dimensional                            | bopd   | Barrels oil per day                             |
| 4D          | Four dimensional                             | bwpd   | Barrels of water per day                        |
| 1P          | Proved Reserves                              | BS&W   | Bottom sediment and water                       |
| 2P          | Proved plus Probable Reserves                | BTU    | British Thermal Units                           |
| 3P          | Proved plus Probable plus Possible Reserves  | bwpd   | Barrels water per day                           |
| ABEX        | Abandonment Expenditure                      | CBM    | Coal Bed Methane                                |
| ACQ         | Annual Contract Quantity                     | $CO_2$ | Carbon Dioxide                                  |
| oAPI        | Degrees API (American Petroleum Institute)   | CAPEX  | Capital Expenditure                             |
| AAPG        | American Association of Petroleum Geologists | CCGT   | Combined Cycle Gas Turbine                      |
| AVO         | Amplitude versus Offset                      | cm     | centimetres                                     |
| A\$         | Australian Dollars                           | CMM    | Coal Mine Methane                               |
| В           | Billion $(10^9)$                             | CNG    | Compressed Natural Gas                          |
| Bbl         | Barrels                                      | Ср     | Centipoise (a measure of viscosity)             |
| /Bbl        | per barrel                                   | CSG    | Coal Seam Gas                                   |
| BBbl        | Billion Barrels                              | CT     | Corporation Tax                                 |
| BHA         | Bottom Hole Assembly                         | D1BM   | Design 1 Build Many                             |
| BHC         | Bottom Hole Compensated                      | DCQ    | Daily Contract Quantity                         |
| Bscf or Bcf | Billion standard cubic feet                  | Deg C  | Degrees Celsius                                 |
| Bscfd or    | Billion standard cubic feet per day          | Deg F  | Degrees Fahrenheit                              |
| Bcfd        | •  | DHI    | Direct Hydrocarbon Indicator                    |
| $Bm^3$      | Billion cubic metres                         | DLIS   | Digital Log Interchange Standard                |
| bcpd        | Barrels of condensate per day                | DST    | Drill Stem Test                                 |
| BĤP         | Bottom Hole Pressure                         | DWT    | Dead-weight ton                                 |
| blpd        | Barrels of liquid per day                    | E&A    | Exploration & Appraisal                         |
|             |  |        |   |

# **Glossary – Standard Oil Industry Terms and Abbreviations**

| E 6-D  | Explanation and Duadwation                      | CDM    | Cuasa Daala Walumaa                              |
|--------|---|--------|--|
| E&P    | Exploration and Production                      | GRV    | Gross Rock Volumes                               |
| EBIT   | Earnings before Interest and Tax                | GTL    | Gas to Liquids                                   |
| EBITDA | Earnings before interest, tax, depreciation and | GWC    | Gas water contact                                |
| Fog    | amortisation                                    | HDT    | Hydrocarbons Down to                             |
| ECS    | Elemental Capture Spectroscopy                  | HSE    | Health, Safety and Environment                   |
| EI     | Entitlement Interest                            | HSFO   | High Sulphur Fuel Oil                            |
| EIA    | Environmental Impact Assessment                 | HUT    | Hydrocarbons up to                               |
| ELT    | Economic Limit Test                             | $H_2S$ | Hydrogen Sulphide                                |
| EMV    | Expected Monetary Value                         | IOR    | Improved Oil Recovery                            |
| EOR    | Enhanced Oil Recovery                           | IPP    | Independent Power Producer                       |
| EUR    | Estimated Ultimate Recovery                     | IRR    | Internal Rate of Return                          |
| FDP    | Field Development Plan                          | J      | Joule (Metric measurement of energy) I kilojoule |
| FEED   | Front End Engineering and Design                |        | = 0.9478  BTU                                    |
| FPSO   | Floating Production Storage and Offloading      | k      | Permeability                                     |
| FSO    | Floating Storage and Offloading                 | KB     | Kelly Bushing                                    |
| FWL    | Free Water Level                                | KJ     | Kilojoules (one Thousand Joules)                 |
| ft     | Foot/feet                                       | kl     | Kilolitres                                       |
| Fx     | Foreign Exchange Rate                           | km     | Kilometres                                       |
| g      | gram  | $km^2$ | Square kilometres                                |
| g/cc   | grams per cubic centimetre                      | kPa    | Thousands of Pascals (measurement of pressure)   |
| gal    | gallon  | KW     | Kilowatt   |
| gal/d  | gallons per day                                 | KWh    | Kilowatt hour                                    |
| G&A    | General and Administrative costs                | LAS    | Log ASCII Standard                               |
| GBP    | Pounds Sterling                                 | LKG    | Lowest Known Gas                                 |
| GCoS   | Geological Chance of Success                    | LKH    | Lowest Known Hydrocarbons                        |
| GDT    | Gas Down to                                     | LKO    | Lowest Known Oil                                 |
| GIIP   | Gas Initially In Place                          | LNG    | Liquefied Natural Gas                            |
| GJ     | Gigajoules (one billion Joules)                 | LoF    | Life of Field                                    |
| GOC    | Gas Oil Contact                                 | LPG    | Liquefied Petroleum Gas                          |
| GOR    | Gas Oil Ratio                                   | LTI    | Lost Time Injury                                 |
|        |   |        | —  |

# **Glossary – Standard Oil Industry Terms and Abbreviations**

| LWD                 | Logging while drilling                        | MWD   | Measuring While Drilling                 |
|---------------------|---|-------|--|
| m                   | Metres  | MWh   | Megawatt hour                            |
| M                   | Thousand                                      | mya   | Million years ago                        |
| $m^3$               | Cubic metres                                  | NGL   | Natural Gas Liquids                      |
| Mcf or              | Thousand standard cubic feet                  | $N_2$ | Nitrogen                                 |
| Mscf                |   | NTG   | Net/Gross Ratio                          |
| MCM                 | Management Committee Meeting                  | NPV   | Net Present Value                        |
| MMcf or             | Million standard cubic feet                   | OBM   | Oil Based Mud                            |
| MMscf               |   | OCM   | Operating Committee Meeting              |
| $m^3/d$             | Cubic metres per day                          | ODT   | Oil-Down-To                              |
| mD                  | Measure of Permeability in millidarcies       | OGIP  | Original Gas in Place                    |
| MD                  | Measured Depth                                | OIIP  | Oil Initially In Place                   |
| MDT                 | Modular Dynamic Tester                        | OOIP  | Original Oil in Place                    |
| Mean                | Arithmetic average of a set of numbers        | OPEX  | Operating Expenditure                    |
| Median              | Middle value in a set of values               | OWC   | Oil Water Contact                        |
| MFT                 | Multi Formation Tester                        | p.a.  | Per annum                                |
| mg/l                | milligrams per litre                          | Pa    | Pascals (metric measurement of pressure) |
| MJ                  | Megajoules (One Million Joules)               | P&A   | Plugged and Abandoned                    |
| $Mm^3$              | Thousand Cubic metres                         | PDP   | Proved Developed Producing               |
| Mm <sup>3</sup> /d  | Thousand Cubic metres per day                 | Phie  | effective porosity                       |
| MM                  | Million                                       | PI    | Productivity Index                       |
| $MMm^3$             | Million Cubic metres                          | PIIP  | Petroleum Initially In Place             |
| MMm <sup>3</sup> /d | Million Cubic metres per day                  | PJ    | Petajoules (10 <sup>15</sup> Joules)     |
| MMBbl               | Millions of barrels                           | PSDM  | Post Stack Depth Migration               |
| MMBTU               | Millions of British Thermal Units             | psi   | Pounds per square inch                   |
| Mode                | Value that exists most frequently in a set of | psia  | Pounds per square inch absolute          |
|                     | values = most likely                          | psig  | Pounds per square inch gauge             |
| Mscfd               | Thousand standard cubic feet per day          | PUD   | Proved Undeveloped                       |
| MMscfd              | Million standard cubic feet per day           | PVT   | Pressure, Volume and Temperature         |
| MW                  | Megawatt                                      |       |  |
|                     |   |       |  |

## Glossary - Standard Oil Industry Terms and Abbreviations

| P10         | 10% Probability                           | TCM   | Technical Committee Meeting     |
|-------------|---|-------|---------------------------------|
| P50         | 50% Probability                           | TOC   | Total Organic Carbon            |
| P90         | 90% Probability                           | TOP   | Take or Pay                     |
| RF          | Recovery factor                           | Tpd   | Tonnes per day                  |
| RFT         | Repeat Formation Tester                   | TVD   | True Vertical Depth             |
| RT          | Rotary Table                              | TVDss | True Vertical Depth Subsea      |
| R/P         | Reserve to Production                     | UFR   | Umbilical Flow Lines and Risers |
| $R_{\rm w}$ | Resistivity of water                      | USGS  | United States Geological Survey |
| SCAL        | Special core analysis                     | US\$  | United States dollar            |
| cf or scf   | Standard Cubic Feet                       | VLCC  | Very Large Crude Carrier        |
| cfd or scfd | Standard Cubic Feet per day               | Vsh   | shale volume                    |
| scf/ton     | Standard cubic foot per ton               | VSP   | Vertical Seismic Profiling      |
| SL          | Straight line (for depreciation)          | WC    | Water Cut                       |
| $s_o$       | Oil Saturation                            | WI    | Working Interest                |
| SPM         | Single Point Mooring                      | WPC   | World Petroleum Council         |
| SPE         | Society of Petroleum Engineers            | WTI   | West Texas Intermediate         |
| SPEE        | Society of Petroleum Evaluation Engineers | wt%   | Weight percent                  |
| SPS         | Subsea Production System                  |       |                                 |
|             |   |       |                                 |

Subsea

Stock tank barrel

Stock tank oil initially in place irreducible water saturation

SS

stb

Swi

STOIIP

Tonnes
TD Total Depth
Te Tonnes equivalent
THP Tubing Head Pressure
TJ Terajoules (10<sup>12</sup> Joules)
Tscf or Tcf Trillion standard cubic feet