



Providing Energy. Improving Lives.

2017

ANNUAL REPORT



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ON THE COVER:
CPCHEM'S NEW
WORLD-SCALE
3.3 BILLION-
POUND-PER-YEAR
ETHANE CRACKER
AT THE CEDAR
BAYOU FACILITY IN
BAYTOWN, TEXAS.

GREG C. GARLAND
CHAIRMAN AND CHIEF EXECUTIVE OFFICER



TO OUR SHAREHOLDERS,

In 2017, we celebrated five years as a stand-alone company. Reflecting on this milestone, it is important to thank our 14,600 dedicated Phillips 66 employees for successfully executing the company's strategy to deliver superior shareholder value while proudly demonstrating our company's vision of Providing Energy, Improving Lives. Since our company's inception, we have achieved a 257 percent total cumulative shareholder return and distributed \$16.4 billion to shareholders in dividends, share repurchases and share exchanges.

Our 2017 operating and financial results were strong. We delivered earnings of \$5.1 billion, adjusted earnings of \$2.3 billion and operating cash flow of \$3.6 billion. Our adjusted earnings increased 51 percent over the prior year, reflecting improved Refining margins and new Midstream growth projects placed into service.

We returned \$3 billion to Phillips 66 shareholders in 2017 through dividends and share repurchases. We increased our dividend for the seventh time since the company's formation and our Board of Directors approved a new \$3 billion share repurchase program, bringing total authorizations to \$12 billion.

We have accomplished these results while running our operations in a safe, reliable and environmentally responsible manner. Our combined workforce recordable injury rate was 0.14, a record for our company. We had the lowest number of reportable environmental events in our history, and our process safety performance Tier 1 rate of 0.03 was industry-leading.

Our commitment to operating excellence is further demonstrated by our refineries running at a 95 percent utilization rate during a year of heavy turnarounds.

In 2017, Phillips 66 provided \$28 million to support organizations promoting education, environmental sustainability, and community safety and preparedness, including more than \$4 million in disaster relief funding. Our employees volunteered 73,000 hours of their time in support of worthy causes, and many on the Texas Gulf Coast responded to the challenges and devastating effects from Hurricane Harvey.

In Midstream, we continue to invest in growth projects integrated with our existing infrastructure. Our Midstream business is favorably positioned to benefit from continued oil and gas production growth in the United States. We are investing in pipeline projects to transport hydrocarbons from high-growth production basins to Gulf Coast market centers. At our Beaumont Terminal, we continue to expand our crude oil storage capacity and export capabilities to capitalize on growing export demand. Within our NGL business, we are optimizing operations at our Sweeny Hub on the Gulf Coast to position the facility to benefit from improving market conditions.

We participate in the chemicals business through our joint venture investment in CPChem. We believe there are attractive growth

opportunities in the United States to leverage existing infrastructure and benefit from growing production of cost-advantaged feedstocks. In 2017, CPChem achieved major milestones at its U.S. Gulf Coast Petrochemicals Project with the mechanical completion of a world-scale ethane cracker and startup of two polyethylene units. This project is expected to generate significant cash flows as it ramps up operations during 2018.

In Refining, we invest in high-return, quick payout projects to enhance margins. During 2017, we increased heavy crude processing capability at our Billings Refinery and completed a diesel recovery project at our Ponca City Refinery. At both the Bayway and Wood River refineries, FCC unit modernization projects are underway to increase clean product yields.

Our Marketing business generates high returns with a low capital intensity. In the United States, we are seeing solid results from our re-imaged branded site designs through increased sales volumes. In Europe, we continue to increase the number of retail sites in countries where we have a strong market share.

As we move into 2018, our strategy for long-term value creation is the same as when we started more than five years ago: capturing growth opportunities in our Midstream and Chemicals businesses and enhancing returns from

our existing assets in the Refining and Marketing businesses. Shareholder distributions are fundamental to our long-term strategy, and we remain committed to a secure, competitive and growing dividend complemented with share repurchases. Our strategy is underpinned by a strong foundation of operating excellence and a high-performing organization.

In closing, we are proud of what the company has accomplished for Phillips 66 shareholders. We take your investment in the company seriously and thank you for the trust you have placed in us. We have been steadfast in our strategy, providing outstanding value to our shareholders, and remaining true to our vision of Providing Energy, Improving Lives. We believe Phillips 66 is a compelling investment and that the company's sustainable operations will continue to deliver benefits to you and our stakeholders for years to come.



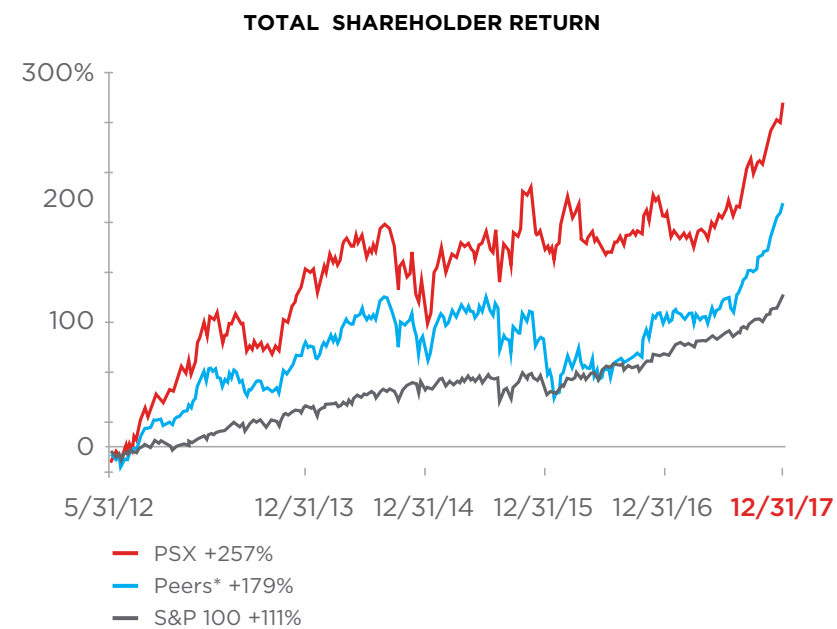
Greg C. Garland
Chairman and Chief Executive Officer



FINANCIAL HIGHLIGHTS

(Millions of Dollars, Except Per Share Amounts)

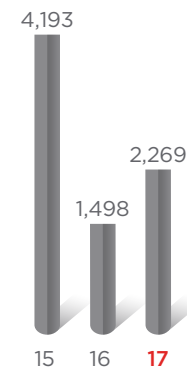
	2017	2016	2015
Sales and other operating revenues	\$102,354	\$84,279	\$98,975
Income before income taxes	3,555	2,191	6,044
Net income	5,248	1,644	4,280
Net income attributable to Phillips 66	5,106	1,555	4,227
Per share of common stock			
Basic	9.90	2.94	7.78
Diluted	9.85	2.92	7.73
Cash and cash equivalents	3,119	2,711	3,074
Total assets	54,371	51,653	48,580
Long-term debt	10,069	9,588	8,843
Total equity	27,428	23,725	23,938
Cash from operating activities	3,648	2,963	5,713
Cash dividends declared per common share	2.73	2.45	2.18
Adjusted earnings	\$2,269	\$1,498	\$4,193
Adjusted earnings per share	\$4.38	\$2.82	\$7.67



*Adeavor; Celanese Corporation; Delek US Holdings, Inc.; Eastman Chemical Co.; Enterprise Products Partners, LP; HollyFrontier Corporation; Huntsman Corporation; LyondellBasell Industries N.V.; Marathon Petroleum Corporation; Oneok, Inc.; PBF Energy Inc.; Targa Resources Corp.; Valero Energy Corporation; and Westlake Chemical Corp.

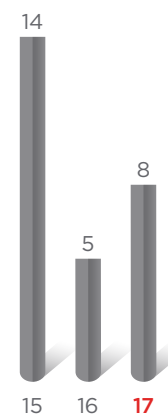
ADJUSTED EARNINGS

(\$ in millions)



ADJUSTED RETURN ON CAPITAL EMPLOYED (ROCE)

(%)



Our 2017 earnings were \$5.1 billion, or \$9.85 per share, which included a \$2.7 billion benefit from U.S. tax reform, primarily associated with the revaluation of the company's net deferred tax liabilities. Adjusted earnings were \$2.3 billion or \$4.38 per share. These amounts were up significantly from 2016. The increase in adjusted earnings was primarily due to an improvement in realized Refining margins, as well as increased Midstream earnings from new growth projects. The increase was partially offset by lower realized Marketing margins.

During 2017, we generated \$3.6 billion of cash from operations, compared with \$3.0 billion in 2016. We funded \$1.8 billion of capital expenditures, paid \$1.4 billion of dividends and repurchased \$1.6 billion of shares. Our ending cash balance was \$3.1 billion.

Total debt at year-end was \$10.1 billion, resulting in a debt-to-capital ratio of 27 percent. Our strong investment grade credit rating and balance sheet reflect our commitment to financial flexibility.

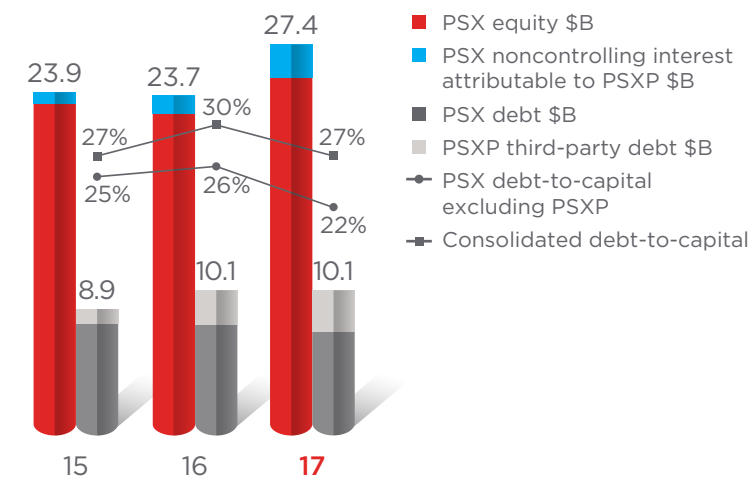
Our financial discipline, with a focus on prudent capital allocation, is fundamental to value creation and has enabled us to deliver strong shareholder distributions.

For 2018, we are funding a \$2.3 billion capital budget, which includes \$1.4 billion of growth capital and \$0.9 billion of sustaining capital. Approximately \$1.0 billion of the growth capital is for Midstream projects, with \$0.4 billion for high-return Refining and Marketing projects.

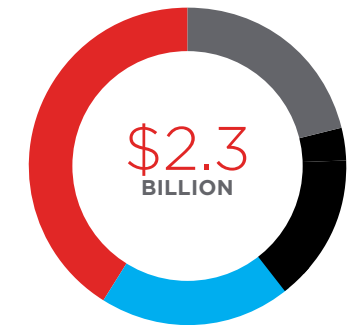
Our proportional share of capital expenditures by our major joint ventures is expected to be \$0.9 billion. We expect our major joint ventures to remain self-funded.

CAPITAL STRUCTURE

(\$B)



2018 CONSOLIDATED CAPITAL BUDGET



- Sustaining
- Phillips 66 Midstream Growth
- Phillips 66 Partners Growth
- Returns

\$1.4 BILLION
GROWTH CAPITAL

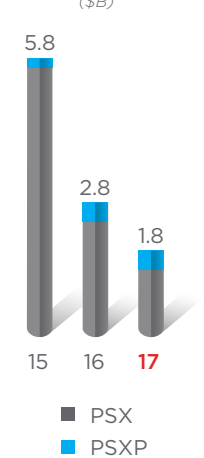
- Pipeline and terminal investments
- Fractionation and processing capability
- Export capacity
- Yield and feedstock enhancements

\$0.9 BILLION
SUSTAINING CAPITAL

- Maintaining safe, reliable assets

CONSOLIDATED CAPITAL EXPENDITURES

(\$B)



OUR BUSINESSES

Phillips 66 is a diversified energy manufacturing and logistics company. With a portfolio of Midstream, Chemicals, Refining, and Marketing and Specialties businesses, the company processes, transports, stores and markets fuels and products globally. Phillips 66 Partners, the company's master limited partnership, is integral to the portfolio. Headquartered in Houston, the company has 14,600 employees committed to safety and operating excellence.



MIDSTREAM

Our Midstream segment provides crude oil and refined product transportation, terminaling and processing services, as well as natural gas liquids (NGL) and liquefied petroleum gas (LPG) transportation, storage, processing and marketing services, mainly in the United States. This segment includes our master limited partnership, Phillips 66 Partners LP, as well as our 50 percent equity investment in DCP Midstream, LLC.

21,000 MILES OF PIPELINE SYSTEMS



REFINING

Our Refining segment refines crude oil and other feedstocks into petroleum products such as gasoline, distillates and aviation fuels at 13 refineries in the United States and Europe. Our Refining business focuses on operating excellence and margin enhancement.

2.1 MILLION BPD OF CRUDE THROUGHPUT CAPACITY



MARKETING AND SPECIALTIES

Our Marketing and Specialties segment markets refined petroleum products such as gasoline, distillates and aviation fuels, mainly in the United States and Europe.

The segment also includes the manufacturing and marketing of specialty products such as base oils and lubricants.

7,550 BRANDED U.S. OUTLETS

1,630 BRANDED INTERNATIONAL OUTLETS



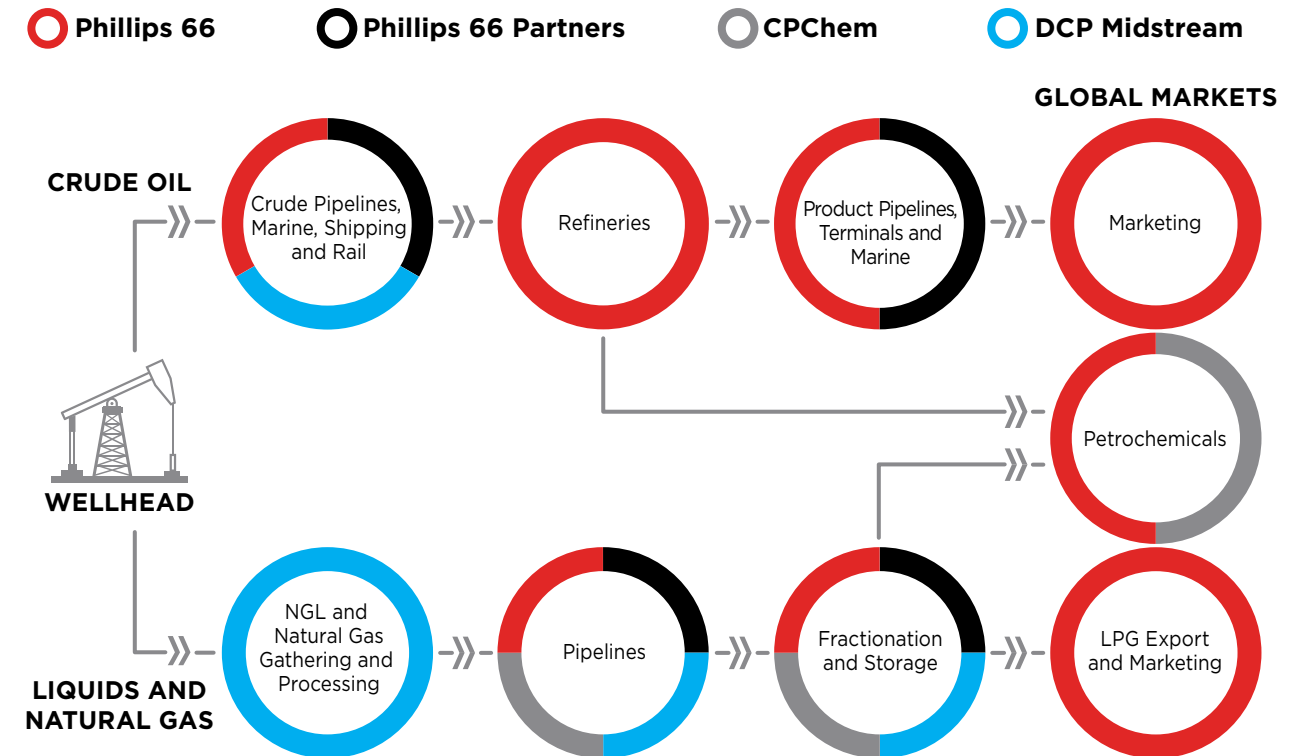
CHEMICALS

The Chemicals segment consists of our 50 percent joint venture interest in Chevron Phillips Chemical Company LLC (CPCChem), which manufactures and markets petrochemicals and plastics worldwide. CPCChem has cost-advantaged assets concentrated in North America and the Middle East.

30 GLOBAL MANUFACTURING FACILITIES

OUR VALUE CHAIN

We have an integrated network of businesses and assets across the value chain downstream of the wellhead. Our diverse portfolio is well-positioned to benefit from continued oil and gas production growth in the United States.



CPCHEM'S NEW ETHANE CRACKER AT CEDAR BAYOU



OUR STRATEGY

The Phillips 66 strategic priorities of growth, returns and distributions are supported by a strong foundation of operating excellence and a high-performing organization. We believe our strategy, which is the same today as when we started in 2012, creates long-term shareholder value. We made progress executing our key strategic priorities during 2017, achieving numerous milestones and successes.

GROWTH

Reshaping our portfolio by capturing growth opportunities in Midstream and Chemicals

RETURNS

Enhancing returns by maximizing earnings from existing assets and investing capital efficiently

DISTRIBUTIONS

Committed to dividend growth, share repurchases and financial strength

OPERATING EXCELLENCE

Committed to safety, reliability and environmental stewardship while protecting shareholder value

HIGH-PERFORMING ORGANIZATION

Building capability, pursuing excellence and doing the right thing

BEAUMONT TERMINAL



OPERATING EXCELLENCE

At Phillips 66, we are committed to safe, efficient and reliable operations with a focus on environmental stewardship. The strength of our health, safety and environmental policy, processes and systems is demonstrated by our continually improving record and industry-leading results.

Our 2017 combined workforce recordable injury rate of 0.14 was a record for us and is approximately 25 times better on average than the rest of U.S. manufacturing.

Our process safety performance Tier 1 rate of 0.03 is industry-leading and is down 50 percent over the last five years. We

also had the lowest number of reportable environmental events in our history.

In our Refining business, we focus on being a safe, efficient, reliable and low-cost operator. We achieved a 95 percent capacity utilization in our largest ever turnaround year while also facing hurricane impacts at our Gulf Coast facilities.

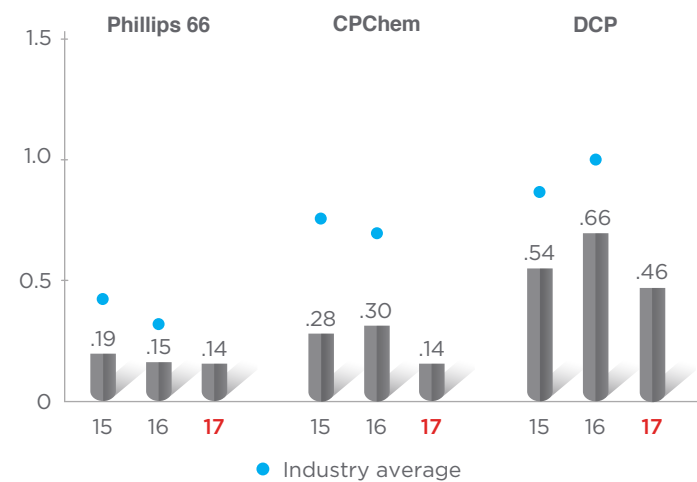
In Midstream, through ongoing optimization efforts, we improved our operating performance at the Sweeny Hub.

In our Chemicals business, CPChem's global Olefins and Polyolefins (O&P) capacity utilization rate was 87 percent,

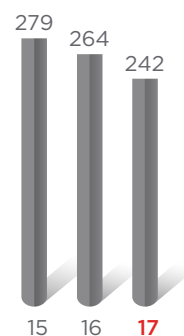
which was heavily impacted by hurricane downtime. CPChem persevered through the hurricane damages at its Cedar Bayou facility, which has returned to normal operations.

Our operating costs increased in 2017 primarily due to new growth projects placed in service, and higher turnaround and utility expense. We are looking across the enterprise and along our value chain to identify opportunities for cost savings and efficiencies. We believe that we can increase our use of technology to be even more agile and work more efficiently.

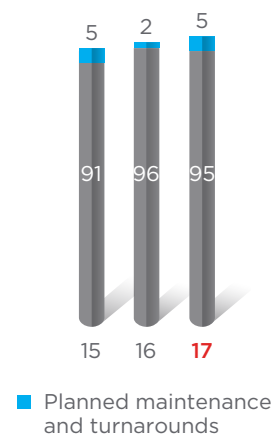
TOTAL RECORDABLE RATES
(Incidents per 200,000 hours worked)



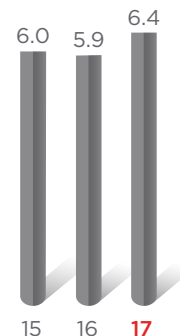
REFINING ENVIRONMENTAL METRICS
(No. of events)



REFINING CAPACITY UTILIZATION
(%)



OPERATING COSTS AND SG&A
(\$B)



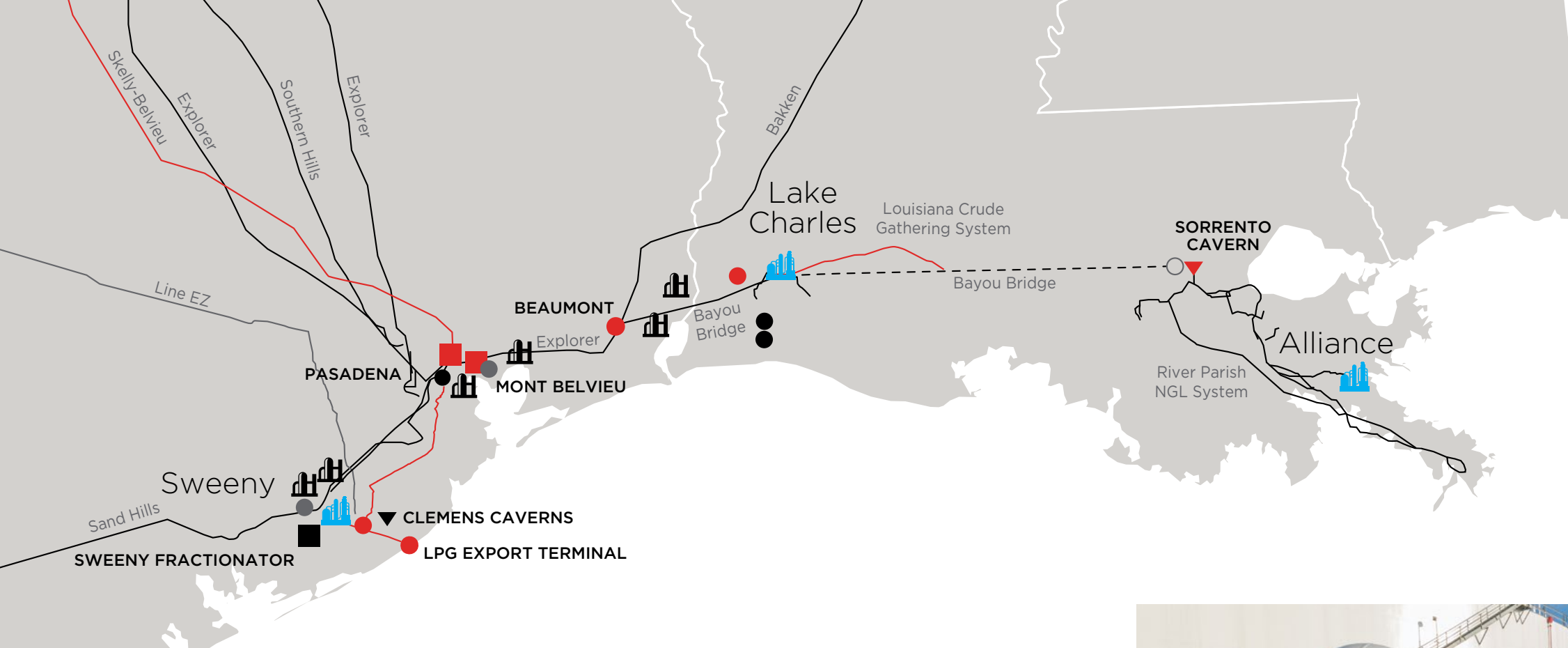
SAFETY RECOGNITION

The American Fuel and Petrochemical Manufacturers recognized 11 refineries for exemplary safety performance during 2017, six of which were Phillips 66 refineries. Our Lake Charles Refinery received the Distinguished Safety Award, the industry's highest level of safety recognition, for its leading performance in process and personal safety. Our Bayway, Billings, Rodeo, Santa Maria and Sweeny locations each received the Elite Silver Award, which recognizes the top 5 percent of all sites in the industry for attaining the highest safety performance.

REDUCING EMISSIONS

Phillips 66 tracks emissions of sulfur oxides (SO_x), nitrous oxides (NO_x) and particulate matter (PM) produced during the manufacturing of fuels. We have invested over \$6 billion in refining and environmental projects and improvements, including investments to reduce emissions through flare gas recovery systems, wet gas scrubbers, and heater and boiler projects. Since 2012, we have achieved a substantial reduction in SO_x, NO_x and PM emissions.

Phillips 66 is committed to managing greenhouse gas (GHG) emissions through investments in public and private research to advance energy solutions. As part of the GHG focus, we monitor emissions from our operations while seeking ways to lower them through increased energy efficiency. We conduct research in alternative energy, processing improvement and product innovation through our research and development technology center in Bartlesville, Oklahoma.



- Terminal (PSX)
- Terminal (PSXP)
- ▼ Underground storage facility (PSX)
- ▼ Underground storage facility (PSXP)
- Fractionator (PSX)
- Fractionator (PSXP)
- ⌚ CPChem ethylene and/or polyethylene facility
- CPChem USGC Petrochemical Project
- Pipeline (PSX)
- Pipeline (CPChem owned; PSX operated)
- Pipeline (PSXP)
- - Pipeline under construction (PSXP)
- Third-party terminal
- ⌚ Phillips 66 refinery

PHILLIPS 66 PARTNERS

Phillips 66 Partners is an integral part of our Midstream growth strategy, providing an attractive source of funding as a master limited partnership. Phillips 66 Partners can grow through organic investment opportunities, acquisitions or through dropdown transactions from Phillips 66. Phillips 66 Partners is positioned to deliver a 30 percent five-year distribution compound average growth rate through 2018.

BEAUMONT TERMINAL



GROWTH

Our Midstream business provides growth opportunities at attractive rates of return. We focus on Midstream growth projects that can be integrated with our existing assets and infrastructure.

Our Beaumont Terminal is strategically located on the U.S. Gulf Coast with connections to 11 crude oil pipelines. During 2017, we commissioned 2.2 million barrels of additional storage, bringing the terminal's total crude and products storage capacity to 11.1 million barrels. An additional 3.5 million barrels of crude storage is under construction that is expected to be commissioned in 2018, and will bring the

terminal's total capacity to 14.6 million barrels. Expansion of the terminal's export capability to 600,000 barrels per day (BPD) was completed in the fourth quarter of 2017.

Phillips 66 Partners owns a 25 percent interest in the Bakken Pipeline, which transports crude oil from the Bakken/Three Forks production area in North Dakota to delivery points in Patoka, Illinois, and Nederland, Texas, including our Beaumont Terminal. Operations on the 1,915-mile pipeline started up during mid-2017, and the pipeline has a capacity of approximately 525,000 BPD.

The Sand Hills Pipeline transports NGL from the Permian and Eagle Ford basins to fractionation facilities along the Texas Gulf Coast, including Phillips 66 Partners' Sweeny Fractionator and the Mont Belvieu market hub. Sand Hills is owned two-thirds by DCP Midstream and one-third by Phillips 66 Partners. Sand Hills' capacity was expanded to 365,000 BPD during the first quarter of 2018, with plans to further expand to 450,000 BPD in the second half of 2018.

Phillips 66 Partners owns a 40 percent interest in the Bayou Bridge Pipeline, which transports crude oil from our Beaumont

Terminal to Lake Charles, Louisiana. An extension of the pipeline from Lake Charles to the market center in St. James, Louisiana, is currently under construction and is expected to be completed during the second half of 2018. The Bayou Bridge Pipeline facilitates the delivery of advantaged crude oil to our Lake Charles and Alliance refineries.

Our energy manufacturing center in Sweeny, Texas, integrates complex refining capability, petrochemicals production, NGL fractionation, and storage and export facilities. The hub includes our Freeport LPG Export Terminal and Phillips 66 Partners' 100,000

BPD Sweeny Fractionator. We continue to focus on optimizing the facilities to lower costs and improve operating rates. Further expansion of the fractionation capacity is in the developmental stage.

In our Chemicals business, CPChem is investing in growth projects designed to capture the benefit of lower-cost petrochemical feedstocks on the U.S. Gulf Coast to meet the growing global demand for high-quality plastics and chemical intermediates. CPChem's U.S. Gulf Coast (USGC) Petrochemicals Project is located across two sites, in Old Ocean and Cedar Bayou, Texas.

The USGC project includes a 3.3 billion-pound-per-year ethane cracker, which produces ethylene, and two polyethylene units, each with the capacity to produce 1.1 billion pounds of resin per year.

The polyethylene units have started up and transitioned to commercial operations. The ethane cracker began commissioning in the first quarter of 2018 and is expected to ramp to full production in the second quarter. The project increases CPChem's global ethylene and polyethylene capacity by approximately one-third.

RETURNS

Our Refining business focuses on operating safely and reliably while optimizing to improve margins. Exercising cost and capital discipline is essential to our strategy. We invest our capital in quick payout, high-return projects, primarily to improve clean product yield and increase advantaged feedstock capability.

In the second quarter of 2017, we increased heavy crude processing capability at our Billings Refinery to 100 percent with the startup of a new vacuum distillation unit. At the Ponca City Refinery, we completed a diesel recovery project in the fourth quarter that increases clean product yield.

We are modernizing FCC units at both the Bayway and Wood River refineries to increase clean product production. We expect the projects to be complete during the second quarter of

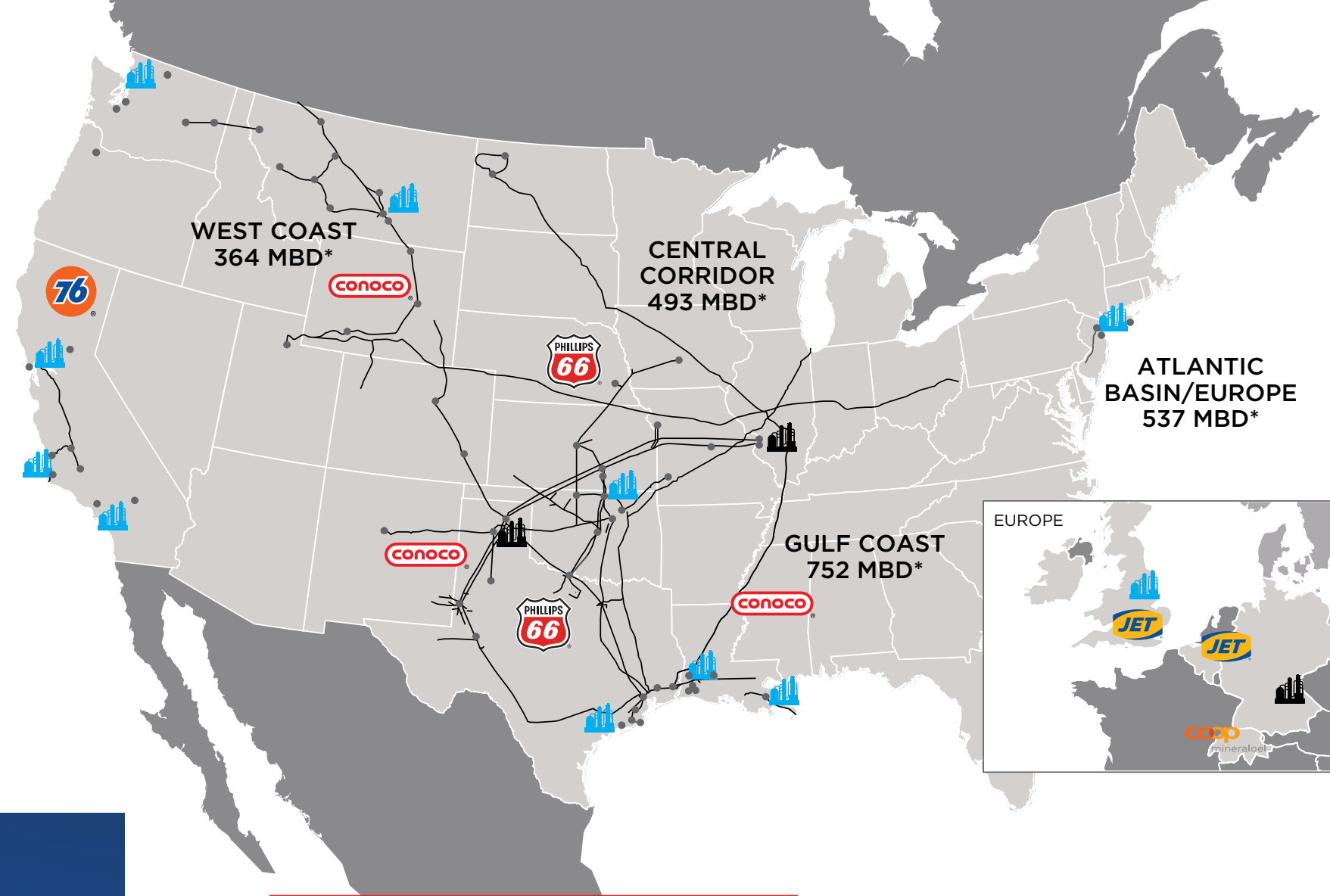
2018. At our Lake Charles Refinery, we are completing modifications to run more domestic crude to reduce our feedstock costs.

Our Marketing business generates stable earnings with a low capital intensity. Our independently owned U.S. Marketing branded sites are closely aligned with our refining and logistics assets and provide ratable pull through for our inland and West Coast refineries.

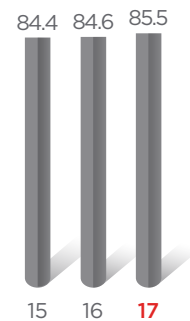
In the United States, we successfully rolled out a signature image design for our Phillips 66, 76 and Conoco brands. During 2017, we revitalized over 400 sites with our signature image, bringing the total number of re-imaged sites to almost 1,300. Re-imaged sites, on average, are achieving a 3 percent increase in fuel sales volumes.

We continue to grow and generate high returns in European Marketing through our branded JET and COOP retail businesses. These are high-volume, efficient operations with strong market share in Germany, Austria and Switzerland. During 2017, we completed construction of 30 new JET branded sites and 12 new COOP sites.

In the Specialties business, finished lubricants are marketed under our premium Phillips 66, Kendall and Red Line brands. Our strategy is to grow volumes through the higher margin marketer business, focusing on fewer, stronger brands and new premium products. We are the third-largest lubricants manufacturer in the United States and receive industry high rankings for supplier satisfaction.



GLOBAL CLEAN PRODUCT YIELD*



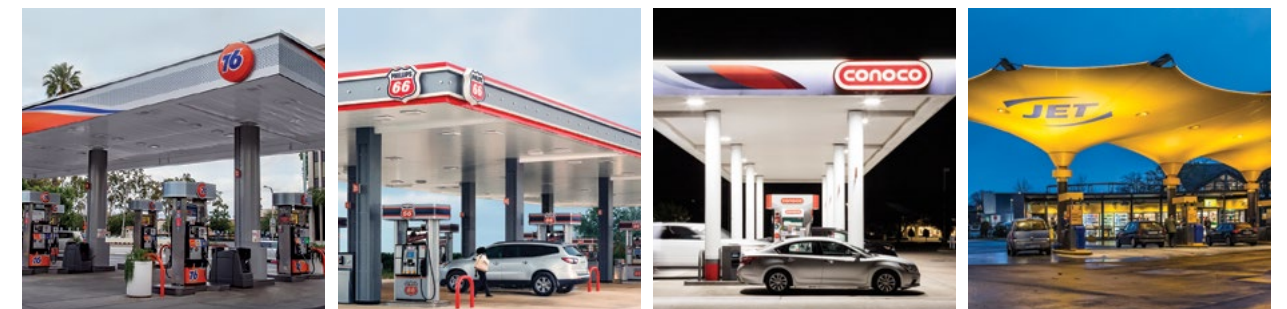
*Yields exclude refineries that have been sold in all periods presented.

BILLINGS REFINERY



- Phillips 66 and Phillips 66 Partners pipelines
- Phillips 66 and Phillips 66 Partners facilities
- 🏭 Phillips 66 refinery
- 🏭 Phillips 66 joint venture refinery

*Refining net crude throughput capacity, effective Jan. 1, 2018



With a continued focus on technology, we successfully launched new branded mobile phone applications with mobile payment capabilities. This is a conduit for customers to purchase fuel and products at Phillips 66, Conoco and 76 branded sites.

REFINING RETURN PROJECTS, COMPLETED IN 2017 AND CURRENTLY UNDER CONSTRUCTION, ARE EXPECTED TO DELIVER **25,000** BPD OF ADDITIONAL CLEAN PRODUCTS BY THE END OF 2018.

DISTRIBUTIONS

Returning capital to shareholders, through a secure, competitive and growing dividend, along with share repurchases, is a strategic priority for us.

During 2017, we distributed \$1.4 billion in dividends and \$1.6 billion in share repurchases. Since the formation of our company in 2012, we have returned \$16.4 billion

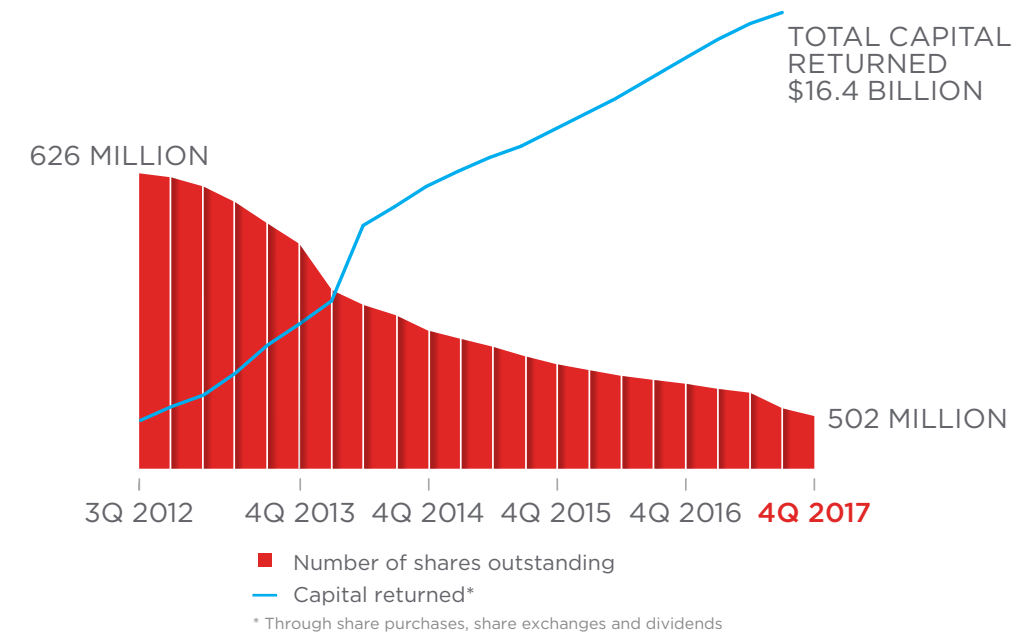
to shareholders through dividends, share repurchases and share exchanges.

Our Board of Directors approved a new \$3 billion share repurchase program in October 2017, which increased our total authorization for share repurchases to \$12 billion. From our formation through the end of 2017, we repurchased or

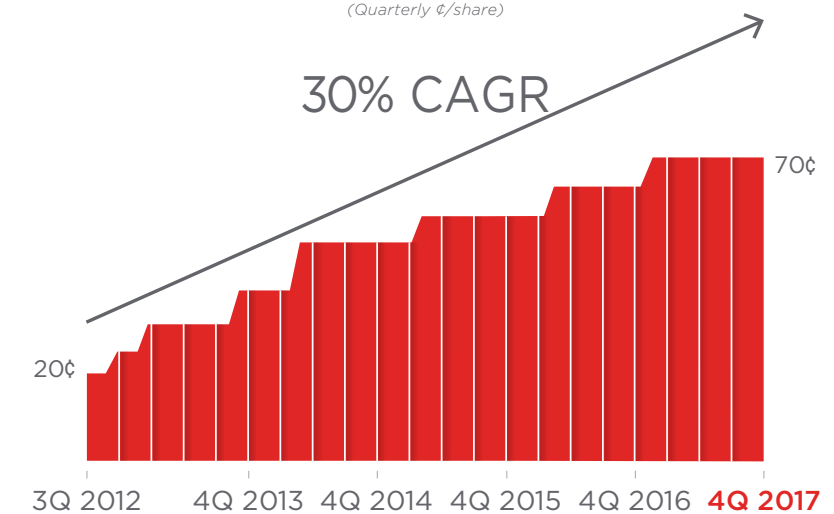
exchanged 142 million shares, representing 23 percent of our original shares outstanding.

In May 2017, Phillips 66 increased the quarterly dividend 11 percent to \$0.70 per share. This is our seventh increase since formation, representing a 30 percent compound annual growth rate.

SHARE COUNT AND CAPITAL RETURNED



DIVIDEND GROWTH (Quarterly ¢/share)





L TO R: EMPLOYEES ASSEMBLE BABY FOOD BAGS FOR THE HOUSTON FOOD BANK. EMPLOYEES VOLUNTEER AT A HABITAT FOR HUMANITY EVENT AND AT HERMANN PARK, HOUSTON.

HIGH-PERFORMING ORGANIZATION

Our values of safety, honor and commitment guide how we make decisions, conduct business and engage with stakeholders. We have a high-performing organization that is defined by culture, capability and performance. This forms the basis for our relationships with colleagues, customers, partners and communities.

Our employees are held accountable to the highest ethical standards. We value an inclusive and diverse workforce, which is reflected in our many Employee Resource Groups (ERGs), with 30 percent of employees participating with at least one group. Our ERGs focus on raising cultural awareness, professional development, recruiting and outreach, and community involvement.

Our employees participated in many worthwhile volunteer activities such as mentoring students in the classroom,

teaching STEM and literacy activities at summer camps, installing residential smoke alarms for the American Red Cross, assembling child safety kits for local Crime Stoppers, building houses for Habitat for Humanity, cleaning local parks, volunteering for local Special Olympics, and hosting waste disposal and recycling days.

During the past year, our employees demonstrated what a high-performing organization looks like with their response to Hurricane Harvey. They did extraordinary things to help their families, friends and neighbors. And they worked to safeguard our assets and communities. Through these efforts, we were able to ensure critical energy products were supplied to first responders, businesses and consumers. We are very proud of how our employees responded to the challenges caused by this storm.

 **73,000** HOURS VOLUNTEERED BY EMPLOYEES DURING 2017

PHILLIPS 66 PROVIDED
\$28 MILLION IN FINANCIAL SUPPORT TO ORGANIZATIONS PROMOTING EDUCATION AND LITERACY, SAFETY AND PREPAREDNESS, ENVIRONMENTAL SUSTAINABILITY AND CIVIC ENRICHMENT. THIS INCLUDED MORE THAN
\$4 MILLION IN DISASTER RELIEF FUNDING

55 NEW DEPENDENT SCHOLARSHIPS, BRINGING THE TOTAL NUMBER OF RECIPIENTS TO
230

691 ORGANIZATIONS RECEIVED VOLUNTEER GRANTS

1,621 ORGANIZATIONS RECEIVED MONETARY MATCHING GIFTS



EMPLOYEES BUILD A HOUSE AT A HABITAT FOR HUMANITY EVENT

BOARD OF DIRECTORS



L TO R: JOHN LOWE, MARNA WHITTINGTON, BRIAN FERGUSON, HAROLD MCGRAW, GREG GARLAND, GLENN TILTON, VICTORIA TSCHINKEL, DENISE RAMOS, WILLIAM LOOMIS, GARY ADAMS

GREG C. GARLAND

Mr. Garland serves as Chairman and CEO of Phillips 66. He was appointed Senior Vice President, Exploration and Production-Americas for ConocoPhillips in 2010. He was previously President and CEO of Chevron Phillips Chemical Company LLC (CPChem) from 2008 to 2010, having served as Senior Vice President, Planning and Specialty Products, CPChem, from 2000 to 2008. Mr. Garland also serves on the boards of Amgen Inc. and Phillips 66 Partners GP LLC, the general partner of Phillips 66 Partners LP. (2)

J. BRIAN FERGUSON

Mr. Ferguson retired as Chairman of Eastman Chemical Company in 2010 and as CEO of Eastman in 2009. He became the Chairman and CEO of Eastman in 2002. He served on the board of NextEra Energy, Inc. from 2005 to 2013 and currently serves on the board of Owens Corning. (1,2,4,5)

JOHN E. LOWE

Mr. Lowe served as assistant to the CEO of ConocoPhillips, a position he held from 2008 until May 2012. He previously held a series of executive positions with ConocoPhillips, including Executive Vice President, Exploration and Production, from 2007 to 2008, and Executive Vice President, Commercial, from 2006 to 2007. Mr. Lowe is a Senior Executive Advisor to Tudor, Pickering, Holt & Co. He served on the board of Agrium Inc. from 2010 to 2015 and currently serves on the boards of TransCanada Corporation and Apache Corporation, where he is Non-Executive Chairman. (1,2,5)

DENISE L. RAMOS

Ms. Ramos has served as the Chief Executive Officer, President and a director of ITT Inc. (formerly ITT Corporation) since October 2011. She previously served as Senior Vice President and Chief Financial Officer of ITT. Prior to joining ITT, Ms. Ramos served as Chief Financial Officer for Furniture Brands International from 2005 to 2007. From 2000 to 2005, Ms. Ramos served as Senior Vice President and Corporate Treasurer at Yum! Brands, Inc. and Chief Financial Officer for the U.S. division of KFC Corporation. Ms. Ramos began her career in 1979 at Atlantic Richfield Company (ARCO), where she spent more than 20 years serving in a number of finance positions including Corporate General Auditor and Assistant Treasurer.

Ms. Ramos served on the board of Praxair, Inc. from 2014 to 2016. She serves on the board of trustees for the Manufacturers Alliance for Productivity and Innovation, and is a member of the Business Council. (1,4,5)

VICTORIA J. TSCHINKEL

Ms. Tschinkel currently serves as the Vice-Chairwoman of 1000 Friends of Florida and previously was its Chairwoman. In addition, Ms. Tschinkel is a director of the National Fish and Wildlife Foundation, serving on the Gulf Benefits Committee. She served as State Director of the Florida Nature Conservancy from 2003 to 2006, was senior environmental consultant to Landers & Parsons, a Tallahassee, Florida law firm, from 1987 to 2002, and was the Secretary of the Florida Department of Environmental Regulation from 1981 to 1987. (1,5)

(1) MEMBER OF THE AUDIT AND FINANCE COMMITTEE
 (2) MEMBER OF THE EXECUTIVE COMMITTEE
 (3) MEMBER OF THE HUMAN RESOURCES AND COMPENSATION COMMITTEE
 (4) MEMBER OF THE NOMINATING AND GOVERNANCE COMMITTEE
 (5) MEMBER OF THE PUBLIC POLICY COMMITTEE
 AS OF MARCH 1, 2018

GARY K. ADAMS

Mr. Adams is the former chief advisor of chemicals for IHSMarkit. He started his chemical industry career with Union Carbide. After 15 years serving in a number of positions at Union Carbide, Mr. Adams joined Chemical Market Associates Inc. (CMAI). He served as President, CEO and Chairman of the Board of CMAI from 1997 until its acquisition by IHS in 2011. Mr. Adams is a director of Trecora Resources and previously served on the boards of Westlake Chemical Partners LP from 2014 to 2016 and Phillips 66 Partners LP from 2013 to 2016. (3,5)

WILLIAM R. LOOMIS, JR.

Mr. Loomis has been an independent financial advisor since 2009. He was a general partner and Managing Director of Lazard Freres & Co. from 1984 to 2002, the CEO of Lazard LLC from 2000 to 2001 and a Limited Managing Director of Lazard LLC from 2002 to 2004. Mr. Loomis served as a director of L Brands Inc. from 2005 to 2016. (1,2,4,5)

HAROLD W. MCGRAW III

Mr. McGraw is Chairman Emeritus of S&P Global Inc. (previously McGraw Hill Financial), having served as Chairman of the Board from 1999 until 2015, as President and Chief Executive Officer from 1998 to November 2013 and as President and Chief Operating Officer starting in 1993. Mr. McGraw is the Honorary Chairman of the International Chamber of Commerce. He currently serves on the board of United Technologies Corporation. (3,5)

GLENN F. TILTON

Mr. Tilton served as Chairman of the Midwest of JPMorgan Chase & Co. from 2011 to 2014. From 2002 to 2010, he served as Chairman, President and CEO of UAL Corporation, a holding company, and United Air Lines, Inc., an air transportation company and wholly owned subsidiary of UAL Corporation. Mr. Tilton previously spent more than 30 years in increasingly senior roles with Texaco Inc., including Chairman and CEO in 2001. He served as Non-Executive Chairman of the Board of United Continental Holdings Inc. from 2010 to 2013 and currently serves on the boards of Abbott Laboratories and AbbVie Inc. (as lead director). (2,3,5)

MARNA C. WHITTINGTON

Dr. Whittington was CEO of Allianz Global Investors Capital, a diversified global investment firm, from 2002 until her retirement in January 2012. She was Chief Operating Officer of Allianz Global Investors, the parent company of Allianz Global Investors Capital, from 2001 to 2011. Prior to that, she was Managing Director and Chief Operating Officer of Morgan Stanley Asset Management. Dr. Whittington started in the investment management industry in 1992, joining Philadelphia-based Miller Anderson & Sherrerd. Previously, she was Executive Vice President and CFO of the University of Pennsylvania, from 1984 to 1992. Earlier, she served as Budget Director and, subsequently, Secretary of Finance for the State of Delaware. Dr. Whittington served on the board of Rohm & Haas Company from 1989 to 2009 and currently serves on the boards of Macy's, Inc. and Oaktree Capital Group, LLC. (2,3,4,5)

EXECUTIVE LEADERSHIP TEAM



STANDING L TO R: JEFF DIETERT, ZHANNA GOLODRYGA, JAY CHURCHILL, TIM ROBERTS
SEATED L TO R: KEVIN MITCHELL, BOB HERMAN, GREG GARLAND, PAULA JOHNSON, SONYA REED

Greg C. Garland, Chairman and Chief Executive Officer

Jay D. Churchill, Senior Vice President, Health, Safety and Environment, and Projects

Jeff A. Dietert, Vice President, Investor Relations

Zhanina Golodryga, Senior Vice President, Chief Digital and Administrative Officer

Robert A. Herman, Executive Vice President, Refining

Paula A. Johnson, Executive Vice President, Legal and Government Affairs, General Counsel, Corporate Secretary

Kevin J. Mitchell, Executive Vice President, Finance and Chief Financial Officer

Sonya M. Reed, Senior Vice President, Human Resources, Communications and Public Affairs

Timothy D. Roberts, Executive Vice President, Marketing and Commercial

NON-GAAP RECONCILIATIONS

RECONCILIATION OF EARNINGS TO ADJUSTED EARNINGS

(Millions of dollars)	2017	2016	2015
Net income attributable to Phillips 66 (earnings)	\$5,106	\$1,555	\$4,227
Pre-tax adjustments:			
Impairments by equity affiliates	64	95	390
Pending claims and settlements	(60)	(117)	30
Certain tax impacts *	(23)	(32)	(9)
Lower-of-cost-or-market inventory adjustments	—	—	53
Asset dispositions	—	—	(280)
Pension settlement expense	83	—	80
Recognition of deferred logistics commitments	—	30	—
Equity affiliate ownership restructuring	—	33	—
Railcar lease residual value deficiencies and related costs	—	40	—
Gain on consolidation of business	(423)	—	—
Hurricane-related costs	210	—	—
Tax impact of adjustments**	47	4	(181)
U.S. tax reform	(2,735)	—	—
Other tax impacts	—	(110)	(117)
Adjusted earnings	\$2,269	\$1,498	\$4,193
Earnings per share of common stock (dollars)	\$9.85	\$2.92	\$7.73
Adjusted earnings per share of common stock (dollars)†	\$4.38	\$2.82	\$7.67

*Pre-tax impact only. Tax-only adjusted items included in "other tax impacts."

**We generally tax effect taxable U.S.-based special items using a combined federal and state statutory income tax rate of approximately 38 percent. Taxable special items attributable to foreign locations likewise use a local statutory income tax rate. Nontaxable events reflect zero income tax. These events include, but are not limited to, most goodwill impairments, transactions legislatively exempt from income tax, transactions related to entities for which we have made an assertion that the undistributed earnings are permanently reinvested, or transactions occurring in jurisdictions with a valuation allowance.

†Weighted-average diluted shares outstanding and income allocated to participating securities, if applicable, in the adjusted earnings per share calculation are the same as those used in the GAAP diluted earnings per share calculation.

RECONCILIATION OF ROCE TO ADJUSTED ROCE

(Millions of dollars) Numerator	2017	2016	2015
Net income	\$5,248	\$1,644	\$4,280
After-tax interest expense	285	220	201
GAAP ROCE earnings	5,533	1,864	4,481
After-tax special items	(2,837)	(57)	(34)
Adjusted ROCE earnings	2,696	1,807	4,447
(Millions of dollars) Denominator	2017	2016	2015
GAAP average capital employed *	\$35,700	\$33,344	\$31,749
GAAP ROCE (percent)	15%	6%	14%
Adjusted ROCE (percent)	8%	5%	14%

* Total equity plus total debt



PHILLIPS 66 FORM 10-K



2017

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2017
OR

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

For the transition period from _____ to _____
Commission file number: **001-35349**

Phillips 66

(Exact name of registrant as specified in its charter)

Delaware **45-3779385**
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

2331 CityWest Blvd., Houston, Texas 77042
(Address of principal executive offices) (Zip Code)
Registrant's telephone number, including area code: **281-293-6600**

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

Title of each class	Name of each exchange on which registered
Common Stock, \$0.01 Par Value	New York Stock Exchange

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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 No

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 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, 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 whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of common stock held by non-affiliates of the registrant on June 30, 2017, the last business day of the registrant's most recently completed second fiscal quarter, based on the closing price on that date of \$82.69, was \$42.3 billion. The registrant, solely for the purpose of this required presentation, had deemed its Board of Directors and executive officers to be affiliates, and deducted their stockholdings in determining the aggregate market value.

The registrant had 501,237,339 shares of common stock outstanding at January 31, 2018.

Documents incorporated by reference:

Portions of the Proxy Statement for the Annual Meeting of Stockholders to be held on May 9, 2018 (Part III).

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Unless otherwise indicated, “the company,” “we,” “our,” “us” and “Phillips 66” are used in this report to refer to the businesses of Phillips 66 and its consolidated subsidiaries. Unless the context requires otherwise, references to “DCP Midstream” include the consolidated operations of DCP Midstream, LLC, including DCP Midstream, LP, the master limited partnership formed by DCP Midstream, LLC.

This Annual Report on Form 10-K contains forward-looking statements including, without limitation, statements relating to our plans, strategies, objectives, expectations and intentions that are made pursuant to the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. The words “anticipate,” “estimate,” “believe,” “budget,” “continue,” “could,” “intend,” “may,” “plan,” “potential,” “predict,” “seek,” “should,” “will,” “would,” “expect,” “objective,” “projection,” “forecast,” “goal,” “guidance,” “outlook,” “effort,” “target” and similar expressions identify forward-looking statements. The company does not undertake to update, revise or correct any forward-looking information unless required to do so under the federal securities laws. Readers are cautioned that such forward-looking statements should be read in conjunction with the company’s disclosures under the heading “CAUTIONARY STATEMENT FOR THE PURPOSES OF THE ‘SAFE HARBOR’ PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995.”

PART I

Items 1 and 2. BUSINESS AND PROPERTIES

CORPORATE STRUCTURE

Phillips 66, headquartered in Houston, Texas, was incorporated in Delaware in 2011 in connection with, and in anticipation of, a restructuring of ConocoPhillips that separated its downstream businesses into an independent, publicly traded company named Phillips 66. The two companies were separated by ConocoPhillips distributing to its stockholders all the shares of common stock of Phillips 66 after the market closed on April 30, 2012 (the Separation). Phillips 66 stock trades on the New York Stock Exchange under the “PSX” stock symbol.

Our business is organized into four operating segments:

- 1) **Midstream**—Provides crude oil and refined products transportation, terminaling and processing services, as well as natural gas, natural gas liquids (NGL) and liquefied petroleum gas (LPG) transportation, storage, processing and marketing services, mainly in the United States. This segment includes our master limited partnership (MLP), Phillips 66 Partners LP (Phillips 66 Partners), as well as our 50 percent equity investment in DCP Midstream, LLC (DCP Midstream).
- 2) **Chemicals**—Consists of our 50 percent equity investment in Chevron Phillips Chemical Company LLC (CPChem), which manufactures and markets petrochemicals and plastics on a worldwide basis.
- 3) **Refining**—Refines crude oil and other feedstocks into petroleum products (such as gasoline, distillates and aviation fuels) at 13 refineries in the United States and Europe.
- 4) **Marketing and Specialties**—Purchases for resale and markets refined petroleum products, mainly in the United States and Europe. In addition, this segment includes the manufacturing and marketing of specialty products (such as base oils and lubricants), as well as power generation operations.

Corporate and Other includes general corporate overhead, interest expense, our investment in new technologies and various other corporate activities. Corporate assets include all cash and cash equivalents.

At December 31, 2017, Phillips 66 had approximately 14,600 employees.

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SEGMENT AND GEOGRAPHIC INFORMATION

For operating segment and geographic information, see Note 26—Segment Disclosures and Related Information, in the Notes to Consolidated Financial Statements, which is incorporated herein by reference.

MIDSTREAM

The Midstream segment consists of three business lines:

- Transportation—Transports crude oil and other feedstocks to our refineries and other locations, delivers refined products to market, and provides terminaling and storage services for crude oil and petroleum products.
- NGL and Other—Transports, stores, fractionates and markets NGL in the United States, exports LPG and provides other fee-based processing services.
- DCP Midstream—Gathers, processes, transports and markets natural gas and transports, fractionates and markets NGL.

Phillips 66 Partners

In 2013, we formed Phillips 66 Partners, an MLP, to own, operate, develop and acquire primarily fee-based crude oil, refined petroleum products and NGL pipelines and terminals, as well as other midstream assets. At December 31, 2017, we owned a 55 percent limited partner interest and a 2 percent general partner interest in Phillips 66 Partners, while the public owned a 43 percent limited partner interest and 13.8 million perpetual convertible preferred units.

Headquartered in Houston, Texas, Phillips 66 Partners' assets and equity investments currently consist of crude oil, refined petroleum products and NGL transportation, terminaling and storage systems, as well as crude oil and NGL processing facilities, that are geographically dispersed throughout the United States. The majority of Phillips 66 Partners' assets are integral to Phillips 66-operated refineries.

During 2017, Phillips 66 Partners expanded its business by acquiring from us:

- A 25 percent interest in both Dakota Access, LLC (Dakota Access) and Energy Transfer Crude Oil Company, LLC (ETCO), which collectively own the Bakken Pipeline.
- A 100 percent interest in Merey Sweeny, L.P. (MSLP), a limited partnership that owns a delayed coker and performs crude oil processing at our Sweeny Refinery.

This acquisition closed in October 2017. See Note 27—Phillips 66 Partners LP, in the Notes to the Consolidated Financial Statements, for more information on this transaction.

The operations and financial results of Phillips 66 Partners are included in Midstream's Transportation and NGL and Other business lines, based on the nature of the activity within the partnership.

Transportation

We own or lease various assets to provide terminaling and storage of crude oil, refined products, natural gas and NGL. These assets include pipeline systems; petroleum products, crude oil and LPG terminals; a petroleum coke handling facility; marine vessels; railcars and trucks.

Pipelines and Terminals

At December 31, 2017, our Transportation business managed over 21,000 miles of crude oil, natural gas, NGL and petroleum product pipeline systems in the United States, including those partially owned or operated by affiliates. We owned or operated 40 finished product terminals, 38 storage locations, 5 LPG terminals, 19 crude oil terminals and 1 petroleum coke exporting facility.

The Beaumont Terminal in Nederland, Texas, is the largest terminal in the Phillips 66 portfolio. During 2017, we continued to invest in the terminal by adding 0.9 million barrels of crude storage capacity and 1.3 million barrels of products storage. At December 31, 2017, including these additions, the terminal capacity was 11.1 million barrels, of which 7.4 million barrels was crude oil storage capacity and 3.7 million barrels was refined product storage capacity. We have 3.5 million barrels of incremental crude storage capacity under construction that will be commissioned throughout 2018. In addition, during the fourth quarter of 2017, we completed expansion of the terminal's export facilities from 400,000 to 600,000 barrels per day (BPD). We have also initiated a variety of other projects aimed at increasing storage and throughput capabilities as we continue the expansion of the Beaumont terminal to 16 million barrels.

The Bakken Pipeline went into commercial service in June 2017. The pipeline is approximately 1,915 miles long with an estimated capacity of 525,000 BPD at December 31, 2017. Phillips 66 Partners has a 25 percent interest in the Bakken Pipeline, through its 25 percent interests in both the Dakota Access and ETCO joint ventures. Energy Transfer Partners, L.P. (ETP) and MarEn Bakken Company LLC also have 38.25 percent and 36.75 percent interests, respectively, in the Bakken Pipeline, with ETP serving as the operator. The Dakota Access section of the Bakken Pipeline is approximately 1,172 miles long and delivers crude oil from the Bakken/Three Forks production area in North Dakota to a storage and terminaling hub outside of Patoka, Illinois, which includes an interconnection with the ETCO pipeline. The ETCO pipeline section of the Bakken Pipeline is approximately 743 miles long and transports crude oil from the Midwest to Phillips 66 and ETP storage terminals located in Nederland, Texas.

The Bayou Bridge Pipeline joint venture delivers crude oil from Nederland, Texas, to Lake Charles, Louisiana. At December 31, 2017, this pipeline had capacity of approximately 480,000 BPD. Phillips 66 Partners has a 40 percent interest in the joint venture, and ETP has a 60 percent interest and serves as the operator. The remaining section of the pipeline, which is being constructed, will deliver crude oil from Lake Charles to St. James, Louisiana, and is expected to be completed in the second half of 2018.

The Sacagawea Pipeline is owned by the joint venture Sacagawea Pipeline Company, LLC, in which Paradigm Pipeline LLC holds a 99 percent interest. Phillips 66 Partners and Paradigm Energy Partners, LLC each own a 50 percent interest in Paradigm Pipeline LLC. In August 2017, a new origin point on the Sacagawea Pipeline near New Town, North Dakota, was established, enabling crude to flow from this origin point to the Bakken Pipeline at Johnson's Corner, Keene Terminal, Palermo Terminal, and North Dakota Pipeline at Stanley, North Dakota.

Phillips 66 Partners and Plains All American Pipeline, L.P. each own a 50 percent interest in the STACK Pipeline LLC joint venture, which owns and operates a crude oil storage terminal and a common carrier pipeline that transports crude oil from the Sooner Trend, Anadarko Basin, Canadian and Kingfisher Counties (STACK) play in northwestern Oklahoma to Cushing, Oklahoma. During the fourth quarter of 2017, this joint venture completed an expansion project to loop the existing pipeline and extend further into the STACK play, which increased capacity by 150,000 BPD.

The following table depicts our ownership interest in major pipeline systems as of December 31, 2017:

Name	Origination/Terminus	Interest	Size	Length (Miles)	Gross Capacity (MBD)
Crude and Feedstocks					
Bakken Pipeline †	North Dakota/Nederland, TX	25%	30"	1,915	525
Bayou Bridge †	Nederland, TX/Lake Charles, LA	40	30"	49	480
Clifton Ridge †	Clifton Ridge, LA/Westlake, LA	100	20"	10	260
Cushing †	Cushing, OK/Ponca City, OK	100	18"	62	130
Eagle Ford Gathering †	Helena, TX	100	6"	6	20
Eagle Ford Gathering †	Tilden, TX/Whitsett, TX	100	6"-10"	22	34
Glacier †	Cut Bank, MT/Billings, MT	79	8"-12"	865	126
Line O †	Cushing, OK/Borger, TX	100	10"	276	37
Line 80 †	Gaines, TX/Borger, TX	100	8", 12"	237	28
Line 100	Taft, CA/Lost Hills, CA	100	8", 10", 12"	79	54
Line 200	Lost Hills, CA/Rodeo, CA	100	12", 16"	228	93
Line 300	Nipomo, CA/Arroyo Grande, CA	100	8", 10", 12"	69	48
Line 400	Arroyo Grande, CA/Lost Hills, CA	100	8", 10", 12"	147	40
Louisiana Crude Gathering	Rayne, LA/Westlake, LA	100	4"-8"	80	25
North Texas Crude †	Wichita Falls, TX	100	2"-16"	224	28
Oklahoma Mainline †	Wichita Falls, TX/Ponca City, OK	100	12"	217	100
Sacagawea †	Keene, ND/Stanley, ND	50	16"	95	175
STACK PL †	Cashion, OK/Cushing, OK	50	8"-16"	149	250
Sweeny Crude	Sweeny, TX/Freeport, TX	100	12", 24", 30"	56	265
WA Line †	Odessa, TX/Borger, TX	100	12", 14"	289	104
West Texas Gathering †	Permian Basin	100	4"-14"	757	115
Petroleum Products					
ATA Line †	Amarillo, TX/Albuquerque, NM	50	6", 10"	293	34
Borger to Amarillo †	Borger, TX/Amarillo, TX	100	8", 10"	93	76
Borger-Denver	McKee, TX/Denver, CO	70	6"-12"	405	38
Cherokee East †	Medford, OK/Mount Vernon, MO	100	10", 12"	287	55
Cherokee North †	Ponca City, OK/Arkansas City, KS	100	10"	29	57
Cherokee South †	Ponca City, OK/Oklahoma City, OK	100	8"	90	46
Cross Channel Connector †	Pasadena, TX/Galena Park, TX	100	20"	5	180
Explorer †	Texas Gulf Coast/Chicago, IL	22	24", 28"	1,830	660
Gold Line †	Borger, TX/East St. Louis, IL	100	8"-16"	681	120
Harbor	Woodbury, NJ/Linden, NJ	33	16"	80	171
Heartland*	McPherson, KS/Des Moines, IA	50	8", 6"	49	30
LAX Jet Line	Wilmington, CA/Los Angeles, CA	50	8"	19	50
Los Angeles Products	Torrance, CA/Los Angeles, CA	100	6", 12"	22	112
Paola Products †	Paola, KS/Kansas City, KS	100	8", 10"	106	96
Pioneer	Sinclair, WY/Salt Lake City, UT	50	8", 12"	562	63
Richmond	Rodeo, CA/Richmond, CA	100	6"	14	26
SAAL †	Amarillo, TX/Abernathy, TX	33	6"	102	33
SAAL †	Abernathy, TX/Lubbock, TX	54	6"	19	30
Seminole †	Billings, MT/Sinclair, WY	100	6"-10"	342	33
Standish †	Marland Junction, OK/Wichita, KS	100	18"	92	72
Sweeny to Pasadena †	Sweeny, TX/Pasadena, TX	100	12", 18"	120	294
Torrance Products	Wilmington, CA/Torrance, CA	100	10", 12"	8	161
Watson Products Line	Wilmington, CA/Long Beach, CA	100	20"	9	238
Yellowstone	Billings, MT/Moses Lake, WA	46	6"-10"	710	66

Name	Origination/Terminus	Interest	Size	Length (Miles)	Gross Capacity (MBD)
NGL					
Chisholm	Kingfisher, OK/Conway, KS	50%	4"-10"	202	42
Powder River	Sage Creek, WY/Borger, TX	100	6"-8"	705	14
River Parish NGL †	Southeast Louisiana	100	4"-20"	510	133
Sand Hills**†	Permian Basin/Mont Belvieu, TX	33	20"	1,190	315
Skelly-Belvieu	Skellytown, TX/Mont Belvieu, TX	50	8"	571	45
Southern Hills**†	U.S. Midcontinent/Mont Belvieu, TX	33	20"	941	140
Sweeny NGL	Brazoria, TX/Sweeny, TX	100	20"	18	204
TX Panhandle Y1/Y2	Sher-Han, TX/Borger, TX	100	3"-10"	299	61
LPG					
Blue Line	Borger, TX/East St. Louis, IL	100	8"-12"	688	29
Brown Line †	Ponca City, OK/Wichita, KS	100	8", 10"	76	26
Conway to Wichita	Conway, KS/Wichita, KS	100	12"	55	38
Medford †	Ponca City, OK/Medford, OK	100	4"-6"	42	10
Sweeny LPG Lines	Sweeny, TX/Mont Belvieu & Freeport, TX	100	10"-20"	246	942
Natural Gas					
Rockies Express***					
West to East	Meeker, CO/Clarington, OH	25	36"-42"	1,712	1.8 Bcf/d
East to West	Clarington, OH/Moultrie, IL	25	24", 42"	670	2.6 Bcf/d

† Owned by Phillips 66 Partners; Phillips 66 held a 57 percent ownership interest in Phillips 66 Partners at December 31, 2017.

* Total pipeline system is 419 miles. Phillips 66 has an ownership interest in multiple segments totaling 49 miles.

** Operated by DCP Midstream, LP; Phillips 66 Partners holds a direct one-third ownership interest in the pipeline entities.

*** Total pipeline system consists of three zones for a total of 1,712 miles. The third zone of the pipeline is bi-directional and can transport 2.6 Bcf/d of natural gas from east-to-west.

The following table depicts our ownership interest in finished product terminals as of December 31, 2017:

Facility Name	Location	Interest	Gross Storage Capacity (MBbl)	Gross Rack Capacity (MBD)
Albuquerque †	New Mexico	100%	244	18
Amarillo †	Texas	100	277	29
Beaumont	Texas	100	3,700	8
Billings	Montana	100	88	16
Bozeman	Montana	100	113	13
Casper †	Montana	100	365	7
Colton	California	100	211	21
Denver	Colorado	100	310	43
Des Moines	Iowa	50	206	15
East St. Louis †	Illinois	100	2,085	78
Glenpool †	Oklahoma	100	588	19
Great Falls	Montana	100	198	12
Hartford †	Illinois	100	1,075	25
Helena	Montana	100	178	10
Jefferson City †	Missouri	100	110	16
Kansas City †	Kansas	100	1,294	66
La Junta	Colorado	100	101	10
Lincoln	Nebraska	100	219	21
Linden †	New Jersey	100	429	121
Los Angeles	California	100	116	75
Lubbock †	Texas	100	179	17
Missoula	Montana	50	368	29
Moses Lake	Washington	50	186	13
Mount Vernon †	Missouri	100	363	46
North Salt Lake	Utah	50	738	41
Oklahoma City †	Oklahoma	100	352	48
Pasadena †	Texas	100	3,210	65
Ponca City †	Oklahoma	100	51	23
Portland	Oregon	100	664	33
Renton	Washington	100	228	20
Richmond	California	100	334	28
Rock Springs	Wyoming	100	125	19
Sacramento	California	100	141	13
Sheridan †	Wyoming	100	86	15
Spokane	Washington	100	351	24
Tacoma	Washington	100	307	17
Tremley Point †	New Jersey	100	1,593	39
Westlake	Louisiana	100	128	16
Wichita Falls	Texas	100	303	15
Wichita North †	Kansas	100	679	19

† Owned by Phillips 66 Partners; Phillips 66 held a 57 percent ownership interest in Phillips 66 Partners at December 31, 2017.

The following table depicts our ownership interest in crude and other terminals as of December 31, 2017:

Facility Name	Location	Interest	Gross Storage Capacity (MBbl)	Gross Loading Capacity*
Crude and Feedstocks				
Beaumont	Texas	100%	7,400	N/A
Billings †	Montana	100	270	N/A
Borger	Texas	50	721	N/A
Clifton Ridge †	Louisiana	100	3,410	N/A
Cushing †	Oklahoma	100	700	N/A
Freeport	Texas	100	2,144	N/A
Jones Creek	Texas	100	2,577	N/A
Junction	California	100	523	N/A
Keene †	North Dakota	50	490	N/A
McKittrick	California	100	237	N/A
Odessa †	Texas	100	523	N/A
Palermo †	North Dakota	70	206	N/A
Pecan Grove †	Louisiana	100	142	N/A
Ponca City †	Oklahoma	100	1,200	N/A
Santa Margarita	California	100	335	N/A
Santa Maria	California	100	112	N/A
Tepetate	Louisiana	100	152	N/A
Torrance	California	100	309	N/A
Wichita Falls †	Texas	100	240	N/A
Petroleum Coke				
Lake Charles	Louisiana	50	N/A	N/A
Rail				
Bayway †	New Jersey	100	N/A	75
Beaumont	Texas	100	N/A	20
Ferndale †	Washington	100	N/A	30
Missoula	Montana	50	N/A	41
Palermo †	North Dakota	70	N/A	100
Thompson Falls	Montana	50	N/A	42
Marine				
Beaumont	Texas	100	N/A	37
Clifton Ridge †	Louisiana	100	N/A	48
Hartford †	Illinois	100	N/A	3
Pecan Grove †	Louisiana	100	N/A	6
Portland	Oregon	100	N/A	10
Richmond	California	100	N/A	3
Tacoma	Washington	100	N/A	12
Tremley Point †	New Jersey	100	N/A	7
NGL Facilities				
Freeport	Texas	100	1,000	36
River Parish †	Louisiana	100	1,500	N/A
Clemens †	Texas	100	9,000	N/A

† Owned by Phillips 66 Partners; Phillips 66 held a 57 percent ownership interest in Phillips 66 Partners at December 31, 2017.

* Rail in thousands of barrels daily (MBD); Marine and NGL Facilities in thousands of barrels per hour.

Rockies Express Pipeline LLC (REX)

We own a 25 percent interest in REX, which owns a natural gas pipeline system with approximately 1,712 miles of transportation pipelines, including laterals, extending from Opal, Wyoming, and Meeker, Colorado, to Clarington, Ohio. The REX Pipeline delivers natural gas to markets, primarily in the Midwest, from both the Rocky Mountain region and the Appalachian Basin.

Marine Vessels

At December 31, 2017, we had 11 international-flagged crude oil and product tankers under time charter contracts, with capacities ranging in size from 300,000 to 1,100,000 barrels. Additionally, we had under time charter contract two Jones Act-compliant tankers and 38 tug/barge units. These vessels are used primarily to transport feedstocks or provide product transportation for certain of our refineries, including delivery of domestic crude oil to our Gulf Coast and East Coast refineries.

Truck and Rail

Our truck and rail fleets support our feedstock and distribution operations. Rail movements are provided via a fleet of more than 10,000 owned and leased railcars. Truck movements are provided through numerous third-party trucking companies, as well as through our 100-percent-owned subsidiary, Sentinel Transportation LLC.

NGL and Other

Our NGL and Other business includes the following:

- A U.S. Gulf Coast NGL market hub comprising the Freeport LPG Export Terminal and Phillips 66 Partners' 100,000 BPD Sweeny Fractionator. These assets are supported by 9 million barrels of gross capacity at Phillips 66 Partners' Clemens storage facility. We refer to these facilities as the "Sweeny Hub."
- A 22.5 percent interest in Gulf Coast Fractionators, which owns an NGL fractionation plant in Mont Belvieu, Texas. We operate the facility, and our net share of its capacity is 32,625 BPD.
- A 12.5 percent undivided interest in a fractionation plant in Mont Belvieu, Texas. Our net share of its capacity is 30,250 BPD.
- A 40 percent undivided interest in a fractionation plant in Conway, Kansas. Our net share of its capacity is 43,200 BPD.
- Phillips 66 Partners owns the River Parish NGL logistics system in southeast Louisiana, comprising approximately 500 miles of pipelines and a storage cavern connecting multiple fractionation facilities, refineries and a petrochemical facility.
- Phillips 66 Partners owns a direct one-third interest in both the DCP Sand Hills Pipeline, LLC (Sand Hills) and DCP Southern Hills Pipeline, LLC, which own pipelines that connect Eagle Ford, Permian and Midcontinent production to the Mont Belvieu, Texas, market.
- Phillips 66 Partners, through its ownership of MSLP, owns a 125,000 BPD capacity vacuum distillation unit and a 70,000 BPD capacity delayed coker unit located at our Sweeny Refinery in Old Ocean, Texas.

The Sweeny Fractionator is located adjacent to our Sweeny Refinery in Old Ocean, Texas, and supplies purity ethane to the petrochemical industry and LPG to domestic and global markets. Raw NGL supply to the fractionator is delivered from nearby major pipelines, including the Sand Hills Pipeline. The fractionator is supported by significant infrastructure including connectivity to two NGL supply pipelines, a pipeline connecting to the Mont Belvieu market center and a multi-million-barrel salt dome storage facility with access to our LPG export terminal in Freeport, Texas.

The Freeport LPG Export Terminal leverages our fractionation, transportation and storage infrastructure to supply petrochemical, heating and transportation markets globally. The terminal can simultaneously load two ships with refrigerated propane and butane at a combined rate of 36,000 barrels per hour. In support of the terminal, a 100,000 BPD unit to upgrade domestic propane for export was installed near the Sweeny Fractionator. In addition, the terminal exports 10,000 to 15,000 BPD of natural gasoline (C5+) produced at the Sweeny Fractionator.

MSLP processes long residue, which is produced from heavy sour crude oil, for a processing fee. The fuel-grade petroleum coke and other by-products produced as a result of the processing are retained by our Sweeny Refinery.

During 2017, Phillips 66 Partners continued development of a new 25,000 BPD isomerization unit at our Lake Charles Refinery to increase production of higher octane gasoline blend components. The project is expected to be completed by the end of 2019.

DCP Midstream

Our Midstream segment includes our 50 percent equity investment in DCP Midstream, which is headquartered in Denver, Colorado. As of December 31, 2017, DCP Midstream owned or operated 61 natural gas processing facilities, with a net processing capacity of approximately 7.8 billion cubic feet per day (Bcf/d). DCP Midstream's owned or operated natural gas pipeline systems included gathering services for these facilities, as well as natural gas transmission, and totaled approximately 63,000 miles of pipeline. DCP Midstream also owned or operated 12 NGL fractionation plants, along with natural gas and NGL storage facilities, a propane wholesale marketing business and NGL pipeline assets.

The residual natural gas, primarily methane, which results from processing raw natural gas, is sold by DCP Midstream at market-based prices to marketers and end users, including large industrial companies, natural gas distribution companies and electric utilities. DCP Midstream purchases or takes custody of substantially all of its raw natural gas from producers, principally under contractual arrangements that expose DCP Midstream to the prices of NGL, natural gas and condensate. DCP Midstream also has fee-based arrangements with producers to provide midstream services such as gathering and processing.

DCP Midstream markets a portion of its NGL to us and CPChem under existing contracts. The primary commitment on certain contracts began a ratable wind-down period in December 2014 and expires in January 2019. These purchase commitments are on an "if-produced, will-purchase" basis.

During 2017, DCP Midstream completed or advanced the following growth projects:

- In the first quarter of 2017, DCP Midstream announced the construction of a 200-million-cubic-feet-per-day (MMcf/d) natural gas processing plant, the Mewbourn 3 plant, and further expansion of its Grand Parkway gathering system. Both are located in the Denver-Julesburg (DJ) Basin and are expected to be in service in the third quarter of 2018.
- In the second quarter of 2017, DCP Midstream approved the 200 MMcf/d O'Connor 2 natural gas processing plant in the DJ Basin. The O'Connor 2 plant and associated gathering infrastructure are expected to be in service in 2019.
- In the second quarter of 2017, DCP Midstream increased capacity in the DJ Basin by up to 40 MMcf/d by placing additional field compression and plant bypass infrastructure in service.
- In the third quarter of 2017, DCP Midstream executed definitive joint-venture agreements on its 25 percent interest in the development of the Gulf Coast Express pipeline project (GCX project). The GCX project is designed to transport up to 1.98 Bcf/d of natural gas. The mostly 42-inch pipeline would traverse approximately 500 miles and be placed in service in 2019, pending regulatory approvals.
- DCP Midstream is jointly developing the Cheyenne Connector pipeline with Tallgrass Energy Partners, LP (Tallgrass) and Western Gas Partners, LP (Western Gas). Tallgrass serves as the operator, and both DCP Midstream and Western Gas hold an option to invest in this pipeline at a later date. The Cheyenne Connector pipeline will provide takeaway solutions with capacity of at least 600 MMcf/d for DCP Midstream's DJ Basin assets, connecting natural gas to REX's Cheyenne Hub, where it can then be delivered to numerous demand markets across the country.
- DCP Midstream is currently expanding the Sand Hills Pipeline to 365,000 BPD, which is expected to be completed in the first quarter of 2018. Further expansion to 450,000 BPD is progressing and is expected to be in service during the second half of 2018. This expansion includes a partial looping of the pipeline and the addition of new pump stations.

Effective January 1, 2017, DCP Midstream and its master limited partnership (then named DCP Midstream Partners, LP, subsequently renamed DCP Midstream, LP on January 11, 2017, and referred to herein as DCP Partners) closed a transaction in which DCP Midstream contributed subsidiaries owning all of its operating assets and its existing debt to DCP Partners, in exchange for approximately 31.1 million DCP Partners units. Following the transaction, we and our co-venturer retained our 50/50 investment in DCP Midstream, DCP Midstream retained its incentive distribution rights in DCP Partners through its ownership of the general partner of DCP Partners, and DCP Midstream held a 36 percent limited partner interest and a 2 percent general partner interest in DCP Partners. See the “Equity Affiliates” section of “Significant Sources of Capital” in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” for additional information on this transaction.

CHEMICALS

The Chemicals segment consists of our 50 percent equity investment in CPChem, which is headquartered in The Woodlands, Texas. At the end of 2017, CPChem owned or had joint-venture interests in 30 global manufacturing facilities and two U.S. research and development centers.

We structure our reporting of CPChem’s operations around two primary business segments: Olefins and Polyolefins (O&P) and Specialties, Aromatics and Styrenics (SA&S). The O&P business segment produces and markets ethylene and other olefin products; the ethylene produced is primarily consumed within CPChem for the production of polyethylene, normal alpha olefins (NAO) and polyethylene pipe. The SA&S business segment manufactures and markets aromatics and styrenics products, such as benzene, styrene, paraxylene and cyclohexane, as well as polystyrene. SA&S also manufactures and/or markets a variety of specialty chemical products including organosulfur chemicals, solvents, catalysts, drilling chemicals and mining chemicals.

The manufacturing of petrochemicals and plastics involves the conversion of hydrocarbon-based raw material feedstocks into higher-value products, often through a thermal process referred to in the industry as “cracking.” For example, ethylene can be produced from cracking the feedstocks ethane, propane, butane, natural gasoline or certain refinery liquids, such as naphtha and gas oil. The produced ethylene has a number of uses, primarily as a raw material in the production of plastics, such as polyethylene and polyvinyl chloride. Plastic resins, such as polyethylene, are manufactured in a thermal/catalyst process, and the produced output is used as a further raw material for various applications, such as packaging and plastic pipe.

CPChem and its equity affiliates have manufacturing facilities located in Belgium, China, Colombia, Qatar, Saudi Arabia, Singapore and the United States.

The following table reflects CPChem’s petrochemicals and plastics product capacities at December 31, 2017:

	Millions of Pounds per Year	
	U.S.	Worldwide
O&P		
Ethylene	8,110	10,585
Propylene	2,675	3,180
High-density polyethylene	5,305	7,600
Low-density polyethylene	620	620
Linear low-density polyethylene	1,590	1,590
Polypropylene	—	310
Normal alpha olefins	2,335	2,850
Polyalphaolefins	125	255
Polyethylene pipe	590	590
Total O&P	21,350	27,580
SA&S		
Benzene	1,600	2,530
Cyclohexane	1,060	1,455
Paraxylene	1,000	1,000
Styrene	1,050	1,875
Polystyrene	835	1,070
Specialty chemicals	439	574
Total SA&S	5,984	8,504
Total O&P and SA&S	27,334	36,084

Capacities include CPChem’s share in equity affiliates and excludes CPChem’s NGL fractionation capacity.

In 2017, CPChem continued construction of two polyethylene facilities and an ethane cracker in the U.S. Gulf Coast region. This project leverages the development of the significant shale resources in the United States. The polyethylene facilities successfully completed commissioning and start-up in September 2017. The two polyethylene units, each with an annual capacity of 1.1 billion pounds, are located near CPChem’s Sweeny facility in Old Ocean, Texas. CPChem’s Cedar Bayou facility in Baytown, Texas, is the location of the 3.3 billion-pound-per-year ethane cracker. Mechanical completion of the ethane cracker was achieved in December 2017, and commissioning is expected to be completed in the first quarter of 2018, with a transition to full production during the second quarter of 2018.

In February 2017, CPChem completed the sale of its K-Resin[®] styrene-butadiene copolymers (SBC) business, which included the K-Resin[®] SBC plant in the Yeosu Petrochemical Complex in South Korea.

In April 2017, CPChem completed expansion of the polyalphaolefins capacity at its Cedar Bayou plant by 20 million pounds per year, or 20 percent. This expansion, together with the NAO capacity added in 2015, allows CPChem to meet the increasing demand for high-performance lubricants feedstocks.

In October 2017, CPChem completed the sale of its equity investment in Petrochemical Conversion Company, which included nylon 6,6, nylon compounding, and polymer conversion assets.

REFINING

Our Refining segment refines crude oil and other feedstocks into petroleum products (such as gasoline, distillates and aviation fuels) at 13 refineries in the United States and Europe.

The table below depicts information for each of our U.S. and international refineries at December 31, 2017:

Region/ Refinery	Location	Interest	Thousands of Barrels Daily				Clean Product Yield Capability
			Net Crude Throughput Capacity		Net Clean Product Capacity**		
			At December 31 2017	Effective January 1 2018	Gasolines	Distillates	
Atlantic Basin/ Europe							
Bayway	Linden, NJ	100.00%	241	258	155	130	92%
Humber	N. Lincolnshire, United Kingdom	100.00	221	221	95	115	81
MiRO*	Karlsruhe, Germany	18.75	58	58	25	25	87
			520	537			
Gulf Coast							
Alliance	Belle Chasse, LA	100.00	247	247	130	120	87
Lake Charles	Westlake, LA	100.00	249	249	100	115	70
Sweeny	Old Ocean, TX	100.00	247	256	135	120	86
			743	752			
Central Corridor							
Wood River	Roxana, IL	50.00	157	157	85	60	81
Borger	Borger, TX	50.00	73	73	50	30	91
Ponca City	Ponca City, OK	100.00	203	203	120	95	93
Billings	Billings, MT	100.00	60	60	35	30	90
			493	493			
West Coast							
Ferndale	Ferndale, WA	100.00	101	105	65	35	81
Los Angeles	Carson/ Wilmington, CA	100.00	139	139	85	65	90
San Francisco	Arroyo Grande/ San Francisco, CA	100.00	120	120	60	65	85
			360	364			
			2,116	2,146			

* Mineraloelraffinerie Oberrhein GmbH.

** Clean product capacities are maximum rates for each clean product category, independent of each other. They are not additive when calculating the clean product yield capability for each refinery.

Primary crude oil characteristics and sources of crude oil for our refineries are as follows:

	Characteristics				Sources				
	Sweet	Medium Sour	Heavy Sour	High TAN*	United States	Canada	South America	Europe	Middle East & Africa
Bayway	●	●			●	●			●
Humber	●	●		●	●			●	●
MiRO	●	●	●					●	●
Alliance	●	●			●				
Lake Charles	●	●	●	●	●	●	●		●
Sweeny	●	●	●	●	●	●	●		
Wood River	●	●	●	●	●	●			
Borger		●	●		●	●			
Ponca City	●	●			●	●			
Billings		●	●	●		●			
Ferndale	●	●			●	●			
Los Angeles		●	●	●	●	●	●		●
San Francisco	●	●	●	●	●		●		●

* High TAN (Total Acid Number): acid content greater than or equal to 1.0 milligram of potassium hydroxide (KOH) per gram.

Atlantic Basin/Europe Region

Bayway Refinery

The Bayway Refinery is located on the New York Harbor in Linden, New Jersey. Bayway's facilities include crude distilling, naphtha reforming, fluid catalytic cracking, solvent deasphalting, hydrodesulfurization and alkylation units. The complex also includes a polypropylene plant with the capacity to produce up to 775 million pounds per year. The refinery produces a high percentage of transportation fuels, as well as petrochemical feedstocks, residual fuel oil and home heating oil. Refined products are distributed to East Coast customers by pipeline, barge, railcar and truck.

Humber Refinery

The Humber Refinery is located on the east coast of England in North Lincolnshire, United Kingdom, approximately 180 miles north of London, United Kingdom. Humber's facilities include crude distilling, naphtha reforming, fluid catalytic cracking, hydrodesulfurization, thermal cracking and delayed coking units. The refinery has two coking units with associated calcining plants, which produce high-value graphite and anode petroleum cokes. The refinery produces a high percentage of transportation fuels. Humber is the only coking refinery in the United Kingdom, and a major producer of specialty graphite cokes and anode coke. Approximately 70 percent of the light oils produced by the refinery are distributed to customers in the United Kingdom by pipeline, railcar and truck, while the other products are exported to the rest of Europe, West Africa and the United States by waterborne cargo.

MiRO Refinery

The MiRO Refinery is located on the Rhine River in Karlsruhe, Germany, approximately 95 miles south of Frankfurt, Germany. MiRO is a joint venture in which we own an 18.75 percent interest. Facilities include crude distilling, naphtha reforming, fluid catalytic cracking, petroleum coking and calcining, hydrodesulfurization, isomerization, ethyl tert-butyl ether and alkylation units. MiRO produces a high percentage of transportation fuels. Other products include petrochemical feedstocks, home heating oil, bitumen, anode-grade petroleum coke and petroleum coke. Refined products are distributed to customers in Germany, Switzerland and Austria by truck, railcar and barge.

Gulf Coast Region

Alliance Refinery

The Alliance Refinery is located on the Mississippi River in Belle Chasse, Louisiana, approximately 25 miles southeast of New Orleans, Louisiana. The single-train facility includes crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization, aromatics and delayed coking units. Alliance produces a high percentage of transportation fuels. Other products include petrochemical feedstocks, home heating oil and anode-grade petroleum coke. Refined products are distributed to customers in the southeastern and eastern United States through major common-carrier pipeline systems and by barge. Refined products are exported primarily to customers in Latin America by waterborne cargo.

Lake Charles Refinery

The Lake Charles Refinery is located in Westlake, Louisiana, approximately 150 miles east of Houston, Texas. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrocracking, hydrodesulfurization and delayed coking units. Refinery facilities also include a specialty coker and calciner. The refinery produces a high percentage of transportation fuels. Other products include off-road diesel, home heating oil, feedstock for our Excel Paralubes joint venture in our M&S segment, specialty graphite petroleum coke and petroleum coke. The majority of the refined products are distributed to customers in the southeastern and eastern United States by truck, railcar, barge or major common carrier pipelines. Refined products are also exported primarily to customers in Latin America and West Africa by waterborne cargo.

Sweeny Refinery

The Sweeny Refinery is located in Old Ocean, Texas, approximately 65 miles southwest of Houston, Texas. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization, and aromatics units, as well as access to the on-site vacuum tower and delayed coking unit, which effective October 2017 became an asset owned by Phillips 66 Partners. The refinery produces a high percentage of transportation fuels. Other products include petrochemical feedstocks, home heating oil and petroleum coke. The refinery receives crude oil by pipeline and via tankers, through wholly and jointly owned terminals on the Gulf Coast, including a deepwater terminal at Freeport, Texas. Refined products are distributed to customers throughout the Midcontinent region, southeastern and eastern United States by pipeline, barge and railcar. Refined products are also exported primarily to customers in Latin America by waterborne cargo.

Central Corridor Region

WRB Refining LP (WRB)

We are the operator and managing partner of WRB, a 50/50 joint venture with Cenovus Energy Inc., which consists of the Wood River and Borger refineries.

- *Wood River Refinery*

The Wood River Refinery is located in Roxana, Illinois, about 15 miles northeast of St. Louis, Missouri, at the confluence of the Mississippi and Missouri rivers. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrocracking, hydrodesulfurization and delayed coking units. The refinery produces a high percentage of transportation fuels. Other products include petrochemical feedstocks, asphalt and petroleum coke. Refined products are distributed to customers by pipeline, railcar, barge and truck and are shipped to markets throughout the Midcontinent region.

- *Borger Refinery*

The Borger Refinery is located in Borger, Texas, in the Texas Panhandle, approximately 50 miles north of Amarillo, Texas. Refinery facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization, and delayed coking units, as well as an NGL fractionation facility. It produces a high percentage of transportation fuels, as well as petroleum coke, NGL's and solvents. Refined products are distributed to customers via pipelines from the refinery to West Texas, New Mexico, Colorado and the Midcontinent region.

Ponca City Refinery

The Ponca City Refinery is located in Ponca City, Oklahoma, approximately 95 miles northwest of Tulsa, Oklahoma. Its facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization, and delayed coking units. It produces a high percentage of transportation fuels and anode-grade petroleum coke. Refined products are primarily distributed to customers by company-owned and common-carrier pipelines to markets throughout the Midcontinent region.

Billings Refinery

The Billings Refinery is located in Billings, Montana. Its facilities include crude distilling, naphtha reforming, fluid catalytic cracking, alkylation, hydrodesulfurization and delayed coking units. The refinery produces a high percentage of transportation fuels and petroleum coke. Finished petroleum products from the refinery are distributed to customers by pipeline, railcar and truck. Pipelines transport most of the refined products to markets in Montana, Wyoming, Idaho, Utah, Colorado and Washington.

West Coast Region

Ferndale Refinery

The Ferndale Refinery is located on Puget Sound in Ferndale, Washington, approximately 20 miles south of the U.S.-Canada border. Facilities include crude distillation, naphtha reforming, fluid catalytic cracking, alkylation and hydrodesulfurization units. The refinery produces a high percentage of transportation fuels. Other products include residual fuel oil, which is supplied to the northwest marine bunker fuel market. Most refined products are distributed to customers by pipeline and barge to major markets in the northwest United States.

Los Angeles Refinery

The Los Angeles Refinery consists of two linked facilities located five miles apart in Carson and Wilmington, California, approximately 15 miles southeast of Los Angeles. The Carson facility serves as the front end of the refinery by processing crude oil, and the Wilmington facility serves as the back end of the refinery by upgrading the intermediate products to finished products. The facilities include crude distillation, naphtha reforming, fluid catalytic cracking, alkylation, hydrocracking, and delayed coking units. The refinery produces a high percentage of transportation fuels. The refinery produces California Air Resources Board (CARB)-grade gasoline. Other products include petroleum coke. Refined products are distributed to customers in California, Nevada and Arizona by pipeline and truck.

San Francisco Refinery

The San Francisco Refinery consists of two facilities linked by a 200-mile pipeline. The Santa Maria facility is located in Arroyo Grande, California, 200 miles south of San Francisco, California, while the Rodeo facility is in the San Francisco Bay Area. Semi-refined liquid products from the Santa Maria facility are shipped by pipeline to the Rodeo facility for upgrading into finished petroleum products. Facilities include crude distillation, naphtha reforming, hydrocracking, hydrodesulfurization and delayed coking units, as well as a calciner. The refinery produces a high percentage of transportation fuels. It also produces CARB-grade gasoline. Other products include petroleum coke. The majority of the refined products are distributed to customers in California by pipeline and barge. Additional refined products are also exported to customers in Latin America by waterborne cargo.

MARKETING AND SPECIALTIES

Our M&S segment purchases for resale and markets refined petroleum products (such as gasolines, distillates and aviation fuels), mainly in the United States and Europe. In addition, this segment includes the manufacturing and marketing of specialty products (such as base oils and lubricants), as well as power generation operations.

Marketing

Marketing—United States

In the United States, as of December 31, 2017, we marketed gasoline, diesel and aviation fuel through approximately 7,550 independently owned outlets in 48 states. These sites utilize the *Phillips 66*, *Conoco* or *76* brands.

At December 31, 2017, our wholesale operations utilized a network of marketers operating approximately 5,700 outlets. We place a strong emphasis on the wholesale channel of trade because of its lower capital requirements. In addition, we held brand-licensing agreements covering approximately 1,050 sites. Our refined products are marketed on both a branded and unbranded basis. A high percentage of our branded marketing sales are made in the Midcontinent, Rockies and West Coast regions, where our wholesale marketing operations provide efficient off-take from our refineries. We continue to utilize consignment fuel arrangements with several marketers whereby we own the fuel inventory and pay the marketers a fixed monthly fee.

In the Gulf Coast and East Coast regions, most sales are conducted via unbranded sales which do not require a highly integrated marketing and distribution infrastructure to secure product placement for refinery pull through. We are expanding our export capability at our U.S. coastal refineries to meet growing international demand and increase flexibility to provide product to the highest-value markets.

In addition to automotive gasoline and diesel, we produce and market jet fuel and aviation gasoline. At December 31, 2017, aviation gasoline and jet fuel were sold through dealers and independent marketers at approximately 800 *Phillips 66*-branded locations in the United States.

Marketing—International

We have marketing operations in four European countries. Our European marketing strategy is to sell primarily through owned, leased or joint-venture retail sites using a low-cost, high-volume approach. We use the *JET* brand name to market retail and wholesale products in Austria, Germany and the United Kingdom. In addition, a joint venture in which we have an equity interest markets products in Switzerland under the *COOP* brand name.

We also market aviation fuels, LPG, heating oils, transportation fuels, marine bunker fuels, bitumen and fuel coke specialty products to commercial customers and into the bulk or spot markets in the above countries.

At December 31, 2017, we had 1,324 marketing outlets in our European operations, of which 993 were company owned and 331 were dealer owned. In addition, through our *COOP* joint-venture operations in Switzerland, we have interests in 306 additional sites.

Specialties

We manufacture and sell a variety of specialty products, including petroleum coke products, waxes, solvents and polypropylene. Certain manufacturing operations are included in the Refining segment, while the marketing function for these products is included in the Specialties business.

Premium Coke, Polypropylene & Solvents

We market high-quality graphite and anode-grade petroleum cokes in the United States, Europe and Asia for use in a variety of industries that include steel, aluminum, titanium dioxide and battery manufacturing. We also market polypropylene in North America under the *COPYLENE* brand name for use in consumer products, and market specialty solvents that include pentane, iso-pentane, hexane, heptane and odorless mineral spirits for use in the petrochemical, agriculture and consumer markets.

Excel Paralubes

We own a 50 percent interest in Excel Paralubes, a joint venture which owns a hydrocracked lubricant base oil manufacturing plant located adjacent to the Lake Charles Refinery. The facility has a nameplate capacity to produce 22,200 BPD of high-quality, clear hydrocracked base oils. The facility's feedstock is sourced primarily from our Lake Charles Refinery.

Lubricants

We manufacture and sell automotive, commercial, industrial and specialty lubricants which are marketed worldwide under the *Phillips 66*, *Kendall* and *Red Line* brands, as well as other private label brands. We also market Group II *Pure Performance* base oils globally, as well as import and market Group III *Ultra-S* base oils through an agreement with South Korea's S-Oil corporation.

Other

Power Generation

We own a cogeneration power plant located adjacent to the Sweeny Refinery. The plant generates electricity and provides process steam to the refinery, as well as merchant power into the Texas market. The plant has a net electrical output of 440 megawatts and is capable of generating up to 3.6 million pounds per hour of process steam.

TECHNOLOGY DEVELOPMENT

Our Technology organization conducts applied and fundamental research in three areas: 1) support for our current business, 2) new environmental solutions to address governmental regulations and 3) future growth. Technology programs include evaluating advantaged crudes; and modeling to reduce energy consumption, increase product yield and increase reliability. Our sustainability group is focusing efforts on organic photovoltaic polymers, solid oxide fuel cells, atmospheric modeling and air chemistry, water use and reuse and renewable fuels. Additionally, we monitor emerging technologies such as electric vehicles and impacts of the digital space on energy consumption, and perform research and monitoring of developments in battery technology.

COMPETITION

The Midstream segment, through our equity investment in DCP Midstream and our other operations, competes with numerous integrated petroleum companies, as well as natural gas transmission and distribution companies, to deliver components of natural gas to end users in commodity natural gas markets. DCP Midstream is one of the leading natural gas gatherers and processors in the United States based on wellhead volumes, and one of the largest U.S. producers and marketers of NGL, based on published industry sources. Principal methods of competing include economically securing the right to purchase raw natural gas for gathering systems, managing the pressure of those systems, operating efficient NGL processing plants and securing markets for the products produced.

In the Chemicals segment, CPChem is ranked among the top 10 producers of many of its major product lines according to published industry sources, based on average 2017 production capacity. Petroleum products, petrochemicals and plastics are typically delivered into the worldwide commodity markets. Our Refining and M&S segments compete primarily in the United States and Europe. We are one of the largest refiners of petroleum products in the United States based on published industry sources. Elements of competition for both our Chemicals and Refining segments include product improvement, new product development, low-cost structures, and efficient manufacturing and distribution systems. In the marketing portion of the business, competitive factors include product properties and processibility, reliability of supply, customer service, price and credit terms, advertising and sales promotion, and development of customer loyalty to branded products.

GENERAL

At December 31, 2017, we held a total of 356 active patents in 18 countries worldwide, including 275 active U.S. patents. The overall profitability of any business segment is not dependent on any single patent, trademark, license or franchise.

Company-sponsored research and development activities charged against earnings were \$60 million in both 2017 and 2016 and \$65 million in 2015.

In support of our goal to attain zero incidents, we have implemented a comprehensive Health, Safety and Environmental (HSE) management system to support consistent management of HSE risks across our enterprise. The management system is designed to ensure that personal safety, process safety, and environmental impact risks are identified and mitigation steps are taken to reduce the risk. The management system requires periodic audits to ensure compliance with government regulations, as well as our internal requirements. Our commitment to continuous improvement is reflected in annual goal setting and performance measurement.

See the environmental information contained in “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Capital Resources and Liquidity—Contingencies” under the captions “Environmental” and “Climate Change.” It includes information on expensed and capitalized environmental costs for 2017 and those expected for 2018 and 2019.

Website Access to SEC Reports

Our Internet website address is <http://www.phillips66.com>. Information contained on our Internet website is not part of this Annual Report on Form 10-K.

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available on our website, free of charge, as soon as reasonably practicable after such reports are filed with, or furnished to, the U.S. Securities and Exchange Commission (SEC). Alternatively, you may access these reports at the SEC’s website at <http://www.sec.gov>.

Item 1A. RISK FACTORS

You should carefully consider the following risk factors in addition to the other information included in this Annual Report on Form 10-K. Each of these risk factors could adversely affect our business, operating results and financial condition, as well as affect the value of an investment in our common stock.

Our operating results and future rate of growth are exposed to the effects of changing commodity prices and refining, marketing and petrochemical margins.

Our revenues, operating results and future rate of growth are highly dependent on a number of factors, including fixed and variable expenses (including the cost of crude oil, NGL, and other refining and petrochemical feedstocks) and the margin we can derive from selling refined and Chemicals segment products. The prices of feedstocks and our products fluctuate substantially. These prices depend on numerous factors beyond our control, including the global supply and demand for feedstocks and our products, which are subject to, among other things:

- Changes in the global economy and the level of foreign and domestic production of crude oil, natural gas and NGL and refined, petrochemical and plastics products.
- Availability of feedstocks and refined products and the infrastructure to transport them.
- Local factors, including market conditions, the level of operations of other facilities in our markets, and the volume of products imported and exported.
- Threatened or actual terrorist incidents, acts of war and other global political conditions.
- Government regulations.
- Weather conditions, hurricanes or other natural disasters.

The price of crude oil influences prices for refined products. We do not produce crude oil and must purchase all of the crude oil we process. Many crude oils available on the world market will not meet the quality restrictions for use in our refineries. Others are not economical to use due to high transportation costs or for other reasons. The prices for crude oil and refined products can fluctuate differently based on global, regional and local market conditions. In addition, the timing of the relative movement of the prices (both among different classes of refined products and among various global markets for similar refined products), as well as the overall change in refined product prices, can reduce refining margins and could have a significant impact on our refining, wholesale marketing and retail operations, revenues, operating income and cash flows. Also, crude oil supply contracts generally have market-responsive pricing provisions. We normally purchase our refinery feedstocks weeks before manufacturing and selling the refined products. Changes in prices that occur between when we purchase feedstocks and when we sell the refined products produced from these feedstocks could have a significant effect on our financial results. We also purchase refined products produced by others for sale to our customers. Price changes that occur between when we purchase and sell these refined products also could have a material adverse effect on our business, financial condition and results of operations.

The price of feedstocks also influences prices for petrochemical and plastics products. Although our Chemicals segment transports and fractionates feedstocks to meet a portion of their demand and has certain long-term feedstock supply contracts with others, it is still subject to volatile feedstock prices. In addition, the petrochemicals industry is both cyclical and volatile. Cyclicalities occur when periods of tight supply, resulting in increased prices and profit margins, are followed by periods of capacity expansion, resulting in oversupply and declining prices and profit margins. Volatility occurs as a result of changes in supply and demand for products, changes in energy prices, and changes in various other economic conditions around the world.

Uncertainty and illiquidity in credit and capital markets can impair our ability to obtain credit and financing on acceptable terms and can adversely affect the financial strength of our business partners.

Our ability to obtain credit and capital depends in large measure on the state of the credit and capital markets, which is beyond our control. Our ability to access credit and capital markets may be restricted at a time when we would like, or need, access to those markets, which could constrain our flexibility to react to changing economic and business conditions. In addition, the cost and availability of debt and equity financing may be adversely impacted by unstable or illiquid market conditions. Protracted uncertainty and illiquidity in these markets also could have an adverse impact on our lenders, commodity hedging counterparties, or our customers, preventing them from meeting their obligations to us.

From time to time, our cash needs may exceed our internally generated cash flow, and our business could be materially and adversely affected if we are unable to obtain necessary funds from financing activities. From time to time, we may need to supplement cash generated from operations with proceeds from financing activities. Uncertainty and illiquidity in financial markets may materially impact the ability of the participating financial institutions to fund their commitments to us under our liquidity facilities. Accordingly, we may not be able to obtain the full amount of the funds available under our liquidity facilities to satisfy our cash requirements, and our failure to do so could have a material adverse effect on our operations and financial position.

Deterioration in our credit profile could increase our costs of borrowing money and limit our access to the capital markets and commercial credit, and could trigger co-venturer rights under joint-venture arrangements.

Our or Phillips 66 Partners' credit ratings could be lowered or withdrawn entirely by a rating agency if, in its judgment, the circumstances warrant. If a rating agency were to downgrade our rating below investment grade, our or Phillips 66 Partners' borrowing costs would increase, and our funding sources could decrease. In addition, a failure by us to maintain an investment grade rating could affect our business relationships with suppliers and operating partners. For example, our agreement with Chevron regarding CPChem permits Chevron to buy our 50 percent interest in CPChem for fair market value if we experience a change in control or if both Standard & Poor's and Moody's lower our credit ratings below investment grade and the credit rating from either rating agency remains below investment grade for 365 days thereafter, with fair market value determined by agreement or by nationally recognized investment banks. As a result of these factors, a downgrade of credit ratings could have a materially adverse impact on our future operations and financial position.

We expect to continue to incur substantial capital expenditures and operating costs as a result of our compliance with existing and future environmental laws and regulations. Likewise, future environmental laws and regulations may impact or limit our current business plans and reduce demand for our products.

Our business is subject to numerous laws and regulations relating to the protection of the environment. These laws and regulations continue to increase in both number and complexity and affect our operations with respect to, among other things:

- The discharge of pollutants into the environment.
- Emissions into the atmosphere (such as nitrogen oxides, sulfur dioxide and mercury emissions, and greenhouse gas emissions as they are, or may become, regulated).
- The quantity of renewable fuels that must be blended into motor fuels.
- The handling, use, storage, transportation, disposal and cleanup of hazardous materials and hazardous and nonhazardous wastes.
- The dismantlement and abandonment of our facilities and restoration of our properties at the end of their useful lives.

We have incurred and will continue to incur substantial capital, operating and maintenance, and remediation expenditures as a result of these laws and regulations. To the extent these expenditures, as with all costs, are not ultimately reflected in the prices of our products and services, our business, financial condition, results of operations and cash flows in future periods could be materially adversely affected.

The U.S. Environmental Protection Agency (EPA) has implemented a Renewable Fuel Standard (RFS) pursuant to the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. The RFS program sets annual quotas for the quantity of renewable fuels (such as ethanol) that must be blended into motor fuels consumed in the United States. To provide certain flexibility in compliance options available to the industry, a Renewable Identification Number (RIN) is assigned to each gallon of renewable fuel produced in, or imported into, the United States. As a producer of petroleum-based motor fuels, we are obligated to blend renewable fuels into the products we produce at a rate that is at least commensurate to the EPA's quota and, to the extent we do not, we must purchase RINs in the open market to satisfy our obligation under the RFS program. To the extent the EPA mandates a blending quantity of renewable fuel that exceeds the amount that is commercially feasible to blend into motor fuel (a situation commonly referred to as "the blend wall"), our operations could be materially adversely impacted, up to and including a reduction in produced motor fuel.

The adoption of climate change legislation or regulation could result in increased operating costs and reduced demand for the refined products we produce.

The U.S. government, including the EPA, as well as several state and international governments, have either considered or adopted legislation or regulations in an effort to reduce greenhouse gas (GHG) emissions. These proposed or promulgated laws apply or could apply in states and/or countries where we have interests or may have interests in the future. In addition, various groups suggest that additional laws may be needed in an effort to address climate change, as illustrated by the Paris Agreement negotiated at the 2015 United Nations Conference on Climate Change, referred to as COP 21, which entered into force on November 4, 2016. We cannot predict the extent to which any such legislation or regulation will be enacted and, if so, what its provisions would be. To the extent we incur additional costs required to comply with the adoption of new laws and regulations that are not ultimately reflected in the prices of our products and services, our business, financial condition, results of operations and cash flows in future periods could be materially adversely affected. In addition, demand for the refined products we produce could be adversely affected.

Climate change may adversely affect our facilities and our ongoing operations.

The potential physical effects of climate change on our operations are highly uncertain and depend upon the unique geographic and environmental factors present. Examples of such effects include rising sea levels at our coastal facilities, changing storm patterns and intensities, and changing temperature levels. As many of our facilities are located near coastal areas, rising sea levels may disrupt our ability to operate those facilities or transport crude oil and refined petroleum products. Extended periods of such disruption could have an adverse effect on our results of operation. We could also incur substantial costs to prevent or repair damage to these facilities.

Domestic and worldwide political and economic developments could affect our operations and materially reduce our profitability and cash flows.

Actions of the U.S., state, local and international governments through tax and other legislation or regulation, executive order, permit or other review of infrastructure or facility development, and commercial restrictions could delay projects, increase costs, limit development, or otherwise reduce our operating profitability both in the United States and abroad. Any such actions may affect many aspects of our operations, including requiring permits or other approvals that may impose unforeseen or unduly burdensome conditions or potentially cause delays in our operations; further limiting or prohibiting construction or other activities in environmentally sensitive or other areas; requiring increased capital costs to construct, maintain or upgrade equipment or facilities; or restricting the locations where we may construct facilities or requiring the relocation of facilities. In addition, the U.S. government can prevent or restrict us from doing business in foreign countries. These restrictions and those of foreign governments could limit our ability to operate in, or gain access to various countries, as well as limit our ability to obtain the optimum slate of crude oil and other refinery feedstocks. Our foreign operations and those of our joint ventures are further subject to risks of loss of revenue, equipment and property as a result of expropriation, acts of terrorism, war, civil unrest and other political risks; unilateral or forced renegotiation, modification or nullification of existing contracts with governmental entities; and difficulties enforcing rights against a governmental agency because of the doctrine of sovereign immunity and foreign sovereignty over international operations. Our foreign operations and those of our joint ventures are also subject to fluctuations in currency exchange rates. Actions by both the United States and host governments may affect our operations significantly in the future.

Renewable fuels, alternative energy mandates and energy conservation efforts could reduce demand for refined products. Tax incentives and other subsidies can make renewable fuels and alternative energy more competitive with refined products than they otherwise might be, which may reduce refined product margins and hinder the ability of refined products to compete with renewable fuels.

Large capital projects can take many years to complete, and market conditions could deteriorate significantly between the project approval date and the project startup date, negatively impacting project returns.

Our basis for approving a large-scale capital project is the expectation that it will deliver an acceptable level of return on the capital invested. We base these forecasted project economics on our best estimate of future market conditions. Most large-scale projects take several years to complete. During this multi-year period, market conditions can change from those we forecast, and these changes could be significant. Accordingly, we may not be able to realize our expected

returns from a large investment in a capital project, and this could negatively impact our results of operations, cash flows and our return on capital employed.

Our investments in joint ventures decrease our ability to manage risk.

We conduct some of our operations, including parts of our Midstream, Refining and M&S segments, and our entire Chemicals segment, through joint ventures in which we share control with our joint-venture participants. Our joint-venture participants may have economic, business or legal interests or goals that are inconsistent with ours or those of the joint venture, or our joint-venture participants may be unable to meet their economic or other obligations, and we may be required to fulfill those obligations alone. Failure by us, or an entity in which we have a joint-venture interest, to adequately manage the risks associated with any acquisitions or joint ventures could have a material adverse effect on the financial condition or results of operations of our joint ventures and, in turn, our business and operations.

Activities in our Chemicals and Midstream segments involve numerous risks that may result in accidents that could affect the ability of our equity affiliates to make distributions to us.

There are a variety of hazards and operating risks inherent in the manufacturing of petrochemicals and the gathering, processing, transmission, storage, and distribution of natural gas and NGL, such as spills, leaks, explosions and mechanical problems that could cause substantial financial losses. In addition, these risks could result in significant injury, loss of human life, damage to property, environmental pollution and impairment of operations, any of which could result in substantial losses. For assets located near populated areas, including residential areas, commercial business centers, industrial sites and other public gathering areas, the level of damage resulting from these risks could be greater. Should any of these risks materialize, it could have a material adverse effect on the business and financial condition of our equity affiliates in these segments and negatively impact their ability to make future distributions to us.

Our operations present hazards and risks, which may not be fully covered by insurance, if insured. If a significant accident or event occurs for which we are not adequately insured, our operations and financial results could be adversely affected.

The scope and nature of our operations present a variety of operational hazards and risks, including explosions, fires, toxic emissions, maritime hazards and natural catastrophes, that must be managed through continual oversight and control. For example, the operation of refineries, power plants, fractionators, pipelines, terminals and vessels is inherently subject to the risks of spills, discharges or other inadvertent releases of petroleum or hazardous substances. If any of these events had previously occurred or occurs in the future in connection with any of our refineries, pipelines or refined products terminals, or in connection with any facilities that receive our wastes or by-products for treatment or disposal, other than events for which we are indemnified, we could be liable for all costs and penalties associated with their remediation under federal, state, local and international environmental laws or common law, and could be liable for property damage to third parties caused by contamination from releases and spills. These and other risks are present throughout our operations. As protection against these hazards and risks, we maintain insurance against many, but not all, potential losses or liabilities arising from such operating risks. As such, our insurance coverage may not be sufficient to fully cover us against potential losses arising from such risks. Uninsured losses and liabilities arising from operating risks could reduce the funds available to us for capital and investment spending and could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We are subject to interruptions of supply and increased costs as a result of our reliance on third-party transportation of crude oil, NGL and refined products.

We often utilize the services of third parties to transport crude oil, NGL and refined products to and from our facilities. In addition to our own operational risks discussed above, we could experience interruptions of supply or increases in costs to deliver refined products to market if the ability of the pipelines or vessels to transport crude oil or refined products is disrupted because of weather events, accidents, governmental regulations or third-party actions. A prolonged disruption of the ability of a pipeline or vessel to transport crude oil, NGL or refined products to or from one or more of our refineries or other facilities could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Increased regulation of hydraulic fracturing could result in reductions or delays in U.S. production of crude oil and natural gas, which could adversely impact our results of operations.

An increasing percentage of crude oil supplied to our refineries and the crude oil and gas production of our Midstream segment's customers is being produced from unconventional oil shale reservoirs. These reservoirs require hydraulic fracturing completion processes to release the hydrocarbons from the rock so they can flow through casing to the surface. Hydraulic fracturing involves the injection of water, sand and chemicals under pressure into the formation to stimulate hydrocarbon production. The EPA, as well as several state agencies, have commenced studies and/or convened hearings regarding the potential environmental impacts of hydraulic fracturing activities. At the same time, certain environmental groups have suggested that additional laws may be needed to more closely and uniformly regulate the hydraulic fracturing process, and legislation has been proposed to provide for such regulation. In addition, some communities have adopted measures to ban hydraulic fracturing in their communities. We cannot predict whether any such legislation will ever be enacted and, if so, what its provisions would be. Any additional levels of regulation and permits required with the adoption of new laws and regulations at the federal or state level could result in our having to rely on higher priced crude oil for our refineries. This could lead to delays, increased operating costs and process prohibitions that could reduce the volumes of natural gas that move through DCP Midstream's gathering systems and could reduce supplies and increase costs of NGL feedstocks to CPChem ethylene facilities. This could materially adversely affect our results of operations and the ability of DCP Midstream and CPChem to make cash distributions to us.

DCP Midstream's success depends on its ability to obtain new sources of natural gas and NGL. Any decrease in the volumes of natural gas DCP Midstream gathers could adversely affect its business and operating results.

DCP Midstream's gathering and transportation pipeline systems are connected to or dependent on the level of production from natural gas wells, which naturally declines over time. As a result, its cash flows associated with these wells will also decline over time. In order to maintain or increase throughput levels on its gathering and transportation pipeline systems and NGL pipelines and the asset utilization rates at its natural gas processing plants, DCP Midstream must continually obtain new supplies. The primary factors affecting DCP Midstream's ability to obtain new supplies of natural gas and NGL, and to attract new customers to its assets, include the level of successful drilling activity near these assets, prices of, and the demand for, natural gas and crude oil, producers' desire and ability to obtain necessary permits in an efficient manner, natural gas field characteristics and production performance, surface access and infrastructure issues, and its ability to compete for volumes from successful new wells. If DCP Midstream is not able to obtain new supplies of natural gas to replace the natural decline in volumes from existing wells or because of competition, throughput on its pipelines and the utilization rates of its treating and processing facilities would decline. This could have a material adverse effect on its business, results of operations, financial position and cash flows, and its ability to make cash distributions to us.

Competitors that produce their own supply of feedstocks, have more extensive retail outlets, or have greater financial resources may have a competitive advantage.

The refining and marketing industry is highly competitive with respect to both feedstock supply and refined product markets. We compete with many companies for available supplies of crude oil and other feedstocks and for outlets for our refined products. We do not produce any of our crude oil feedstocks. Some of our competitors, however, obtain a portion of their feedstocks from their own production and some have more extensive retail outlets than we have. Competitors that have their own production or extensive retail outlets (and greater brand-name recognition) are at times able to offset losses from refining operations with profits from producing or retailing operations, and may be better positioned to withstand periods of depressed refining margins or feedstock shortages.

Some of our competitors also have materially greater financial and other resources than we have. Such competitors have a greater ability to bear the economic risks inherent in all phases of our business. In addition, we compete with other industries that provide alternative means to satisfy the energy and fuel requirements of our industrial, commercial and individual customers.

We may incur losses as a result of our forward-contract activities and derivative transactions.

We currently use commodity derivative instruments, and we expect to use them in the future. If the instruments we utilize to hedge our exposure to various types of risk are not effective, we may incur losses. Derivative transactions involve the risk that counterparties may be unable to satisfy their obligations to us. The risk of counterparty default is heightened in a poor economic environment.

One of our subsidiaries acts as the general partner of a publicly traded master limited partnership, Phillips 66 Partners, which may involve a greater exposure to legal liability than our historic business operations.

One of our subsidiaries acts as the general partner of Phillips 66 Partners, a publicly traded master limited partnership. Our control of the general partner of Phillips 66 Partners may increase the possibility that we could be subject to claims of breach of fiduciary duties, including claims of conflicts of interest, related to Phillips 66 Partners. Any liability resulting from such claims could have a material adverse effect on our future business, financial condition, results of operations and cash flows.

A significant interruption in one or more of our facilities could adversely affect our business.

Our operations could be subject to significant interruption if one or more of our facilities were to experience a major accident, mechanical failure, or power outage, encounter work stoppages relating to organized labor issues, be damaged by severe weather or other natural or man-made disaster, such as an act of terrorism, or otherwise be forced to shut down. If any facility were to experience an interruption in operations, earnings from the facility could be materially adversely affected (to the extent not recoverable through insurance, if insured) because of lost production and repair costs. A significant interruption in one or more of our facilities could also lead to increased volatility in prices for feedstocks and refined products, and could increase instability in the financial and insurance markets, making it more difficult for us to access capital and to obtain insurance coverage that we consider adequate.

Our performance depends on the uninterrupted operation of our facilities, which are becoming increasingly dependent on our information technology systems.

Our performance depends on the efficient and uninterrupted operation of the manufacturing equipment in our production facilities. The inability to operate one or more of our facilities due to a natural disaster; power outage; labor dispute; or failure of one or more of our information technology, telecommunications, or other systems could significantly impair our ability to manufacture our products. Our manufacturing equipment is becoming increasingly dependent on our information technology systems. A disruption in our information technology systems due to a catastrophic event or security breach could interrupt or damage our operations.

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

In the ordinary course of our business, we collect sensitive data, including personally identifiable information of our customers using credit cards at our branded retail outlets. Despite our security measures, our information technology and infrastructure, or information technology and infrastructure of our third-party service providers (e.g., cloud-based service providers), may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Although we have experienced occasional, actual or attempted breaches of our cybersecurity, none of these breaches has had a material effect on our business, operations or reputation (or compromised any customer data). Any such breaches could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of customer information, disrupt the services we provide to customers, and damage our reputation, any of which could adversely affect our business.

The level of returns on pension and postretirement plan assets and the actuarial assumptions used for valuation purposes could affect our earnings and cash flows in future periods.

Assumptions used in determining projected benefit obligations and the expected return on plan assets for our pension plan and other postretirement benefit plans are evaluated by us based on a variety of independent sources of market information and in consultation with outside actuaries. If we determine that changes are warranted in the assumptions used, such as the discount rate, expected long-term rate of return, or health care cost trend rate, our future pension and postretirement benefit expenses and funding requirements could increase. In addition, several factors could cause actual results to differ significantly from the actuarial assumptions that we use. Funding obligations are determined based on the value of assets and liabilities on a specific date as required under relevant regulations. Future pension funding requirements, and the timing of funding payments, could be affected by legislation enacted by governmental authorities.

In connection with the Separation, ConocoPhillips has indemnified us for certain liabilities and we have agreed to indemnify ConocoPhillips for certain liabilities. If we are required to act on these indemnities to ConocoPhillips, we may need to use cash to meet those obligations and our financial results could be negatively impacted. The ConocoPhillips indemnity may not be sufficient to insure us against the full amount of liabilities for which it has been allocated responsibility, and ConocoPhillips may not be able to satisfy its indemnification obligations in the future.

Pursuant to the Indemnification and Release Agreement and certain other agreements with ConocoPhillips entered into in connection with the Separation, ConocoPhillips agreed to indemnify us for certain liabilities, and we agreed to indemnify ConocoPhillips for certain liabilities. Indemnities that we may be required to provide ConocoPhillips are not subject to any cap, may be significant and could negatively impact our business, particularly indemnities relating to our actions that could impact the tax-free nature of the distribution of Phillips 66 stock. Third parties could also seek to hold us responsible for any of the liabilities that ConocoPhillips has agreed to retain. Further, the indemnity from ConocoPhillips may not be sufficient to protect us against the full amount of such liabilities, and ConocoPhillips may not be able to fully satisfy its indemnification obligations. Moreover, even if we ultimately succeed in recovering from ConocoPhillips any amounts for which we are held liable, we may be temporarily required to bear these losses ourselves. Each of these risks could negatively affect our business, results of operations and financial condition.

We are subject to continuing contingent liabilities of ConocoPhillips following the Separation.

Notwithstanding the Separation, there are several significant areas where the liabilities of ConocoPhillips may become our obligations. For example, under the Internal Revenue Code and the related rules and regulations, each corporation that was a member of the ConocoPhillips consolidated U.S. federal income tax reporting group during any taxable period or portion of any taxable period ending on or before the effective time of the Separation is jointly and severally liable for the U.S. federal income tax liability of the entire ConocoPhillips consolidated tax reporting group for that taxable period. In connection with the Separation, we entered into the Tax Sharing Agreement with ConocoPhillips that allocates the responsibility for prior period taxes of the ConocoPhillips consolidated tax reporting group between us and ConocoPhillips. ConocoPhillips may be unable to pay any prior period taxes for which it is responsible, and we could be required to pay the entire amount of such taxes. Other provisions of federal law establish similar liability for other matters, including laws governing tax-qualified pension plans as well as other contingent liabilities.

If the distribution in connection with the Separation, together with certain related transactions, does not qualify as a transaction that is generally tax-free for U.S. federal income tax purposes, our stockholders and ConocoPhillips could be subject to significant tax liability and, in certain circumstances, we could be required to indemnify ConocoPhillips for material taxes pursuant to indemnification obligations under the Tax Sharing Agreement.

ConocoPhillips received a private letter ruling from the Internal Revenue Service (IRS) substantially to the effect that, among other things, the distribution, together with certain related transactions, qualified as a transaction that is generally tax-free for U.S. federal income tax purposes under Sections 355 and 368(a)(1)(D) of the Code. The private letter ruling and the tax opinion that ConocoPhillips received relied on certain representations, assumptions and undertakings, including those relating to the past and future conduct of our business, and neither the private letter ruling nor the opinion would be valid if such representations, assumptions and undertakings were incorrect. Moreover, the private letter ruling does not address all the issues that are relevant to determining whether the distribution qualified for tax-free treatment. Notwithstanding the private letter ruling and the tax opinion, the IRS could determine the distribution should be treated as a taxable transaction for U.S. federal income tax purposes if it determines any of the representations, assumptions or

undertakings that were included in the request for the private letter ruling are false or have been violated or if it disagrees with the conclusions in the opinion that are not covered by the IRS ruling.

If the IRS were to determine that the distribution failed to qualify for tax-free treatment, in general, ConocoPhillips would be subject to tax as if it had sold the Phillips 66 common stock in a taxable sale for its fair market value, and ConocoPhillips stockholders who received shares of Phillips 66 common stock in the distribution would be subject to tax as if they had received a taxable distribution equal to the fair market value of such shares.

Under the Tax Sharing Agreement, we would generally be required to indemnify ConocoPhillips against any tax resulting from the distribution to the extent that such tax resulted from (i) any of our representations or undertakings being incorrect or violated, or (ii) other actions or failures to act by us. Our indemnification obligations to ConocoPhillips and its subsidiaries, officers and directors are not limited by any maximum amount. If we are required to indemnify ConocoPhillips or such other persons under the circumstances set forth in the Tax Sharing Agreement, we may be subject to substantial liabilities.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 3. LEGAL PROCEEDINGS

The following is a description of reportable legal proceedings, including those involving governmental authorities under federal, state and local laws regulating the discharge of materials into the environment. While it is not possible to accurately predict the final outcome of these pending proceedings, if any one or more of such proceedings were decided adversely to Phillips 66, we expect there would be no material effect on our consolidated financial position. Nevertheless, such proceedings are reported pursuant to Securities and Exchange Commission (SEC) regulations.

Our U.S. refineries are implementing two separate consent decrees, regarding alleged violations of the Federal Clean Air Act, with the U.S. Environmental Protection Agency (EPA), five states and one local air pollution agency. Some of the requirements and limitations contained in the decrees provide for stipulated penalties for violations. Stipulated penalties under the decrees are not automatic, but must be requested by one of the agency signatories. As part of periodic reports under the decrees or other reports required by permits or regulations, we occasionally report matters that could be subject to a request for stipulated penalties. If a specific request for stipulated penalties meeting the reporting threshold set forth in SEC rules is made pursuant to these decrees based on a given reported exceedance, we will separately report that matter and the amount of the proposed penalty.

New Matters

There are no new matters to report.

Matters Previously Reported (unresolved or resolved since the quarterly report on Form 10-Q for the quarterly period ended September 30, 2017)

The California Air Resources Board issued four separate Notices of Violation (NOV) to the company alleging violations of fuel specification requirements at our Los Angeles Refinery and Torrance Tank Farm. This matter was resolved with a payment of \$190,000 in December 2017.

On June 27, 2017, Phillips 66 reached settlement with the San Francisco Regional Water Quality Control Board for certain exceedances of copper and chlorine under the Rodeo Refinery's National Pollutant Discharge Elimination System permit. The settlement was finalized and payment of \$109,000 to resolve the matter was made following a 30-day public comment period that ended in November 2017.

In October 2016, after receiving a Notice of Intent to Sue from the Sierra Club, we entered into a voluntary settlement with the Illinois Environmental Protection Agency for alleged violations of wastewater requirements at the Wood River Refinery. The settlement involves certain capital projects and payment of \$125,000. After the settlement was filed with the Court for final approval, the Sierra Club sought and was granted approval to intervene in the case. The settlement and a first modification have been entered by the Court, but the Sierra Club still seeks to reopen and challenge the settlement.

In September 2014, the EPA issued an NOV alleging a violation of hazardous air pollution regulations at the Wood River Refinery during 2014. We are working with the EPA to resolve this NOV.

In July 2014, Phillips 66 received an NOV from the EPA alleging various flaring-related violations between 2009 and 2013 at the Wood River Refinery. We are working with the EPA to resolve this NOV.

In May 2012, the Illinois Attorney General's office filed and notified us of a complaint with respect to operations at the Wood River Refinery alleging violations of the Illinois groundwater standards and a third-party's hazardous waste permit. The complaint seeks as relief remediation of area groundwater; compliance with the hazardous waste permit; enhanced pipeline and tank integrity measures; additional spill reporting; and fines and penalties exceeding \$100,000. We are working with the Illinois Environmental Protection Agency and Attorney General's office to resolve these allegations.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

<u>Name</u>	<u>Position Held</u>	<u>Age*</u>
Greg C. Garland	Chairman and Chief Executive Officer	60
Robert A. Herman	Executive Vice President, Refining	58
Paula A. Johnson	Executive Vice President, Legal and Government Affairs, General Counsel and Corporate Secretary	54
Kevin J. Mitchell	Executive Vice President, Finance and Chief Financial Officer	51
Chukwuemeka A. Oyolu	Vice President and Controller	48

* On February 23, 2018.

There are no family relationships among any of the officers named above. The Board of Directors annually elects the officers to serve until a successor is elected and qualified or as otherwise provided in our By-Laws. Set forth below is information about the executive officers identified above.

Greg C. Garland is the Chairman and Chief Executive Officer of Phillips 66, a position he has held since June 2014. Previously, Mr. Garland served as Phillips 66's Chairman, President and Chief Executive Officer from April 2012 to June 2014. Mr. Garland previously served as ConocoPhillips' Senior Vice President, Exploration and Production—Americas from October 2010 to April 2012, and as President and Chief Executive Officer of CPChem from 2008 to 2010.

Robert A. Herman is Executive Vice President, Refining for Phillips 66, a position he has held since September 2017. Previously, Mr. Herman served Phillips 66 as Executive Vice President, Midstream from June 2014 to September 2017, Senior Vice President, HSE, Projects and Procurement from February 2014 to June 2014, and Senior Vice President, Health, Safety, and Environment from April 2012 to February 2014.

Paula A. Johnson is Executive Vice President, Legal and Government Affairs, General Counsel and Corporate Secretary of Phillips 66, a position she has held since October 2016. Previously, Ms. Johnson served as Executive Vice President, Legal, General Counsel and Corporate Secretary of Phillips 66 from May 2013 to October 2016, and Senior Vice President, Legal, General Counsel and Corporate Secretary of Phillips 66 from April 2012 to May 2013.

Kevin J. Mitchell is Executive Vice President, Finance and Chief Financial Officer of Phillips 66, a position he has held since January 2016. Previously, Mr. Mitchell served as Phillips 66's Vice President, Investor Relations from September 2014, when he joined the company, to January 2016. Prior to joining the company, he served as the General Auditor of ConocoPhillips from May 2010 until September 2014.

Chukwuemeka A. Oyolu is Vice President and Controller of Phillips 66, a position he has held since December 2014. Mr. Oyolu was Phillips 66's General Manager, Finance for Refining, Marketing and Transportation from May 2012 to February 2014 when he became General Manager, Planning and Optimization.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

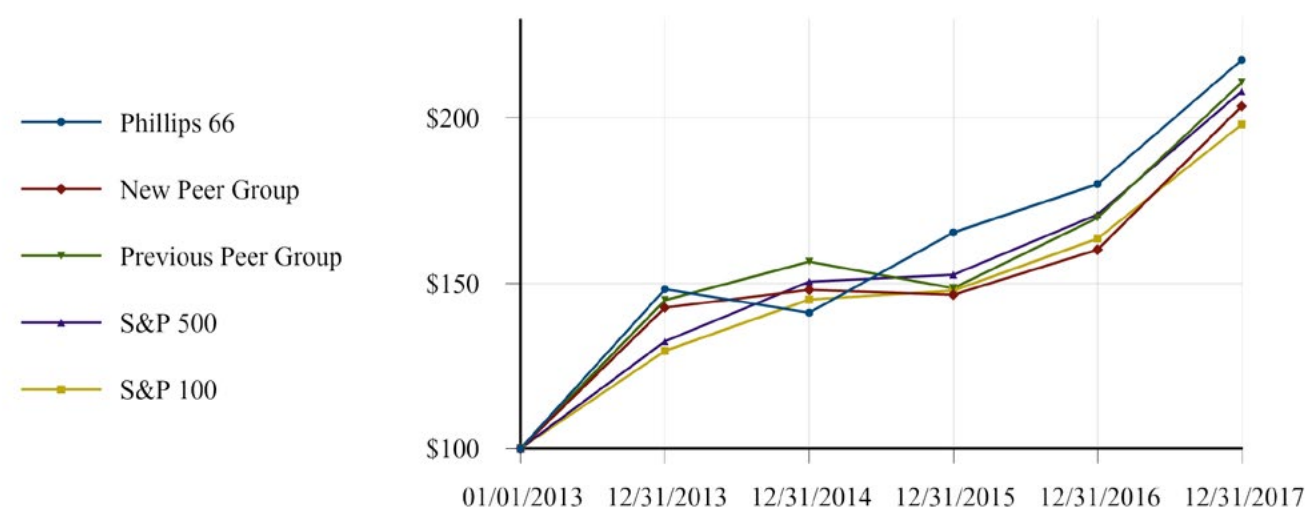
Quarterly Common Stock Prices and Cash Dividends Per Share

Phillips 66's common stock is traded on the New York Stock Exchange under the symbol "PSX." The following table reflects intraday high and low sales prices of, and dividends declared on, our common stock for each quarter presented:

	Stock Price		Dividends
	High	Low	
2017			
First Quarter	\$ 88.26	76.28	0.63
Second Quarter	83.11	75.14	0.70
Third Quarter	92.19	80.73	0.70
Fourth Quarter	102.43	89.26	0.70
2016			
First Quarter	\$ 90.87	71.74	0.56
Second Quarter	89.31	76.40	0.63
Third Quarter	81.31	73.67	0.63
Fourth Quarter	88.87	77.66	0.63
Closing Stock Price at December 29, 2017			\$ 101.15
Closing Stock Price at January 31, 2018			\$ 102.40
Number of Stockholders of Record at January 31, 2018			38,605

Performance Graph

Cumulative Total Shareholder Return on \$100 Invested on January 1, 2013



In our 2016 annual report, the performance graph included a peer index (the “Previous Peer Group”) composed of Celanese Corporation; Delek US Holdings, Inc.; Dow Chemical Company; Eastman Chemical Co.; Energy Transfer Equity, LP; Enterprise Products Partners, LP; HollyFrontier Corporation; Huntsman Corporation; Marathon Petroleum Corporation; Oneok, Inc.; PBF Energy Inc.; Targa Resources Corp.; Tesoro Corporation; Valero Energy Corporation; Western Refining, Inc.; and Westlake Chemical Corp. To more appropriately weight our peers with our business segments and utilize peers with more comparable market capitalizations, we have removed Energy Transfer from the peer group and replaced Dow with LyondellBasell Industries N.V. Additionally, Tesoro acquired Western Refining (subsequently renamed Andeavor). Accordingly, the New Peer Index is composed of Andeavor; Celanese Corporation; Delek US Holdings, Inc.; Eastman Chemical Co.; Enterprise Products Partners, LP; HollyFrontier Corporation; Huntsman Corporation; LyondellBasell Industries N.V.; Marathon Petroleum Corporation; Oneok, Inc.; PBF Energy Inc.; Targa Resources Corp.; Valero Energy Corporation; and Westlake Chemical Corp.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased*	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs**	Millions of Dollars	
				Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs	
October 1-31, 2017	1,717,513	\$ 92.25	1,717,513	\$	3,277
November 1-30, 2017	1,675,652	93.30	1,675,652		3,120
December 1-31, 2017	1,492,675	99.17	1,492,675		2,972
Total	4,885,840	\$ 94.72	4,885,840		

* Includes repurchase of shares of common stock from company employees in connection with the company’s broad-based employee incentive plans, when applicable.

** As of December 31, 2017, our Board of Directors has authorized repurchases totaling up to \$12 billion of our outstanding common stock, including the authorization in October 2017 to repurchase \$3 billion of additional shares. The authorizations from the Board of Directors do not have expiration dates. The share repurchases are expected to be funded primarily through available cash. The authorized shares will be repurchased from time to time in the open market at the company’s discretion, subject to market conditions and other factors, and in accordance with applicable regulatory requirements. We are not obligated to acquire any particular amount of common stock and may commence, suspend or discontinue purchases at any time or from time to time without prior notice. Shares of stock repurchased are held as treasury shares.

Item 6. SELECTED FINANCIAL DATA

	Millions of Dollars Except Per Share Amounts				
	2017	2016	2015	2014	2013
Sales and other operating revenues	\$ 102,354	84,279	98,975	161,212	171,596
Income from continuing operations	5,248	1,644	4,280	4,091	3,682
Income from continuing operations attributable to Phillips 66	5,106	1,555	4,227	4,056	3,665
Per common share					
Basic	9.90	2.94	7.78	7.15	5.97
Diluted	9.85	2.92	7.73	7.10	5.92
Net income	5,248	1,644	4,280	4,797	3,743
Net income attributable to Phillips 66	5,106	1,555	4,227	4,762	3,726
Per common share					
Basic	9.90	2.94	7.78	8.40	6.07
Diluted	9.85	2.92	7.73	8.33	6.02
Total assets	54,371	51,653	48,580	48,692	49,769
Long-term debt	10,069	9,588	8,843	7,793	6,101
Cash dividends declared per common share	2.7300	2.4500	2.1800	1.8900	1.3275

In December 2013, we entered into an agreement to exchange the stock of Phillips Specialty Products Inc. (PSPI), a flow improver business, which was included in our Marketing and Specialties segment, for shares of Phillips 66 common stock owned by the other party. The PSPI share exchange was completed in February 2014. Accordingly, the selected income from continuing operations data above for the years ended December 31, 2014 and 2013, exclude income from PSPI’s discontinued operations of \$706 million and \$61 million, respectively.

To ensure full understanding, you should read the selected financial data presented above in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and accompanying notes included elsewhere in this Annual Report on Form 10-K.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management's Discussion and Analysis is the company's analysis of its financial performance, financial condition, and significant trends that may affect future performance. It should be read in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K. It contains forward-looking statements including, without limitation, statements relating to the company's plans, strategies, objectives, expectations and intentions that are made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. The words "anticipate," "estimate," "believe," "budget," "continue," "could," "intend," "may," "plan," "potential," "predict," "seek," "should," "will," "would," "expect," "objective," "projection," "forecast," "goal," "guidance," "outlook," "effort," "target" and similar expressions identify forward-looking statements. The company does not undertake to update, revise or correct any of the forward-looking information unless required to do so under the federal securities laws. Readers are cautioned that such forward-looking statements should be read in conjunction with the company's disclosures under the heading: "CAUTIONARY STATEMENT FOR THE PURPOSES OF THE 'SAFE HARBOR' PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995."

The terms "earnings" and "loss" as used in Management's Discussion and Analysis refer to net income (loss) attributable to Phillips 66.

BUSINESS ENVIRONMENT AND EXECUTIVE OVERVIEW

Phillips 66 is an energy manufacturing and logistics company with midstream, chemicals, refining, and marketing and specialties businesses. At December 31, 2017, we had total assets of \$54.4 billion.

Executive Overview

We reported earnings of \$5.1 billion and generated \$3.6 billion in cash from operating activities in 2017. Our reported earnings included a \$2.7 billion provisional income tax benefit from the U.S. Tax Cuts and Jobs Act (the Tax Act) enacted on December 22, 2017. Phillips 66 Partners LP (Phillips 66 Partners) raised net proceeds totaling \$1.8 billion from equity and debt offerings. We used available cash to fund capital expenditures and investments of \$1.8 billion, repurchase \$1.6 billion of our common stock and pay dividends of \$1.4 billion. We ended 2017 with \$3.1 billion of cash and cash equivalents and approximately \$5.8 billion of total committed capacity available under both our and Phillips 66 Partners' credit facilities.

We continue to focus on the following strategic priorities:

- **Operating Excellence.** Our commitment to operating excellence guides everything we do. We are committed to protecting the health and safety of everyone who has a role in our operations and the communities in which we operate. Continuous improvement in safety, environmental stewardship, reliability and cost efficiency is a fundamental requirement for our company and employees. We employ rigorous training and audit programs to drive ongoing improvement in both personal and process safety as we strive for zero incidents. We achieved a record-low combined injury rate in 2017. Since we cannot control commodity prices, controlling operating expenses and overhead costs, within the context of our commitment to safety and environmental stewardship, is a high priority. Senior management actively monitors these costs. We are committed to protecting the environment and strive to reduce our environmental footprint throughout our operations. Optimizing utilization rates at our refineries through reliable and safe operations enables us to capture the value available in the market in terms of prices and margins. During 2017, our worldwide refining crude oil capacity utilization rate was 95 percent.
- **Growth.** We have budgeted \$2.3 billion in capital expenditures and investments in 2018, including \$0.6 billion for Phillips 66 Partners. Additionally, our share of expected capital spending by joint ventures DCP Midstream, LLC (DCP Midstream), Chevron Phillips Chemical Company LLC (CPChem) and WRB Refining LP (WRB) in 2018 is \$0.9 billion. In Midstream, we plan to invest in our Transportation and NGL businesses, focusing on projects integrated with our existing assets and infrastructure. In Chemicals, CPChem's capital expenditures are expected to decrease due to completion of its U.S. Gulf Coast Petrochemicals Project. The two polyethylene units started up in September 2017, while commissioning of the ethane cracker is expected to begin in the first

quarter of 2018. Growth capital in Refining will be directed toward small, high-return, quick-payout projects primarily to increase clean product yields, while in Marketing and Specialties (M&S) it will be directed primarily towards increasing our retail sites in Europe.

- **Returns.** We plan to improve refining returns by increasing throughput of advantaged feedstocks, disciplined capital allocation and portfolio optimization. A disciplined capital allocation process ensures we focus investments in projects that generate competitive returns throughout the business cycle. In 2017, we improved clean product yield in Refining, and in M&S, we continued to enhance our network and brand by re-imaging sites in the United States, while growing our number of sites in Europe.
- **Distributions.** We believe shareholder value is enhanced through, among other things, consistent growth of regular dividends, complemented by share repurchases. We increased our quarterly dividend rate by 11 percent during 2017, and have increased it 250 percent since the company's inception in 2012. Regular dividends demonstrate the confidence our Board of Directors and management have in our capital structure and operations' capability to generate free cash flow throughout the business cycle. In 2017, we repurchased \$1.6 billion, or approximately 18.7 million shares, of our common stock. Also, in October 2017, our Board of Directors authorized up to \$3 billion of additional share repurchases. At the discretion of our Board of Directors, we plan to increase dividends annually and fund our share repurchase program while continuing to invest in the growth of our business.
- **High-Performing Organization.** We strive to attract, develop and retain individuals with the knowledge and skills to implement our business strategy and who support our values and culture. Throughout the company, we focus on getting results in the right way and believe success is both what we do and how we do it. We encourage collaboration throughout our company, while valuing differences, respecting diversity, and creating a great place to work. We foster an environment of learning and development through structured programs focused on enhancing functional and technical skills where employees are engaged in our business and committed to their own, as well as the company's, success.

Business Environment

Commodity prices rose significantly during 2017, compared with 2016. The discount for the U.S. crude oil benchmark West Texas Intermediate (WTI) versus the international benchmark Brent widened over much of 2017, initially related to extended production cuts by the Organization of the Petroleum Exporting Countries (OPEC) and certain non-OPEC countries, but further widened with Hurricane Harvey and logistical issues at the Cushing, Oklahoma, trading hub. Over the course of 2017, commodity prices had both favorable and unfavorable impacts on our businesses that vary by segment.

Net income in the Midstream segment, which includes our 50 percent equity investment in DCP Midstream, is closely linked to natural gas liquids (NGL) prices, natural gas prices and crude oil prices. Average natural gas prices increased in 2017, compared with 2016, due to higher demand and low production in early 2017. In the fourth quarter of 2017, natural gas prices gained momentum with colder temperatures and increased residential and commercial heating demand. Total U.S. natural gas production also increased through the fourth quarter of 2017, largely from dry gas in the Marcellus play and associated gas from the Permian Basin. NGL prices improved throughout 2017 due to international demand.

The Chemicals segment consists of our 50 percent equity investment in CPChem. The chemicals and plastics industry is mainly a commodity-based industry where the margins for key products are based on supply and demand, as well as cost factors. During 2017, the chemicals and plastics industry continued to benefit from feedstock cost advantages associated with manufacturing ethylene in regions of the world with significant NGL production. The price of crude oil is rising faster than NGL prices and thus the petrochemicals industry continues to experience lower ethylene cash costs in regions of the world where ethylene manufacturing is based upon NGL rather than crude oil-derived feedstocks. In particular, companies with North American ethane-based crackers have benefited and have captured a somewhat higher polyethylene chain margin. The ethylene-to-polyethylene chain margins expanded in 2017 because of the crude oil price recovery after the significant decline in oil prices that began in 2014.

Our Refining segment results are driven by several factors, including refining margins, cost control, refinery throughput, feedstock costs, product yields and turnaround activity. Industry crack spread indicators, the difference between market prices for refined products and crude oil, are used to estimate refining margins. During 2017, the U.S. 3:2:1 crack spread (three barrels of crude oil producing two barrels of gasoline and one barrel of diesel) strengthened across all quarters, compared with 2016, largely attributable to higher product demand and lower product inventories in the last half of 2017 due to Hurricane Harvey. Northwest European crack spreads on average increased in 2017, compared with 2016, also due to higher demand.

Results for our M&S segment depend largely on marketing fuel margins, lubricant margins, and other specialty product margins. While M&S margins are primarily driven by market factors, largely determined by the relationship between supply and demand, marketing fuel margins, in particular, are influenced by the trend in spot prices for refined products. Generally speaking, a downward trend of spot prices has a favorable impact on marketing fuel margins, while an upward trend of spot prices has an unfavorable impact on marketing fuel margins. Spot prices moved upward in 2017, following the increase in crude oil prices.

RESULTS OF OPERATIONS

Basis of Presentation

During the fourth quarter of 2017, the segment performance measure used by our chief executive officer to assess performance and allocate resources was changed from “net income attributable to Phillips 66” to “net income.” This change reflects the recognition that management does not differentiate between those earnings attributable to Phillips 66 and those attributable to noncontrolling interests when making operating and resource allocation decisions impacting segment performance. Prior period segment information has been recast to conform to the current presentation.

Consolidated Results

A summary of net income (loss) by business segment with a reconciliation to net income attributable to Phillips 66 follows:

	Millions of Dollars		
	Year Ended December 31		
	2017	2016	2015
Midstream	\$ 464	280	74
Chemicals	525	583	962
Refining	1,404	374	2,555
Marketing and Specialties	686	891	1,187
Corporate and Other	2,169	(484)	(498)
Net income	5,248	1,644	4,280
Less: net income attributable to noncontrolling interests	142	89	53
Net income attributable to Phillips 66	\$ 5,106	1,555	4,227

2017 vs. 2016

Our earnings increased \$3,551 million, or 228 percent, in 2017, mainly reflecting:

- Recognition of a \$2,735 million provisional income tax benefit from the enactment of the Tax Act in December 2017.
- Higher realized refining margins.
- Recognition of a \$261 million after-tax gain from the consolidation of Merely Sweeny, L.P. (MSLP).
- Improved equity earnings from affiliates in our Midstream segment.

These increases were partially offset by:

- Increased costs due to Hurricane Harvey, primarily impacting CPChem in our Chemicals segment.
- Lower realized marketing margins.
- Higher interest and debt expense.

2016 vs. 2015

Our earnings decreased \$2,672 million, or 63 percent, in 2016, primarily resulting from:

- Lower realized refining margins.
- Lower olefins and polyolefins margins.
- Recognition in 2015 of \$242 million of the deferred gain related to the sale in 2013 of the Immingham Combined Heat and Power Plant (ICHP).

These decreases were partially offset by:

- Improved results from DCP Midstream, primarily as a result of goodwill and other asset impairments recorded in 2015.

See the “Segment Results” section for additional information on our segment results.

Income Statement Analysis

2017 vs. 2016

Sales and other operating revenues and purchased crude oil and products increased 21 percent and 27 percent, respectively, in 2017. The increases were primarily due to higher prices for petroleum products, crude oil and NGL.

Equity in earnings of affiliates increased 22 percent in 2017, primarily resulting from higher equity in earnings from DCP Midstream and other affiliates in our Midstream segment, as well as WRB, partially offset by lower results from CPChem.

- Equity in earnings from our Midstream segment increased \$270 million due to improved results from DCP Midstream, primarily driven by improved margins, as well as higher equity in earnings from our Transportation affiliates, including our joint ventures that own the Bakken Pipeline, which started commercial operations in June 2017.
- Equity in earnings of WRB increased \$207 million, primarily due to higher market crack spreads, partially offset by lower feedstock advantage.
- Equity in earnings of CPChem decreased \$120 million, primarily due to hurricane-related costs and downtime.

Other income increased \$447 million in 2017. We recognized a noncash, pre-tax gain of \$423 million in February 2017 related to the consolidation of MSLP. See Note 5—Business Combinations, in the Notes to Consolidated Financial Statements, for additional information.

Operating expenses increased 10 percent in 2017. This increase was mainly due to the consolidation of a transportation joint venture in December 2016, as well as higher refining turnaround expenses and utility costs, pension settlement expense, and costs associated with a full year of operations at the Freeport LPG Export Terminal. These increases were partially offset by lower costs due to the sale of the Whitegate Refinery in 2016.

Depreciation and amortization increased 13 percent in 2017 due to the Freeport LPG Export Terminal beginning operations in late 2016, as well as other assets placed in service in 2017.

Interest and debt expense increased 30 percent in 2017. This increase was primarily due to lower capitalized interest from the completion of major projects, including the startup of the Freeport LPG Export Terminal in late 2016, as well as higher average debt principal balances.

Income tax expense (benefit) was a benefit in 2017, compared with expense in 2016, primarily due to the \$2,735 million provisional income tax benefit from the enactment of the Tax Act in December 2017. This benefit was partially offset by higher income tax expense from increased income before income taxes. See Note 21—Income Taxes, in the Notes to Consolidated Financial Statements, for more information regarding our income taxes.

Net income attributable to noncontrolling interest increased \$53 million in 2017, reflecting the contribution of assets to Phillips 66 Partners during 2017 and late 2016. See Note 27—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for more information.

2016 vs. 2015

Sales and other operating revenues and purchased crude oil and products both decreased 15 percent in 2016. The decreases were primarily due to lower average prices for petroleum products and crude oil, while average NGL prices were slightly improved during 2016.

Equity in earnings of affiliates decreased 10 percent in 2016, primarily resulting from decreased earnings from CPChem and WRB, partially offset by improved results from DCP Midstream.

- Equity in earnings of CPChem decreased 37 percent, primarily due to lower realized olefins and polyolefins margins.
- Equity in earnings of WRB decreased \$186 million, mainly resulting from lower market crack spreads, partially offset by higher feedstock advantage.
- Equity in earnings of DCP Midstream improved \$426 million in 2016, primarily driven by goodwill and other asset impairments recorded by DCP Midstream in 2015.

Net gain on dispositions decreased \$273 million in 2016. In 2015, we recognized a \$242 million deferred gain related to the sale of ICHP. See Note 6—Assets Held for Sale or Sold, in the Notes to Consolidated Financial Statements, for additional information.

See Note 21—Income Taxes, in the Notes to Consolidated Financial Statements, for information regarding our income tax expense and effective tax rates.

Segment Results

Midstream

	Year Ended December 31		
	2017	2016	2015
	Millions of Dollars		
Net Income (Loss)			
Transportation	\$ 376	311	335
NGL and Other	43	2	63
DCP Midstream	45	(33)	(324)
Total Midstream	\$ 464	280	74

Transportation Volumes

	Thousands of Barrels Daily		
Pipelines*	3,501	3,511	3,264
Terminals	2,665	2,422	1,981
Operating Statistics			
NGL fractionated**	186	170	112
NGL extracted***	374	393	410

* Pipelines represent the sum of volumes transported through each separately tariffed pipeline segment, including our share of equity volumes from Yellowstone Pipe Line Company and Lake Charles Pipe Line Company.

** Excludes DCP Midstream.

*** Represents 100 percent of DCP Midstream's volumes.

	Dollars Per Gallon		
Weighted-Average NGL Price*			
DCP Midstream	\$ 0.62	0.46	0.45

* Based on index prices from the Mont Belvieu and Conway market hubs that are weighted by NGL component and location mix.

The Midstream segment provides crude oil and refined products transportation, terminaling and processing services, as well as natural gas, NGL and liquefied petroleum gas (LPG) transportation, storage, processing and marketing services, mainly in the United States. This segment includes our master limited partnership (MLP), Phillips 66 Partners, as well as our 50 percent equity investment in DCP Midstream, which includes the operations of its MLP, DCP Midstream, LP (DCP Partners).

2017 vs. 2016

Net income from the Midstream segment increased \$184 million in 2017, compared with 2016, due to improved results across all business lines.

Transportation net income increased \$65 million in 2017, compared with 2016. The improvement was mainly driven by increased equity in earnings from affiliates, including our joint ventures that own the Bakken Pipeline, which started commercial operations in June 2017, as well as Rockies Express Pipeline LLC (REX) due to our share of a favorable breach of contract settlement claim. These increases were partially offset by higher operating costs.

Net income from our NGL and Other business increased \$41 million in 2017, compared with 2016. The increase reflects a full year of operations at the Freeport LPG Export Terminal, the contribution of MSLP to Phillips 66 Partners in October 2017, and higher equity earnings from DCP Sand Hills Pipeline, LLC (Sand Hills), partially offset by lower realized margins.

Net income from our investment in DCP Midstream improved \$78 million in 2017, compared with 2016. The increase was primarily due to improved margins driven by higher average NGL and natural gas prices, and improved results from DCP Midstream's hedging program.

See the "Business Environment and Executive Overview" section for information on market factors impacting 2017 results.

2016 vs. 2015

Net income from the Midstream segment increased \$206 million in 2016, compared with 2015. The increase was primarily due to improved results from DCP Midstream, partially offset by lower net income from our Transportation and NGL and Other businesses.

Transportation net income decreased \$24 million in 2016, compared with 2015. Lower net income primarily resulted from higher operating costs and increased depreciation expense due to growth projects. These items were partially offset by higher revenues from increased throughput volumes and higher tariffs.

Net income from our NGL and Other business decreased \$61 million in 2016, compared with 2015. The decrease was primarily driven by lower realized margins, as well as increased depreciation and operating expenses associated with the Sweeny Fractionator and, late in the year, the Freeport LPG Export Terminal. These items were partially offset by higher fractionated volumes, reflecting the operation of the Sweeny Fractionator for a full year in 2016, and the benefit of the first liquefied petroleum gas cargos exported from the Freeport LPG Export Terminal in late 2016.

Improved results from our investment in DCP Midstream increased our net income by \$291 million in 2016, compared with 2015. In 2015, DCP Midstream recorded goodwill and other asset impairments, which reduced our net income by \$232 million. In addition, favorable contract restructuring efforts, improved asset performance, higher equity in earnings from DCP Midstream's equity affiliates, lower operating costs and higher NGL prices contributed to better results in 2016. These improvements were partially offset by lower natural gas and crude oil prices.

Chemicals

	Year Ended December 31		
	2017	2016	2015
	Millions of Dollars		
Net Income	\$ 525	583	962
	Millions of Pounds		
CPChem Externally Marketed Sales Volumes*			
Olefins and Polyolefins	15,870	16,011	16,916
Specialties, Aromatics and Styrenics	4,618	4,911	5,301
	20,488	20,922	22,217

* Represents 100 percent of CPChem's outside sales of produced petrochemical products, as well as commission sales from equity affiliates.

Olefins and Polyolefins Capacity Utilization (percent)*	87%	91	92
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The Chemicals segment consists of our 50 percent interest in CPChem, which we account for under the equity method. CPChem uses NGL and other feedstocks to produce petrochemicals. These products are then marketed and sold or used as feedstocks to produce plastics and other chemicals. We structure our reporting of CPChem's operations around two primary business segments: Olefins and Polyolefins (O&P) and Specialties, Aromatics and Styrenics (SA&S). The O&P business segment produces and markets ethylene and other olefin products. Ethylene produced is primarily consumed within CPChem for the production of polyethylene, normal alpha olefins and polyethylene pipe. The SA&S business segment manufactures and markets aromatics and styrenics products, such as benzene, styrene, paraxylene and cyclohexane, as well as polystyrene. SA&S also manufactures and/or markets a variety of specialty chemical products. Unless otherwise noted, amounts referenced below reflect our net 50 percent interest in CPChem.

2017 vs. 2016

Net income from the Chemicals segment decreased \$58 million in 2017, compared with 2016. The decrease was primarily driven by higher costs and lower volumes due to Hurricane Harvey, as well as lower margins. These items were partially offset by lower impairment charges, higher equity in earnings from an O&P affiliate due to lower turnaround costs and a gain on the sale of CPChem's K-Resin[®] styrene-butadiene copolymers business. CPChem recognized impairment charges of \$127 million and \$177 million in 2017 and 2016, respectively, due to lower demand and margin factors. As a result of these impairments, net income of the Chemicals segment was reduced by \$39 million and \$89 million in 2017 and 2016, respectively.

As a result of Hurricane Harvey, CPChem's Cedar Bayou facility in Baytown, Texas, experienced severe flooding, which caused it to shut down operations in the third quarter of 2017. This facility restarted in phases during the fourth quarter of 2017. CPChem's U.S. Gulf Coast Petrochemicals Project, which consists of an ethane cracker at Cedar Bayou and two polyethylene units at Old Ocean, Texas, was also impacted by the flooding. CPChem achieved mechanical completion of its ethane cracker at the Cedar Bayou facility in December 2017, and is expected to complete commissioning of the ethane cracker in the first quarter of 2018, with a transition to full production in the second quarter of 2018.

See the "Business Environment and Executive Overview" section for information on market factors impacting CPChem's results.

2016 vs. 2015

Net income from the Chemicals segment decreased \$379 million in 2016, compared with 2015. The decrease in net income was primarily due to lower realized margins from the O&P business, driven by a decline in sales prices for polyethylene and normal alpha olefins (NAO) and higher feedstock costs, as well as impacts from increased turnaround activity. Lower equity earnings from CPChem's equity affiliates and lower SA&S volumes further reduced net income in 2016.

In addition, CPChem recognized a \$177 million impairment in 2016 due to lower demand and margin factors affecting an equity affiliate, which resulted in an \$89 million after-tax reduction in our equity earnings from CPChem. Our equity in earnings from CPChem were reduced by \$24 million in 2015 as a result of an impairment CPChem recognized on an equity affiliate. These items were partially offset by higher NAO and polyethylene sales volumes and improved SA&S margins.

Refining

	Year Ended December 31		
	2017	2016	2015
	Millions of Dollars		
Net Income (Loss)			
Atlantic Basin/Europe	\$ 370	204	569
Gulf Coast	512	52	551
Central Corridor	477	234	857
West Coast	45	(116)	578
Worldwide	\$ 1,404	374	2,555

	Dollars Per Barrel		
	2017	2016	2015
Net Income (Loss)			
Atlantic Basin/Europe	\$ 1.86	0.93	2.68
Gulf Coast	1.79	0.18	2.08
Central Corridor	5.18	2.38	8.96
West Coast	0.34	(0.92)	4.42
Worldwide	1.97	0.51	3.63

Realized Refining Margins			
Atlantic Basin/Europe	\$ 8.25	6.26	9.39
Gulf Coast	7.07	5.49	9.29
Central Corridor	12.44	8.70	14.88
West Coast	10.49	9.15	16.86
Worldwide	9.13	6.99	11.84

	Thousands of Barrels Daily		
	Year Ended December 31		
	2017	2016	2015
Operating Statistics			
Refining operations*			
Atlantic Basin/Europe			
Crude oil capacity	520	566	588
Crude oil processed	494	568	539
Capacity utilization (percent)	95%	100	92
Refinery production	553	607	587
Gulf Coast			
Crude oil capacity	743	743	738
Crude oil processed	709	704	654
Capacity utilization (percent)	95%	95	89
Refinery production	789	783	733
Central Corridor			
Crude oil capacity	493	493	492
Crude oil processed	467	485	465
Capacity utilization (percent)	95%	98	95
Refinery production	489	506	486
West Coast			
Crude oil capacity	360	360	360
Crude oil processed	342	318	330
Capacity utilization (percent)	95%	88	92
Refinery production	368	345	359
Worldwide			
Crude oil capacity	2,116	2,162	2,178
Crude oil processed	2,012	2,075	1,988
Capacity utilization (percent)	95%	96	91
Refinery production	2,199	2,241	2,165

* Includes our share of equity affiliates.

The Refining segment refines crude oil and other feedstocks into petroleum products (such as gasoline, distillates and aviation fuels) at 13 refineries in the United States and Europe.

2017 vs. 2016

Net income for the Refining segment increased \$1,030 million in 2017, compared with 2016. The increase was primarily due to higher realized refining margins and West Coast volumes, as well as an after-tax gain of \$261 million recognized on the consolidation of MSLP, partially offset by higher turnaround expenses, utilities costs and pension settlement expense. The higher realized refining margins primarily resulted from improved market crack spreads and secondary product margins, partially offset by lower feedstock advantage.

See the “Business Environment and Executive Overview” section for information on industry crack spreads and other market factors impacting this year’s results. In addition, see Note 5—Business Combinations and Note 27—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for additional information on the consolidation of MSLP in February 2017 and the subsequent contribution of our ownership interest in MSLP to Phillips 66 Partners in October 2017, respectively.

Our worldwide refining crude oil capacity utilization rate was 95 percent in 2017, compared with 96 percent in 2016. The decrease was primarily attributable to higher turnaround activities and unplanned downtime, partially offset by improved market conditions.

2016 vs. 2015

Net income for the Refining segment decreased \$2,181 million in 2016, compared with 2015. Lower net income in 2016 reflected lower realized refining margins resulting from decreased market crack spreads, higher costs associated with renewable fuels blending activities, lower clean product differentials and lower feedstock advantage. These items were partially offset by higher volumes due to lower turnaround activities and less unplanned downtime.

Our worldwide refining crude oil capacity utilization rate was 96 percent in 2016, compared with 91 percent in 2015. The increase was primarily attributable to lower turnaround activities and less unplanned downtime.

Non-GAAP Reconciliations

Our realized refining margins measure the difference between a) sales and other operating revenues derived from the sale of petroleum products manufactured at our refineries and b) purchase costs of feedstocks, primarily crude oil, used to produce the petroleum products. The margins are adjusted to include our proportional share of our joint-venture refineries’ realized margins, as well as to exclude those items that are not representative of the underlying operating performance of a period, which we call “special items.” The realized refining margins are converted to a per-barrel basis by dividing them by total refinery processed inputs (primarily crude oil) measured on a barrel basis, including our share of inputs processed by our joint-venture refineries. Our realized refining margin per barrel is intended to be comparable with industry refining margins, which are known as “crack spreads.” As discussed in “Business Environment,” industry crack spreads measure the difference between market prices for refined petroleum products and crude oil. Realized refining margin per barrel calculated on a similar basis as industry crack spreads provides a useful measure of how well we performed relative to benchmark industry margins.

Under generally accepted accounting principles in the United States (GAAP), the performance measure most directly comparable to refining margin per barrel is the Refining segment’s “net income per barrel.” Refining margin per barrel excludes items that are typically included in a manufacturer’s gross margin, such as depreciation and operating expenses, and other items used to determine net income, such as general and administrative expenses and income taxes. It also includes our proportional share of joint-venture refineries’ realized margins and excludes special items. Because refining margin per barrel is calculated in this manner, and because refining margin per barrel may be defined differently by other companies in our industry, it has limitations as an analytical tool. Following are reconciliations of net income to realized refining margins:

	Millions of Dollars, Except as Indicated				
	Atlantic Basin/ Europe	Gulf Coast	Central Corridor	West Coast	Worldwide
Realized Refining Margins					
Year Ended December 31, 2017					
Net income	\$ 370	512	477	45	1,404
<i>Plus:</i>					
Income tax expense	78	297	278	19	672
Taxes other than income taxes	56	97	46	64	263
Depreciation, amortization and impairments	192	273	129	244	838
Selling, general and administrative expenses	61	55	34	48	198
Operating expenses	847	1,212	593	982	3,634
Equity in (earnings) losses of affiliates	11	(4)	(329)	—	(322)
Other segment (income) expense, net	(10)	(421)	13	5	(413)
Proportional share of refining gross margins contributed by equity affiliates	59	1	959	—	1,019
<i>Special items:</i>					
Certain tax impacts	(23)	—	—	—	(23)
Realized refining margins	\$ 1,641	2,022	2,200	1,407	7,270
Total processed inputs (<i>thousands of barrels</i>)	199,068	285,951	92,146	134,089	711,254
Adjusted total processed inputs (<i>thousands of barrels</i>)*	199,068	285,951	176,823	134,089	795,931
Net income per barrel (<i>dollars per barrel</i>)**	\$ 1.86	1.79	5.18	0.34	1.97
Realized refining margins (<i>dollars per barrel</i>)***	8.25	7.07	12.44	10.49	9.13
Year Ended December 31, 2016					
Net income (loss)	\$ 204	52	234	(116)	374
<i>Plus:</i>					
Income tax expense (benefit)	(17)	17	133	(72)	61
Taxes other than income taxes	58	73	42	80	253
Depreciation, amortization and impairments	200	234	106	230	770
Selling, general and administrative expenses	64	51	31	49	195
Operating expenses	817	1,234	465	979	3,495
Equity in (earnings) losses of affiliates	8	(50)	(122)	—	(164)
Other segment (income) expense, net	(11)	3	(6)	(2)	(16)
Proportional share of refining gross margins contributed by equity affiliates	55	(4)	705	—	756
<i>Special items:</i>					
Pending claims and settlements	—	(70)	—	—	(70)
Certain tax impacts	(32)	—	—	—	(32)
Railcar lease residual value deficiencies and related costs	5	16	11	8	40
Recognition of deferred logistics commitments	30	—	—	—	30
Realized refining margins	\$ 1,381	1,556	1,599	1,156	5,692
Total processed inputs (<i>thousands of barrels</i>)	220,519	283,574	98,217	126,329	728,639
Adjusted total processed inputs (<i>thousands of barrels</i>)*	220,519	283,574	183,691	126,329	814,113
Net income (loss) per barrel (<i>dollars per barrel</i>)**	\$ 0.93	0.18	2.38	(0.92)	0.51
Realized refining margins (<i>dollars per barrel</i>)***	6.26	5.49	8.70	9.15	6.99

* Adjusted total processed inputs include our proportional share of processed inputs of an equity affiliate.

** Net income (loss) divided by total processed inputs.

*** Realized refining margins per barrel, as presented, are calculated using the underlying realized refining margin amounts, in dollars, divided by adjusted total processed inputs, in barrels. As such, recalculated per barrel amounts using the rounded margins and barrels presented may differ from the presented per barrel amounts due to rounding.

	Millions of Dollars, Except as Indicated				
	Atlantic Basin/ Europe	Gulf Coast	Central Corridor	West Coast	Worldwide
Realized Refining Margins					
Year Ended December 31, 2015					
Net income	\$ 569	551	857	578	2,555
<i>Plus:</i>					
Income tax expense (benefit)	(15)	338	469	312	1,104
Taxes other than income taxes	57	76	42	84	259
Depreciation, amortization and impairments	197	226	102	216	741
Selling, general and administrative expenses	67	60	35	59	221
Operating expenses	995	1,241	447	961	3,644
Equity in (earnings) losses of affiliates	8	(25)	(308)	—	(325)
Other segment (income) expense, net	30	2	8	(5)	35
Proportional share of refining gross margins contributed by equity affiliates	89	(9)	977	—	1,057
Realized refining margins	\$ 1,997	2,460	2,629	2,205	9,291
Total processed inputs (<i>thousands of barrels</i>)	212,627	264,874	95,682	130,799	703,982
Adjusted total processed inputs (<i>thousands of barrels</i>)*	212,627	264,874	176,641	130,799	784,941
Net income per barrel (<i>dollars per barrel</i>)**	\$ 2.68	2.08	8.96	4.42	3.63
Realized refining margins (<i>dollars per barrel</i>)***	9.39	9.29	14.88	16.86	11.84

* Adjusted total processed inputs include our proportional share of processed inputs of an equity affiliate.

** Net income divided by total processed inputs.

*** Realized refining margins per barrel, as presented, are calculated using the underlying realized refining margin amounts, in dollars, divided by adjusted total processed inputs, in barrels. As such, recalculated per barrel amounts using the rounded margins and barrels presented may differ from the presented per barrel amounts due to rounding.

Marketing and Specialties

	Year Ended December 31		
	2017	2016	2015
	Millions of Dollars		
Net Income			
Marketing and Other	\$ 551	747	1,004
Specialties	135	144	183
Total Marketing and Specialties	\$ 686	891	1,187

	Dollars Per Barrel		
	2017	2016	2015
Net Income			
U.S.	\$ 0.56	0.74	0.76
International	1.81	2.21	1.98

Realized Marketing Fuel Margins			
U.S.	\$ 1.48	1.64	1.65
International	4.21	4.05	4.40

	Dollars Per Gallon		
	2017	2016	2015
U.S. Average Wholesale Prices*			
Gasoline	\$ 1.87	1.62	1.92
Distillates	1.85	1.48	1.77

* On third-party branded petroleum products sales, excluding excise taxes.

	Thousands of Barrels Daily		
	2017	2016	2015
Marketing Petroleum Products Sales			
Gasoline	1,246	1,238	1,205
Distillates	931	947	953
Other	18	16	16
	2,195	2,201	2,174

The M&S segment purchases for resale and markets refined petroleum products (such as gasoline, distillates and aviation fuels), mainly in the United States and Europe. In addition, this segment includes the manufacturing and marketing of specialty products (such as base oils and lubricants), as well as power generation operations.

2017 vs. 2016

Net income from the M&S segment decreased \$205 million in 2017, compared with 2016. The decrease was primarily due to lower realized marketing margins, as well as the absence of biofuel tax credits and a favorable income tax adjustment recognized in 2016.

See the “Business Environment and Executive Overview” section for information on marketing fuel margins and other market factors impacting 2016 results.

2016 vs. 2015

Net income from the M&S segment decreased \$296 million in 2016, compared with 2015. The decrease was mainly attributable to the \$242 million deferred gain recognized in 2015 related to the 2013 ICHP sale. See Note 6—Assets Held for Sale or Sold, in the Notes to Consolidated Financial Statements, for additional information.

Also contributing to the lower net income in 2016 were lower realized marketing margins driven by an upward trend of spot prices during most of 2016, and lower margins and volumes in lubricants. These decreases were partially offset by favorable tax adjustments and higher marketing volumes.

Non-GAAP Reconciliations

Our realized marketing fuel margins measure the difference between a) sales and other operating revenues derived from the sale of fuels in our M&S segment and b) purchase costs of those fuels. These margins are converted to a per-barrel basis by dividing them by sales volumes measured on a barrel basis. Marketing fuel margin per barrel demonstrates the value uplift our marketing operations provide by optimizing the placement and ultimate sale of our refineries’ fuel production.

Within the M&S segment, the GAAP performance measure most directly comparable to marketing fuel margin per barrel is the marketing business’ “net income per barrel.” Marketing fuel margin per barrel excludes items that are typically included in gross margin, such as depreciation and operating expenses, and other items used to determine net income, such as general and administrative expenses and income taxes. Because marketing fuel margin per barrel excludes these items, and because marketing fuel margin per barrel may be defined differently by other companies in our industry, it has limitations as an analytical tool. Following are reconciliations of net income to realized marketing fuel margins:

	Millions of Dollars, Except as Indicated					
	U.S.			International		
	2017	2016	2015	2017	2016	2015
Realized Marketing Fuel Margins						
Net income	\$ 395	519	518	176	235	217
<i>Plus:</i>						
Income tax expense	233	285	292	41	17	57
Taxes other than income taxes	5,481	5,187	5,208	7,579	8,132	8,499
Depreciation, amortization and impairment	14	12	9	67	63	62
Selling, general and administrative expenses	751	708	732	264	259	269
Equity in earnings of affiliates	(5)	(4)	(4)	(83)	(75)	(78)
Other operating revenues*	(5,815)	(5,558)	(5,614)	(7,594)	(8,157)	(8,507)
Other segment (income) expense, net	(15)	—	(15)	2	3	6
Marketing margins	1,039	1,149	1,126	452	477	525
Less: margin for non-fuel related sales	—	—	—	42	45	44
Realized marketing fuel margins	\$ 1,039	1,149	1,126	410	432	481
Total fuel sales volumes (thousands of barrels)	703,928	699,111	684,045	97,346	106,574	109,332
Net income per barrel (dollars per barrel)	\$ 0.56	0.74	0.76	1.81	2.21	1.98
Realized marketing fuel margins (dollars per barrel)**	1.48	1.64	1.65	4.21	4.05	4.40

* Primarily excise taxes and other non-fuel revenues.

** Realized marketing fuel margins per barrel, as presented, are calculated using the underlying realized marketing fuel margin amounts, in dollars, divided by sales volumes, in barrels. As such, recalculated per barrel amounts using the rounded margins and barrels presented may differ from the presented per barrel amounts due to rounding.

Corporate and Other

	Millions of Dollars		
	Year Ended December 31		
	2017	2016	2015
Net Income (Loss)			
Net interest expense	\$ (266)	(210)	(186)
Corporate general and administrative expenses	(175)	(161)	(157)
Technology	(62)	(58)	(60)
U.S. tax reform	2,735	—	—
Other	(63)	(55)	(95)
Total Corporate and Other	\$ 2,169	(484)	(498)

2017 vs. 2016

Net interest expense consists of interest and financing expense, net of interest income and capitalized interest. Net interest expense increased \$56 million in 2017, compared with 2016, primarily due to lower capitalized interest as a result of the Freeport LPG Export Terminal beginning operations in late 2016, and higher interest expense driven by higher average debt principal balances, reflecting Phillips 66 Partners' debt issuances in October 2017 and 2016.

The Tax Act was enacted on December 22, 2017. The material provisions of the Tax Act i) reduced the U.S. federal corporate income tax rate from 35 percent to 21 percent beginning January 1, 2018, ii) imposed a one-time deemed repatriation tax on foreign-sourced earnings that were previously tax deferred, and iii) created a new tax regime on post-2017 foreign-sourced earnings. We have not yet completed our accounting for the income tax effects of the Tax Act as of December 31, 2017, but have made reasonable estimates of those effects on our existing deferred income tax balances and the one-time deemed repatriation tax. We recognized a provisional income tax benefit of \$2,735 million, which is included in the "Income tax expense (benefit)" line on our consolidated statement of income. We have included these one-time impacts of the Tax Act in Corporate and Other. Of the provisional income tax benefit recognized, \$2,870 million was associated with the revaluation of our existing deferred tax assets and liabilities, and \$14 million reflected higher manufacturing deductions, which was an indirect benefit of the Tax Act. These benefits were partially offset by the one-time deemed repatriation tax estimate of \$149 million. We expect the Tax Act to significantly lower our effective tax rates in 2018 and future years for both our consolidated operations and each of our operating segments. See Note 21—Income Taxes, in the Notes to Consolidated Financial Statements, for more information.

2016 vs. 2015

Net interest expense increased \$24 million in 2016, compared with 2015, mainly due to lower capitalized interest.

The category "Other" includes certain income tax expenses, environmental costs associated with sites no longer in operation, foreign currency transaction gains and losses and other costs not directly associated with an operating segment. The decrease in other costs in 2016 was primarily attributable to favorable tax impacts and the write-off of certain fixed assets during 2015, partially offset by higher environmental accruals.

CAPITAL RESOURCES AND LIQUIDITY

Financial Indicators

	Millions of Dollars, Except as Indicated		
	Year Ended December 31		
	2017	2016	2015
Cash and cash equivalents	\$ 3,119	2,711	3,074
Net cash provided by operating activities	3,648	2,963	5,713
Short-term debt	41	550	44
Total debt	10,110	10,138	8,887
Total equity	27,428	23,725	23,938
Percent of total debt to capital*	27%	30	27
Percent of floating-rate debt to total debt	11%	3	1

* Capital includes total debt and total equity.

To meet our short- and long-term liquidity requirements, we look to a variety of funding sources but rely primarily on cash generated from operating activities. Additionally, Phillips 66 Partners raises funds for its growth activities through debt and equity financings. During 2017, we generated \$3.6 billion in cash from operations. Phillips 66 Partners completed the private placement of perpetual convertible preferred units and common units and the public offering of senior notes and common units for net proceeds totaling \$1.8 billion. We used this available cash primarily for capital expenditures and investments of \$1.8 billion; repurchases of our common stock of \$1.6 billion; and dividend payments on our common stock of \$1.4 billion. During 2017, cash and cash equivalents increased by \$0.4 billion, to \$3.1 billion.

In addition to cash flows from operating activities, we rely on our commercial paper and credit facility programs, asset sales and our ability to issue securities using our shelf registration statement to support our short- and long-term liquidity requirements. We believe current cash and cash equivalents and cash generated by operations, together with access to external sources of funds as described below under "Significant Sources of Capital," will be sufficient to meet our funding requirements in the near and long term, including our capital spending, dividend payments, defined benefit plan contributions, debt repayment and share repurchases.

Significant Sources of Capital

Operating Activities

During 2017, cash of \$3,648 million was provided by operating activities, a 23 percent increase compared with 2016. The increase was primarily attributable to increased operating results due to higher realized refining margins and distributions from our equity affiliates. This increase was partially offset by working capital changes, reflecting the negative impact of building inventory at higher commodity prices and timing of refining payables payments, as well as lower marketing margins.

During 2016, cash of \$2,963 million was provided by operating activities, a 48 percent decrease compared with 2015. The decrease was primarily attributable to lower realized refining margins, as well as a reduction in distributions from our equity affiliates. This decrease was partially offset by positive working capital of \$501 million in 2016 compared to a negative working capital impact of \$221 million in 2015. The positive working capital impact in 2016 was primarily driven by increased refining payables, due to an increase in feedstock costs at the end of 2016 as compared with 2015, and the timing of tax payments and refunds, partially offset by an increase in receivables, resulting from higher commodity prices.

Our short- and long-term operating cash flows are highly dependent upon refining and marketing margins, NGL prices and chemicals margins. Prices and margins in our industry are typically volatile, and are driven by market conditions over which we have little or no control. Absent other mitigating factors, as these prices and margins fluctuate, we would expect a corresponding change in our operating cash flows.

The level and quality of output from our refineries also impacts our cash flows. Factors such as operating efficiency, maintenance turnarounds, market conditions, feedstock availability and weather conditions can affect output. We actively manage the operations of our refineries, and any variability in their operations typically has not been as significant to cash flows as that caused by margins and prices. Our worldwide refining crude oil capacity utilization was 95 percent in 2017, compared with 96 percent in 2016.

Equity Affiliates

Our operating cash flows are also impacted by distribution decisions made by our equity affiliates, including DCP Midstream, CPChem and WRB. Over the three years ended December 31, 2017, we received distributions of \$107 million from DCP Midstream, \$1,854 million from CPChem and \$300 million from WRB. We cannot control the amount or timing of future distributions from equity affiliates; therefore, future distributions by these and other equity affiliates are not assured.

Effective January 1, 2017, DCP Midstream and DCP Partners closed a transaction in which DCP Midstream contributed subsidiaries owning all of its operating assets, \$424 million of cash and \$3.15 billion of debt to DCP Partners, in exchange for DCP Partners units which had an estimated fair value of \$1.125 billion at the time of the transaction. We and our co-venturer retained our 50/50 investment in DCP Midstream, and DCP Midstream retained its incentive distribution rights (IDRs) in DCP Partners through its ownership of the general partner of DCP Partners. After the transaction, DCP Midstream held a 36 percent limited partner interest and a 2 percent general partner interest in DCP Partners. DCP Midstream, through its ownership of the general partner, has agreed, if required, to forgo receipt of IDRs up to \$100 million annually (100 percent basis) through 2019, to support a minimum distribution coverage ratio for DCP Partners. In connection with the transaction, DCP Midstream terminated its revolving credit agreement, which had previously served to limit distributions to its owners while amounts had been borrowed under the facility. As a result, distributions to the owners of DCP Midstream resumed in 2017.

In 2015, CPChem made a special distribution to its owners, with our share totaling \$696 million. CPChem funded the distribution by issuing \$1.4 billion of senior notes with maturities ranging from three to five years, with a combination of fixed and floating interest rates. This cash inflow from CPChem was included in operating cash flows, as we had cumulative undistributed equity earnings attributable to CPChem in excess of the amount distributed. We did not receive any distributions from CPChem in the second half of 2017 due to the impacts of Hurricane Harvey on its Gulf Coast operations and its U.S. Gulf Coast Petrochemicals Project. We expect distributions from CPChem to resume in 2018.

Foreign Cash Holdings

With the passage of the Tax Act in December 2017, we are subject to a one-time deemed repatriation tax on foreign-sourced earnings. For a portion of those foreign earnings, we had previously deferred any associated U.S. income taxes. As a result of the Tax Act, we now have the ability to utilize a greater percentage of our worldwide cash and cash equivalents for domestic purposes without incurring additional material U.S. income taxes beyond those imposed by the one-time deemed repatriation tax, thereby improving the flexibility of our worldwide cash management system. We expect a portion of our foreign cash holdings will be reserved exclusively for foreign use in support of those operations and local statutory and regulatory requirements; however, that amount is not expected to materially impact our liquidity. Additionally, we do not expect the payment of the one-time deemed repatriation tax to materially impact our liquidity.

Phillips 66 Partners

In 2013, we formed Phillips 66 Partners, a publicly traded MLP, to own, operate, develop and acquire primarily fee-based crude oil, refined petroleum products, and NGL pipelines and terminals, as well as other Midstream assets.

Ownership

At December 31, 2017, we owned a 55 percent limited partner interest and a 2 percent general partner interest in Phillips 66 Partners, while its public unitholders owned a 43 percent limited partner interest and 13.8 million perpetual convertible preferred units. We consolidate Phillips 66 Partners as a variable interest entity for financial reporting purposes. See Note 3—Variable Interest Entities, in the Notes to Consolidated Financial Statements, for additional information on why we consolidate the partnership. As a result of this consolidation, the public common and preferred unitholders' interests in Phillips 66 Partners are reflected as noncontrolling interests in our consolidated balance sheet, and totaled \$2,314 million at December 31, 2017. Generally, drop down transactions to Phillips 66 Partners will eliminate in consolidation, except for third-party debt or third-party equity offerings made by Phillips 66 Partners to finance such transactions. As a result of Phillips 66 Partners' third-party debt and equity offerings in 2017, primarily

related to the contribution of assets in October 2017, our consolidated cash increased by \$1,848 million and consolidated debt increased by \$643 million.

Debt and Equity Financings

During the three years ended December 31, 2017, Phillips 66 Partners raised net proceeds of approximately \$5.4 billion from the following third-party debt and equity offerings:

- In October 2017, Phillips 66 Partners received net proceeds of \$643 million from the issuance of \$500 million of 3.750% Senior Notes due 2028 and \$150 million of 4.680% Senior Notes due 2045.
- In October 2017, Phillips 66 Partners received net proceeds of \$737 million from a private placement of 13,819,791 perpetual convertible preferred units, at a price of \$54.27 per unit.
- In October 2017, Phillips 66 Partners received net proceeds of \$295 million from a private placement of 6,304,204 common units, at a price of \$47.59 per unit.
- In October 2016, Phillips 66 Partners received net proceeds of \$1,111 million from the issuance of \$500 million of 3.550% Senior Notes due 2026 and \$625 million of 4.900% Senior Notes due 2046.
- In August 2016, Phillips 66 Partners received net proceeds of \$299 million from a public offering of 6,000,000 common units, at a price of \$50.22 per unit.
- In June 2016, Phillips 66 Partners began issuing common units under a continuous offering program, which allows for the offering of up to \$250 million of common units. Through December 31, 2017, net proceeds of \$192 million had been received under this program.
- In May 2016, Phillips 66 Partners received net proceeds of \$656 million from a public offering of 12,650,000 common units, at a price of \$52.40 per unit.
- In February 2015, Phillips 66 Partners received net proceeds of \$1,092 million from the issuance of \$300 million of 2.646% Senior Notes due 2020, \$500 million of 3.605% Senior Notes due 2025, and \$300 million of 4.680% Senior Notes due 2045.
- In February 2015, Phillips 66 Partners received net proceeds of \$384 million from a public offering of 5,250,000 million common units, at a price of \$75.50 per unit.

Phillips 66 Partners primarily used these net proceeds to fund the cash portion of acquisitions of assets from Phillips 66. See Note 27—Phillips 66 Partners LP, in the Notes to Consolidated Financial Statements, for additional information on Phillips 66 Partners and additional details on assets contributed to the partnership by us during 2017.

Phillips 66 Partners filed a new shelf registration statement for a second continuous offering program that became effective with the Securities and Exchange Commission (SEC) on January 23, 2018, related to the continuous offering of up to an aggregate of \$250 million of common units, in amounts, at prices and on terms to be determined by the market conditions and other factors at the time of the offerings.

Credit Facilities and Commercial Paper

Phillips 66 has a \$5.0 billion revolving credit facility that extends until October 2021. This facility may be used for direct bank borrowings, as support for issuances of letters of credit, or as support for our commercial paper program. The facility is with a broad syndicate of financial institutions and contains covenants that we consider usual and customary for an agreement of this type for comparable commercial borrowers, including a maximum consolidated net debt-to-capitalization ratio of 60 percent. The agreement has customary events of default, such as nonpayment of principal when due; nonpayment of interest, fees or other amounts; violation of covenants; cross-payment default and cross-acceleration (in each case, to indebtedness in excess of a threshold amount); and a change of control. Borrowings under the facility will incur interest at the London Interbank Offered Rate (LIBOR) plus a margin based on the credit rating of our senior unsecured long-term debt as determined from time to time by Standard & Poor's (S&P) Ratings

Services and Moody's Investors Service. The facility also provides for customary fees, including administrative agent fees and commitment fees. At December 31, 2017, no amount had been drawn under this revolving credit agreement.

We have a \$5.0 billion commercial paper program for short-term working capital needs that is supported by our revolving credit facility. Commercial paper maturities are generally limited to 90 days. At December 31, 2017, we had no borrowings under our commercial paper program.

Phillips 66 Partners has a \$750 million revolving credit facility that extends until October 2021. The Phillips 66 Partners facility is with a broad syndicate of financial institutions. At December 31, 2017, Phillips 66 Partners had no borrowings outstanding under this facility.

Other Debt Issuances and Financings

In April 2017, Phillips 66 completed a private offering of \$600 million aggregate principal amount of unsecured notes, consisting of \$300 million of Notes due 2019 and \$300 million of Notes due 2020. Interest on the notes is a floating rate equal to three-month LIBOR plus 0.65% per annum for the 2019 Notes and three-month LIBOR plus 0.75% per annum for the 2020 Notes. Interest on both series of notes is payable quarterly in arrears on January 15, April 15, July 15 and October 15, commencing in July 2017. The 2019 Notes mature on April 15, 2019, and the 2020 Notes mature on April 15, 2020.

Also in April 2017, Phillips 66 entered into term loan facilities with an aggregate borrowing amount of \$900 million, consisting of a \$450 million 364-day facility and a \$450 million three-year facility. Interest on the term loans is a floating rate based on either the Eurodollar rate or the reference rate, plus a margin determined by our long-term credit ratings.

Phillips 66 used the net proceeds from the issuance of the notes, together with the proceeds from the term loans, and cash on-hand to repay its outstanding 2.950% Senior Notes upon maturity in May 2017.

In October 2017, as part of the contribution of assets to Phillips 66 Partners, discussed above, Phillips 66 Partners assumed the \$450 million term loan outstanding under the 364-day facility originally issued in April 2017, and subsequently repaid the loan.

In addition, we have capital lease obligations related to equipment and transportation assets, and the use of an oil terminal in the United Kingdom. These leases mature within the next sixteen years. The present value of our minimum capital lease payments for these obligations as of December 31, 2017, was \$192 million.

Availability of Debt and Equity Financing

The \$6.0 billion of outstanding Senior Notes and \$600 million of floating-rate notes issued by Phillips 66 are guaranteed by Phillips 66 Company, a 100-percent-owned subsidiary. Our senior unsecured long-term debt has been rated investment grade by S&P (BBB+) and Moody's (A3). We do not have any ratings triggers on any of our corporate debt that would cause an automatic default, and thereby impact our access to liquidity, in the event of a downgrade of our credit rating. If our credit rating deteriorated to a level prohibiting us from accessing the commercial paper market, we would expect to be able to access funds under our liquidity facilities mentioned above.

In addition, we have a universal shelf registration statement on file with the SEC under which we, as a well-known seasoned issuer, have the ability to issue and sell an indeterminate amount of various types of debt and equity securities.

Off-Balance Sheet Arrangements

Under the operating lease agreement on our headquarters facility in Houston, Texas, we have a residual value guarantee with a maximum future exposure of \$554 million. The operating lease has a term of five years and provides us the option, at the end of the lease term, to request to renew the lease, purchase the facility, or assist the lessor in marketing it for resale.

We also have residual value guarantees associated with railcar and airplane leases with maximum future potential payments of \$305 million. For information on our need to perform under the railcar lease guarantee, see the "Capital Requirements" section to follow.

In addition, we have guarantees outstanding related to certain joint-venture debt obligations, which have remaining terms of up to eight years. The maximum potential amount of future payments to third parties under these guarantees is approximately \$308 million.

See Note 13—Guarantees, in the Notes to Consolidated Financial Statements, for additional information on our guarantees.

Capital Requirements

Capital Expenditures and Investments

For information about our capital expenditures and investments, see "Capital Spending" below.

Debt Financing

Our debt balance at December 31, 2017, was \$10.1 billion and our total debt-to-capital ratio was 27 percent. See Note 12—Debt, in the Notes to Consolidated Financial Statements, for our annual debt maturities over the next five years.

Dividends

On February 7, 2018, our Board of Directors declared a quarterly cash dividend of \$0.70 per common share, payable March 1, 2018, to holders of record at the close of business on February 20, 2018.

Share Repurchases

Since July 2012, our Board of Directors has, at various times, authorized repurchases of our outstanding common stock which aggregate to a total authorization of up to \$12.0 billion. The share repurchases are expected to be funded primarily through available cash. The shares will be repurchased from time to time in the open market at our discretion, subject to market conditions and other factors, and in accordance with applicable regulatory requirements. We are not obligated to acquire any particular amount of common stock and may commence, suspend or discontinue purchases at any time or from time to time without prior notice. Since the inception of our share repurchases in 2012, through December 31, 2017, we have repurchased a total of 124,142,530 shares at an aggregate cost of \$9.0 billion. Shares of stock repurchased are held as treasury shares.

On February 13, 2018, we entered into a Stock Purchase and Sale Agreement (Purchase Agreement) with Berkshire Hathaway Inc. and National Indemnity Company, a wholly owned subsidiary of Berkshire Hathaway, to repurchase 35 million shares of Phillips 66 common stock for an aggregate purchase price of approximately \$3.3 billion. Pursuant to the Purchase Agreement, the purchase price per share of \$93.725 was based on the volume-weighted-average price of our common stock on the New York Stock Exchange on February 13, 2018. The transaction closed on February 14, 2018. We funded the repurchase with cash on hand of approximately \$1.9 billion and borrowings of approximately \$1.4 billion under our commercial paper program. This specific share repurchase transaction was separately authorized by our Board of Directors and therefore does not impact previously announced authorizations which total up to \$12.0 billion.

Railcar and Airplane Leases Residual Value Guarantees

On May 1, 2015, the U.S. Department of Transportation issued a final rule focused on the safe transportation of flammable liquids by rail. The final rule, which is being challenged, subjects new and existing railcars transporting crude oil in high volumes to heightened design standards, including thicker tank walls and heat shields, improved pressure relief valves and enhanced braking systems. We are currently evaluating the impact of the new regulations on our crude oil railcar fleet, which is mostly held under operating leases. The regulations become effective subsequent to the expiration dates of a portion of our leases. Some of our leases require a portion of the leased railcars to be retrofitted. Certain leases are subject to residual value guarantees. Under the lease terms, we have the option to either purchase the railcars or return them to the lessors. If railcars are returned to the lessors, we may be required to make the lessors whole under the residual value guarantees, which are subject to a cap. The current market demand for crude oil railcars is low, which has resulted in a decline in crude oil railcar prices. Based on third-party appraisals of the railcars' fair value at the end of their lease terms, we estimated a total residual value deficiency of \$109 million that would be payable at the end of the lease terms, with approximately one-half paid in late 2017 and the other half due in 2019. During 2017 and 2016, we recognized \$73 million of expense related to the residual value deficiency of our leased railcars. In October 2017, upon maturity of one of our railcar leases, \$53 million of the total residual value deficiency of \$109 million was settled. The residual value deficiency of \$36 million remaining at December 31, 2017, will be recognized on a straight-line basis through May 2019. Due to current market uncertainties, changes in the estimated fair values of railcars could occur, which could increase or decrease our currently estimated residual value deficiency. As of December 31, 2017, our maximum future exposure for residual value guarantees associated with our railcar and airplane leases was approximately \$305 million. See Note 13—Guarantees, in the Notes to Consolidated Financial Statements.

Contractual Obligations

The following table summarizes our aggregate contractual fixed and variable obligations as of December 31, 2017:

	Millions of Dollars				
	Payments Due by Period				
	Total	Up to 1 Year	Years 2-3	Years 4-5	After 5 Years
Debt obligations (a)	\$ 10,026	25	1,375	2,050	6,576
Capital lease obligations	192	16	27	22	127
Total debt	10,218	41	1,402	2,072	6,703
Interest on debt	7,371	436	839	765	5,331
Operating lease obligations	1,826	533	726	241	326
Purchase obligations (b)	77,683	32,236	9,554	6,698	29,195
Other long-term liabilities (c)					
Asset retirement obligations	268	7	30	18	213
Accrued environmental costs	458	78	117	72	191
Unrecognized income tax benefits (d)	1	1	(d)	(d)	(d)
Total	\$ 97,825	33,332	12,668	9,866	41,959

(a) For additional information, see Note 12—Debt, in the Notes to Consolidated Financial Statements.

(b) Represents any agreement to purchase goods or services that is enforceable, legally binding and specifies all significant terms. We expect these purchase obligations will be fulfilled by operating cash flows in the applicable maturity period. The majority of the purchase obligations are market-based contracts, including exchanges and futures, for the purchase of products such as crude oil and unfractionated NGL. The products are mostly used to supply our refineries and fractionators, optimize the supply chain, and resell to customers. Product purchase commitments with third parties totaled \$35,480 million. In addition, \$24,230 million are product purchases from CPChem, mostly for natural gas and NGL over the remaining contractual term of 82 years, and product purchases of \$1,652 million from DCP entities for NGL over the remaining contractual term of three years.

Purchase obligations of \$5,097 million are related to agreements to access and utilize the capacity of third-party equipment and facilities, including pipelines and product terminals, to transport, process, treat, and store products. The remainder is primarily our net share of purchase commitments for materials and services for jointly owned facilities where we are the operator.

(c) Excludes pensions. From 2018 through 2022, we expect to contribute an average of \$70 million per year to our qualified and nonqualified pension and other postretirement benefit plans in the United States and an average of \$34 million per year to our non-U.S. plans, which are expected to be in excess of required minimums in many cases. The U.S. five-year average consists of \$60 million for 2018 and then approximately \$75 million per year for the remaining four years. Our minimum funding in 2018 is expected to be \$60 million in the United States and \$35 million outside the United States.

(d) Excludes unrecognized income tax benefits of \$33 million because the ultimate disposition and timing of any payments to be made with regard to such amounts are not reasonably estimable or the amounts relate to potential refunds. Also excludes interest and penalties of \$8 million. Although unrecognized income tax benefits are not a contractual obligation, they are presented in this table because they represent potential demands on our liquidity.

Capital Spending

	Millions of Dollars			
	2018 Budget	2017	2016	2015
Capital Expenditures and Investments				
Midstream	\$ 1,218	771	1,453	4,457
Chemicals	—	—	—	—
Refining	827	853	1,149	1,069
Marketing and Specialties	140	108	98	122
Corporate and Other	116	100	144	116
	<u>\$ 2,301</u>	<u>1,832</u>	<u>2,844</u>	<u>5,764</u>
Selected Equity Affiliates*				
DCP Midstream	\$ 405	268	99	438
CPChem	398	776	987	1,319
WRB	143	126	164	175
	<u>\$ 946</u>	<u>1,170</u>	<u>1,250</u>	<u>1,932</u>

* Our share of capital spending.

Midstream

Capital spending in our Midstream segment during the three-year period ended December 31, 2017, included:

- Construction activities related to the Sweeny Fractionator and Freeport LPG Export Terminal projects.
- Bakken Pipeline project, developed by our 25-percent-owned joint ventures, Dakota Access, LLC and Energy Transfer Crude Oil Company.
- Construction activities related to increasing storage capacity at our crude oil and petroleum products terminal located near Beaumont, Texas.
- Acquisition by Phillips 66 Partners of certain southeast Louisiana NGL logistics assets comprising approximately 500 miles of pipelines and a storage cavern connecting multiple fractionation facilities, refineries and a petrochemical facility.
- Development of the Bayou Bridge Pipeline by Phillips 66 Partners' 40-percent-owned joint venture.
- Construction activities by joint ventures of Phillips 66 Partners in the Bakken production area of North Dakota, including the Palermo Rail Terminal, Sacagawea Crude Pipeline, the New Town injection point, Keene CDP Terminal and Sacagawea Gas Pipeline.
- Expansion activities on the Phillips 66 Partners' 33-percent-owned Sand Hills Pipeline including investment in the transportation of NGL from the Permian Basin to the Texas Gulf Coast.
- Expansion activities on the Phillips 66 Partners' 50-percent-owned STACK Pipeline joint venture.
- Spending associated with return, reliability and maintenance projects in our Transportation and NGL and Other businesses.

During the three-year period ended December 31, 2017, DCP Midstream's capital expenditures and investments were \$1.6 billion on a 100 percent basis. In 2015, we contributed \$1.5 billion of cash to DCP Midstream and our co-venturer contributed its interests in certain operating assets of equal value, that are held as equity investments. Upon completion of this transaction, our interest in DCP Midstream remained at 50 percent.

In 2015, REX repaid \$450 million of its debt, reducing its long-term debt to approximately \$2.6 billion. REX funded the repayment through member cash contributions. Our 25 percent share was approximately \$112 million, which we contributed to REX in 2015.

Chemicals

During the three-year period ended December 31, 2017, CPChem had a self-funded capital program, and thus required no new capital infusions from us or our co-venturer. During this period, on a 100 percent basis, CPChem's capital expenditures and investments were \$6.2 billion. In addition, CPChem's advances to its equity affiliates, primarily used for project construction and start-up activities, were \$139 million and its repayments received from equity affiliates were \$140 million.

Refining

Capital spending for the Refining segment during the three-year period ended December 31, 2017, was \$3.1 billion, primarily for air emission reduction and clean fuels projects to meet new environmental standards, refinery upgrade projects to increase accessibility of advantaged crudes and improve product yields, improvements to the operating integrity of key processing units, and safety-related projects.

Key projects completed during the three-year period included:

- Installation of a tail gas treating unit at the Humber Refinery to reduce emissions from the sulfur recovery units.
- Installation of facilities to improve clean product yields at the Sweeny, Lake Charles and Ponca City refineries.
- Installation of facilities to improve processing of advantaged crudes at the Billings and Ponca City refineries, as well as the jointly owned Wood River Refinery.
- Installation of facilities to comply with U.S. Environmental Protection Agency (EPA) Tier 3 gasoline regulations at the Alliance, Lake Charles and Sweeny refineries, as well as the jointly owned Wood River Refinery.
- Installation of a crude tank to increase accessibility of waterborne crude at the Los Angeles Refinery.

Major construction activities in progress include:

- Installation of facilities to comply with EPA Tier 3 gasoline regulations at the Bayway and Ferndale refineries.
- Installation of facilities to improve processing of advantaged crudes at the Lake Charles Refinery.
- Installation of facilities to improve clean product yield at the Bayway Refinery, as well as the jointly owned Wood River Refinery.

Generally, our equity affiliates in the Refining segment are intended to have self-funding capital programs. During this three-year period, on a 100 percent basis, WRB's capital expenditures and investments were \$930 million. We expect WRB's 2018 capital program to be self-funding.

Marketing and Specialties

Capital spending for the M&S segment during the three-year period ended December 31, 2017, was primarily for the acquisition of and investments in projects targeted at developing our new international sites. In addition, capital is used for reliability and maintenance projects at our Lubricants facilities.

Corporate and Other

Capital spending for Corporate and Other during the three-year period ended December 31, 2017, was primarily for projects related to information technology and facilities.

2018 Budget

Our 2018 capital budget is \$2.3 billion including Phillips 66 Partners' capital budget of \$0.6 billion. This excludes our portion of planned capital spending by joint ventures DCP Midstream, CPChem and WRB totaling \$0.9 billion, all of which is expected to be self-funded.

The Midstream capital budget of \$1.2 billion is focused on projects integrated with our existing assets and infrastructure, including continued expansion of the Beaumont Terminal, additional Gulf Coast fractionation capacity and investment in pipelines and other terminals. The Midstream capital budget also includes Phillips 66 Partners' growth projects, including expansions of the Sand Hills and Bayou Bridge pipelines, and construction of an isomerization unit at our Lake Charles Refinery. Refining's capital budget of \$0.8 billion is primarily directed toward reliability, safety and

environmental projects, as well as small, high-return, quick payout projects, primarily to improve clean product yields. In M&S, we plan to invest approximately \$0.1 billion, primarily directed towards increasing retail sites in Europe. In Corporate and Other, we plan to fund approximately \$0.1 billion in projects primarily related to information technology and facilities.

Contingencies

A number of lawsuits involving a variety of claims that arose in the ordinary course of business have been filed against us or are subject to indemnifications provided by us. We also may be required to remove or mitigate the effects on the environment of the placement, storage, disposal or release of certain chemical, mineral and petroleum substances at various active and inactive sites. We regularly assess the need for financial recognition or disclosure of these contingencies. In the case of all known contingencies (other than those related to income taxes), we accrue a liability when the loss is probable and the amount is reasonably estimable. If a range of amounts can be reasonably estimated and no amount within the range is a better estimate than any other amount, then the minimum of the range is accrued. We do not reduce these liabilities for potential insurance or third-party recoveries. If applicable, we accrue receivables for probable insurance or other third-party recoveries. In the case of income-tax-related contingencies, we use a cumulative probability-weighted loss accrual in cases where sustaining a tax position is less than certain.

Based on currently available information, we believe it is remote that future costs related to known contingent liability exposures will exceed current accruals by an amount that would have a material adverse impact on our consolidated financial statements. As we learn new facts concerning contingencies, we reassess our position both with respect to accrued liabilities and other potential exposures. Estimates particularly sensitive to future changes include contingent liabilities recorded for environmental remediation, tax and legal matters. Estimated future environmental remediation costs are subject to change due to such factors as the uncertain magnitude of cleanup costs, the unknown time and extent of such remedial actions that may be required, and the determination of our liability in proportion to that of other potentially responsible parties. Estimated future costs related to tax and legal matters are subject to change as events evolve and as additional information becomes available during the administrative and litigation processes.

Legal and Tax Matters

Our legal and tax matters are handled by our legal and tax organizations. These organizations apply their knowledge, experience and professional judgment to the specific characteristics of our cases and uncertain tax positions. We employ a litigation management process to manage and monitor the legal proceedings against us. Our process facilitates the early evaluation and quantification of potential exposures in individual cases and enables the tracking of those cases that have been scheduled for trial and/or mediation. Based on professional judgment and experience in using these litigation management tools and available information about current developments in all our cases, our legal organization regularly assesses the adequacy of current accruals and determines if adjustment of existing accruals, or establishment of new accruals, is required. In the case of income-tax-related contingencies, we monitor tax legislation and court decisions, the status of tax audits and the statute of limitations within which a taxing authority can assert a liability. See Note 21—Income Taxes, in the Notes to Consolidated Financial Statements, for additional information about income-tax-related contingencies.

Environmental

Like other companies in our industry, we are subject to numerous international, federal, state and local environmental laws and regulations. Among the most significant of these international and federal environmental laws and regulations are the:

- U.S. Federal Clean Air Act, which governs air emissions.
- U.S. Federal Clean Water Act, which governs discharges into water bodies.
- European Union Regulation for Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), which governs the manufacture, placing on the market or use of chemicals.
- U.S. Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), which imposes liability on generators, transporters and arrangers of hazardous substances at sites where hazardous substance releases have occurred or are threatening to occur.
- U.S. Federal Resource Conservation and Recovery Act (RCRA), which governs the treatment, storage and disposal of solid waste.

- U.S. Federal Emergency Planning and Community Right-to-Know Act (EPCRA), which requires facilities to report toxic chemical inventories to local emergency planning committees and response departments.
- U.S. Federal Oil Pollution Act of 1990 (OPA90), under which owners and operators of onshore facilities and pipelines as well as owners and operators of vessels are liable for removal costs and damages that result from a discharge of oil into navigable waters of the United States.
- European Union Trading Directive resulting in the European Union Emissions Trading Scheme (EU ETS), which uses a market-based mechanism to incentivize the reduction of greenhouse gas emissions.

These laws and their implementing regulations set limits on emissions and, in the case of discharges to water, establish water quality limits. They also, in most cases, require permits in association with new or modified operations. These permits can require an applicant to collect substantial information in connection with the application process, which can be expensive and time consuming. In addition, there can be delays associated with notice and comment periods and the agency's processing of the application. Many of the delays associated with the permitting process are beyond the control of the applicant.

Many states and foreign countries where we operate also have, or are developing, similar environmental laws and regulations governing these same types of activities. While similar, in some cases these regulations may impose additional, or more stringent, requirements that can add to the cost and difficulty of developing infrastructure and marketing and transporting products across state and international borders. For example, in California the South Coast Air Quality Management District (SCAQMD) approved amendments to the Regional Clean Air Incentives Market (RECLAIM) that became effective in 2016, which require a phased reduction of nitrogen oxide emissions through 2022 and potentially affect refineries in the Los Angeles metropolitan area. In 2017, SCAQMD required additional nitrogen dioxide emissions reductions through 2025 and began evaluating if and how to replace the RECLAIM program with a traditional command and controls regulatory regime.

The ultimate financial impact arising from environmental laws and regulations is neither clearly known nor easily determinable as new standards, such as air emission standards, water quality standards and stricter fuel regulations, continue to evolve. However, environmental laws and regulations, including those that may arise to address concerns about global climate change, are expected to continue to have an increasing impact on our operations in the United States and in other countries in which we operate. Notable areas of potential impacts include air emission compliance and remediation obligations in the United States.

An example of this in the fuels area is the Energy Independence and Security Act of 2007 (EISA). It requires fuel producers and importers to provide additional renewable fuels for transportation motor fuels and stipulates a mix of various types to be included through 2022. We have met the increasingly stringent requirements to date while establishing implementation, operating and capital strategies, along with advanced technology development, to address projected future requirements. It is uncertain how various future requirements contained in EISA, and the regulations promulgated thereunder, may be implemented and what their full impact may be on our operations. For the 2018 compliance year, the EPA has set volumes of advanced and total renewable fuel at higher levels than mandated in most previous years (although the 2018 compliance year volumes are roughly equivalent to those required for the 2017 compliance year); it is uncertain if these increased obligations will be achievable by fuel producers and shippers without drawing on the Renewable Identification Number (RIN) bank. For compliance years after 2018, we do not know whether the EPA will utilize its authority to reduce statutory volumes. Additionally, we may experience a decrease in demand for refined petroleum products due to the regulatory program as currently promulgated. This program continues to be the subject of possible Congressional review and re-promulgation in revised form, and the EPA's regulations pertaining to the 2014 through 2017 compliance years are subject to legal challenge, further creating uncertainty regarding renewable fuel volume requirements and obligations. Additionally, the market for RINs has been the subject of fraudulent third-party activity, and it is reasonably possible that some RINs that we have purchased may be determined to be invalid. Should that occur, we could incur costs to replace those fraudulent RINs. Although the cost for replacing any fraudulently marketed RINs is not reasonably estimable at this time, we would not expect to incur the full financial impact of fraudulent RINs replacement costs in any single interim or annual period, and would not expect such costs to have a material impact on our results of operations or financial condition.

We also are subject to certain laws and regulations relating to environmental remediation obligations associated with current and past operations. Such laws and regulations include CERCLA and RCRA and their state equivalents. Remediation obligations include cleanup responsibility arising from petroleum releases from underground storage tanks located at numerous previously and currently owned and/or operated petroleum-marketing outlets throughout the United

States. Federal and state laws require contamination caused by such underground storage tank releases be assessed and remediated to meet applicable standards. In addition to other cleanup standards, many states have adopted cleanup criteria for methyl tertiary-butyl ether for both soil and groundwater.

At RCRA-permitted facilities, we are required to assess environmental conditions. If conditions warrant, we may be required to remediate contamination caused by prior operations. In contrast to CERCLA, which is often referred to as “Superfund,” the cost of corrective action activities under RCRA corrective action programs typically is borne solely by us. We anticipate increased expenditures for RCRA remediation activities may be required, but such annual expenditures for the near term are not expected to vary significantly from the range of such expenditures we have experienced over the past few years. Longer-term expenditures are subject to considerable uncertainty and may fluctuate significantly.

We occasionally receive requests for information or notices of potential liability from the EPA and state environmental agencies alleging that we are a potentially responsible party under CERCLA or an equivalent state statute. On occasion, we also have been made a party to cost recovery litigation by those agencies or by private parties. These requests, notices and lawsuits assert potential liability for remediation costs at various sites that typically are not owned by us, but allegedly contain wastes attributable to our past operations. As of December 31, 2016, we reported that we had been notified of potential liability under CERCLA and comparable state laws at 31 sites within the United States. During 2017, there were three new sites for which we received notification of potential liability, and three sites were deemed resolved and closed, leaving 31 unresolved sites with potential liability at December 31, 2017.

For most Superfund sites, our potential liability will be significantly less than the total site remediation costs because the percentage of waste attributable to us, versus that attributable to all other potentially responsible parties, is relatively low. Although liability of those potentially responsible is generally joint and several for federal sites and frequently so for state sites, other potentially responsible parties at sites where we are a party typically have had the financial strength to meet their obligations, and where they have not, or where potentially responsible parties could not be located, our share of liability has not increased materially. Many of the sites for which we are potentially responsible are still under investigation by the EPA or the state agencies concerned. Prior to actual cleanup, those potentially responsible normally assess site conditions, apportion responsibility and determine the appropriate remediation. In some instances, we may have no liability or attain a settlement of liability. Actual cleanup costs generally occur after the parties obtain EPA or equivalent state agency approval of a remediation plan. There are relatively few sites where we are a major participant, and given the timing and amounts of anticipated expenditures, neither the cost of remediation at those sites nor such costs at all CERCLA sites, in the aggregate, is expected to have a material adverse effect on our competitive or financial condition.

Expensed environmental costs were \$690 million in 2017 and are expected to be approximately \$670 million and \$640 million in 2018 and 2019, respectively. Capitalized environmental costs were \$159 million in 2017 and are expected to be approximately \$185 million and \$135 million, in 2018 and 2019, respectively. This amount does not include capital expenditures made for another purpose that have an indirect benefit on environmental compliance.

Accrued liabilities for remediation activities are not reduced for potential recoveries from insurers or other third parties and are not discounted (except those assumed in a business combination, which we record on a discounted basis).

Many of these liabilities result from CERCLA, RCRA and similar state laws that require us to undertake certain investigative and remedial activities at sites where we conduct, or once conducted, operations or at sites where our generated waste was disposed. We also have accrued for a number of sites we identified that may require environmental remediation, but which are not currently the subject of CERCLA, RCRA or state enforcement activities. If applicable, we accrue receivables for probable insurance or other third-party recoveries. In the future, we may incur significant costs under both CERCLA and RCRA. Remediation activities vary substantially in duration and cost from site to site, depending on the mix of unique site characteristics, evolving remediation technologies, diverse regulatory agencies and enforcement policies, and the presence or absence of potentially liable third parties. Therefore, it is difficult to develop reasonable estimates of future site remediation costs.

Notwithstanding any of the foregoing, and as with other companies engaged in similar businesses, environmental costs and liabilities are inherent concerns in certain of our operations and products, and there can be no assurance that material costs and liabilities will not be incurred. However, we currently do not expect any material adverse effect on our results of operations or financial position as a result of compliance with current environmental laws and regulations.

Climate Change

There has been a broad range of proposed or promulgated state, national and international laws focusing on greenhouse gas (GHG) emissions reduction, including various regulations proposed or issued by the EPA. These proposed or promulgated laws apply or could apply in states and/or countries where we have interests or may have interests in the future. Laws regulating GHG emissions continue to evolve, and while it is not possible to accurately estimate either a timetable for implementation or our future compliance costs relating to implementation, such laws potentially could have a material impact on our results of operations and financial condition as a result of increasing costs of compliance, lengthening project implementation and agency review items, or reducing demand for certain hydrocarbon products. Examples of legislation or precursors for possible regulation that do or could affect our operations include:

- EU ETS, which is part of the European Union’s policy to combat climate change and is a key tool for reducing industrial greenhouse gas emissions. EU ETS impacts factories, power stations and other installations across all EU member states.
- California’s Global Warming Solutions Act, which requires the California Air Resources Board to develop regulations and market mechanisms that will target reduction of California’s GHG emissions by 25 percent by 2020 (as well as SB32, which requires further reduction of California’s GHG emissions to 40 percent below the 1990 emission level by 2030, and the recently-enacted AB398, which extends the California GHG emission cap-and-trade program through 2030). Other GHG emissions programs in the western U.S. states have been enacted or are under consideration or development, including amendments to California’s Low Carbon Fuel Standard, Oregon’s Low Carbon Fuel Standard, and Washington’s carbon reduction programs.
- The U.S. Supreme Court decision in *Massachusetts v. EPA*, 549 U.S. 497, 127 S. Ct. 1438 (2007), confirming that the EPA has the authority to regulate carbon dioxide as an “air pollutant” under the Federal Clean Air Act.
- The EPA’s announcement on March 29, 2010 (published as “Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs,” 75 Fed. Reg. 17004 (April 2, 2010)), and the EPA’s and U.S. Department of Transportation’s joint promulgation of a Final Rule on April 1, 2010, that triggers regulation of GHGs under the Clean Air Act. These collectively may lead to more climate-based claims for damages, and may result in longer agency review time for development projects to determine the extent of potential climate change.
- EPA’s 2015 Final Rule regulating GHG emissions from existing fossil fuel-fired electrical generating units under the Federal Clean Air Act, commonly referred to as the Clean Power Plan.
- Carbon taxes in certain jurisdictions.
- GHG emission cap and trade programs in certain jurisdictions.

In the EU, the first phase of the EU ETS completed at the end of 2007 and Phase II was undertaken from 2008 through to 2012. The current phase (Phase III) runs from 2013 through to 2020, with the main changes being reduced allocation of free allowances and increased auctioning of new allowances. Phillips 66 has assets that are subject to the EU ETS, and the company is actively engaged in minimizing any financial impact from the EU ETS.

From November 30 to December 12, 2015, more than 190 countries, including the United States, participated in the United Nations Climate Change Conference in Paris, France. The conference culminated in what is known as the “Paris Agreement,” which, upon certain conditions being met, entered into force on November 4, 2016. The Paris Agreement establishes a commitment by signatory parties to pursue domestic GHG emission reductions. In 2017, the President of the United States announced his intention to withdraw the United States from the Paris Agreement.

In the United States, some additional form of regulation is likely to be forthcoming in the future at the state or federal levels with respect to GHG emissions. Such regulation could take any of several forms that may result in the creation of additional costs in the form of taxes, the restriction of output, investments of capital to maintain compliance with laws and regulations, or required acquisition or trading of emission allowances. We are working to continuously improve operational and energy efficiency through resource and energy conservation throughout our operations.

Compliance with changes in laws and regulations that create a GHG emission trading program, GHG reduction requirements or carbon taxes could significantly increase our costs, reduce demand for fossil energy derived products, impact the cost and availability of capital and increase our exposure to litigation. Such laws and regulations could also increase demand for less carbon intensive energy sources.

An example of one such program is California's cap and trade program, which was promulgated pursuant to the State's Global Warming Solutions Act. The program had been limited to certain stationary sources, which include our refineries in California, but beginning in January 2015 expanded to include emissions from transportation fuels distributed in California. Inclusion of transportation fuels in California's cap and trade program as currently promulgated has increased our cap and trade program compliance costs. The ultimate impact on our financial performance, either positive or negative, from this and similar programs, will depend on a number of factors, including, but not limited to:

- Whether and to what extent legislation or regulation is enacted.
- The nature of the legislation or regulation (such as a cap and trade system or a tax on emissions).
- The GHG reductions required.
- The price and availability of offsets.
- The demand for, and amount and allocation of allowances.
- Technological and scientific developments leading to new products or services.
- Any potential significant physical effects of climate change (such as increased severe weather events, changes in sea levels and changes in temperature).
- Whether, and the extent to which, increased compliance costs are ultimately reflected in the prices of our products and services.

We consider and take into account anticipated future GHG emissions in designing and developing major facilities and projects, and implement energy efficiency initiatives to reduce GHG emissions. Data on our GHG emissions, legal requirements regulating such emissions, and the possible physical effects of climate change on our coastal assets are incorporated into our planning, investment, and risk management decision-making.

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to select appropriate accounting policies and to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. See Note 1—Summary of Significant Accounting Policies, in the Notes to Consolidated Financial Statements, for descriptions of our major accounting policies. Certain of these accounting policies involve judgments and uncertainties to such an extent that there is a reasonable likelihood that materially different amounts would have been reported under different conditions, or if different assumptions had been used. The following discussion of critical accounting estimates, along with the discussion of contingencies in this report, address all important accounting areas where the nature of accounting estimates or assumptions could be material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change.

Impairments

Long-lived assets used in operations are assessed for impairment whenever changes in facts and circumstances indicate a possible significant deterioration in future cash flows is expected. If the sum of the undiscounted pre-tax cash flows of an asset group is less than the carrying value, including applicable liabilities, the carrying value is written down to estimated fair value. Individual assets are grouped for impairment purposes based on a judgmental assessment of the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets (for example, at a refinery complex level). Because there usually is a lack of quoted market prices for long-lived assets, the fair value of impaired assets is typically determined using one or more of the following methods: the present value of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants; a market multiple of earnings for similar assets; or historical market transactions of similar assets, adjusted using principal market participant assumptions when necessary. The expected future cash flows used for impairment reviews and related fair value calculations are based on judgmental assessments of future volumes, commodity prices, operating costs, margins, discount rates and capital project decisions, considering all available information at the date of review.

Investments in nonconsolidated entities accounted for under the equity method are assessed for impairment when there are indicators of a loss in value, such as a lack of sustained earnings capacity or a current fair value less than the investment's carrying amount. When it is determined that an indicated impairment is other than temporary, a charge is recognized for the difference between the investment's carrying value and its estimated fair value.

When determining whether a decline in value is other than temporary, management considers factors such as the length of time and extent of the decline, the investee's financial condition and near-term prospects, and our ability and intention to retain our investment for a period that allows for recovery. When quoted market prices are not available, the fair value is usually based on the present value of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants and a market analysis of comparable assets, if appropriate. Differing assumptions could affect the timing and the amount of an impairment of an investment in any period.

Asset Retirement Obligations

Under various contracts, permits and regulations, we have legal obligations to remove tangible equipment and restore the land at the end of operations at certain operational sites. Our largest asset removal obligations involve asbestos abatement at refineries. Estimating the timing and amount of payments for future asset removal costs is difficult. Most of these removal obligations are many years, or decades, in the future, and the contracts and regulations often have vague descriptions of what removal practices and criteria must be met when the removal event actually occurs. Asset removal technologies and costs, regulatory and other compliance considerations, expenditure timing, and other inputs into valuation of the obligation, including discount and inflation rates, are also subject to change.

Environmental Costs

In addition to asset retirement obligations discussed above, we have certain obligations to complete environmental-related projects. These projects are primarily related to cleanup at domestic refineries, underground storage sites and non-operated sites. Future environmental remediation costs are difficult to estimate because they are subject to change due to such factors as the uncertain magnitude of cleanup costs, timing and extent of such remedial actions that may be required, and the determination of our liability in proportion to that of other responsible parties.

Intangible Assets and Goodwill

At December 31, 2017, we had \$756 million of intangible assets that we have determined to have indefinite useful lives, and therefore are not amortized. This judgmental assessment of an indefinite useful life must be continuously evaluated in the future. If, due to changes in facts and circumstances, management determines these intangible assets have finite useful lives, amortization will commence at that time on a prospective basis. As long as these intangible assets are judged to have indefinite lives, they will be subject to annual impairment tests that require management's judgment of the estimated fair value of these intangible assets.

At December 31, 2017, we had \$3.3 billion of goodwill recorded in conjunction with past business combinations. Goodwill is not amortized. Instead, goodwill is subject to at least annual reviews for impairment at a reporting unit level. The reporting units used to evaluate and measure goodwill for impairment are determined primarily from the manner in which the business is managed. A reporting unit is an operating segment or a component that is one level below an operating segment.

Because quoted market prices for our reporting units are not available, management applies judgment in determining the estimated fair values of the reporting units for purposes of performing the goodwill impairment test. Management uses all available information to make this fair value determination, including observed market earnings multiples of comparable companies, our common stock price and associated total company market capitalization. Sales or dispositions of significant assets within a reporting unit are allocated a portion of that reporting unit's goodwill, based on relative fair values, which impacts the amount of gain or loss on the sale or disposition.

We completed our annual impairment test as of October 1, 2017, and concluded that the fair value of each of our reporting units continued to exceed their respective recorded net book values by a significant percentage. A decline in the estimated fair value of one or more of our reporting units in the future could result in an impairment. For example, a prolonged or significant decline in our stock price or a significant decline in actual or forecasted earnings could provide evidence of a significant decline in fair value and a need to record a material impairment of goodwill for one or more of our reporting units. After we have completed our annual test, we continue to monitor for impairment indicators, which can lead to further goodwill impairment testing.

Tax Assets and Liabilities

Our operations are subject to various taxes, including federal, state and foreign income taxes, property taxes, and transactional taxes such as excise, sales/use and payroll taxes. We record tax liabilities based on our assessment of existing tax laws and regulations. The recording of tax liabilities requires significant judgment and estimates. We recognize the financial statement effects of an income tax position when it is more likely than not that the position will be sustained upon examination by a taxing authority. A contingent liability related to a transactional tax claim is recorded if the loss is both probable and estimable. Actual incurred tax liabilities can vary from our estimates for a variety of reasons, including different interpretations of tax laws and regulations and different assessments of the amount of tax due.

In determining our income tax expense (benefit), we assess the likelihood our deferred tax assets will be recovered through future taxable income. Valuation allowances reduce deferred tax assets to an amount that will, more likely than not, be realized. Judgment is required in estimating the amount of valuation allowance, if any, that should be recorded against our deferred tax assets. Based on our historical taxable income, our expectations for the future, and available tax-planning strategies, we expect the net deferred tax assets will more likely than not be realized as offsets to reversing deferred tax liabilities and as reductions to future taxable income. If our actual results of operations differ from such estimates or our estimates of future taxable income change, the valuation allowance may need to be revised.

New tax laws and regulations, as well as changes to existing tax laws and regulations, are continuously being proposed or promulgated. The implementation of future legislative and regulatory tax initiatives could result in increased income tax liabilities that cannot be predicted at this time. The material provisions of the Tax Act i) reduced the U.S. federal corporate income tax rate from 35 percent to 21 percent beginning January 1, 2018, ii) imposed a one-time deemed repatriation tax on foreign-sourced earnings that were previously tax deferred, and iii) created a new tax regime on post-2017 foreign-sourced earnings. We have not yet completed our accounting for the income tax effects of the Tax Act as of December 31, 2017, but have made reasonable estimates of those effects on our existing deferred income tax balances and the one-time deemed repatriation tax. As more guidelines and interpretations of the Tax Act become available over the next year, the estimates previously made may change, which could increase or decrease our revalued deferred income tax balances and the one-time deemed repatriation tax, with an offset to earnings.

Projected Benefit Obligations

Determination of the projected benefit obligations for our defined benefit pension and postretirement plans impacts the obligations on the balance sheet and the amount of benefit expense in the income statement. The actuarial determination of projected benefit obligations and company contribution requirements involves judgment about uncertain future events, including estimated retirement dates, salary levels at retirement, mortality rates, lump-sum election rates, rates of return on plan assets, future interest rates, future health care cost-trend rates, and rates of utilization of health care services by retirees. Due to the specialized nature of these calculations, we engage outside actuarial firms to assist in the determination of these projected benefit obligations and company contribution requirements. Due to differing objectives and requirements between financial accounting rules and the pension plan funding regulations promulgated by governmental agencies, the actuarial methods and assumptions for the two purposes differ in certain important respects. Ultimately, we will be required to fund all promised benefits under pension and postretirement benefit plans not funded by plan assets or investment returns, but the judgmental assumptions used in the actuarial calculations significantly affect periodic financial statements and funding patterns over time. Benefit expense is particularly sensitive to the discount rate and return on plan assets assumptions. A one percentage-point decrease in the discount rate assumption would increase annual benefit expense by an estimated \$65 million, while a one percentage-point decrease in the return on plan assets assumption would increase annual benefit expense by an estimated \$35 million. In determining the discount rate, we use yields on high-quality fixed income investments with payments matched to the estimated distributions of benefits from our plans.

In 2017 and 2016, our expected weighted-average long-term rate of return was approximately 6 percent for our worldwide pension plan assets. The actual weighted-average rate of return was 15 percent and 10 percent in 2017 and 2016, respectively. For the past ten years, our weighted-average actual rate of return was 7 percent for worldwide pension plan assets.

NEW ACCOUNTING STANDARDS

In February 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2017-05, "Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20)." This ASU clarifies the scope and accounting for the sale or transfer of nonfinancial assets and in substance nonfinancial assets to noncustomers, including partial sales. This ASU will eliminate the use of carryover basis for most nonmonetary exchanges, including contributions of assets to equity method joint ventures. These amendments could result in the entity recognizing a gain or loss on the sale or transfer of nonfinancial assets. Public entities should apply the guidance in ASU No. 2017-05 to annual periods beginning after December 15, 2017, including interim periods within those periods. There was no impact on our financial statements from adopting this ASU on January 1, 2018.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business," which clarifies the definition of a business with the objective of adding guidance to assist in evaluating whether transactions should be accounted for as acquisitions of assets or businesses. The amendment provides a screen for determining when a transaction involves an acquisition of a business. If substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset, or a group of similar identifiable assets, then the transaction is not considered an acquisition of a business. If the screen is not met, then the amendment requires that to be considered a business, the operation must include at a minimum an input and a substantive process that together significantly contribute to the ability to create an output. The guidance may reduce the number of transactions accounted for as business acquisitions. Public business entities should apply the guidance in ASU No. 2017-01 to annual periods beginning after December 15, 2017, including interim periods within those periods, with early adoption permitted. The amendments should be applied prospectively and no disclosures are required at the effective date. There was no impact on our financial statements from adopting this ASU on January 1, 2018.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." The new standard amends the impairment model to utilize an expected loss methodology in place of the currently used incurred loss methodology, which may result in earlier recognition of losses. Public business entities should apply the guidance in ASU No. 2016-13 for annual periods beginning after December 15, 2019, including interim periods within those annual periods. Early adoption will be permitted for annual periods beginning after December 15, 2018. We are currently evaluating the provisions of ASU No. 2016-13 and assessing the impact on our financial statements.

In February 2016, the FASB issued ASU No. 2016-02, “Leases (Topic 842).” The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will continue to be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. Similarly, lessors will be required to classify leases as sales-type, finance or operating, with classification affecting the pattern of income recognition. Classification for both lessees and lessors will be based on an assessment of whether risks and rewards as well as substantive control have been transferred through a lease contract. Public business entities should apply the guidance in ASU No. 2016-02 for annual periods beginning after December 15, 2018, including interim periods within those annual periods. Early adoption is permitted. Entities are required to adopt the ASU using a modified retrospective approach, subject to certain optional practical expedients, and apply the provisions of ASU No. 2016-02 to leasing arrangements existing at or entered into after the earliest comparative period presented in the financial statements. We are currently evaluating the provisions of ASU No. 2016-02 and assessing its impact on our financial statements. As part of our assessment to-date, we have formed an implementation team, commenced identification of our lease population and selected a lease software package. We expect the adoption of ASU 2016-02 will materially gross up our consolidated balance sheet with the recognition of the ROU assets and operating lease liabilities. The impact to our consolidated statements of income and cash flows is not expected to be material. The new standard will also require additional disclosures for financing and operating leases.

In January 2016, the FASB issued ASU No. 2016-01, “Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities,” to meet its objective of providing more decision-useful information about financial instruments. The majority of this ASU’s provisions amend only the presentation or disclosures of financial instruments; however, one provision will also affect net income. Equity investments carried under the cost method or lower of cost or fair value method of accounting, in accordance with current GAAP, will have to be carried at fair value upon adoption of ASU No. 2016-01, with changes in fair value recorded in net income. For equity investments that do not have readily determinable fair values, a company may elect to carry such investments at cost less impairments, if any, adjusted up or down for price changes in similar financial instruments issued by the investee, when and if observed. Public business entities should apply the guidance in ASU No. 2016-01 for annual periods beginning after December 15, 2017, and interim periods within those annual periods, with early adoption prohibited. We are currently evaluating the provisions of ASU No. 2016-01. Our initial review indicates that ASU No. 2016-01 will have a limited impact on our financial statements.

In May 2014, the FASB issued ASU No. 2014-09, “Revenue from Contracts with Customers (Topic 606).” This ASU and other related updates are intended to improve comparability of revenue recognition practices across entities, industries, jurisdictions and capital markets and expand disclosure requirements. In August 2015, the FASB issued ASU No. 2015-14, “Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date.” The amendment in this ASU defers the effective date of ASU No. 2014-09 for all entities for one year. Public business entities should apply the guidance in ASU No. 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. Our assessment work primarily included the formation of an implementation work team, training on the new ASU’s revenue recognition model, contract review and documentation and the monitoring of industry interpretative issues. We adopted the standard on January 1, 2018, using the modified retrospective application. Our evaluation of the new ASU is near completion, which includes understanding the impact of adoption on earnings from equity method investments. Based upon our analysis to-date, the primary impact of adoption of the new standard is the netting of sales-based taxes collected from our customers against revenue. Sales-based taxes include excise taxes on sales of petroleum products as noted on our consolidated statement of income. We have not identified any other material impact on our financial statements other than disclosures.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Financial Instrument Market Risk

We and certain of our subsidiaries hold and issue derivative contracts and financial instruments that expose our cash flows or earnings to changes in commodity prices, foreign currency exchange rates or interest rates. We may use financial- and commodity-based derivative contracts to manage the risks produced by changes in the prices of crude oil and related products, natural gas, NGL, and electric power; fluctuations in interest rates and foreign currency exchange rates; or to capture market opportunities.

Our use of derivative instruments is governed by an “Authority Limitations” document approved by our Board of Directors, that prohibits the use of highly leveraged derivatives or derivative instruments without sufficient market liquidity for comparable valuations. The Authority Limitations document also establishes Value at Risk (VaR) limits, and compliance with these limits is monitored daily. Our Chief Financial Officer monitors risks resulting from foreign currency exchange rates and interest rates. Our Executive Vice President, Marketing and Commercial monitors commodity price risk. The Commercial organization manages our commercial marketing, optimizes our commodity flows and positions, and monitors related risks of our businesses.

Commodity Price Risk

We sell into or receive supply from the worldwide crude oil, refined products, natural gas, NGL, and electric power markets, exposing our revenues, purchases, cost of operating activities, and cash flows to fluctuations in the prices for these commodities. Generally, our policy is to remain exposed to the market prices of commodities. Consistent with this policy, our Commercial organization uses derivative contracts to effectively convert our exposure from fixed-price sales contracts, often requested by refined product customers, back to fluctuating market prices. Conversely, our Commercial organization also uses futures, forwards, swaps and options in various markets to accomplish the following objectives to optimize the value of our supply chain, and this may reduce our exposure to fluctuations in market prices:

- In addition to cash settlement prior to contract expiration, exchange-traded futures contracts may be settled by physical delivery of the commodity. This provides another source of supply to balance physical systems or to meet our refinery requirements and marketing demand.
- Manage the risk to our cash flows from price exposures on specific crude oil, refined product, natural gas, NGL, and electric power transactions.
- Enable us to use the market knowledge gained from these activities to capture market opportunities such as moving physical commodities to more profitable locations, storing commodities to capture seasonal or time premiums, and blending commodities to capture quality upgrades. Derivatives may be utilized to optimize these activities.

We use a VaR model to estimate the loss in fair value that could potentially result on a single day from the effect of adverse changes in market conditions on the derivative financial instruments and derivative commodity instruments held or issued, including commodity purchase and sales contracts recorded on the balance sheet at December 31, 2017, as derivative instruments. Using the Monte Carlo simulation, a 95 percent confidence level and a one-day holding period, the VaR for those instruments issued or held for trading purposes at December 31, 2017 and 2016, was immaterial to our cash flows and net income. The VaR for instruments held for purposes other than trading at December 31, 2017 and 2016, was also immaterial to our cash flows and net income.

Interest Rate Risk

Our use of fixed- or variable-rate debt directly exposes us to interest rate risk. Fixed-rate debt, such as our senior notes, exposes us to changes in the fair value of our debt due to changes in market interest rates. Fixed-rate debt also exposes us to the risk that we may need to refinance maturing debt with new debt at higher rates, or that we may be obligated to pay rates higher than the current market. Variable-rate debt, such as our floating-rate notes or borrowings under our revolving credit facility, exposes us to short-term changes in market rates that impact our interest expense. The following tables provide information about our debt instruments that are sensitive to changes in U.S. interest rates. These tables present principal cash flows and related weighted-average interest rates by expected maturity dates. Weighted-average variable rates are based on effective rates at the reporting date. The carrying amount of our floating-rate debt approximates its fair value. The fair value of the fixed-rate financial instruments is estimated based on observable market prices.

Expected Maturity Date	Millions of Dollars, Except as Indicated			
	Fixed Rate Maturity	Average Interest Rate	Floating Rate Maturity	Average Interest Rate
Year-End 2017				
2018	\$ —	—%	\$ 25	1.94%
2019	—	—	300	2.01
2020	300	2.65	775	2.31
2021	—	—	50	1.94
2022	2,000	4.30	—	—
Remaining years	6,576	4.78	—	—
Total	\$ 8,876		\$ 1,150	
Fair value	\$ 9,746		\$ 1,150	

Expected Maturity Date	Millions of Dollars, Except as Indicated			
	Fixed Rate Maturity	Average Interest Rate	Floating Rate Maturity	Average Interest Rate
Year-End 2016				
2017	\$ 516	3.08%	\$ 15	1.80%
2018	518	2.39	12	0.80
2019	18	7.00	—	—
2020	816	2.76	12	0.80
2021	—	—	221	1.86
Remaining years	7,926	4.72	—	—
Total	\$ 9,794		\$ 260	
Fair value	\$ 10,260		\$ 260	

For additional information about our use of derivative instruments, see Note 15—Derivatives and Financial Instruments, in the Notes to Consolidated Financial Statements.

CAUTIONARY STATEMENT FOR THE PURPOSES OF THE “SAFE HARBOR” PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. You can identify our forward-looking statements by the words “anticipate,” “estimate,” “believe,” “budget,” “continue,” “could,” “intend,” “may,” “plan,” “potential,” “predict,” “seek,” “should,” “will,” “would,” “expect,” “objective,” “projection,” “forecast,” “goal,” “guidance,” “outlook,” “effort,” “target” and similar expressions.

We based the forward-looking statements on our current expectations, estimates and projections about us and the industries in which we operate in general. We caution you these statements are not guarantees of future performance as they involve assumptions that, while made in good faith, may prove to be incorrect, and involve risks and uncertainties we cannot predict. In addition, we based many of these forward-looking statements on assumptions about future events that may prove to be inaccurate. Accordingly, our actual outcomes and results may differ materially from what we have expressed or forecast in the forward-looking statements. Any differences could result from a variety of factors, including the following:

- Fluctuations in NGL, crude oil, petroleum products and natural gas prices and refining, marketing and petrochemical margins.
- Failure of new products and services to achieve market acceptance.
- Unexpected changes in costs or technical requirements for constructing, modifying or operating our facilities or transporting our products.
- Unexpected technological or commercial difficulties in manufacturing, refining or transporting our products, including chemicals products.
- Lack of, or disruptions in, adequate and reliable transportation for our NGL, crude oil, natural gas and refined products.
- The level and success of drilling and quality of production volumes around DCP Midstream’s assets and its ability to connect supplies to its gathering and processing systems, residue gas and NGL infrastructure.
- Inability to timely obtain or maintain permits, including those necessary for capital projects; comply with government regulations; or make capital expenditures required to maintain compliance.
- Failure to complete definitive agreements and feasibility studies for, and to timely complete construction of, announced and future capital projects.
- Potential disruption or interruption of our operations due to accidents, weather events, civil unrest, political events, terrorism or cyber attacks.
- International monetary conditions and exchange controls.
- Substantial investment or reduced demand for products as a result of existing or future environmental rules and regulations.
- Liability resulting from litigation or for remedial actions, including removal and reclamation obligations under environmental regulations.
- General domestic and international economic and political developments including: armed hostilities; expropriation of assets; changes in governmental policies relating to NGL, crude oil, natural gas or refined product pricing, regulation or taxation; and other political, economic or diplomatic developments.
- Changes in tax, environmental and other laws and regulations (including alternative energy mandates) applicable to our business.
- Limited access to capital or significantly higher cost of capital related to changes to our credit profile or illiquidity or uncertainty in the domestic or international financial markets.
- The operation, financing and distribution decisions of our joint ventures.
- Domestic and foreign supplies of crude oil and other feedstocks.
- Domestic and foreign supplies of petrochemicals and refined products, such as gasoline, diesel, aviation fuel and home heating oil.
- Governmental policies relating to exports of crude oil and natural gas.
- Overcapacity or undercapacity in the midstream, chemicals and refining industries.
- Fluctuations in consumer demand for refined products.
- The factors generally described in Item 1A.—Risk Factors in this report.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

PHILLIPS 66

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Report of Management

Management prepared, and is responsible for, the consolidated financial statements and the other information appearing in this annual report. The consolidated financial statements present fairly the company's financial position, results of operations and cash flows in conformity with generally accepted accounting principles in the United States. In preparing its consolidated financial statements, the company includes amounts that are based on estimates and judgments management believes are reasonable under the circumstances. The company's financial statements have been audited by Ernst & Young LLP, an independent registered public accounting firm appointed by the Audit and Finance Committee of the Board of Directors. Management has made available to Ernst & Young LLP all of the company's financial records and related data, as well as the minutes of stockholders' and directors' meetings.

Assessment of Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Phillips 66's internal control system was designed to provide reasonable assurance to the company's management and directors regarding the preparation and fair presentation of published financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Management assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2017. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework* (2013). Based on this assessment, management concluded the company's internal control over financial reporting was effective as of December 31, 2017.

Ernst & Young LLP has issued an audit report on the company's internal control over financial reporting as of December 31, 2017, and their report is included herein.

/s/ Greg C. Garland

Greg C. Garland
Chairman and
Chief Executive Officer

/s/ Kevin J. Mitchell

Kevin J. Mitchell
Executive Vice President, Finance and
Chief Financial Officer

Date: February 23, 2018

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Phillips 66

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Phillips 66 (the Company) as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 23, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include 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. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

Houston, Texas
February 23, 2018

We have served as the Company's auditor since 2011.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Phillips 66

Opinion on Internal Control over Financial Reporting

We have audited Phillips 66's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Phillips 66 (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows, for each of the three years in the period ended December 31, 2017, and the related notes and our report dated February 23, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included under the heading "Assessment of Internal Control Over Financial Reporting" in the accompanying "Report of Management." Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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/ Ernst & Young LLP

Houston, Texas
February 23, 2018

Consolidated Statement of Income **Phillips 66**

Years Ended December 31	Millions of Dollars		
	2017	2016	2015
Revenues and Other Income			
Sales and other operating revenues*	\$ 102,354	84,279	98,975
Equity in earnings of affiliates	1,732	1,414	1,573
Net gain on dispositions	15	10	283
Other income	521	74	118
Total Revenues and Other Income	104,622	85,777	100,949
Costs and Expenses			
Purchased crude oil and products	79,409	62,468	73,399
Operating expenses	4,699	4,275	4,294
Selling, general and administrative expenses	1,695	1,638	1,670
Depreciation and amortization	1,318	1,168	1,078
Impairments	24	5	7
Taxes other than income taxes*	13,462	13,688	14,077
Accretion on discounted liabilities	22	21	21
Interest and debt expense	438	338	310
Foreign currency transaction (gains) losses	—	(15)	49
Total Costs and Expenses	101,067	83,586	94,905
Income before income taxes	3,555	2,191	6,044
Income tax expense (benefit)	(1,693)	547	1,764
Net Income	5,248	1,644	4,280
Less: net income attributable to noncontrolling interests	142	89	53
Net Income Attributable to Phillips 66	\$ 5,106	1,555	4,227

Net Income Attributable to Phillips 66 Per Share of Common Stock (dollars)

Basic	\$ 9.90	2.94	7.78
Diluted	9.85	2.92	7.73

Dividends Paid Per Share of Common Stock (dollars)	\$ 2.73	2.45	2.18
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Weighted-Average Common Shares Outstanding (thousands)

Basic	515,090	527,531	542,355
Diluted	518,508	530,066	546,977

* Includes excise taxes on sales of petroleum products: \$ 13,054 13,381 13,780
See Notes to Consolidated Financial Statements.

Consolidated Statement of Comprehensive Income **Phillips 66**

Years Ended December 31	Millions of Dollars		
	2017	2016	2015
Net Income	\$ 5,248	1,644	4,280
Other comprehensive income (loss)			
Defined benefit plans			
Actuarial loss arising during the period	(1)	(178)	(138)
Amortization to net income of net actuarial loss and settlements	176	94	174
Curtailment gain	—	31	—
Plans sponsored by equity affiliates	10	(11)	11
Income taxes on defined benefit plans	(70)	13	(13)
Defined benefit plans, net of tax	115	(51)	34
Foreign currency translation adjustments	268	(301)	(163)
Income taxes on foreign currency translation adjustments	(9)	5	7
Foreign currency translation adjustments, net of tax	259	(296)	(156)
Cash flow hedges	6	8	—
Income taxes on hedging activities	(2)	(3)	—
Hedging activities, net of tax	4	5	—
Other Comprehensive Income (Loss), Net of Tax	378	(342)	(122)
Comprehensive Income	5,626	1,302	4,158
Less: comprehensive income attributable to noncontrolling interests	142	89	53
Comprehensive Income Attributable to Phillips 66	\$ 5,484	1,213	4,105

See Notes to Consolidated Financial Statements.

Consolidated Balance Sheet		Phillips 66	
		Millions of Dollars	
At December 31		2017	2016
Assets			
Cash and cash equivalents	\$	3,119	2,711
Accounts and notes receivable (net of allowances of \$29 million in 2017 and \$34 million in 2016)		6,424	5,485
Accounts and notes receivable—related parties		1,082	912
Inventories		3,395	3,150
Prepaid expenses and other current assets		370	422
Total Current Assets		14,390	12,680
Investments and long-term receivables		13,941	13,534
Net properties, plants and equipment		21,460	20,855
Goodwill		3,270	3,270
Intangibles		876	888
Other assets		434	426
Total Assets	\$	54,371	51,653
Liabilities			
Accounts payable	\$	7,242	6,395
Accounts payable—related parties		785	666
Short-term debt		41	550
Accrued income and other taxes		1,002	805
Employee benefit obligations		582	527
Other accruals		455	520
Total Current Liabilities		10,107	9,463
Long-term debt		10,069	9,588
Asset retirement obligations and accrued environmental costs		641	655
Deferred income taxes		5,008	6,743
Employee benefit obligations		884	1,216
Other liabilities and deferred credits		234	263
Total Liabilities		26,943	27,928
Equity			
Common stock (2,500,000,000 shares authorized at \$0.01 par value) Issued (2017—643,835,464 shares; 2016—641,593,854 shares)		6	6
Par value		6	6
Capital in excess of par		19,768	19,559
Treasury stock (at cost: 2017—141,565,145 shares; 2016—122,827,264 shares)		(10,378)	(8,788)
Retained earnings		16,306	12,608
Accumulated other comprehensive loss		(617)	(995)
Total Stockholders' Equity		25,085	22,390
Noncontrolling interests		2,343	1,335
Total Equity		27,428	23,725
Total Liabilities and Equity	\$	54,371	51,653

See Notes to Consolidated Financial Statements.

Consolidated Statement of Cash Flows		Phillips 66		
		Millions of Dollars		
Years Ended December 31		2017	2016	2015
Cash Flows From Operating Activities				
Net income	\$	5,248	1,644	4,280
Adjustments to reconcile net income to net cash provided by operating activities				
Depreciation and amortization		1,318	1,168	1,078
Impairments		24	5	7
Accretion on discounted liabilities		22	21	21
Deferred income taxes		(1,886)	612	529
Undistributed equity earnings		(516)	(815)	185
Net gain on dispositions		(15)	(10)	(283)
Gain on consolidation of business		(423)	—	—
Other		(186)	(163)	117
Working capital adjustments				
Decrease (increase) in accounts and notes receivable		(1,182)	(1,258)	2,129
Decrease (increase) in inventories		(176)	216	(144)
Decrease (increase) in prepaid expenses and other current assets		104	(147)	324
Increase (decrease) in accounts payable		1,153	1,579	(2,300)
Increase (decrease) in taxes and other accruals		163	111	(230)
Net Cash Provided by Operating Activities		3,648	2,963	5,713
Cash Flows From Investing Activities				
Capital expenditures and investments		(1,832)	(2,844)	(5,764)
Proceeds from asset dispositions*		86	156	70
Advances/loans—related parties		(10)	(432)	(50)
Collection of advances/loans—related parties		326	108	50
Restricted cash received from consolidation of business		318	—	—
Other		(34)	(146)	(44)
Net Cash Used in Investing Activities		(1,146)	(3,158)	(5,738)
Cash Flows From Financing Activities				
Issuance of debt		3,508	2,090	1,169
Repayment of debt		(3,678)	(833)	(926)
Issuance of common stock		35	34	31
Repurchase of common stock		(1,590)	(1,042)	(1,512)
Dividends paid on common stock		(1,395)	(1,282)	(1,172)
Distributions to noncontrolling interests		(120)	(75)	(46)
Net proceeds from issuance of Phillips 66 Partners LP common and preferred units		1,205	972	384
Other		(76)	(42)	(45)
Net Cash Used in Financing Activities		(2,111)	(178)	(2,117)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash		17	10	9
Net Change in Cash, Cash Equivalents and Restricted Cash		408	(363)	(2,133)
Cash, cash equivalents and restricted cash at beginning of year		2,711	3,074	5,207
Cash, Cash Equivalents and Restricted Cash at End of Year		\$ 3,119	2,711	3,074

* Includes return of investments in equity affiliates.

See Notes to Consolidated Financial Statements.

Consolidated Statement of Changes in Equity
Phillips 66

	Millions of Dollars							Total
	Attributable to Phillips 66							
	Common Stock			Retained Earnings	Accum. Other Comprehensive Loss	Noncontrolling Interests		
	Par Value	Capital in Excess of Par	Treasury Stock					
December 31, 2014	\$ 6	19,040	(6,234)	9,309	(531)	447	22,037	
Net income	—	—	—	4,227	—	53	4,280	
Other comprehensive loss	—	—	—	—	(122)	—	(122)	
Cash dividends paid on common stock	—	—	—	(1,172)	—	—	(1,172)	
Repurchase of common stock	—	—	(1,512)	—	—	—	(1,512)	
Benefit plan activity	—	105	—	(16)	—	—	89	
Issuance of Phillips 66 Partners LP common units	—	—	—	—	—	384	384	
Distributions to noncontrolling interests	—	—	—	—	—	(46)	(46)	
December 31, 2015	6	19,145	(7,746)	12,348	(653)	838	23,938	
Net income	—	—	—	1,555	—	89	1,644	
Other comprehensive loss	—	—	—	—	(342)	—	(342)	
Cash dividends paid on common stock	—	—	—	(1,282)	—	—	(1,282)	
Repurchase of common stock	—	—	(1,042)	—	—	—	(1,042)	
Benefit plan activity	—	106	—	(13)	—	—	93	
Issuance of Phillips 66 Partners LP common units	—	308	—	—	—	483	791	
Distributions to noncontrolling interests	—	—	—	—	—	(75)	(75)	
December 31, 2016	6	19,559	(8,788)	12,608	(995)	1,335	23,725	
Net income	—	—	—	5,106	—	142	5,248	
Other comprehensive income	—	—	—	—	378	—	378	
Cash dividends paid on common stock	—	—	—	(1,395)	—	—	(1,395)	
Repurchase of common stock	—	—	(1,590)	—	—	—	(1,590)	
Benefit plan activity	—	72	—	(13)	—	—	59	
Issuance of Phillips 66 Partners LP common and preferred units	—	137	—	—	—	986	1,123	
Distributions to noncontrolling interests	—	—	—	—	—	(120)	(120)	
December 31, 2017	\$ 6	19,768	(10,378)	16,306	(617)	2,343	27,428	

	Shares in Thousands	
	Common Stock Issued	Treasury Stock
December 31, 2014	637,032	90,650
Repurchase of common stock	—	19,276
Shares issued—share-based compensation	2,304	—
December 31, 2015	639,336	109,926
Repurchase of common stock	—	12,901
Shares issued—share-based compensation	2,258	—
December 31, 2016	641,594	122,827
Repurchase of common stock	—	18,738
Shares issued—share-based compensation	2,241	—
December 31, 2017	643,835	141,565

See Notes to Consolidated Financial Statements.

Note 1—Summary of Significant Accounting Policies

- **Consolidation Principles and Investments**—Our consolidated financial statements include the accounts of majority-owned, controlled subsidiaries and variable interest entities where we are the primary beneficiary. The equity method is used to account for investments in affiliates in which we have the ability to exert significant influence over the affiliates' operating and financial policies. When we do not have the ability to exert significant influence, the investment is classified either as available-for-sale if fair value is readily determinable, or as the cost method if fair value is not readily determinable. Undivided interests in pipelines, natural gas plants and terminals are consolidated on a proportionate basis. Other securities and investments are generally carried at cost.
- **Recasted Financial Information**—Certain prior period financial information has been recasted to reflect the current year's presentation.
- **Foreign Currency Translation**—Adjustments resulting from the process of translating foreign functional currency financial statements into U.S. dollars are included in accumulated other comprehensive income (loss) in stockholders' equity. Foreign currency transaction gains and losses result from remeasuring monetary assets and liabilities denominated in a foreign currency into the functional currency of our subsidiary holding the asset or liability. We include these transaction gains and losses in current earnings. Most of our foreign operations use their local currency as the functional currency.
- **Use of Estimates**—The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosures of contingent assets and liabilities. Actual results could differ from these estimates.
- **Revenue Recognition**—Revenues associated with sales of crude oil, natural gas liquids (NGL), petroleum and chemical products, and other items are recognized when title passes to the customer, which is when the risk of ownership passes to the purchaser and physical delivery of goods occurs, either immediately or within a fixed delivery schedule that is reasonable and customary in the industry.

Revenues associated with transactions commonly called buy/sell contracts, in which the purchase and sale of inventory with the same counterparty are entered into in contemplation of one another, are combined and reported in the "Purchased crude oil and products" line on our consolidated statement of income (i.e., these transactions are recorded net).

- **Cash Equivalents**—Cash equivalents are highly liquid, short-term investments that are readily convertible to known amounts of cash and will mature within 90 days or less from the date of acquisition. We carry these investments at cost plus accrued interest.
- **Shipping and Handling Costs**—We record shipping and handling costs in the "Purchased crude oil and products" line on our consolidated statement of income. Freight costs billed to customers are recorded in "Sales and other operating revenues."
- **Inventories**—We have several valuation methods for our various types of inventories and consistently use the following methods for each type of inventory. Crude oil and petroleum products inventories are valued at the lower of cost or market in the aggregate, primarily on the last-in, first-out (LIFO) basis. Any necessary lower-of-cost-or-market write-downs at year end are recorded as permanent adjustments to the LIFO cost basis. LIFO is used to better match current inventory costs with current revenues and to meet tax-conformity requirements. Costs include both direct and indirect expenditures incurred in bringing an item or product to its existing condition and location. Materials and supplies inventories are valued using the weighted-average-cost method.

- **Fair Value Measurements**—We categorize assets and liabilities measured at fair value into one of three different levels depending on the observability of the inputs employed in the measurement. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, through market-corroborated inputs. Level 3 inputs are unobservable inputs for the asset or liability that are used to measure fair value to the extent that relevant observable inputs are not available, and that reflect the assumptions we believe market participants would use when pricing an asset or liability for which there is little, if any, market activity at the measurement date.
- **Derivative Instruments**—Derivative instruments are recorded on the balance sheet at fair value. We have elected to net derivative assets and liabilities with the same counterparty on the balance sheet if the right of offset exists and certain other criteria are met. We also net collateral payables or receivables against derivative assets and derivative liabilities, respectively.

Recognition and classification of the gain or loss that results from recording and adjusting a derivative to fair value depends on the purpose for issuing or holding the derivative. All realized and unrealized gains and losses from derivative instruments for which we do not apply hedge accounting are immediately recognized in our consolidated statement of income. Unrealized gains or losses from derivative instruments that qualify for and are designated as a cash flow hedge are recognized in other comprehensive income (loss) and appear on the balance sheet in accumulated other comprehensive income (loss) until the hedged transaction is recognized in earnings; however, to the extent the change in the fair value of a derivative instrument exceeds the change in the anticipated cash flows of the hedged transaction, the excess gain or loss is recognized immediately in earnings.

- **Capitalized Interest**—A portion of interest from external borrowings is capitalized on major projects with an expected construction period of one year or longer. Capitalized interest is added to the cost of the related asset, and is amortized over the useful life of the related asset.
- **Loans and Long-Term Receivables**—We enter into agreements with other parties to pursue business opportunities, which may require us to provide loans or advances to certain affiliated and non-affiliated companies. Loans are recorded when cash is transferred or seller financing is provided to the affiliated or non-affiliated company pursuant to a loan agreement. The loan balance will increase as interest is earned on the outstanding loan balance and will decrease as interest and principal payments are received. Interest is earned at the loan agreement's stated interest rate. Loans and long-term receivables are assessed for impairment when events indicate the loan balance may not be fully recovered.
- **Intangible Assets Other Than Goodwill**—Intangible assets with finite useful lives are amortized using the straight-line method over their useful lives. Intangible assets with indefinite useful lives are not amortized but are tested at least annually for impairment. Each reporting period, we evaluate the remaining useful lives of intangible assets not being amortized to determine whether events and circumstances continue to support indefinite useful lives. Indefinite-lived intangible assets are considered impaired if their fair value is lower than their net book value. The fair value of intangible assets is determined based on quoted market prices in active markets, if available. If quoted market prices are not available, the fair value of intangible assets is determined based upon the present values of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants, or upon estimated replacement cost, if expected future cash flows from the intangible asset are not determinable.
- **Goodwill**—Goodwill represents the excess of the purchase price over the estimated fair value of the net assets acquired in a business combination. It is not amortized, but is tested for impairment annually and when events or changes in circumstance indicate that the fair value of a reporting unit with goodwill is below its carrying value. The impairment test requires allocating goodwill and other assets and liabilities to reporting units. The fair value of each reporting unit is determined and compared to the book value of the reporting unit. If the fair value of the reporting unit is less than the book value, an impairment is recognized for the amount by which the book value exceeds the reporting unit's fair value. A goodwill loss cannot exceed the total amount of goodwill allocated to that reporting unit. For purposes of testing goodwill for impairment, we have three reporting units with goodwill balances: Transportation, Refining, and Marketing and Specialties.

- **Depreciation and Amortization**—Depreciation and amortization of properties, plants and equipment are determined by either the individual-unit-straight-line method or the group-straight-line method (for those individual units that are highly integrated with other units).
- **Impairment of Properties, Plants and Equipment**—Properties, plants and equipment (PP&E) used in operations are assessed for impairment whenever changes in facts and circumstances indicate a possible significant deterioration in the future cash flows expected to be generated by an asset group. If indicators of potential impairment exist, an undiscounted cash flow test is performed. If the sum of the undiscounted pre-tax cash flows is less than the carrying value of the asset group, including applicable liabilities, the carrying value of the PP&E included in the asset group is written down to estimated fair value through additional amortization or depreciation provisions and reported in the “Impairments” line on our consolidated statement of income in the period in which the determination of the impairment is made. Individual assets are grouped for impairment purposes at the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets (for example, at a refinery complex level). Because there is usually a lack of quoted market prices for long-lived assets, the fair value of impaired assets is typically determined using one or more of the following methods: the present values of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants; a market multiple of earnings for similar assets; or historical market transactions of similar assets, adjusted using principal market participant assumptions when necessary. Long-lived assets held for sale are accounted for at the lower of amortized cost or fair value, less cost to sell, with fair value determined using a binding negotiated price, if available, or present value of expected future cash flows as previously described.

The expected future cash flows used for impairment reviews and related fair value calculations are based on estimated future volumes, prices, costs, margins and capital project decisions, considering all available evidence at the date of review.

- **Impairment of Investments in Nonconsolidated Entities**—Investments in nonconsolidated entities are assessed for impairment whenever changes in the facts and circumstances indicate a loss in value has occurred. When indicators exist, the fair value is estimated and compared to the investment carrying value. If any impairment is judgmentally determined to be other than temporary, the carrying value of the investment is written down to fair value. The fair value of the impaired investment is based on quoted market prices, if available, or upon the present value of expected future cash flows using discount rates and other assumptions believed to be consistent with those used by principal market participants and a market analysis of comparable assets, if appropriate.
- **Maintenance and Repairs**—Costs of maintenance and repairs, which are not significant improvements, are expensed when incurred. Major refinery maintenance turnarounds are expensed as incurred.
- **Property Dispositions**—When complete units of depreciable property are sold, the asset cost and related accumulated depreciation are eliminated, with any gain or loss reflected in the “Net gain on dispositions” line on our consolidated statement of income. When less than complete units of depreciable property are disposed of or retired, the difference between asset cost and salvage value is charged or credited to accumulated depreciation.
- **Asset Retirement Obligations and Environmental Costs**—The fair value of legal obligations to retire and remove long-lived assets are recorded in the period in which the obligation arises. When the liability is initially recorded, we capitalize this cost by increasing the carrying amount of the related PP&E. Over time, the liability is increased for the change in its present value, and the capitalized cost in PP&E is depreciated over the useful life of the related asset. If our estimate of the liability changes after initial recognition, we record an adjustment to the liability and PP&E.

Environmental expenditures are expensed or capitalized, depending upon their future economic benefit. Expenditures relating to an existing condition caused by past operations, and those having no future economic benefit, are expensed. Liabilities for environmental expenditures are recorded on an undiscounted basis (unless acquired in a business combination) when environmental assessments or cleanups are probable and the costs can be reasonably estimated. Recoveries of environmental remediation costs from other parties, such as state reimbursement funds, are recorded as assets when their receipt is probable and estimable.

- **Guarantees**—The fair value of a guarantee is determined and recorded as a liability at the time the guarantee is given. The initial liability is subsequently reduced as we are released from exposure under the guarantee. We amortize the guarantee liability over the relevant time period, if one exists, based on the facts and circumstances surrounding each type of guarantee. In cases where the guarantee term is indefinite, we reverse the liability when we have information indicating the liability has essentially been relieved or amortize it over an appropriate time period as the fair value of our guarantee exposure declines over time. We amortize the guarantee liability to the related income statement line item based on the nature of the guarantee. When it becomes probable we will have to perform on a guarantee, we accrue a separate liability for the excess amount above the guarantee’s book value, if it is reasonably estimable, based on the facts and circumstances at that time. We reverse the fair value liability only when there is no further exposure under the guarantee.
- **Share-Based Compensation**—We recognize share-based compensation expense over the shorter of: (1) the service period (i.e., the stated period of time required to earn the award); or (2) the period beginning at the start of the service period and ending when an employee first becomes eligible for retirement, but not less than six months as this is the minimum period of time required for an award not to be subject to forfeiture. Our equity-classified programs generally provide accelerated vesting (i.e., a waiver of the remaining period of service required to earn an award) for awards held by employees at the time they become eligible for retirement (at age 55 with 5 years of service). We have elected to recognize expense on a straight-line basis over the service period for the entire award, irrespective of whether the award was granted with ratable or cliff vesting, and elected to recognize forfeiture reversals of awards when they occur.
- **Income Taxes**—Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Interest related to unrecognized income tax benefits is reflected in interest expense, and penalties in operating expenses.
- **Taxes Collected from Customers and Remitted to Governmental Authorities**—Excise taxes are reported gross within sales and other operating revenues and taxes other than income taxes, while other sales and value-added taxes are recorded net in taxes other than income taxes.
- **Treasury Stock**—We record treasury stock purchases at cost, which includes incremental direct transaction costs. Amounts are recorded as reductions in stockholders’ equity in the consolidated balance sheet.

Note 2—Changes in Accounting Principles

Effective January 1, 2017, we early adopted Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) No. 2017-04, “Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment,” which eliminated the second step from the goodwill impairment test. Under the revised test, an entity should perform its goodwill impairment tests by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. This ASU was applied prospectively to goodwill impairment tests performed on or after January 1, 2017.

Effective January 1, 2017, we early adopted ASU No. 2016-18, “Statement of Cash Flows (Topic 230): Restricted Cash.” The update clarified the classification and presentation of changes in restricted cash. The ASU requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash and restricted cash equivalents. Adoption of this ASU on a retrospective basis did not have a material impact on our financial statements. See Note 23—Cash Flow Information for more information.

Effective January 1, 2017, we early adopted ASU No. 2016-15, “Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments.” The update clarified how certain cash receipts and cash payments should be presented and classified in the statement of cash flows. In addition, the ASU clarified that when cash receipts and cash

payments have aspects of more than one class of cash flows and cannot be separated, classification will depend on the predominant source or use. Adoption of this ASU on a retrospective basis did not have a material impact on our financial statements.

Effective January 1, 2017, we adopted ASU No. 2016-09, “Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting,” which simplified several aspects of the accounting for share-based payment award transactions, including accounting for income taxes and classification of excess tax benefits on the statement of cash flows, forfeitures and minimum statutory tax withholding requirements. Adoption of this ASU on a prospective basis did not materially impact our financial position, results of operations, or cash flows. We account for forfeitures of awards when they occur and excess tax benefits, which were previously reported in cash flows from financing activities, are now reported in cash flows from operating activities.

In June 2014, the FASB issued ASU No. 2014-10, “Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities (VIE) Guidance in Topic 810, Consolidation.” This update removed the definition of a development stage entity from the Master Glossary of the Accounting Standard Codification (ASC) and the related financial reporting requirements specific to development stage entities. This update was intended to reduce cost and complexity of financial reporting for entities that have not commenced planned principal operations. For financial reporting requirements other than the VIE guidance in ASC Topic 810, ASU No. 2014-10 was effective for annual and quarterly reporting periods of public entities beginning after December 15, 2014. For the financial reporting requirements related to VIEs in ASC Topic 810, ASU No. 2014-10 was effective for annual and quarterly reporting periods for public entities beginning after December 15, 2015. We adopted the provisions of this ASU related to the financial reporting requirements other than the VIE guidance effective January 1, 2015. We adopted the remaining provisions effective January 1, 2016.

Note 3—Variable Interest Entities

Consolidated VIEs

In 2013, we formed Phillips 66 Partners LP (Phillips 66 Partners), a master limited partnership, to own, operate, develop and acquire primarily fee-based crude oil, refined petroleum products and NGL pipelines and terminals, as well as other midstream assets. We consolidate Phillips 66 Partners as we determined that Phillips 66 Partners is a VIE and we are the primary beneficiary. As general partner of Phillips 66 Partners, we have the ability to control its financial interests, as well as the ability to direct the activities of Phillips 66 Partners that most significantly impact its economic performance. See Note 27—Phillips 66 Partners LP, for additional information.

The most significant assets of Phillips 66 Partners that are available to settle only its obligations, along with its most significant liabilities for which its creditors do not have recourse to Phillips 66’s general credit at December 31 were:

	Millions of Dollars	
	2017	2016
Cash and cash equivalents	\$ 185	2
Equity investments*	1,932	1,142
Net properties, plants and equipment	2,918	2,675
Long-term debt	2,920	2,396

* Included in “Investments and long-term receivables” on the Phillips 66 consolidated balance sheet.

Non-Consolidated VIEs

We hold variable interests in VIEs that have not been consolidated because we are not considered the primary beneficiary. Information on our significant non-consolidated VIEs follows.

Merey Sweeny, L.P. (MSLP) is a limited partnership that owns a delayed coker and related facilities at the Sweeny Refinery. Under the agreements that governed the relationships between the former co-venturers in MSLP, certain defaults by Petróleos de Venezuela S.A. (PDVSA) with respect to supply of crude oil to the Sweeny Refinery triggered the right to acquire PDVSA’s 50 percent ownership interest in MSLP. The call right was exercised in August 2009. The exercise of the call right was challenged, and the dispute was arbitrated in our favor and subsequently litigated. Through February 7, 2017, we determined MSLP was a VIE and used the equity method of accounting because the exercise of the call right remained subject to legal challenge. MSLP was a VIE because, in securing lender consents in connection with our separation from ConocoPhillips in 2012 (the Separation), we provided a 100 percent debt guarantee to the lender of MSLP’s 8.85% senior notes. PDVSA did not participate in the debt guarantee. In our VIE assessment, this disproportionate debt guarantee, plus other liquidity support provided jointly by us and PDVSA independently of equity ownership, resulted in MSLP not being exposed to all potential losses. We determined we were not the primary beneficiary while the call exercise was subject to legal challenge, because under the partnership agreement, the co-venturers jointly directed the activities of MSLP that most significantly impacted economic performance. As discussed more fully in Note 5—Business Combinations, the exercise of the call right ceased to be subject to legal challenge in February 2017. At that point, we no longer considered MSLP a VIE and the entity became a consolidated subsidiary.

We own a 25 percent interest in both Dakota Access, LLC (Dakota Access) and Energy Transfer Crude Oil Company, LLC (ETCO), which collectively own the Bakken Pipeline. These entities did not have sufficient equity at risk to fully fund the construction of all assets required for principal operations, and thus represented VIEs until operations began. We determined we were not the primary beneficiary because we and our co-venturer at the time jointly directed the activities of Dakota Access and ETCO that most significantly impact economic performance. In June 2017, these entities started commercial operations and were no longer considered VIEs. We use the equity method of accounting for these investments.

Note 4—Inventories

Inventories at December 31 consisted of the following:

	Millions of Dollars	
	2017	2016
Crude oil and petroleum products	\$ 3,106	2,883
Materials and supplies	289	267
	\$ 3,395	3,150

Inventories valued on the LIFO basis totaled \$2,980 million and \$2,772 million at December 31, 2017 and 2016, respectively. The estimated excess of current replacement cost over LIFO cost of inventories amounted to approximately \$4.3 billion and \$3.3 billion at December 31, 2017 and 2016, respectively.

Excluding the disposition of the Whitegate Refinery, which occurred in September 2016, certain planned reductions in inventory caused liquidations of LIFO inventory values during each of the three years ended December 31, 2017. These liquidations increased net income by approximately \$13 million in 2017 and decreased net income by approximately \$68 million and \$37 million in 2016 and 2015, respectively.

In conjunction with the Whitegate Refinery disposition, the refinery’s LIFO inventory values were liquidated causing a decrease in net income of \$62 million during 2016. This LIFO liquidation impact was included in the net gain recognized on the disposition.

Note 5—Business Combinations

MSLP owns a delayed coker and related facilities at the Sweeny Refinery. Prior to August 28, 2009, MSLP was owned 50/50 by ConocoPhillips and PDVSA. Under the agreements that governed the relationships between the partners, certain defaults by PDVSA with respect to supply of crude oil to the Sweeny Refinery triggered the right, exercised in August 2009, to acquire its 50 percent ownership interest in MSLP for a purchase price determined by a contractual formula. As the distributions PDVSA received from MSLP exceeded the amounts it contributed to MSLP, the contractual formula required no cash consideration for the acquisition. The exercise was challenged, and the dispute was arbitrated in our favor and subsequently litigated. While the dispute was being arbitrated and litigated, we continued to use the equity method of accounting for our 50 percent interest in MSLP. When the exercise of the call right ceased to be subject to legal challenge on February 7, 2017, we deemed that we had acquired PDVSA's 50 percent share of MSLP and began accounting for MSLP as a consolidated subsidiary.

Based on a third-party appraisal of the fair value of MSLP's net assets, utilizing discounted cash flows and replacement costs, the acquisition of PDVSA's 50 percent interest resulted in our recording a pre-tax gain of \$423 million in the first quarter of 2017. This gain was included in the "Other income" line on our consolidated statement of income. The fair value of our original equity interest in MSLP immediately prior to the deemed acquisition was \$145 million. As a result of the transaction, we recorded \$318 million of restricted cash, \$250 million of PP&E and \$238 million of debt, as well as a net \$93 million for the elimination of our equity investment in MSLP and net intercompany payables. Our acquisition accounting was finalized during the first quarter of 2017.

The results of MSLP were included in our Refining segment until October 2017, when we contributed our 100 percent interest in MSLP to Phillips 66 Partners, which is included in our Midstream segment. See Note 27—Phillips 66 Partners LP for further discussion regarding the contribution.

In November 2016, Phillips 66 Partners acquired NGL logistics assets located in southeast Louisiana, consisting of approximately 500 miles of pipelines and storage caverns connecting multiple fractionation facilities, refineries and a petrochemical facility. The acquisition provided an opportunity for fee-based growth in the Louisiana market within our Midstream segment. The acquisition was included in the "Capital expenditures and investments" line on our consolidated statement of cash flows. At the acquisition date, we recorded \$183 million of PP&E and \$3 million of goodwill. Our acquisition accounting was finalized during the first quarter of 2017, with no change to the provisional amounts recorded in 2016.

Note 6—Assets Held for Sale or Sold

In September 2016, we completed the sale of the Whitegate Refinery and related marketing assets, which were included primarily in our Refining segment. The net carrying value of the assets at the time of their disposition was \$135 million, which consisted of \$127 million of inventory, other working capital, and PP&E; and \$8 million of allocated goodwill. An immaterial gain was recognized in 2016 on the disposition.

In February 2015, we completed the sale of the Bantry Bay terminal, which was included in our Refining segment. At the time of the disposition, the terminal had a net carrying value of \$68 million, which primarily related to net PP&E. An immaterial gain was recognized in 2015 on this disposition.

In July 2013, we completed the sale of the Immingham Combined Heat and Power Plant (IChP), which was included in our Marketing and Specialties segment. A gain on this disposal was deferred at the time of the sale due to an indemnity provided to the buyer. We recognized the deferred gain in earnings as our exposure under the indemnity declined, beginning in the third quarter of 2014 and ending in the second quarter of 2015 when the indemnity expired. We recognized \$242 million of the deferred gain during the year ended December 31, 2015.

Note 7—Investments, Loans and Long-Term Receivables

Components of investments, loans and long-term receivables at December 31 were:

	Millions of Dollars	
	2017	2016
Equity investments	\$ 13,733	13,102
Loans and long-term receivables	94	334
Other investments	114	98
	\$ 13,941	13,534

Equity Investments

Affiliated companies in which we had a significant equity investment at December 31, 2017, included:

- WRB Refining LP (WRB)—50 percent owned business venture with Cenovus Energy Inc. (Cenovus)—owns the Wood River and Borger refineries.
- DCP Midstream, LLC (DCP Midstream)—50 percent owned joint venture with Spectra Energy Corp, a wholly owned subsidiary of Enbridge Inc.—owns and operates gas plants, gathering systems, storage facilities and fractionation plants, including through its investment in DCP Midstream, LP (DCP Partners).
- Chevron Phillips Chemical Company LLC (CPChem)—50 percent owned joint venture with Chevron U.S.A. Inc., an indirect wholly owned subsidiary of Chevron Corporation—manufactures and markets petrochemicals and plastics.
- Rockies Express Pipeline LLC (REX)—25 percent owned joint venture with Tallgrass Energy Partners L.P.—owns and operates a natural gas pipeline system from Colorado to Ohio.
- DCP Sand Hills Pipeline, LLC (Sand Hills)—Phillips 66 Partners' 33 percent owned joint venture with DCP Partners—owns and operates NGL pipeline systems from the Permian and Eagle Ford basins to Mont Belvieu, Texas.
- DCP Southern Hills Pipeline, LLC (Southern Hills)—Phillips 66 Partners' 33 percent owned joint venture with DCP Partners—owns and operates NGL pipeline systems from the Midcontinent region to Mont Belvieu, Texas.
- Dakota Access and ETCO—Phillips 66 Partners' two 25 percent owned joint ventures with Energy Transfer Partners L.P. (ETP) and MarEn Bakken Company LLC. Dakota Access owns a pipeline system that delivers crude oil from the Bakken/Three Forks production area in North Dakota to Patoka, Illinois, and ETCO owns a connecting crude oil pipeline system from Patoka, Illinois, to Nederland, Texas. Collectively, these two pipeline systems form the Bakken Pipeline, which is operated by ETP.

Summarized 100 percent financial information for all equity method investments in affiliated companies, combined, was:

	Millions of Dollars		
	2017	2016	2015
Revenues	\$ 35,523	30,605	33,126
Income before income taxes	3,956	3,206	3,180
Net income	3,764	2,960	3,158
Current assets	7,325	7,097	6,024
Noncurrent assets	49,950	50,163	46,047
Current liabilities	5,248	5,173	4,130
Noncurrent liabilities	13,743	13,709	11,493
Noncontrolling interests	2,549	2,260	2,404

At December 31, 2017, retained earnings included approximately \$2,320 million related to the undistributed earnings of affiliated companies. Dividends received from affiliates were \$1,270 million, \$616 million, and \$1,769 million in 2017, 2016 and 2015, respectively.

WRB

WRB's operating assets consist of the Wood River and Borger refineries, located in Roxana, Illinois, and Borger, Texas, respectively, for which we are the operator and managing partner. As a result of our contribution of these two assets to WRB, a basis difference was created because the fair value of the contributed assets recorded by WRB exceeded their historical book value. The difference is primarily amortized and recognized as a benefit evenly over a period of 26 years, which was the estimated remaining useful life of the refineries' PP&E at the closing date. At December 31, 2017, the book value of our investment in WRB was \$2,269 million, and the basis difference was \$2,787 million. Equity earnings in 2017, 2016 and 2015 were increased by \$186 million, \$185 million and \$218 million, respectively, due to amortization of the basis difference.

In the first quarter of 2017, we received payment of the \$75 million outstanding principal balance of a partner loan we made to WRB in 2016. This cash inflow was included in the "Collection of advances/loans—related parties" line on our consolidated statement of cash flows.

DCP Midstream

DCP Midstream owns and operates gas plants, gathering systems, storage facilities and fractionation plants, primarily through its investment in DCP Partners. DCP Midstream markets a portion of its NGL to us and CPChem under supply agreements, the primary production commitment of which began a ratable wind-down period in December 2014 and expires in January 2019. This purchase commitment is on an "if-produced, will-purchase" basis. NGL is purchased under this agreement at various published market index prices, less transportation and fractionation fees. At December 31, 2017, the book value of our investment in DCP Midstream was \$2,227 million, and the basis difference was \$54 million.

In 2015, we contributed \$1.5 billion in cash to DCP Midstream as a capital contribution. Our co-venturer contributed its interests in Sand Hills and Southern Hills as a capital contribution equal in value to ours. Our capital contribution was included in the "Capital expenditures and investments" line on our consolidated statement of cash flows.

CPChem

CPChem manufactures and markets petrochemicals and plastics. We have multiple supply and purchase agreements in place with CPChem, ranging in initial terms from one to 99 years, with extension options. These agreements cover sales and purchases of refined products, solvents, and petrochemical and NGL feedstocks, as well as fuel oils and gases. All products are purchased and sold under specified pricing formulas based on various published pricing indices. At December 31, 2017, the book value of our equity method investment in CPChem was \$6,222 million.

REX

REX owns a natural gas pipeline that runs from Meeker, Colorado, to Clarington, Ohio. At December 31, 2017, the book value of our equity method investment in REX was \$445 million, and the basis difference was \$376 million. The basis difference was created by historical impairment charges we recorded to our investment.

In 2015, we contributed \$112 million to REX to cover our 25 percent share of a \$450 million debt repayment. Our capital contribution was included in the "Capital expenditures and investments" line on our consolidated statement of cash flows.

Sand Hills

The Sand Hills pipeline is a fee-based pipeline that transports NGL from the Permian Basin and Eagle Ford Shale to facilities along the Texas Gulf Coast and the Mont Belvieu market hub. At December 31, 2017, the book value of Phillips 66 Partners' equity investment in Sand Hills was \$515 million.

Southern Hills

The Southern Hills pipeline is a fee-based pipeline that transports NGL from the Midcontinent to facilities along the Texas Gulf Coast and the Mont Belvieu market hub. At December 31, 2017, the book value of Phillips 66 Partners' investment in Southern Hills was \$209 million, and the basis difference was \$94 million.

Dakota Access and ETCO

The Dakota Access and ETCO joint ventures were created to construct pipeline systems that collectively form the Bakken Pipeline. The Bakken Pipeline went into commercial service in June 2017, and delivers crude oil produced in the Bakken/Three Forks production area of North Dakota to market centers in the Midwest and the Gulf Coast. In October 2017, these investments were contributed to Phillips 66 Partners as discussed further in Note 27—Phillips 66 Partners LP. At December 31, 2017, the aggregate book value of Phillips 66 Partners' investments in Dakota Access and ETCO was \$621 million, and the basis difference was \$53 million.

In May 2016, we and our co-venturer at the time, executed agreements under which we and our co-venturer would loan Dakota Access and ETCO up to a maximum of \$2,256 million and \$227 million, respectively, with the amounts loaned by us and our co-venturer being proportionate to our ownership interests (Sponsor Loans). In August 2016, Dakota Access and ETCO secured a \$2.5 billion facility (Facility) with a syndicate of financial institutions on a limited recourse basis with certain guarantees, and the outstanding Sponsor Loans were repaid. Allowable draws under the Facility were initially reduced and finally suspended in September 2016 pending resolution of permitting delays. As a result, Dakota Access and ETCO resumed making draws under the Sponsor Loans. The maximum amounts that could be loaned under the Sponsor Loans were reduced in September 2016, to \$1,411 million for Dakota Access and \$76 million for ETCO. At December 31, 2016, Dakota Access and ETCO had \$976 million and \$22 million, respectively, outstanding under the Sponsor Loans. Our 25 percent share of those loans was \$244 million and \$6 million, respectively. In February 2017, the Sponsor Loans were repaid in their entirety when draws resumed under the Facility. These cash inflows were included in the "Collection of advances/loans—related parties" line on our consolidated statement of cash flows.

Note 8—Properties, Plants and Equipment

Our investment in PP&E is recorded at cost. Investments in refining and processing facilities are generally depreciated on a straight-line basis over a 25-year life, pipeline assets over a 45-year life and terminal assets over a 33-year life. The company's investment in PP&E, with the associated accumulated depreciation and amortization (Accum. D&A), at December 31 was:

	Millions of Dollars					
	2017			2016		
	Gross PP&E	Accum. D&A	Net PP&E	Gross PP&E	Accum. D&A	Net PP&E
Midstream	\$ 8,849	1,853	6,996	8,179	1,579	6,600
Chemicals	—	—	—	—	—	—
Refining	22,144	8,987	13,157	21,152	8,197	12,955
Marketing and Specialties	1,658	909	749	1,451	776	675
Corporate and Other	1,091	533	558	1,207	582	625
	\$ 33,742	12,282	21,460	31,989	11,134	20,855

Note 9—Goodwill and Intangibles

Goodwill

The carrying amount of goodwill by segment at December 31 was:

	Millions of Dollars			
	Midstream	Refining	Marketing and Specialties	Total
Balance at January 1, 2016	\$ 623	1,813	839	3,275
Goodwill assigned to acquisitions	3	—	—	3
Goodwill allocated to dispositions	—	(8)	—	(8)
Balance at December 31, 2016	626	1,805	839	3,270
Adjustments	—	—	—	—
Balance at December 31, 2017	\$ 626	1,805	839	3,270

Intangible Assets

The gross carrying value of indefinite-lived intangible assets at December 31 consisted of the following:

	Millions of Dollars	
	2017	2016
Trade names and trademarks	\$ 503	503
Refinery air and operating permits	252	260
Other	1	1
	\$ 756	764

At December 31, 2017, the net book value of our amortized intangible assets was \$120 million, which included accumulated amortization of \$173 million. At December 31, 2016, the net book value of our amortized intangible assets was \$124 million, which included accumulated amortization of \$152 million. Amortization expense was \$21 million, \$18 million and \$13 million in 2017, 2016 and 2015, respectively, and is expected to be less than \$20 million per year in future years.

Note 10—Asset Retirement Obligations and Accrued Environmental Costs

Asset retirement obligations and accrued environmental costs at December 31 were:

	Millions of Dollars	
	2017	2016
Asset retirement obligations	\$ 268	244
Accrued environmental costs	458	496
Total asset retirement obligations and accrued environmental costs	726	740
Asset retirement obligations and accrued environmental costs due within one year*	(85)	(85)
Long-term asset retirement obligations and accrued environmental costs	\$ 641	655

* Classified as a current liability on the consolidated balance sheet, under the caption "Other accruals."

Asset Retirement Obligations

We have asset retirement obligations that we are required to perform under law or contract once an asset is permanently taken out of service. Most of these obligations are not expected to be paid until many years in the future and are expected to be funded from general company resources at the time of removal. Our largest individual obligations involve asbestos abatement at refineries.

During 2017 and 2016, our overall asset retirement obligation changed as follows:

	Millions of Dollars	
	2017	2016
Balance at January 1	\$ 244	251
Accretion of discount	10	9
Changes in estimates of existing obligations	17	10
Spending on existing obligations	(14)	(15)
Property dispositions	—	(5)
Foreign currency translation	11	(6)
Balance at December 31	\$ 268	244

Accrued Environmental Costs

The \$38 million decrease in total accrued environmental costs in 2017 was due to payments and settlements during the year, which exceeded new accruals, accrual adjustments and accretion.

Of our total accrued environmental costs at December 31, 2017, \$222 million was primarily related to cleanup at domestic refineries and underground storage tanks at U.S. service stations; \$187 million was associated with nonoperator sites; and \$49 million was related to sites at which we have been named a potentially responsible party under federal or state laws. A large portion of our expected environmental expenditures have been discounted as these obligations were acquired in various business combinations. Expected expenditures for acquired environmental obligations were discounted using a weighted-average 5 percent discount factor, resulting in an accrued balance for acquired environmental liabilities of \$268 million at December 31, 2017. The expected future undiscounted payments related to the portion of the accrued environmental costs that have been discounted are: \$18 million in 2018, \$46 million in 2019, \$30 million in 2020, \$16 million in 2021, \$16 million in 2022, and \$216 million for all future years after 2022.

Note 11—Earnings Per Share

The numerator of basic earnings per share (EPS) is net income attributable to Phillips 66, reduced by noncancelable dividends paid on unvested share-based employee awards during the vesting period (participating securities). The denominator of basic EPS is the sum of the daily weighted-average number of common shares outstanding during the periods presented and fully vested stock and unit awards that have not yet been issued as common stock. The numerator of diluted EPS is also based on net income attributable to Phillips 66, which is reduced only by dividend equivalents paid on participating securities for which the dividends are more dilutive than the participation of the awards in the earnings of the periods presented. To the extent unvested stock, unit or option awards and vested unexercised stock options are dilutive, they are included with the weighted-average common shares outstanding in the denominator. Treasury stock is excluded from the denominator in both basic and diluted EPS.

	2017		2016		2015	
	Basic	Diluted	Basic	Diluted	Basic	Diluted
Amounts Attributed to Phillips 66 Common Stockholders (<i>millions</i>):						
Net income attributable to Phillips 66	\$ 5,106	5,106	1,555	1,555	4,227	4,227
Income allocated to participating securities	(6)	—	(6)	(5)	(6)	—
Net income available to common stockholders	\$ 5,100	5,106	1,549	1,550	4,221	4,227
Weighted-average common shares outstanding (<i>thousands</i>):	511,268	515,090	523,250	527,531	537,602	542,355
Effect of share-based compensation	3,822	3,418	4,281	2,535	4,753	4,622
Weighted-average common shares outstanding—EPS	515,090	518,508	527,531	530,066	542,355	546,977
Earnings Per Share of Common Stock (<i>dollars</i>)	\$ 9.90	9.85	2.94	2.92	7.78	7.73

Note 12—Debt

Long-term debt at December 31 was:

	Millions of Dollars	
	2017	2016
2.950% Senior Notes due 2017	\$ —	1,500
4.300% Senior Notes due 2022	2,000	2,000
4.650% Senior Notes due 2034	1,000	1,000
5.875% Senior Notes due 2042	1,500	1,500
4.875% Senior Notes due 2044	1,500	1,500
Phillips 66 Partners 2.646% Senior Notes due 2020	300	300
Phillips 66 Partners 3.605% Senior Notes due 2025	500	500
Phillips 66 Partners 3.550% Senior Notes due 2026	500	500
Phillips 66 Partners 3.750% Senior Notes due 2028	500	—
Phillips 66 Partners 4.680% Senior Notes due 2045	450	300
Phillips 66 Partners 4.900% Senior Notes due 2046	625	625
Floating-rate notes due 2019 at 2.009% at year-end 2017	300	—
Floating-rate notes due 2020 at 2.109% at year-end 2017	300	—
Term loan due 2020 at 2.469% at year-end 2017	450	—
Note payable to MSLP due 2020 at 7.00%*	—	68
Industrial Development Bonds due 2018 through 2021 at 0.80%-2.09% at year-end 2017 and 0.57%-0.81% at year-end 2016*	100	50
Phillips 66 Partners revolving credit facility due 2021 at 1.98% at year-end 2016	—	210
Other	1	1
Debt at face value	10,026	10,054
Capitalized leases	192	188
Net unamortized discounts and debt issuance costs	(108)	(104)
Total debt	10,110	10,138
Short-term debt	(41)	(550)
Long-term debt	\$ 10,069	9,588

* In February 2017, MSLP became a consolidated subsidiary, see Note 5—Business Combinations.

Maturities of borrowings outstanding at December 31, 2017, inclusive of net unamortized discounts and debt issuance costs, for each of the years from 2018 through 2022 are \$41 million, \$314 million, \$1,084 million, \$62 million and \$2,003 million, respectively.

Debt Issuances

In October 2017, Phillips 66 Partners closed on a public offering of \$650 million aggregate principal amount of senior notes, consisting of \$500 million of 3.750% Senior Notes due 2028 and \$150 million of 4.680% Senior Notes due 2045. Interest on the 3.750% Senior Notes due 2028 is payable semiannually in arrears on March 1 and September 1 of each year, commencing on March 1, 2018. Interest on the 4.680% Senior Notes due 2045 is payable semiannually in arrears on February 15 and August 15 of each year.

In April 2017, Phillips 66 completed a private offering of \$600 million aggregate principal amount of unsecured notes, consisting of \$300 million of Notes due 2019 and \$300 million of Notes due 2020. Interest on these notes is a floating rate equal to three-month London Interbank Offered Rate (LIBOR) plus 0.65% per annum for the 2019 Notes and three-month LIBOR plus 0.75% per annum for the 2020 Notes. Interest on both series of notes is payable quarterly in arrears on January 15, April 15, July 15 and October 15, commencing in July 2017. The 2019 Notes mature on April 15, 2019, and the 2020 Notes mature on April 15, 2020. The notes are guaranteed by Phillips 66 Company, a 100-percent-owned subsidiary.

Also in April 2017, Phillips 66 entered into term loan facilities with an aggregate borrowing amount of \$900 million, consisting of a \$450 million 364-day facility and a \$450 million three-year facility. Interest on the term loans is a floating rate based on either the Eurodollar rate or the reference rate, plus a margin determined by our long-term credit ratings.

In February 2017, as part of the consolidation of MSLP, Phillips 66 assumed \$135 million of 8.85% Senior Notes due in 2019 and \$100 million of tax-exempt bonds due between 2018 and 2021. See Note 5—Business Combinations for additional information regarding the consolidation of MSLP.

Debt Repayments

In October 2017, as part of a contribution of assets to Phillips 66 Partners, Phillips 66 Partners assumed the \$450 million term loan outstanding under the 364-day facility originally issued in April 2017, and subsequently repaid the loan. See Note 27—Phillips 66 Partners LP for additional information.

In May 2017, we repaid \$1,500 million of 2.950% Senior Notes upon maturity with the funding from the April 2017 debt issuances discussed above. In addition, we repaid \$135 million of MSLP 8.85% Senior Notes due in 2019 originally recorded in February 2017 as part of the consolidation of MSLP. See Note 5—Business Combinations for additional information regarding MSLP.

During 2017, Phillips 66 Partners repaid all outstanding borrowings under its \$750 million revolving credit facility.

Credit Facilities and Commercial Paper

Phillips 66 has a \$5.0 billion revolving credit facility that extends until October 2021. This facility may be used for direct bank borrowings, as support for issuances of letters of credit, or as support for our commercial paper program. The facility is with a broad syndicate of financial institutions and contains covenants that we consider usual and customary for an agreement of this type for comparable commercial borrowers, including a maximum consolidated net debt-to-capitalization ratio of 60 percent. The agreement has customary events of default, such as nonpayment of principal when due; nonpayment of interest, fees or other amounts; violation of covenants; cross-payment default and cross-acceleration (in each case, to indebtedness in excess of a threshold amount); and a change of control. Borrowings under the facility will incur interest at the LIBOR plus a margin based on the credit rating of our senior unsecured long-term debt as determined from time to time by Standard & Poor's Ratings Services and Moody's Investors Service. The facility also provides for customary fees, including administrative agent fees and commitment fees. At December 31, 2017, no amount had been drawn under this revolving credit agreement.

We have a \$5.0 billion commercial paper program for short-term working capital needs that is supported by our revolving credit facility. Commercial paper maturities are generally limited to 90 days. At December 31, 2017, we had no borrowings under our commercial paper program.

Phillips 66 Partners has a \$750 million revolving credit facility that extends until October 2021. The Phillips 66 Partners facility is with a broad syndicate of financial institutions. At December 31, 2017, Phillips 66 Partners had no borrowings outstanding under this facility.

Note 13—Guarantees

At December 31, 2017, we were liable for certain contingent obligations under various contractual arrangements as described below. We recognize a liability for the fair value of our obligation as a guarantor for newly issued or modified guarantees. Unless the carrying amount of the liability is noted below, we have not recognized a liability either because the guarantees were issued prior to December 31, 2002, or because the fair value of the obligation is immaterial. In addition, unless otherwise stated, we are not currently performing with any significance under the guarantee and expect future performance to be either immaterial or have only a remote chance of occurrence.

Guarantees of Joint-Venture Debt

In December 2016, as part of the restructuring within DCP Midstream, we issued a guarantee, effective January 1, 2017, to support the debt DCP Midstream issued in the first quarter of 2017. At December 31, 2017, the maximum potential amount of future payments to third parties under the guarantee is estimated to be \$175 million. Payment would be required if DCP Midstream defaults on this debt obligation, which matures in 2019.

At December 31, 2017, we had other guarantees outstanding for our portion of certain joint-venture debt obligations, which have remaining terms of up to 8 years. The maximum potential amount of future payments to third parties under these guarantees is approximately \$133 million. Payment would be required if a joint venture defaults on its debt obligations.

Other Guarantees

Under the operating lease agreement on our headquarters facility in Houston, Texas, we have a residual value guarantee with a maximum future exposure of \$554 million. The operating lease has a term of five years and provides us the option, at the end of the lease term, to request to renew the lease, purchase the facility or assist the lessor in marketing it for resale.

We also have residual value guarantees associated with railcar and airplane leases with maximum future exposures totaling \$305 million. Based on third-party appraisals of the railcars' fair value at the end of their lease terms, we estimated a total residual value deficiency of \$109 million and recognized \$28 million as expense in 2016. During 2017, we recognized an additional \$45 million of expense related to the residual value deficiency. In October 2017, upon maturity of one of our railcar leases, \$53 million of the total residual value deficiency of \$109 million was settled. The remaining residual value deficiency of \$36 million remaining at December 31, 2017, will be recognized on a straight-line basis through May 2019.

Indemnifications

Over the years, we have entered into various agreements to sell ownership interests in certain corporations, joint ventures and assets that gave rise to indemnification. Agreements associated with these sales include indemnifications for taxes, litigation, environmental liabilities, permits and licenses, and employee claims, as well as real estate indemnity against tenant defaults. The provisions of these indemnifications vary greatly. The majority of these indemnifications are related to environmental issues, which generally have indefinite terms and potentially unlimited exposure. The carrying amount recorded for indemnifications at December 31, 2017, was \$193 million.

We amortize the indemnification liability over the relevant time period, if one exists, based on the facts and circumstances surrounding each type of indemnity. In cases where the indemnification term is indefinite, we will reverse the liability when we have information to support that the liability was essentially relieved or amortize the liability over an appropriate time period as the fair value of our indemnification exposure declines. Although it is reasonably possible future payments may exceed amounts recorded, due to the nature of the indemnifications, it is not possible to make a reasonable estimate of the maximum potential amount of future payments. Included in the recorded carrying amount were \$104 million of environmental accruals for known contamination at December 31, 2017. For additional information about environmental liabilities, see Note 10—Asset Retirement Obligations and Accrued Environmental Costs and Note 14—Contingencies and Commitments.

Indemnification and Release Agreement

In 2012, in connection with the Separation, we entered into the Indemnification and Release Agreement with ConocoPhillips. This agreement governs the treatment between ConocoPhillips and us of matters relating to indemnification, insurance, litigation responsibility and management, and litigation document sharing and cooperation arising in connection with the Separation. Generally, the agreement provides for cross-indemnities principally designed to place financial responsibility for the obligations and liabilities of our business with us and financial responsibility for the obligations and liabilities of ConocoPhillips' business with ConocoPhillips. The agreement also establishes procedures for handling claims subject to indemnification and related matters.

Note 14—Contingencies and Commitments

A number of lawsuits involving a variety of claims that arose in the ordinary course of business have been filed against us or are subject to indemnifications provided by us. We also may be required to remove or mitigate the effects on the environment of the placement, storage, disposal or release of certain chemical, mineral and petroleum substances at various active and inactive sites. We regularly assess the need for financial recognition or disclosure of these contingencies. In the case of all known contingencies (other than those related to income taxes), we accrue a liability when the loss is probable and the amount is reasonably estimable. If a range of amounts can be reasonably estimated and no amount within the range is a better estimate than any other amount, then the minimum of the range is accrued. We do not reduce these liabilities for potential insurance or third-party recoveries. If applicable, we accrue receivables for probable insurance or other third-party recoveries. In the case of income-tax-related contingencies, we use a cumulative probability-weighted loss accrual in cases where sustaining a tax position is less than certain. See Note 21—Income Taxes, for additional information about income-tax-related contingencies.

Based on currently available information, we believe it is remote that future costs related to known contingent liability exposures will exceed current accruals by an amount that would have a material adverse impact on our consolidated financial statements. As we learn new facts concerning contingencies, we reassess our position both with respect to accrued liabilities and other potential exposures. Estimates particularly sensitive to future changes include contingent liabilities recorded for environmental remediation, tax and legal matters. Estimated future environmental remediation costs are subject to change due to such factors as the uncertain magnitude of cleanup costs, the unknown time and extent of such remedial actions that may be required, and the determination of our liability in proportion to that of other potentially responsible parties. Estimated future costs related to tax and legal matters are subject to change as events evolve and as additional information becomes available during the administrative and litigation processes.

Environmental

We are subject to international, federal, state and local environmental laws and regulations. When we prepare our consolidated financial statements, we record accruals for environmental liabilities based on management's best estimates, using all information available at the time. We measure estimates and base contingent liabilities on currently available facts, existing technology, and presently enacted laws and regulations, taking into account stakeholder and business considerations. When measuring contingent environmental liabilities, we also consider our prior experience in remediation of contaminated sites, other companies' cleanup experience, and data released by the U.S. Environmental Protection Agency (EPA) or other organizations. We consider unasserted claims in our determination of environmental liabilities, and we accrue them in the period they are both probable and reasonably estimable.

Although liability for environmental remediation costs is generally joint and several for federal sites and frequently so for state sites, we are usually only one of many companies alleged to have liability at a particular site. Due to such joint and several liabilities, we could be responsible for all cleanup costs related to any site at which we have been designated as a potentially responsible party. We have been successful to date in sharing cleanup costs with other financially sound companies. Many of the sites at which we are potentially responsible are still under investigation by the EPA or the state agencies concerned. Prior to actual cleanup, those potentially responsible normally assess the site conditions, apportion responsibility and determine the appropriate remediation. In some instances, we may have no liability or may attain a settlement of liability. Where it appears that other potentially responsible parties may be financially unable to bear their proportional share, we consider this inability in estimating our potential liability, and we adjust our accruals accordingly. As a result of various acquisitions in the past, we assumed certain environmental obligations. Some of these environmental obligations are mitigated by indemnifications made by others for our benefit, although some of the indemnifications are subject to dollar and time limits.

We are currently participating in environmental assessments and cleanups at numerous federal Superfund and comparable state sites. After an assessment of environmental exposures for cleanup and other costs, we make accruals on an undiscounted basis (except those pertaining to sites acquired in a business combination, which we record on a discounted basis) for planned investigation and remediation activities for sites where it is probable future costs will be incurred and these costs can be reasonably estimated. We have not reduced these accruals for possible insurance recoveries. In the future, we may be involved in additional environmental assessments, cleanups and proceedings. See Note 10—Asset Retirement Obligations and Accrued Environmental Costs, for a summary of our accrued environmental liabilities.

Legal Proceedings

Our legal organization applies its knowledge, experience and professional judgment to the specific characteristics of our cases, employing a litigation management process to manage and monitor the legal proceedings against us. Our process facilitates the early evaluation and quantification of potential exposures in individual cases and enables the tracking of those cases that have been scheduled for trial and/or mediation. Based on professional judgment and experience in using these litigation management tools and available information about current developments in all our cases, our legal organization regularly assesses the adequacy of current accruals and determines if adjustment of existing accruals, or establishment of new accruals, is required.

Other Contingencies

We have contingent liabilities resulting from throughput agreements with pipeline and processing companies not associated with financing arrangements. Under these agreements, we may be required to provide any such company with additional funds through advances and penalties for fees related to throughput capacity not utilized.

At December 31, 2017, we had performance obligations secured by letters of credit and bank guarantees of \$773 million related to various purchase and other commitments incident to the ordinary conduct of business.

Long-Term Throughput Agreements and Take-or-Pay Agreements

We have certain throughput agreements and take-or-pay agreements in support of third-party financing arrangements. The agreements typically provide for crude oil transportation to be used in the ordinary course of our business. The aggregate amounts of estimated payments under these various agreements are \$327 million annually for each of the years from 2018 through 2022 and \$2,644 million in the aggregate for years 2023 and thereafter. Total payments under the agreements were \$323 million in 2017, \$325 million in 2016 and \$328 million in 2015.

Note 15—Derivatives and Financial Instruments

Derivative Instruments

We use financial and commodity-based derivative contracts to manage exposures to fluctuations in commodity prices, interest rates and foreign currency exchange rates, or to capture market opportunities. Because we do not apply hedge accounting for commodity derivative contracts, all realized and unrealized gains and losses from commodity derivative contracts are recognized in our consolidated statement of income. Gains and losses from derivative contracts held for trading not directly related to our physical business are reported net in the "Other income" line on our consolidated statement of income. Cash flows from all our derivative activity for the periods presented appear in the operating section on our consolidated statement of cash flows.

Purchase and sales contracts with firm minimum notional volumes for commodities that are readily convertible to cash are recorded on our consolidated balance sheet as derivatives unless the contracts are eligible for, and we elect, the normal purchases and normal sales exception, whereby the contracts are recorded on an accrual basis. We generally apply the normal purchases and normal sales exception to eligible crude oil, refined products, NGL, natural gas and power commodity contracts to purchase or sell quantities we expect to use or sell in the normal course of business. All other derivative instruments are recorded at fair value on our consolidated balance sheet. For further information on the fair value of derivatives, see Note 16—Fair Value Measurements.

Commodity Derivative Contracts—We sell into or receive supply from the worldwide crude oil, refined products, NGL, natural gas, and electric power markets, exposing our revenues, purchases, cost of operating activities and cash flows to fluctuations in the prices for these commodities. Generally, our policy is to remain exposed to the market prices of commodities; however, we use futures, forwards, swaps and options in various markets to balance physical systems, meet customer needs, manage price exposures on specific transactions, and do a limited, immaterial amount of trading not directly related to our physical business, all of which may reduce our exposure to fluctuations in market prices. We also use the market knowledge gained from these activities to capture market opportunities such as moving physical commodities to more profitable locations, storing commodities to capture seasonal or time premiums, and blending commodities to capture quality upgrades.

The following table indicates the consolidated balance sheet line items that include the fair values of commodity derivative assets and liabilities. The balances in the following table are presented on a gross basis, before the effects of counterparty and collateral netting. However, we have elected to present our commodity derivative assets and liabilities with the same counterparty on a net basis on our consolidated balance sheet when the right of setoff exists.

	Millions of Dollars							
	December 31, 2017				December 31, 2016			
	Commodity Derivatives		Effect of Collateral Netting	Net Carrying Value Presented on the Balance Sheet	Commodity Derivatives		Effect of Collateral Netting	Net Carrying Value Presented on the Balance Sheet
Assets	Liabilities	Assets			Liabilities			
Assets								
Prepaid expenses and other current assets	\$ 43	(19)	—	24	267	(154)	—	113
Other assets	7	(3)	—	4	5	(1)	—	4
Liabilities								
Other accruals	699	(746)	21	(26)	474	(612)	73	(65)
Other liabilities and deferred credits	—	(1)	—	(1)	—	(1)	—	(1)
Total	\$ 749	(769)	21	1	746	(768)	73	51

At December 31, 2017 and 2016, there was no material cash collateral received or paid that was not offset on our consolidated balance sheet.

The realized and unrealized gains (losses) incurred from commodity derivatives, and the line items where they appear on our consolidated statement of income, were:

	Millions of Dollars		
	2017	2016	2015
Sales and other operating revenues	\$ (247)	(451)	162
Other income	27	29	58
Purchased crude oil and products	(18)	(62)	121
Net gain (loss) from commodity derivative activity	\$ (238)	(484)	341

The following table summarizes our material net exposures resulting from outstanding commodity derivative contracts. These financial and physical derivative contracts are primarily used to manage price exposure on our underlying operations. The underlying exposures may be from non-derivative positions such as inventory volumes. Financial derivative contracts may also offset physical derivative contracts, such as forward sales contracts. The percentage of our derivative contract volumes expiring within the next 12 months was at least 98 percent at December 31, 2017 and 2016.

Commodity	Open Position Long / (Short)	
	2017	2016
Crude oil, refined products and NGL (millions of barrels)	(11)	(18)

Interest Rate Derivative Contracts—In 2016, we entered into interest rate swaps to hedge the variability of anticipated lease payments on our new headquarters. These monthly lease payments will vary based on monthly changes in the one-month LIBOR and changes, if any, in our credit rating over the five-year term of the lease. The pay-fixed, receive-floating interest rate swaps have an aggregate notional value of \$650 million and end on April 25, 2021. They qualify for and are designated as cash-flow hedges.

The aggregate net fair value of these swaps, which is included in the “Prepaid expenses and other current assets,” “Other assets” and “Other accruals” lines of our consolidated balance sheet, totaled \$14 million and \$8 million at December 31, 2017 and 2016, respectively.

We report the effective portion of the mark-to-market gain or loss on our interest rate swaps designated as cash-flow hedges as a component of other comprehensive income (loss), and reclassify such gains and losses into earnings in the same period during which the hedged forecasted transaction affects earnings. Gains and losses due to ineffectiveness are recognized in general and administrative expenses. We did not have any material hedge ineffectiveness gain or loss for the years ended December 31, 2017 and 2016. Net realized losses from settlements of the swaps were immaterial for the years ended December 31, 2017 and 2016.

We currently estimate that pre-tax gains of \$2 million will be reclassified from accumulated other comprehensive income (loss) into general and administrative expenses during the next twelve months as the hedged transactions settle; however, the actual amounts that will be reclassified will vary based on changes in interest rates throughout 2018.

Credit Risk

Financial instruments potentially exposed to concentrations of credit risk consist primarily of over-the-counter (OTC) derivative contracts and trade receivables.

The credit risk from our OTC derivative contracts, such as forwards and swaps, derives from the counterparty to the transaction. Individual counterparty exposure is managed within predetermined credit limits and includes the use of cash-call margins when appropriate, thereby reducing the risk of significant nonperformance. We also use futures, swaps and option contracts that have a negligible credit risk because these trades are cleared with an exchange clearinghouse and subject to mandatory margin requirements until settled. However, we are exposed to the credit risk of those exchange brokers for receivables arising from daily margin cash calls, as well as for cash deposited to meet initial margin requirements.

Our trade receivables result primarily from the sale of products from, or related to, our refinery operations and reflect a broad national and international customer base, which limits our exposure to concentrations of credit risk. The majority of these receivables have payment terms of 30 days or less. We continually monitor this exposure and the creditworthiness of the counterparties and recognize bad debt expense based on historical write-off experience or specific counterparty collectability. Generally, we do not require collateral to limit the exposure to loss; however, we will sometimes use letters of credit, prepayments or master netting arrangements to mitigate credit risk with counterparties that both buy from and sell to us, as these agreements permit the amounts owed by us or owed to others to be offset against amounts due to us.

Certain of our derivative instruments contain provisions that require us to post collateral if the derivative exposure exceeds a threshold amount. We have contracts with fixed threshold amounts and other contracts with variable threshold amounts that are contingent on our credit rating. The variable threshold amounts typically decline for lower credit ratings, while both the variable and fixed threshold amounts typically revert to zero if our credit ratings fall below investment grade. Cash is the primary collateral in all contracts; however, many contracts also permit us to post letters of credit as collateral.

The aggregate fair values of all derivative instruments with such credit-risk-related contingent features that were in a liability position were not material at December 31, 2017 and 2016.

Note 16—Fair Value Measurements

Recurring Fair Value Measurements

We carry certain assets and liabilities at fair value, which we measure at the reporting date using an exit price (i.e., the price that would be received to sell an asset or paid to transfer a liability), and disclose the quality of these fair values based on the valuation inputs used in these measurements under the following hierarchy:

- Level 1: Fair value measured with unadjusted quoted prices from an active market for identical assets or liabilities.
- Level 2: Fair value measured either with: (1) adjusted quoted prices from an active market for similar assets or liabilities; or (2) other valuation inputs that are directly or indirectly observable.
- Level 3: Fair value measured with unobservable inputs that are significant to the measurement.

We classify the fair value of an asset or liability based on the significance of its observable or unobservable inputs to the measurement. However, the fair value of an asset or liability initially reported as Level 3 will be subsequently reported as Level 2 if the unobservable inputs become inconsequential to its measurement or corroborating market data becomes available. Conversely, an asset or liability initially reported as Level 2 will be subsequently reported as Level 3 if corroborating market data becomes unavailable. For the year ended December 31, 2017, derivative assets with an aggregate value of \$131 million and derivative liabilities with an aggregate value of \$134 million were transferred to Level 1 from Level 2, as measured from the beginning of the reporting period. The measurements were reclassified within the fair value hierarchy due to the availability of unadjusted quoted prices from an active market.

We used the following methods and assumptions to estimate the fair value of financial instruments:

- *Cash and cash equivalents*—The carrying amount reported on our consolidated balance sheet approximates fair value.
- *Accounts and notes receivable*—The carrying amount reported on our consolidated balance sheet approximates fair value.
- *Derivative instruments*—We fair value our exchange-traded contracts based on quoted market prices obtained from the New York Mercantile Exchange, the Intercontinental Exchange or other exchanges, and classify them as Level 1 in the fair value hierarchy. When exchange-cleared contracts lack sufficient liquidity or are valued using either adjusted exchange-provided prices or non-exchange quotes, we classify those contracts as Level 2.

OTC financial swaps and physical commodity forward purchase and sales contracts are generally valued using forward quotes provided by brokers and price index developers, such as Platts and Oil Price Information Service. We corroborate these quotes with market data and classify the resulting fair values as Level 2. When forward market prices are not available, we estimate fair value using the forward price of a similar commodity, adjusted for the difference in quality or location. In certain less liquid markets or for longer-term contracts, forward prices are not as readily available. In these circumstances, OTC swaps and physical commodity purchase and sales contracts are valued using internally developed methodologies that consider historical relationships among various commodities that result in management's best estimate of fair value. We classify these contracts as Level 3. Financial OTC and physical commodity options are valued using industry-standard models that consider various assumptions, including quoted forward prices for commodities, time value, volatility factors and contractual prices for the underlying instruments, as well as other relevant economic measures. The degree to which these inputs are observable in the forward markets determines whether the options are classified as Level 2 or 3. We use a mid-market pricing convention (the mid-point between bid and ask prices). When appropriate, valuations are adjusted to reflect credit considerations, generally based on available market evidence.

We determine the fair value of our interest rate swaps based on observed market valuations for interest rate swaps that have notionals, terms and pay and reset frequencies similar to ours.

- *Rabbi trust assets*—These deferred compensation investments are measured at fair value using unadjusted quoted prices available from national securities exchanges and are therefore categorized as Level 1 in the fair value hierarchy.
- *Debt*—The carrying amount of our floating-rate debt approximates fair value. The fair value of our fixed-rate debt is estimated based on observable market prices.

The following tables display the fair value hierarchy for our material financial assets and liabilities either accounted for or disclosed at fair value on a recurring basis. These values are determined by treating each contract as the fundamental unit of account; therefore, derivative assets and liabilities with the same counterparty are shown on a gross basis in the hierarchy sections of these tables, before the effects of counterparty and collateral netting. These tables also show that our Level 3 activity was not material.

We have master netting agreements for all of our exchange-cleared derivative instruments, the majority of our OTC derivative instruments, and certain physical commodity forward contracts (primarily pipeline crude oil deliveries). The following tables show the impact of these contracts in the column "Effect of Counterparty Netting."

The carrying values and fair values by hierarchy of our material financial instruments and commodity forward contracts, either carried or disclosed at fair value, including any effects of netting derivative assets with liabilities and netting collateral due to right of setoff or master netting agreements, were:

Millions of Dollars								
December 31, 2017								
	Fair Value Hierarchy			Total Fair Value of Gross Assets & Liabilities	Effect of Counterparty Netting	Effect of Collateral Netting	Difference in Carrying Value and Fair Value	Net Carrying Value Presented on the Balance Sheet
	Level 1	Level 2	Level 3					
Commodity Derivative Assets								
Exchange-cleared instruments	\$ 333	395	—	728	(721)	—	—	7
Physical forward contracts	—	20	1	21	—	—	—	21
Interest rate derivatives	—	14	—	14	—	—	—	14
Rabbi trust assets	112	—	—	112	N/A	N/A	—	112
	\$ 445	429	1	875	(721)	—	—	154
Commodity Derivative Liabilities								
Exchange-cleared instruments	\$ 369	373	—	742	(721)	(21)	—	—
Physical forward contracts	—	23	4	27	—	—	—	27
Floating-rate debt	—	1,150	—	1,150	N/A	N/A	—	1,150
Fixed-rate debt, excluding capital leases	—	9,746	—	9,746	N/A	N/A	(978)	8,768
	\$ 369	11,292	4	11,665	(721)	(21)	(978)	9,945

Millions of Dollars								
December 31, 2016								
	Fair Value Hierarchy			Total Fair Value of Gross Assets & Liabilities	Effect of Counterparty Netting	Effect of Collateral Netting	Difference in Carrying Value and Fair Value	Net Carrying Value Presented on the Balance Sheet
	Level 1	Level 2	Level 3					
Commodity Derivative Assets								
Exchange-cleared instruments	\$ 273	371	—	644	(628)	—	—	16
OTC instruments	—	6	—	6	(1)	—	—	5
Physical forward contracts	—	94	2	96	—	—	—	96
Interest rate derivatives	—	8	—	8	—	—	—	8
Rabbi trust assets	97	—	—	97	N/A	N/A	—	97
	\$ 370	479	2	851	(629)	—	—	222
Commodity Derivative Liabilities								
Exchange-cleared instruments	\$ 249	452	—	701	(628)	(73)	—	—
OTC instruments	—	1	—	1	(1)	—	—	—
Physical forward contracts	—	61	5	66	—	—	—	66
Floating-rate debt	—	260	—	260	N/A	N/A	—	260
Fixed-rate debt, excluding capital leases	—	10,260	—	10,260	N/A	N/A	(570)	9,690
	\$ 249	11,034	5	11,288	(629)	(73)	(570)	10,016

The rabbi trust assets are recorded in the “Investments and long-term receivables” line and floating-rate and fixed-rate debt are recorded in the “Short-term debt” and “Long-term debt” lines on our consolidated balance sheet. For information regarding the location of our commodity derivative assets and liabilities on our consolidated balance sheet, see the first table in Note 15—Derivatives and Financial Instruments.

Nonrecurring Fair Value Measurements

See Note 5—Business Combinations for information on the remeasurement of our investment in MSLP to fair value. During the years ended December 31, 2017, and 2016, there were no other material nonrecurring fair value remeasurements of assets subsequent to their initial recognition.

Note 17—Equity

Preferred Stock

We have 500 million shares of preferred stock authorized, with a par value of \$0.01 per share, none of which have been issued.

Treasury Stock

Since July 2012, our Board of Directors has, at various times, authorized repurchases of our outstanding common stock which aggregate to a total authorization of up to \$12.0 billion. The shares will be repurchased from time to time in the open market at the company’s discretion, subject to market conditions and other factors, and in accordance with applicable regulatory requirements. We are not obligated to acquire any particular amount of common stock and may commence, suspend or discontinue purchases at any time or from time to time without prior notice. Since the inception of our share repurchases in 2012, through December 31, 2017, we have repurchased a total of 124,142,530 shares at an aggregate cost of \$9.0 billion. Shares of stock repurchased are held as treasury shares.

In 2014, we completed the exchange of our flow improver business for shares of Phillips 66 common stock owned by the other party to the transaction. We received 17,422,615 shares of our common stock with a fair value at the time of the exchange of \$1.35 billion.

Common Stock Dividends

On February 7, 2018, our Board of Directors declared a quarterly cash dividend of \$0.70 per common share, payable March 1, 2018, to holders of record at the close of business on February 20, 2018.

Noncontrolling Interests

Our noncontrolling interests primarily represent issuances of common and preferred units to the public by Phillips 66 Partners. See Note 27—Phillips 66 Partners LP, for information on Phillips 66 Partners.

Note 18—Leases

We lease ocean transport vessels, tugboats, barges, pipelines, railcars, service station sites, computers, office buildings, corporate aircraft, land and other facilities and equipment. Certain leases include escalation clauses for adjusting rental payments to reflect changes in price indices, as well as renewal options and/or options to purchase the leased property. There are no significant restrictions imposed on us by the leasing agreements with regard to dividends, asset dispositions or borrowing ability. Our capital lease obligations relate primarily to the lease of an oil terminal in the United Kingdom. The lease obligation is subject to foreign currency translation adjustments each reporting period. The total net PP&E recorded for capital leases was \$210 million and \$208 million at December 31, 2017 and 2016, respectively.

Future minimum lease payments at December 31, 2017, for operating and capital lease obligations were:

	Millions of Dollars	
	Capital Lease Obligations	Operating Lease Obligations*
2018	\$ 22	533
2019	22	420
2020	18	306
2021	18	141
2022	15	100
Remaining years	148	326
Total	243	1,826
Less: income from subleases	—	71
Net minimum lease payments	\$ 243	1,755
Less: amount representing interest	51	
Capital lease obligations	\$ 192	

* Includes the remaining residual value deficiency on our railcar leases. See Note 13—Guarantees, for additional information.

Operating lease rental expense for the years ended December 31 was:

	Millions of Dollars		
	2017	2016	2015
Minimum rentals*	\$ 680	669	641
Contingent rentals	6	6	6
Less: sublease rental income	73	95	136
	\$ 613	580	511

* Includes expenses related to the residual value deficiency on our railcar leases. See Note 13—Guarantees, for additional information.

Note 19—Pension and Postretirement Plans

The following table provides a reconciliation of the projected benefit obligations and plan assets for our pension plans and accumulated benefit obligations for our other postretirement benefit plans:

	Millions of Dollars					
	Pension Benefits				Other Benefits	
	2017		2016		2017	2016
	U.S.	Int'l.	U.S.	Int'l.		
Change in Benefit Obligation						
Benefit obligation at January 1	\$ 2,881	1,055	2,791	912	225	219
Service cost	132	32	127	32	6	7
Interest cost	108	27	116	28	8	8
Plan participant contributions	—	2	—	3	3	2
Actuarial loss (gain)	267	(5)	62	237	6	(6)
Benefits paid	(345)	(20)	(215)	(19)	(16)	(13)
Curtailed gain	—	—	—	(31)	—	—
Acquisition of a business	—	—	—	—	—	8
Foreign currency exchange rate change	—	118	—	(107)	—	—
Benefit obligation at December 31	\$ 3,043	1,209	2,881	1,055	232	225
Change in Fair Value of Plan Assets						
Fair value of plan assets at January 1	\$ 2,274	796	2,023	742	—	—
Actual return on plan assets	399	71	136	148	—	—
Company contributions	423	35	330	40	13	11
Plan participant contributions	—	2	—	3	3	2
Benefits paid	(345)	(20)	(215)	(19)	(16)	(13)
Foreign currency exchange rate change	—	88	—	(118)	—	—
Fair value of plan assets at December 31	\$ 2,751	972	2,274	796	—	—
Funded Status at December 31	\$ (292)	(237)	(607)	(259)	(232)	(225)

Amounts recognized in the consolidated balance sheet for our pension and other postretirement benefit plans at December 31, 2017 and 2016, include:

	Millions of Dollars					
	Pension Benefits				Other Benefits	
	2017		2016		2017	2016
	U.S.	Int'l.	U.S.	Int'l.		
Amounts Recognized in the Consolidated Balance Sheet at December 31						
Current liabilities	\$ (25)	—	(10)	—	(16)	(10)
Noncurrent liabilities	(267)	(237)	(597)	(259)	(216)	(215)
Total recognized	\$ (292)	(237)	(607)	(259)	(232)	(225)

Included in accumulated other comprehensive income (loss) at December 31 were the following before-tax amounts that had not been recognized in net periodic benefit cost:

	Millions of Dollars					
	Pension Benefits				Other Benefits	
	2017		2016		2017	2016
	U.S.	Int'l.	U.S.	Int'l.		
Unrecognized net actuarial loss (gain)	\$ 545	190	684	227	1	(5)
Unrecognized prior service cost (credit)	—	(4)	3	(5)	(7)	(9)

	Millions of Dollars					
	Pension Benefits				Other Benefits	
	2017		2016		2017	2016
	U.S.	Int'l.	U.S.	Int'l.		
Sources of Change in Other Comprehensive Income (Loss)						
Net gain (loss) arising during the period	\$ (14)	14	(54)	(129)	(6)	7
Curtailment gain	—	—	—	31	—	—
Amortization of loss and settlements included in income	153	23	80	14	—	—
Net change in unrecognized net actuarial loss (gain) during the period	\$ 139	37	26	(84)	(6)	7
Prior service cost arising during the period	\$ —	—	—	—	—	—
Amortization of prior service cost (credit) included in income	3	(1)	3	(1)	(2)	(1)
Net change in unrecognized prior service cost (credit) during the period	\$ 3	(1)	3	(1)	(2)	(1)

The accumulated benefit obligations for all U.S. and international pension plans were \$2,743 million and \$1,006 million, respectively, at December 31, 2017, and \$2,601 million and \$880 million, respectively, at December 31, 2016.

Information for U.S. and international pension plans with an accumulated benefit obligation in excess of plan assets at December 31 were:

	Millions of Dollars			
	Pension Benefits			
	2017		2016	
	U.S.	Int'l.	U.S.	Int'l.
Projected benefit obligations	\$ 172	389	2,881	355
Accumulated benefit obligations	143	368	2,601	334
Fair value of plan assets	—	196	2,274	166

Components of net periodic benefit cost for all defined benefit plans are presented in the table below:

	Millions of Dollars								
	Pension Benefits						Other Benefits		
	2017		2016		2015		2017	2016	2015
	U.S.	Int'l.	U.S.	Int'l.	U.S.	Int'l.			
Components of Net Periodic Benefit Cost									
Service cost	\$ 132	32	127	32	124	38	6	7	7
Interest cost	108	27	116	28	109	28	8	8	7
Expected return on plan assets	(146)	(40)	(128)	(38)	(138)	(37)	—	—	—
Amortization of prior service cost (credit)	3	(1)	3	(1)	3	(1)	(2)	(1)	(2)
Recognized net actuarial loss (gain)	70	23	72	14	75	15	—	—	(1)
Settlements	83	—	8	—	80	—	—	—	—
Total net periodic benefit cost	\$ 250	41	198	35	253	43	12	14	11

In determining net periodic benefit cost, we amortize prior service costs on a straight-line basis over the average remaining service period of employees expected to receive benefits under the plan. For net actuarial gains and losses, we amortize 10 percent of the unamortized balance each year. The amount subject to amortization is determined on a plan-by-plan basis. Amounts included in accumulated other comprehensive income (loss) at December 31, 2017, that are expected to be amortized into net periodic benefit cost during 2018 are provided below:

	Millions of Dollars		
	Pension Benefits		Other Benefits
	U.S.	Int'l.	
Unrecognized net actuarial loss	\$ 59	19	—
Unrecognized prior service credit	—	(1)	(1)

The following weighted-average assumptions were used to determine benefit obligations and net periodic benefit costs for years ended December 31:

	Pension Benefits				Other Benefits	
	2017		2016		2017	2016
	U.S.	Int'l.	U.S.	Int'l.		
Assumptions Used to Determine Benefit Obligations:						
Discount rate	3.60%	2.36	3.95	2.42	3.35	3.65
Rate of compensation increase	4.00	3.74	4.00	3.78	—	—
Assumptions Used to Determine Net Periodic Benefit Cost:						
Discount rate	3.95%	2.46	4.35	3.35	3.65	4.00
Expected return on plan assets	6.75	4.74	6.75	5.31	—	—
Rate of compensation increase	4.00	3.78	4.00	3.65	—	—

For both U.S. and international pension plans, the overall expected long-term rate of return is developed from the expected future return of each asset class, weighted by the expected allocation of pension assets to that asset class. We rely on a variety of independent market forecasts in developing the expected rate of return for each class of assets.

Our other postretirement benefit plans for health insurance are contributory. Effective December 31, 2012, we terminated the subsidy for retiree medical plans. Since January 1, 2013, eligible employees have been able to utilize notional amounts credited to an account during their period of service with the company to pay all, or a portion, of their cost to participate in postretirement health insurance through the company. In general, employees hired after December 31, 2012, will not receive credits to an account, but will have unsubsidized access to health insurance through the plan. The cost of health insurance will be adjusted annually by the company's actuary to reflect actual experience and expected health care cost trends. The measurement of the accumulated benefit obligation assumes a health care cost trend rate of 6.25 percent in 2018 that declines to 5.00 percent by 2023. A one percentage-point change in the assumed health care cost trend rate would be immaterial to Phillips 66.

Plan Assets

The investment strategy for managing pension plan assets is to seek a reasonable rate of return relative to an appropriate level of risk and provide adequate liquidity for benefit payments and portfolio management. We follow a policy of diversifying pension plan assets across asset classes, investment managers, and individual holdings. As a result, our plan assets have no significant concentrations of credit risk. Asset classes that are considered appropriate include equities, fixed income, cash, real estate and insurance contracts. Plan fiduciaries may consider and add other asset classes to the investment program from time to time. The target allocations for plan assets are approximately 57 percent equity securities, 41 percent debt securities and 2 percent in all other types of investments. Generally, the investments in the plans are publicly traded, therefore minimizing the liquidity risk in the portfolio.

The following is a description of the valuation methodologies used for the pension plan assets.

- Fair values of equity securities and government debt securities are based on quoted market prices.
- Fair values of mutual funds are valued based on quoted market prices, which represent the net asset value of shares held.
- Cash and cash equivalents are valued at cost, which approximates fair value.
- Fair values of insurance contracts are valued at the present value of the future benefit payments owed by the insurance company to the plans' participants.

- Fair values of real estate investments are valued using real estate valuation techniques and other methods that include reference to third-party sources and sales comparables where available.
- Fair values of investments in common/collective trusts are valued at net asset value (NAV) as determined by the issuer of each fund. Certain investments that are measured at fair value using the NAV value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy.

The fair values of our pension plan assets at December 31, by asset class, were:

	Millions of Dollars							
	U.S.				International			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
2017								
Equity securities	\$ 589	—	—	589	—	—	—	—
Government debt securities	632	—	—	632	—	—	—	—
Mutual funds	129	—	—	129	—	—	—	—
Cash and cash equivalents	90	—	—	90	6	—	—	6
Insurance contracts	—	—	—	—	—	—	14	14
Real estate	—	—	—	—	—	—	8	8
Total assets in the fair value hierarchy	1,440	—	—	1,440	6	—	22	28
Common/collective trusts measured at NAV				1,311				944
Total	\$ 1,440	—	—	2,751	6	—	22	972

	Millions of Dollars							
	U.S.				International			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
2016								
Equity securities	\$ 533	—	—	533	—	—	—	—
Mutual funds	47	—	—	47	—	—	—	—
Cash and cash equivalents	21	—	—	21	5	—	—	5
Insurance contracts	—	—	—	—	—	—	13	13
Real estate	—	—	—	—	—	—	6	6
Total assets in the fair value hierarchy	601	—	—	601	5	—	19	24
Common/collective trusts measured at NAV				1,673				772
Total	\$ 601	—	—	2,274	5	—	19	796

As reflected in the table above, Level 3 activity was not material.

Our funding policy for U.S. plans is to contribute at least the minimum required by the Employee Retirement Income Security Act of 1974 and the Internal Revenue Code of 1986, as amended. Contributions to international plans are subject to local laws and tax regulations. Actual contribution amounts are dependent upon plan asset returns, changes in pension obligations, regulatory environments, and other economic factors. In 2018, we expect to contribute approximately \$60 million to our U.S. pension plans and other postretirement benefit plans and \$35 million to our international pension plans.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid by us in the years indicated:

	Millions of Dollars		
	Pension Benefits		Other Benefits
	U.S.	Int'l.	
2018	\$ 329	22	27
2019	302	22	28
2020	294	24	27
2021	290	26	26
2022	292	27	24
2023-2026	1,298	162	101

Defined Contribution Plans

Most U.S. employees are eligible to participate in the Phillips 66 Savings Plan (Savings Plan). Employees can contribute up to 75 percent of their eligible pay, subject to certain statutory limits, in the thrift feature of the Savings Plan to a choice of investment funds. Phillips 66 provides a company match of participant thrift contributions up to 5 percent of eligible pay. In addition, participants who contribute at least 1 percent to the Savings Plan are eligible for "Success Share," a semi-annual discretionary company contribution to the Savings Plan that can range from 0 to 6 percent of eligible pay, with a target of 2 percent. The total expense related to participants in the Savings Plan was \$101 million, \$99 million and \$134 million in 2017, 2016 and 2015, respectively.

Note 20—Share-Based Compensation Plans

In accordance with the Employee Matters Agreement related to the Separation, compensation awards based on ConocoPhillips stock and granted before April 30, 2012 (the Separation Date) were converted to compensation awards based on both ConocoPhillips and Phillips 66 stock if, on the Separation Date, the awards were: (1) options outstanding and exercisable; or (2) restricted stock or restricted stock units (RSUs) awarded for completed performance periods under the ConocoPhillips Performance Share Program. Phillips 66 restricted stock, RSUs and options issued in this conversion became subject to the "Omnibus Stock and Performance Incentive Plan of Phillips 66" (the 2012 Plan) on the Separation Date, whether held by grantees working for Phillips 66 or grantees that remained employees of ConocoPhillips. Some of these awards based on Phillips 66 stock and held by employees of ConocoPhillips are outstanding and appear in the activity tables for the Stock Option and the Performance Share Programs presented later in this footnote.

In May 2013, shareholders approved the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66 (the P66 Omnibus Plan). Subsequent to this approval, all new share-based awards are granted under the P66 Omnibus Plan, which authorizes the Human Resources and Compensation Committee (HRCC) of our Board of Directors to grant stock options, stock appreciation rights, stock awards (including restricted stock and RSU awards), cash awards, and performance awards to our employees, non-employee directors and other plan participants. The number of new shares that may be issued under the P66 Omnibus Plan to settle share-based awards may not exceed 45 million.

Total share-based compensation expense recognized in income and the associated income tax benefit for the years ended December 31 were:

	Millions of Dollars		
	2017	2016	2015
Share-based compensation expense	\$ 142	156	144
Income tax benefit	(74)	(59)	(54)

Stock Options

Stock options granted under the provisions of the P66 Omnibus Plan and earlier plans permit purchases of our common stock at exercise prices equivalent to the average of the high and low market price of our stock on the date the options were granted. The options have terms of 10 years and vest ratably, with one-third of the options becoming exercisable on each anniversary date for the three years following the date of grant. Options awarded to employees eligible for retirement are not subject to forfeiture six months after the grant date.

The following table summarizes our stock option activity from January 1, 2017, to December 31, 2017:

	Options	Weighted-Average Exercise Price	Weighted-Average Grant-Date Fair Value	Millions of Dollars
				Aggregate Intrinsic Value
Outstanding at January 1, 2017	5,103,130	\$ 49.48		
Granted	864,100	78.48	\$ 16.95	
Forfeited	(32,500)	78.48		
Exercised	(1,095,875)	32.38		\$ 62
Outstanding at December 31, 2017	4,838,855	\$ 58.34		
Vested at December 31, 2017	4,191,679	\$ 55.25		\$ 195
Exercisable at December 31, 2017	3,258,015	\$ 48.79		\$ 172

The weighted-average remaining contractual terms of vested options and exercisable options at December 31, 2017, were 5.48 years and 4.62 years, respectively. During 2017, we received \$35 million in cash and realized an income tax benefit of \$9 million from the exercise of options. At December 31, 2017, the remaining unrecognized compensation expense from unvested options was \$6 million, which will be recognized over a weighted-average period of 20 months, the longest period being 27 months. The calculations of realized income tax benefits and weighted-average periods include awards based on both Phillips 66 and ConocoPhillips stock held by Phillips 66 employees.

During 2016 and 2015, we granted options with a weighted-average grant-date fair value of \$16.94 and \$18.84, respectively. During 2016 and 2015, employees exercised options with an aggregate intrinsic value of \$58 million and \$60 million, respectively.

The following table provides the significant assumptions used to calculate the grant date fair values of options granted over the years shown below, as calculated using the Black-Scholes-Merton option-pricing model:

	2017	2016	2015
Risk-free interest rate	2.28%	1.71	1.60
Dividend yield	2.90%	3.00	3.00
Volatility factor	26.91%	28.68	34.17
Expected life (years)	7.22	7.08	6.66

After the Separation and through 2015, we calculated the volatility of options granted using a formula that adjusts the pre-Separation historical volatility of ConocoPhillips by the ratio of Phillips 66 implied market volatility on the grant date divided by the pre-Separation implied market volatility of ConocoPhillips. In 2016, we began calculating the volatility using historical Phillips 66 end-of-week closing stock prices from the Separation date.

We use the average period of time elapsed between grant dates and exercise dates of past grants to estimate the expected life of new option grants.

Restricted Stock Units

Generally, RSUs are granted annually under the provisions of the P66 Omnibus Plan and cliff vest at the end of three years. The grant date fair value is equal to the average of the high and low market price of our stock on the grant date. The recipients receive a quarterly cash payment of a dividend equivalent until the RSU is settled by issuing one share of our common stock for each RSU at the end of the service period. RSUs granted to retirement eligible employees are not subject to forfeiture six months after the grant date. Special RSUs are granted to attract or retain key personnel and the terms and conditions may vary by award.

The following table summarizes our RSU activity from January 1, 2017, to December 31, 2017:

	Stock Units	Weighted-Average Grant-Date Fair Value	Millions of Dollars	
			Total Fair Value	
Outstanding at January 1, 2017	2,643,139	\$ 71.28		
Granted	975,164	78.49		
Forfeited	(58,171)	77.18		
Issued	(1,063,707)	63.67	\$	85
Outstanding at December 31, 2017	2,496,425	\$ 77.20		
Not Vested at December 31, 2017	1,615,668	\$ 77.32		

At December 31, 2017, the remaining unrecognized compensation cost from the unvested RSU awards was \$50 million, which will be recognized over a weighted-average period of 20 months, the longest period being 37 months.

During 2016 and 2015, we granted RSUs with a weighted-average grant-date fair value of \$78.56 and \$74.09, respectively. During 2016 and 2015, we issued shares with an aggregate fair value of \$109 million and \$107 million, respectively, to settle RSUs.

Performance Share Units

Under the P66 Omnibus Plan, we annually grant to senior management restricted performance share units (PSUs) with three-year performance periods that vest: (1) with respect to awards for performance periods beginning before 2009, when the employee becomes eligible for retirement; or (2) with respect to awards for performance periods beginning in 2009, the shorter of: (a) the participant's retirement eligibility date; or (b) five years after the grant date of the award; or (3) with respect to awards for performance periods beginning in 2013 or later, at the end of the performance period on the grant date.

For PSU awards with performance periods beginning before 2013, we recognize compensation expense beginning on the date authorized and ending on the vest date. Since PSU awards with performance periods beginning in 2013 or later vest on the grant date, we recognize compensation expense beginning on the date of authorization and ending on the grant date for all employees.

We settle each PSU with performance periods beginning before 2013 by issuing one share of our common stock and recipients receive a quarterly cash payment of a dividend equivalent beginning on the grant date and ending on the settlement date.

PSUs with performance periods beginning in 2013 or later are settled by paying cash equal to the fair value of the awards, which is based on the average of the high and low market prices of our stock near the end of the performance periods. The HRCC must approve the three-year performance results prior to payout. Dividend equivalents are not paid on these awards.

The following table summarizes our PSU activity from January 1, 2017, to December 31, 2017:

	Performance Share Units	Weighted-Average Grant-Date Fair Value	Millions of Dollars	
			Total Fair Value	
Outstanding at January 1, 2017	3,239,497	\$ 50.12		
Granted	642,212	86.88		
Issued	(681,219)	42.85	\$	54
Cash settled	(642,212)	86.88		56
Outstanding at December 31, 2017	2,558,278	\$ 52.06		
Not Vested at December 31, 2017	286,031	\$ 66.65		

At December 31, 2017, the remaining unrecognized compensation cost from unvested PSU awards held by employees of Phillips 66 was \$4 million, which will be recognized over a weighted-average period of 23 months, with the longest period being 9 years. The calculations of unamortized expense and weighted-average periods include awards based on both Phillips 66 and ConocoPhillips stock held by Phillips 66 employees.

During 2016 and 2015, we granted PSUs with a weighted-average grant-date fair value of \$78.62 and \$74.14, respectively. During 2016 and 2015, we issued shares with an aggregate fair value of \$26 million and \$37 million, respectively, to settle PSUs. We cash settled PSUs with an aggregate fair value of \$60 million in 2016. No PSUs were cash settled in 2015.

Note 21—Income Taxes

On December 22, 2017, the U.S. government enacted comprehensive income tax legislation, referred to as the Tax Cuts and Jobs Act (the Tax Act). The material provisions of the Tax Act i) reduced the U.S. federal corporate income tax rate from 35 percent to 21 percent beginning January 1, 2018, ii) required companies to reflect on their 2017 corporate income tax return a liability for a one-time deemed repatriation tax on foreign-sourced earnings that were previously tax deferred, and iii) created a new tax regime for post-2017 foreign-sourced earnings.

To account for the reduction in the U.S. federal corporate income tax rate, we remeasured our deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future, generally 21 percent, which resulted in a provisional deferred tax benefit of \$2,870 million. To account for the one-time deemed repatriation income tax, we calculated our provisional liability in accordance with the Tax Act and considered previously accrued current and deferred tax liabilities on undistributed earnings of our foreign subsidiaries and foreign joint ventures. The effects of the one-time deemed repatriation tax resulted in a provisional income tax expense of \$149 million.

The provisions in the Tax Act are broad and complex. We have not yet completed our accounting for the income tax effects of the Tax Act as of December 31, 2017, but have made reasonable estimates of those effects on our existing deferred income tax balances and the one-time deemed repatriation tax. The final financial statement impact of the Tax Act may differ from the above estimates, possibly materially, due to, among other things, changes in interpretations of the Tax Act, any legislative action to address questions that arise because of the Tax Act, and changes in accounting standards for income taxes or related interpretations in response to the Tax Act, or any updates or changes to estimates the company has utilized to calculate the provisional impacts. The Securities and Exchange Commission (SEC) has issued rules that would allow for a measurement period of up to one year after the enactment date of the Tax Act to finalize the recording of the related income tax impacts.

Components of income tax expense (benefit) were:

	Millions of Dollars		
	2017	2016	2015
Income Tax Expense (Benefit)			
Federal			
Current	\$ 9	(105)	1,128
Deferred	(1,960)	645	444
Foreign			
Current	126	66	(74)
Deferred	3	(84)	42
State and local			
Current	61	(24)	227
Deferred	68	49	(3)
	\$ (1,693)	547	1,764

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for tax purposes. Major components of deferred tax liabilities and assets at December 31 were:

	Millions of Dollars	
	2017	2016
Deferred Tax Liabilities		
Properties, plants and equipment, and intangibles	\$ 2,942	4,525
Investment in joint ventures	1,923	2,442
Investment in subsidiaries	594	803
Inventory	—	154
Other	18	19
Total deferred tax liabilities	5,477	7,943
Deferred Tax Assets		
Benefit plan accruals	314	669
Inventory	10	—
Asset retirement obligations and accrued environmental costs	121	211
Other financial accruals and deferrals	44	188
Loss and credit carryforwards	96	261
Other	3	1
Total deferred tax assets	588	1,330
Less: valuation allowance	28	38
Net deferred tax assets	560	1,292
Net deferred tax liabilities	\$ 4,917	6,651

The loss and credit carryforwards deferred tax assets are primarily related to a German interest deduction carryforward of \$77 million, a U.S. alternative minimum tax credit of \$10 million and a capital loss and net operating loss carryforward in the United Kingdom of \$7 million. All losses may be carried forward indefinitely and the alternative minimum credit of \$10 million, if not utilized sooner, will become refundable with the filing of the 2021 U.S. federal income tax return.

Valuation allowances have been established to reduce deferred tax assets to an amount that will, more likely than not, be realized. During 2017, valuation allowances decreased by a total of \$10 million. Based on our historical taxable income, expectations for the future and available tax planning strategies, management expects the remaining net deferred tax assets will be realized as offsets to reversing deferred tax liabilities and the tax consequences of future taxable income.

At December 31, 2017, all undistributed earnings of our foreign subsidiaries and foreign joint ventures have been included in our provisional computation of the one-time deemed repatriation tax associated with the enactment of the Tax Act. After considering the effects of the Tax Act described above, we have not provided a deferred tax liability related to any remaining difference in the book and tax investment in our foreign subsidiaries or foreign joint ventures because such differences are essentially permanent in duration. Based on our preliminary analysis, which is not yet complete, the temporary difference and associated unrecorded deferred tax liability are not material.

As a result of the Separation and pursuant to the Tax Sharing Agreement with ConocoPhillips, the unrecognized income tax benefits related to our operations for which ConocoPhillips was the taxpayer remain the responsibility of ConocoPhillips, and we have indemnified ConocoPhillips for such amounts. Following is a reconciliation of the changes in our unrecognized income tax benefits balance:

	Millions of Dollars		
	2017	2016	2015
Balance at January 1	\$ 70	82	142
Additions for tax positions of prior years	1	5	6
Reductions for tax positions of prior years	(5)	(17)	(17)
Settlements	(32)	—	(49)
Balance at December 31	\$ 34	70	82

Included in the balance of unrecognized income tax benefits for 2017, 2016 and 2015 were \$5 million, \$13 million and \$34 million, respectively, which, if recognized, would affect our effective income tax rate. With respect to various unrecognized income tax benefits and the related accrued liability, approximately \$2 million may be recognized or paid within the next twelve months due to completion of audits.

At December 31, 2017, 2016 and 2015, accrued liabilities for interest and penalties, net of accrued income taxes, totaled \$8 million, \$12 million and \$19 million, respectively. As a result of reversing certain of these accruals, earnings increased by \$1 million, \$7 million and \$3 million in 2017, 2016 and 2015, respectively.

We file tax returns in the U.S. federal jurisdiction and in many foreign and state jurisdictions. Audits in significant jurisdictions are generally complete as follows: United Kingdom (2014), Germany (2011) and United States (2010). Certain issues remain in dispute for audited years, and unrecognized income tax benefits for years still subject to or currently undergoing an audit are subject to change. As a consequence, the balance in unrecognized income tax benefits can be expected to fluctuate from period to period. Although it is reasonably possible such changes could be significant when compared with our total unrecognized income tax benefits, the amount of change is not estimable.

The amounts of U.S. and foreign income before income taxes, with a reconciliation of income tax at the federal statutory rate to the recorded income tax expense (benefit), were:

	Millions of Dollars			Percentage of Income Before Income Taxes		
	2017	2016	2015	2017	2016	2015
Income before income taxes						
United States	\$ 2,799	1,713	4,983	78.7 %	78.2	82.4
Foreign	756	478	1,061	21.3	21.8	17.6
	\$ 3,555	2,191	6,044	100.0 %	100.0	100.0
Federal statutory income tax	\$ 1,244	767	2,115	35.0 %	35.0	35.0
State income tax, net of federal benefit	79	12	150	2.2	0.6	2.5
Tax Cuts and Jobs Act	(2,721)	—	—	(76.5)	—	—
Foreign rate differential	(210)	(152)	(239)	(5.9)	(6.9)	(3.9)
Noncontrolling interests	(46)	(26)	(13)	(1.3)	(1.2)	(0.2)
Federal manufacturing deduction	(18)	—	(77)	(0.5)	—	(1.3)
Change in valuation allowance	(4)	(81)	(17)	(0.1)	(3.7)	(0.2)
Goodwill allocated to assets sold	—	—	41	—	—	0.7
German tax legislation	—	—	(103)	—	—	(1.7)
Sale of foreign subsidiaries	—	—	(125)	—	—	(2.1)
Other	(17)	27	32	(0.5)	1.2	0.4
	\$ (1,693)	547	1,764	(47.6)%	25.0	29.2

Included in the line item “Sale of foreign subsidiaries” is a \$72 million income tax benefit realized in 2015 attributable to the nontaxable gain from the sale of ICHP.

Income tax expense of \$81 million and \$150 million in 2017 and 2016, respectively, and an income tax benefit of \$34 million in 2015 are reflected in the “Capital in Excess of Par” column on our consolidated statement of changes in equity.

Note 22—Accumulated Other Comprehensive Income (Loss)

Changes in the balances of each component of accumulated other comprehensive income (loss) were as follows:

	Millions of Dollars			
	Defined Benefit Plans	Foreign Currency Translation	Hedging	Accumulated Other Comprehensive Loss
December 31, 2014	\$ (696)	167	(2)	(531)
Other comprehensive loss before reclassification	(78)	(156)	—	(234)
Amounts reclassified from accumulated other comprehensive loss*				
Amortization of defined benefit plan items**				
Actuarial losses and settlements	112	—	—	112
Net current period other comprehensive income (loss)	34	(156)	—	(122)
December 31, 2015	(662)	11	(2)	(653)
Other comprehensive income (loss) before reclassifications	(112)	(296)	5	(403)
Amounts reclassified from accumulated other comprehensive loss*				
Amortization of defined benefit plan items**				
Actuarial losses and settlements	61	—	—	61
Net current period other comprehensive income (loss)	(51)	(296)	5	(342)
December 31, 2016	(713)	(285)	3	(995)
Other comprehensive income before reclassifications	3	259	4	266
Amounts reclassified from accumulated other comprehensive loss*				
Amortization of defined benefit plan items**				
Actuarial losses and settlements	112	—	—	112
Net current period other comprehensive income	115	259	4	378
December 31, 2017	\$ (598)	(26)	7	(617)

* There were no significant reclassifications related to foreign currency translation or hedging.

** Included in the computation of net periodic benefit cost. See Note 19—Pension and Postretirement Plans, for additional information.

Note 23—Cash Flow Information

Supplemental Cash Flow Information

	Millions of Dollars		
	2017	2016	2015
Cash Payments (Receipts)			
Interest	\$ 421	311	275
Income taxes*	(257)	(375)	1,560

* 2017 and 2016 reflected a net cash refund position; cash payments for income taxes were \$102 million and \$385 million in 2017 and 2016, respectively.

Restricted Cash

At December 31, 2017 and 2016, the company did not have any restricted cash. The restrictions on the cash acquired in February 2017, as a result of the consolidation of MSLP, were fully removed in May 2017 when MSLP's outstanding debt that contained lender restrictions on the use of cash was paid in full. See Note 5—Business Combinations and Note 12—Debt for additional information regarding MSLP.

Note 24—Other Financial Information

	Millions of Dollars		
	2017	2016	2015
Interest and Debt Expense			
Incurred			
Debt	\$ 432	402	389
Other	21	17	27
	453	419	416
Capitalized			
Expensed	\$ (15)	(81)	(106)
	\$ 438	338	310
Other Income			
Interest income	\$ 31	18	27
Gain on consolidation of business*	423	—	—
Other, net**	67	56	91
	\$ 521	74	118
<i>* See Note 5—Business Combinations regarding the gain recognized in 2017.</i>			
<i>** Includes derivatives-related activities.</i>			
Research and Development Expenditures—expensed	\$ 60	60	65
Advertising Expenses	\$ 76	80	73
Foreign Currency Transaction (Gains) Losses—after-tax			
Midstream	\$ —	—	—
Chemicals	—	—	—
Refining	(1)	(10)	34
Marketing and Specialties	1	1	4
Corporate and Other	—	(2)	—
	\$ —	(11)	38

Note 25—Related Party Transactions

Significant transactions with related parties were:

	Millions of Dollars		
	2017	2016	2015
Operating revenues and other income (a)	\$ 2,596	2,174	2,452
Purchases (b)	10,468	8,109	8,142
Operating expenses and selling, general and administrative expenses (c)	79	125	129

As discussed more fully in Note 5—Business Combinations, in February 2017, we began accounting for MSLP as a consolidated subsidiary. Accordingly, the table above only includes processing fees paid to MSLP through the consolidation date.

- We sold NGL and other petrochemical feedstocks, along with solvents, to CPChem, and we sold gas oil and hydrogen feedstocks to Excel Paralubes (Excel). We sold refined products to our OnCue Holdings, LLC joint venture. We sold certain feedstocks and intermediate products to WRB and also acted as agent for WRB in supplying crude oil and other feedstocks for a fee. In addition, we charged several of our affiliates, including CPChem, for the use of common facilities, such as steam generators, waste and water treaters, and warehouse facilities.
- We purchased crude oil and refined products from WRB and also acted as agent for WRB in distributing solvents. We purchased natural gas and NGL from DCP Midstream and CPChem, as well as other feedstocks from various affiliates, for use in our refinery and fractionation processes. We paid NGL fractionation fees to CPChem. We also paid fees to various pipeline equity companies for transporting crude oil, refined products and NGL. We purchased base oils and fuel products from Excel for use in our refining and specialty businesses.
- We paid utility and processing fees to various affiliates.

Note 26—Segment Disclosures and Related Information

Our operating segments are:

- Midstream**—Provides crude oil and refined products transportation, terminaling and processing services, as well as natural gas, NGL and liquefied petroleum gas (LPG) transportation, storage, processing and marketing services, mainly in the United States. The Midstream segment includes our master limited partnership, Phillips 66 Partners, as well as our 50 percent equity investment in DCP Midstream.
- Chemicals**—Consists of our 50 percent equity investment in CPChem, which manufactures and markets petrochemicals and plastics on a worldwide basis.
- Refining**—Refines crude oil and other feedstocks into petroleum products (such as gasoline, distillates and aviation fuels) at 13 refineries in the United States and Europe.
- Marketing and Specialties**—Purchases for resale and markets refined petroleum products, mainly in the United States and Europe. In addition, this segment includes the manufacturing and marketing of specialty products, as well as power generation operations.

Corporate and Other includes general corporate overhead, interest expense, our investments in new technologies and various other corporate activities. Corporate assets include all cash and cash equivalents. In addition, Corporate and Other includes the provisional income tax benefit from the enactment of the Tax Act on December 22, 2017. See Note 21—Income Taxes for further discussion.

During the fourth quarter of 2017, the segment performance measure used by our chief executive officer to assess performance and allocate resources was changed from “net income attributable to Phillips 66” to “net income.” This change reflects the recognition that management does not differentiate between those earnings attributable to Phillips 66 and those attributable to noncontrolling interests when making operating and resource allocation decisions impacting segment performance. Prior period segment information has been recast to conform to the current presentation. Intersegment sales are at prices that we believe approximate market.

Analysis of Results by Operating Segment

	Millions of Dollars		
	2017	2016	2015
Sales and Other Operating Revenues			
Midstream			
Total sales	\$ 6,620	4,226	3,676
Intersegment eliminations	(1,842)	(1,299)	(1,034)
Total Midstream	4,778	2,927	2,642
Chemicals	5	5	5
Refining			
Total sales	65,494	52,068	63,470
Intersegment eliminations	(40,284)	(34,120)	(40,317)
Total Refining	25,210	17,948	23,153
Marketing and Specialties			
Total sales	73,565	64,476	74,591
Intersegment eliminations	(1,233)	(1,109)	(1,446)
Total Marketing and Specialties	72,332	63,367	73,145
Corporate and Other	29	32	30
Consolidated sales and other operating revenues	\$ 102,354	84,279	98,975

Depreciation, Amortization and Impairments

Midstream	\$ 299	218	128
Chemicals	—	—	—
Refining	838	770	741
Marketing and Specialties	116	107	100
Corporate and Other	89	78	116
Consolidated depreciation, amortization and impairments	\$ 1,342	1,173	1,085

	Millions of Dollars		
	2017	2016	2015
Equity in Earnings of Affiliates			
Midstream	\$ 454	184	(268)
Chemicals	713	834	1,316
Refining	322	164	325
Marketing and Specialties	243	232	207
Corporate and Other	—	—	(7)
Consolidated equity in earnings of affiliates	\$ 1,732	1,414	1,573

Income Tax Expense (Benefit)

Midstream	\$ 174	123	73
Chemicals	191	256	353
Refining	672	61	1,104
Marketing and Specialties	334	370	466
Corporate and Other	(3,064)	(263)	(232)
Consolidated income tax expense (benefit)	\$ (1,693)	547	1,764

Net Income (Loss)

Midstream	\$ 464	280	74
Chemicals	525	583	962
Refining	1,404	374	2,555
Marketing and Specialties	686	891	1,187
Corporate and Other	2,169	(484)	(498)
Consolidated net income	\$ 5,248	1,644	4,280

	Millions of Dollars		
	2017	2016	2015
Investments In and Advances To Affiliates			
Midstream	\$ 4,734	4,769	4,198
Chemicals	6,222	5,773	5,177
Refining	2,398	2,420	2,262
Marketing and Specialties	390	391	342
Corporate and Other	—	1	1
Consolidated investments in and advances to affiliates	\$ 13,744	13,354	11,980
Total Assets			
Midstream	\$ 13,231	12,832	11,043
Chemicals	6,226	5,802	5,237
Refining	23,820	22,825	21,993
Marketing and Specialties	7,103	6,227	5,631
Corporate and Other	3,991	3,967	4,676
Consolidated total assets	\$ 54,371	51,653	48,580
Capital Expenditures and Investments			
Midstream	\$ 771	1,453	4,457
Chemicals	—	—	—
Refining	853	1,149	1,069
Marketing and Specialties	108	98	122
Corporate and Other	100	144	116
Consolidated capital expenditures and investments	\$ 1,832	2,844	5,764
Interest Income and Expense			
Interest income			
Midstream	\$ 1	2	—
Marketing and Specialties	—	—	2
Corporate and Other	30	16	25
Consolidated interest income	\$ 31	18	27
Interest and debt expense			
Corporate and Other	\$ 438	338	310
Sales and Other Operating Revenues by Product Line			
Refined products	\$ 85,405	73,385	86,249
Crude oil resales	11,808	7,594	8,993
NGL	4,670	3,107	2,998
Other	471	193	735
Consolidated sales and other operating revenues by product line	\$ 102,354	84,279	98,975

Geographic Information

	Millions of Dollars					
	Sales and Other Operating Revenues*			Long-Lived Assets**		
	2017	2016	2015	2017	2016	2015
United States	\$ 75,684	59,742	69,578	33,264	32,442	29,624
United Kingdom	10,626	9,895	12,120	1,254	1,177	1,459
Germany	6,692	6,128	6,584	591	503	502
Other foreign countries	9,352	8,514	10,693	95	87	116
Worldwide consolidated	\$ 102,354	84,279	98,975	35,204	34,209	31,701

* Sales and other operating revenues are attributable to countries based on the location of the operations generating the revenues.

** Defined as net properties, plants and equipment plus investments in and advances to affiliated companies.

Note 27—Phillips 66 Partners LP

Phillips 66 Partners is a publicly traded master limited partnership formed to own, operate, develop and acquire primarily fee-based crude oil, refined petroleum product and NGL pipelines and terminals, as well as other midstream assets. Headquartered in Houston, Texas, Phillips 66 Partners' assets currently consist of crude oil, refined petroleum products and NGL transportation, terminaling and storage systems, as well as crude oil and NGL processing facilities.

We consolidate Phillips 66 Partners as a variable interest entity for financial reporting purposes. See Note 3—Variable Interest Entities for additional information on why we consolidate the partnership. As a result of this consolidation, the public common and perpetual convertible preferred unitholders' ownership interests in Phillips 66 Partners are reflected as noncontrolling interests of \$2,314 million and \$1,306 million on our consolidated balance sheet as of December 31, 2017, and 2016, respectively. Generally, drop down transactions to Phillips 66 Partners will eliminate in consolidation, except for third-party debt and third-party equity offerings made by Phillips 66 Partners to finance such transactions.

At December 31, 2017, we owned a 55 percent limited partner interest and a 2 percent general partner interest in Phillips 66 Partners, while the public owned a 43 percent limited partner interest and 13.8 million perpetual convertible preferred units.

2017 Activities

In October 2017, we contributed to Phillips 66 Partners our 25 percent interests in both Dakota Access and ETCO and our 100 percent interest in MSLP. Total consideration for the transaction was \$1.65 billion, which consisted of \$372 million in cash at closing, the assumption of \$588 million of promissory notes payable to us, the assumption of a \$450 million term loan payable to a third party, and the issuance to us of common and general partner units with a fair value of \$240 million. Shortly after closing, Phillips 66 Partners repaid the \$588 million of promissory notes payable to us, resulting in total cash received by us for the transaction of \$960 million.

Phillips 66 Partners financed the consideration paid with the proceeds from the following third-party equity and debt offerings:

- Net proceeds of \$737 million from a private placement of 13,819,791 perpetual convertible preferred units, at a price of \$54.27 per unit. Holders of the preferred units are entitled to receive cumulative quarterly distributions equal to \$0.678375 per unit. Beginning in October 2020, holders are entitled to receive quarterly distributions equal to the greater of \$0.678375 per unit or the per-unit distribution paid to common unitholders.
- Net proceeds of \$295 million from a private placement of 6,304,204 common units, at a price of \$47.59 per unit.
- A portion of the \$643 million of net proceeds from a public offering of \$650 million of Senior Notes. See Note 12—Debt for additional information on the Senior Notes.

In June 2016, Phillips 66 Partners began issuing common units under a continuous offering program, which allows for the issuance of up to an aggregate of \$250 million of Phillips 66 Partners' common units, in amounts, at prices and on terms to be determined by market conditions and other factors at the time of the offerings (such continuous offering program, or at-the-market program, is referred to as the ATM program). For year ended December 31, 2017, on a settlement-date basis, Phillips 66 Partners issued 3,372,716 common units under the ATM program, which generated net proceeds of \$173 million. From inception through December 31, 2017, Phillips 66 Partners has issued an aggregate of 3,718,868 common units under the ATM program, which generated net proceeds of \$192 million.

Phillips 66 Partners filed a new shelf registration statement for Phillips 66 Partners' second continuous offering program that became effective with the SEC on January 23, 2018, which allows for the issuance of up to an aggregate of \$250 million of Phillips 66 Partners' common units, in amounts, at prices and on terms to be determined by market conditions and other factors at the time of the offerings.

Note 28—New Accounting Standards

In February 2017, the FASB issued ASU No. 2017-05, "Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20)." This ASU clarifies the scope and accounting for the sale or transfer of nonfinancial assets and in substance nonfinancial assets to noncustomers, including partial sales. This ASU will eliminate the use of carryover basis for most nonmonetary exchanges, including contributions of assets to equity method joint ventures. These amendments could result in the entity recognizing a gain or loss on the sale or transfer of nonfinancial assets. Public entities should apply the guidance in ASU No. 2017-05 to annual periods beginning after December 15, 2017, including interim periods within those periods. There was no impact on our financial statements from adopting this ASU on January 1, 2018.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business," which clarifies the definition of a business with the objective of adding guidance to assist in evaluating whether transactions should be accounted for as acquisitions of assets or businesses. The amendment provides a screen for determining when a transaction involves an acquisition of a business. If substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset, or a group of similar identifiable assets, then the transaction is not considered an acquisition of a business. If the screen is not met, then the amendment requires that to be considered a business, the operation must include at a minimum an input and a substantive process that together significantly contribute to the ability to create an output. The guidance may reduce the number of transactions accounted for as business acquisitions. Public business entities should apply the guidance in ASU No. 2017-01 to annual periods beginning after December 15, 2017, including interim periods within those periods, with early adoption permitted. The amendments should be applied prospectively and no disclosures are required at the effective date. There was no impact on our financial statements from adopting this ASU on January 1, 2018.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." The new standard amends the impairment model to utilize an expected loss methodology in place of the currently used incurred loss methodology, which may result in earlier recognition of losses. Public business entities should apply the guidance in ASU No. 2016-13 for annual periods beginning after December 15, 2019, including interim periods within those annual periods. Early adoption will be permitted for annual periods beginning after December 15, 2018. We are currently evaluating the provisions of ASU No. 2016-13 and assessing the impact on our financial statements.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)." The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will continue to be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. Similarly, lessors will be required to classify leases as sales-type, finance or operating, with classification affecting the pattern of income recognition. Classification for both lessees and lessors will be based on an assessment of whether risks and rewards as well as substantive control have been transferred through a lease contract. Public business entities should apply the guidance in ASU No. 2016-02 for annual periods beginning after December 15, 2018, including interim periods within those annual periods. Early adoption is permitted. Entities are required to adopt the ASU using a modified retrospective approach, subject to certain optional practical expedients, and apply the provisions of ASU No. 2016-02 to leasing arrangements existing at or entered into

after the earliest comparative period presented in the financial statements. We are currently evaluating the provisions of ASU No. 2016-02 and assessing its impact on our financial statements. As part of our assessment to-date, we have formed an implementation team, commenced identification of our lease population and selected a lease software package. We expect the adoption of ASU 2016-02 will materially gross up our consolidated balance sheet with the recognition of the ROU assets and operating lease liabilities. The impact to our consolidated statements of income and cash flows is not expected to be material. The new standard will also require additional disclosures for financing and operating leases.

In January 2016, the FASB issued ASU No. 2016-01, "Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities," to meet its objective of providing more decision-useful information about financial instruments. The majority of this ASU's provisions amend only the presentation or disclosures of financial instruments; however, one provision will also affect net income. Equity investments carried under the cost method or lower of cost or fair value method of accounting, in accordance with current GAAP, will have to be carried at fair value upon adoption of ASU No. 2016-01, with changes in fair value recorded in net income. For equity investments that do not have readily determinable fair values, a company may elect to carry such investments at cost less impairments, if any, adjusted up or down for price changes in similar financial instruments issued by the investee, when and if observed. Public business entities should apply the guidance in ASU No. 2016-01 for annual periods beginning after December 15, 2017, and interim periods within those annual periods, with early adoption prohibited. We are currently evaluating the provisions of ASU No. 2016-01. Our initial review indicates that ASU No. 2016-01 will have a limited impact on our financial statements.

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)." This ASU and other related updates are intended to improve comparability of revenue recognition practices across entities, industries, jurisdictions and capital markets and expand disclosure requirements. In August 2015, the FASB issued ASU No. 2015-14, "Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date." The amendment in this ASU defers the effective date of ASU No. 2014-09 for all entities for one year. Public business entities should apply the guidance in ASU No. 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. Our assessment work primarily included the formation of an implementation work team, training on the new ASU's revenue recognition model, contract review and documentation and the monitoring of industry interpretative issues. We adopted the standard on January 1, 2018, using the modified retrospective application. Our evaluation of the new ASU is near completion, which includes understanding the impact of adoption on earnings from equity method investments. Based upon our analysis to-date, the primary impact of adoption of the new standard is the netting of sales-based taxes collected from our customers against revenue. Sales-based taxes include excise taxes on sales of petroleum products as noted on our consolidated statement of income. We have not identified any other material impact on our financial statements other than disclosures.

Note 29—Condensed Consolidating Financial Information

Phillips 66 has \$6.0 billion of senior notes outstanding, the payment obligations of which are fully and unconditionally guaranteed by Phillips 66 Company, a 100-percent-owned subsidiary. The following condensed consolidating financial information presents the results of operations, financial position and cash flows for:

- Phillips 66 and Phillips 66 Company (in each case, reflecting investments in subsidiaries utilizing the equity method of accounting).
- All other nonguarantor subsidiaries.
- The consolidating adjustments necessary to present Phillips 66's results on a consolidated basis.

This condensed consolidating financial information should be read in conjunction with the accompanying consolidated financial statements and notes.

Statement of Income	Millions of Dollars				
	Year Ended December 31, 2017				
	Phillips 66	Phillips 66 Company	All Other Subsidiaries	Consolidating Adjustments	Total Consolidated
Revenues and Other Income					
Sales and other operating revenues	\$ —	74,640	27,714	—	102,354
Equity in earnings of affiliates	5,336	3,256	559	(7,419)	1,732
Net gain on dispositions	—	1	14	—	15
Other income	3	471	47	—	521
Intercompany revenues	—	1,610	13,457	(15,067)	—
Total Revenues and Other Income	5,339	79,978	41,791	(22,486)	104,622
Costs and Expenses					
Purchased crude oil and products	—	63,812	30,379	(14,782)	79,409
Operating expenses	—	3,672	1,085	(58)	4,699
Selling, general and administrative expenses	7	1,300	399	(11)	1,695
Depreciation and amortization	—	892	426	—	1,318
Impairments	—	20	4	—	24
Taxes other than income taxes	—	5,784	7,678	—	13,462
Accretion on discounted liabilities	—	17	5	—	22
Interest and debt expense	348	70	236	(216)	438
Total Costs and Expenses	355	75,567	40,212	(15,067)	101,067
Income before income taxes	4,984	4,411	1,579	(7,419)	3,555
Income tax benefit	(122)	(925)	(646)	—	(1,693)
Net Income	5,106	5,336	2,225	(7,419)	5,248
Less: net income attributable to noncontrolling interests	—	—	142	—	142
Net Income Attributable to Phillips 66	\$ 5,106	5,336	2,083	(7,419)	5,106
Comprehensive Income	\$ 5,484	5,714	2,498	(8,070)	5,626

Statement of Income	Millions of Dollars				
	Year Ended December 31, 2016				
	Phillips 66	Phillips 66 Company	All Other Subsidiaries	Consolidating Adjustments	Total Consolidated
Revenues and Other Income					
Sales and other operating revenues	\$ —	58,822	25,457	—	84,279
Equity in earnings of affiliates	1,797	1,839	296	(2,518)	1,414
Net gain (loss) on dispositions	—	(9)	19	—	10
Other income	—	42	32	—	74
Intercompany revenues	—	864	9,160	(10,024)	—
Total Revenues and Other Income	1,797	61,558	34,964	(12,542)	85,777
Costs and Expenses					
Purchased crude oil and products	—	48,171	24,102	(9,805)	62,468
Operating expenses	—	3,465	846	(36)	4,275
Selling, general and administrative expenses	6	1,236	406	(10)	1,638
Depreciation and amortization	—	821	347	—	1,168
Impairments	—	1	4	—	5
Taxes other than income taxes	—	5,477	8,211	—	13,688
Accretion on discounted liabilities	—	16	5	—	21
Interest and debt expense	366	21	124	(173)	338
Foreign currency transaction gains	—	—	(15)	—	(15)
Total Costs and Expenses	372	59,208	34,030	(10,024)	83,586
Income before income taxes	1,425	2,350	934	(2,518)	2,191
Income tax expense (benefit)	(130)	553	124	—	547
Net Income	1,555	1,797	810	(2,518)	1,644
Less: net income attributable to noncontrolling interests	—	—	89	—	89
Net Income Attributable to Phillips 66	\$ 1,555	1,797	721	(2,518)	1,555
Comprehensive Income	\$ 1,213	1,455	451	(1,817)	1,302

Millions of Dollars

	Year Ended December 31, 2015				
	Phillips 66	Phillips 66 Company	All Other Subsidiaries	Consolidating Adjustments	Total Consolidated
Statement of Income					
Revenues and Other Income					
Sales and other operating revenues	\$ —	68,478	30,497	—	98,975
Equity in earnings (losses) of affiliates	4,470	2,812	(134)	(5,575)	1,573
Net gain (loss) on dispositions	—	(115)	398	—	283
Other income	—	81	37	—	118
Intercompany revenues	—	1,071	9,845	(10,916)	—
Total Revenues and Other Income	4,470	72,327	40,643	(16,491)	100,949
Costs and Expenses					
Purchased crude oil and products	—	54,925	29,221	(10,747)	73,399
Operating expenses	4	3,412	917	(39)	4,294
Selling, general and administrative expenses	5	1,265	416	(16)	1,670
Depreciation and amortization	—	818	260	—	1,078
Impairments	—	4	3	—	7
Taxes other than income taxes	—	5,505	8,572	—	14,077
Accretion on discounted liabilities	—	16	5	—	21
Interest and debt expense	365	25	34	(114)	310
Foreign currency transaction losses	—	1	48	—	49
Total Costs and Expenses	374	65,971	39,476	(10,916)	94,905
Income before income taxes	4,096	6,356	1,167	(5,575)	6,044
Income tax expense (benefit)	(131)	1,886	9	—	1,764
Net Income	4,227	4,470	1,158	(5,575)	4,280
Less: net income attributable to noncontrolling interests	—	—	53	—	53
Net Income Attributable to Phillips 66	\$ 4,227	4,470	1,105	(5,575)	4,227
Comprehensive Income	\$ 4,105	4,348	1,032	(5,327)	4,158

Millions of Dollars

	At December 31, 2017				
	Phillips 66	Phillips 66 Company	All Other Subsidiaries	Consolidating Adjustments	Total Consolidated
Balance Sheet					
Assets					
Cash and cash equivalents	\$ —	1,411	1,708	—	3,119
Accounts and notes receivable	10	5,317	4,476	(2,297)	7,506
Inventories	—	2,386	1,009	—	3,395
Prepaid expenses and other current assets	2	276	92	—	370
Total Current Assets	12	9,390	7,285	(2,297)	14,390
Investments and long-term receivables	32,125	23,483	9,959	(51,626)	13,941
Net properties, plants and equipment	—	13,117	8,343	—	21,460
Goodwill	—	2,853	417	—	3,270
Intangibles	—	722	154	—	876
Other assets	12	266	158	(2)	434
Total Assets	\$ 32,149	49,831	26,316	(53,925)	54,371
Liabilities and Equity					
Accounts payable	\$ —	7,272	3,052	(2,297)	8,027
Short-term debt	—	9	32	—	41
Accrued income and other taxes	—	451	551	—	1,002
Employee benefit obligations	—	513	69	—	582
Other accruals	55	298	102	—	455
Total Current Liabilities	55	8,543	3,806	(2,297)	10,107
Long-term debt	6,972	50	3,047	—	10,069
Asset retirement obligations and accrued environmental costs	—	467	174	—	641
Deferred income taxes	—	3,349	1,661	(2)	5,008
Employee benefit obligations	—	639	245	—	884
Other liabilities and deferred credits	8	4,700	3,814	(8,288)	234
Total Liabilities	7,035	17,748	12,747	(10,587)	26,943
Common stock	9,396	24,952	10,125	(35,077)	9,396
Retained earnings	16,335	7,748	1,306	(9,083)	16,306
Accumulated other comprehensive loss	(617)	(617)	(205)	822	(617)
Noncontrolling interests	—	—	2,343	—	2,343
Total Liabilities and Equity	\$ 32,149	49,831	26,316	(53,925)	54,371

Balance Sheet	Millions of Dollars				
	At December 31, 2016				
	Phillips 66	Phillips 66 Company	All Other Subsidiaries	Consolidating Adjustments	Total Consolidated
Assets					
Cash and cash equivalents	\$ —	854	1,857	—	2,711
Accounts and notes receivable	13	4,336	3,276	(1,228)	6,397
Inventories	—	2,198	952	—	3,150
Prepaid expenses and other current assets	2	317	103	—	422
Total Current Assets	15	7,705	6,188	(1,228)	12,680
Investments and long-term receivables	31,165	22,733	8,588	(48,952)	13,534
Net properties, plants and equipment	—	13,044	7,811	—	20,855
Goodwill	—	2,853	417	—	3,270
Intangibles	—	719	169	—	888
Other assets	15	245	168	(2)	426
Total Assets	\$ 31,195	47,299	23,341	(50,182)	51,653
Liabilities and Equity					
Accounts payable	\$ —	5,626	2,663	(1,228)	7,061
Short-term debt	500	30	20	—	550
Accrued income and other taxes	—	348	457	—	805
Employee benefit obligations	—	475	52	—	527
Other accruals	59	371	90	—	520
Total Current Liabilities	559	6,850	3,282	(1,228)	9,463
Long-term debt	6,920	150	2,518	—	9,588
Asset retirement obligations and accrued environmental costs	—	501	154	—	655
Deferred income taxes	—	4,391	2,354	(2)	6,743
Employee benefit obligations	—	948	268	—	1,216
Other liabilities and deferred credits	1,297	3,337	4,060	(8,431)	263
Total Liabilities	8,776	16,177	12,636	(9,661)	27,928
Common stock	10,777	25,403	10,117	(35,520)	10,777
Retained earnings	12,637	6,714	(269)	(6,474)	12,608
Accumulated other comprehensive loss	(995)	(995)	(478)	1,473	(995)
Noncontrolling interests	—	—	1,335	—	1,335
Total Liabilities and Equity	\$ 31,195	47,299	23,341	(50,182)	51,653

Statement of Cash Flows	Millions of Dollars				
	Year Ended December 31, 2017				
	Phillips 66	Phillips 66 Company	All Other Subsidiaries	Consolidating Adjustments	Total Consolidated
Cash Flows From Operating Activities					
Net Cash Provided by Operating Activities	\$ 2,619	2,702	1,747	(3,420)	3,648
Cash Flows From Investing Activities					
Capital expenditures and investments*	—	(1,133)	(839)	140	(1,832)
Proceeds from asset dispositions**	—	265	84	(263)	86
Intercompany lending activities	401	1,453	(1,854)	—	—
Advances/loans—related parties	—	(10)	—	—	(10)
Collection of advances/loans—related parties	—	75	251	—	326
Restricted cash received from consolidation of business	—	—	318	—	318
Other	—	(26)	(8)	—	(34)
Net Cash Provided by (Used in) Investing Activities	401	624	(2,048)	(123)	(1,146)
Cash Flows From Financing Activities					
Issuance of debt	1,500	—	2,008	—	3,508
Repayment of debt	(1,500)	(17)	(2,161)	—	(3,678)
Issuance of common stock	35	—	—	—	35
Repurchase of common stock	(1,590)	—	—	—	(1,590)
Dividends paid on common stock	(1,395)	(2,752)	(668)	3,420	(1,395)
Distributions to noncontrolling interests	—	—	(120)	—	(120)
Net proceeds from issuance of Phillips 66 Partners LP common and preferred units	—	—	1,205	—	1,205
Other*	(70)	—	(129)	123	(76)
Net Cash Provided by (Used in) Financing Activities	(3,020)	(2,769)	135	3,543	(2,111)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash					
	—	—	17	—	17
Net Change in Cash, Cash Equivalents and Restricted Cash					
	—	557	(149)	—	408
Cash, cash equivalents and restricted cash at beginning of period	—	854	1,857	—	2,711
Cash, Cash Equivalents and Restricted Cash at End of Period	\$ —	1,411	1,708	—	3,119

* Includes intercompany capital contributions.

** Includes return of investments in equity affiliates.

Millions of Dollars

Statement of Cash Flows	Year Ended December 31, 2016				
	Phillips 66	Phillips 66 Company	All Other Subsidiaries*	Consolidating Adjustments	Total Consolidated
Cash Flows From Operating Activities					
Net Cash Provided by Operating Activities	\$ 3,491	2,307	1,552	(4,387)	2,963
Cash Flows From Investing Activities					
Capital expenditures and investments**	—	(1,425)	(1,457)	38	(2,844)
Proceeds from asset dispositions***	—	1,007	156	(1,007)	156
Intercompany lending activities	(1,139)	2,046	(907)	—	—
Advances/loans—related parties	—	(75)	(357)	—	(432)
Collection of advances/loans—related parties	—	—	108	—	108
Other	—	18	(164)	—	(146)
Net Cash Provided by (Used in) Investing Activities	(1,139)	1,571	(2,621)	(969)	(3,158)
Cash Flows From Financing Activities					
Issuance of debt	—	—	2,090	—	2,090
Repayment of debt	—	(26)	(807)	—	(833)
Issuance of common stock	34	—	—	—	34
Repurchase of common stock	(1,042)	—	—	—	(1,042)
Dividends paid on common stock	(1,282)	(3,604)	(783)	4,387	(1,282)
Distributions to noncontrolling interests	—	—	(75)	—	(75)
Net proceeds from issuance of Phillips 66 Partners LP common units	—	—	972	—	972
Other**	(62)	31	(980)	969	(42)
Net Cash Provided by (Used in) Financing Activities	(2,352)	(3,599)	417	5,356	(178)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash	—	—	10	—	10
Net Change in Cash, Cash Equivalents and Restricted Cash	—	279	(642)	—	(363)
Cash, cash equivalents and restricted cash at beginning of period	—	575	2,499	—	3,074
Cash, Cash Equivalents and Restricted Cash at End of Period	\$ —	854	1,857	—	2,711

* Revised to eliminate a purchase and sale transaction between two entities consolidated within the column. This revision increased net cash provided by operating activities by \$1,049 million, with an offsetting decrease of \$1,049 million in net cash provided by financing activities. The revision did not impact any issuer or guarantor column, nor did it impact our consolidated cash flows.

** Includes intercompany capital contributions.

*** Includes return of investments in equity affiliates.

Millions of Dollars

Statement of Cash Flows	Year Ended December 31, 2015				
	Phillips 66	Phillips 66 Company	All Other Subsidiaries	Consolidating Adjustments	Total Consolidated
Cash Flows From Operating Activities					
Net Cash Provided by Operating Activities	\$ 1,060	4,879	2,564	(2,790)	5,713
Cash Flows From Investing Activities					
Capital expenditures and investments*	—	(2,815)	(5,283)	2,334	(5,764)
Proceeds from asset dispositions**	—	774	178	(882)	70
Intercompany lending activities	2,461	(3,153)	692	—	—
Advances/loans—related parties	—	(50)	—	—	(50)
Collection of advances/loans—related parties	—	50	—	—	50
Other	—	6	(50)	—	(44)
Net Cash Provided by (Used in) Investing Activities	2,461	(5,188)	(4,463)	1,452	(5,738)
Cash Flows From Financing Activities					
Issuance of debt	—	—	1,169	—	1,169
Repayment of debt	(800)	(23)	(103)	—	(926)
Issuance of common stock	31	—	—	—	31
Repurchase of common stock	(1,512)	—	—	—	(1,512)
Dividends paid on common stock	(1,172)	(1,172)	(1,576)	2,748	(1,172)
Distributions to controlling interests	—	—	(186)	186	—
Distributions to noncontrolling interests	—	—	(46)	—	(46)
Net proceeds from issuance of Phillips 66 Partners LP common units	—	—	384	—	384
Other*	(68)	34	1,585	(1,596)	(45)
Net Cash Provided by (Used in) Financing Activities	(3,521)	(1,161)	1,227	1,338	(2,117)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Cash	—	—	9	—	9
Net Change in Cash, Cash Equivalents and Restricted Cash	—	(1,470)	(663)	—	(2,133)
Cash, cash equivalents and restricted cash at beginning of period	—	2,045	3,162	—	5,207
Cash, Cash Equivalents and Restricted Cash at End of Period	\$ —	575	2,499	—	3,074

* Includes intercompany capital contributions.

** Includes return of investments in equity affiliates.

Note 30—Subsequent Event

On February 13, 2018, we entered into a Stock Purchase and Sale Agreement (Purchase Agreement) with Berkshire Hathaway Inc. and National Indemnity Company, a wholly owned subsidiary of Berkshire Hathaway, to repurchase 35 million shares of Phillips 66 common stock for an aggregate purchase price of approximately \$3.3 billion. Pursuant to the Purchase Agreement, the purchase price per share of \$93.725 was based on the volume-weighted-average price of our common stock on the New York Stock Exchange on February 13, 2018. The transaction closed on February 14, 2018. We funded the repurchase with cash on hand of approximately \$1.9 billion and borrowings of approximately \$1.4 billion under our commercial paper program. This specific share repurchase transaction was separately authorized by our Board of Directors and therefore does not impact previously announced authorizations which total up to \$12.0 billion.

Selected Quarterly Financial Data (Unaudited)

	Millions of Dollars				Per Share of Common Stock	
	Sales and Other Operating Revenues*	Income Before Income Taxes	Net Income	Net Income Attributable to Phillips 66	Net Income Attributable to Phillips 66	
					Basic	Diluted
2017						
First	\$ 22,894	797	563	535	1.02	1.02
Second	24,087	848	581	550	1.06	1.06
Third	25,627	1,256	849	823	1.60	1.60
Fourth**	29,746	654	3,255	3,198	6.29	6.25
2016						
First	\$ 17,409	596	398	385	0.72	0.72
Second	21,849	720	516	496	0.94	0.93
Third	21,624	813	536	511	0.97	0.96
Fourth	23,397	62	194	163	0.31	0.31

* Includes excise taxes on sales of petroleum products.

** Includes a \$2,721 million provisional income tax benefit from the enactment of the U.S. Tax Cuts and Jobs Act on December 22, 2017.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in reports we file or submit under the Securities Exchange Act of 1934, as amended (the Act), is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to management, including our principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. As of December 31, 2017, with the participation of management, our Chairman and Chief Executive Officer and our Executive Vice President, Finance and Chief Financial Officer carried out an evaluation, pursuant to Rule 13a-15(b) of the Act, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Act). Based upon that evaluation, our Chairman and Chief Executive Officer and our Executive Vice President, Finance and Chief Financial Officer concluded that our disclosure controls and procedures were operating effectively as of December 31, 2017.

There have been no changes in our internal control over financial reporting, as defined in Rule 13a-15(f) of the Act, in the quarterly period ended December 31, 2017, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting

This report is included in Item 8 and is incorporated herein by reference.

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

This report is included in Item 8 and is incorporated herein by reference.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding our executive officers appears in Part I of this report.

The remaining information required by Item 10 of Part III is incorporated herein by reference from our Proxy Statement for the Annual Meeting of Stockholders to be held on May 9, 2018, which will be filed within 120 days after December 31, 2017 (2018 Definitive Proxy Statement).*

Item 11. EXECUTIVE COMPENSATION

The information required by Item 11 of Part III is incorporated herein by reference from our 2018 Definitive Proxy Statement.*

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by Item 12 of Part III is incorporated herein by reference from our 2018 Definitive Proxy Statement.*

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Item 13 of Part III is incorporated herein by reference from our 2018 Definitive Proxy Statement.*

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by Item 14 of Part III is incorporated herein by reference from our 2018 Definitive Proxy Statement.*

* Except for information or data specifically incorporated herein by reference under Items 10 through 14, other information and data appearing in our 2018 Definitive Proxy Statement are not deemed to be a part of this Annual Report on Form 10-K or deemed to be filed with the Commission as a part of this report.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

- (a) 1. Financial Statements and Supplementary Data
The financial statements and supplementary information listed in the Index to Financial Statements, which appears on page 70, are filed as part of this Annual Report on Form 10-K.
- 2. Financial Statement Schedules
All financial statement schedules are omitted because they are not required, not significant, not applicable, or the information is shown in the financial statements or notes thereto.
- 3. Exhibits
The exhibits listed in the Index to Exhibits, which appears on pages 138 to 141, are filed as part of this Annual Report on Form 10-K.
- (c) Pursuant to Rule 3-09 of Regulation S-X, the financial statements of Chevron Phillips Chemical Company LLC as of December 31, 2017 and 2016, and for each of the three years ended December 31, 2017, are included as an exhibit to this Annual Report on Form 10-K.

Item 16. FORM 10-K SUMMARY

None.

PHILLIPS 66

INDEX TO EXHIBITS

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
2.1	Separation and Distribution Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	2.1	05/01/2012	001-35349
3.1	Amended and Restated Certificate of Incorporation of Phillips 66.	8-K	3.1	05/01/2012	001-35349
3.2	Amended and Restated By-Laws of Phillips 66.	8-K	3.1	02/09/2017	001-35349
4.1	Indenture, dated as of March 12, 2012, among Phillips 66, as issuer, Phillips 66 Company, as guarantor, and The Bank of New York Mellon Trust Company, N.A., as trustee, in respect of senior debt securities of Phillips 66. As permitted by Item 601(b)(4)(iii)(A) of Regulation S-K, the company has not filed with this Annual Report on Form 10-K certain instruments defining the rights of holders of long-term debt of the company and its subsidiaries because the total amount of securities authorized thereunder does not exceed 10 percent of the total assets of the company and its subsidiaries on a consolidated basis. The company agrees to furnish a copy of such agreements to the Commission upon request.	10	4.3	04/05/2012	001-35349
10.1	Credit Agreement among Phillips 66, Phillips 66 Company, JPMorgan Chase Bank, N.A., as Administrative Agent, and the lenders named therein, dated as of February 22, 2012.	10	4.1	03/01/2012	001-35349
10.2	First Amendment to Credit Agreement among Phillips 66, Phillips 66 Company, JPMorgan Chase Bank, N.A., and lenders named therein, dated as of June 10, 2013.	10-Q	10.1	05/01/2014	001-35349
10.3	Second Amendment to Credit Agreement among Phillips 66, Phillips 66 Company, JPMorgan Chase Bank, N.A., and lenders named therein, dated as of December 10, 2014.	10-K	10.3	02/20/2015	001-35349
10.4	Third Amendment to Credit Agreement among Phillips 66, Phillips 66 Company, JPMorgan Chase Bank, N.A., and lenders named therein, dated as of October 3, 2016.	10-K	10.4	02/17/2017	001-35349
10.5	Third Amended and Restated Limited Liability Company Agreement of Chevron Phillips Chemical Company LLC, effective as of May 1, 2012.	10-Q	10.14	08/03/2012	001-35349
10.6*	First Amendment to Third Amended and Restated Limited Liability Company Agreement of Chevron Phillips Chemical Company LLC, effective as of December 31, 2017.				
10.7	Second Amended and Restated Limited Liability Company Agreement of Duke Energy Field Services, LLC, dated July 5, 2005, by and between ConocoPhillips Gas Company and Duke Energy Enterprises Corporation.	10	10.12	03/01/2012	001-35349

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
10.8	First Amendment to Second Amended and Restated Limited Liability Company Agreement of Duke Energy Field Services, LLC, dated August 11, 2006, by and between ConocoPhillips Gas Company and Duke Energy Enterprises Corporation.	10	10.13	03/01/2012	001-35349
10.9	Second Amendment to Second Amended and Restated Limited Liability Company Agreement of DCP Midstream, LLC (formerly Duke Energy Field Services, LLC), dated February 1, 2007, by and between ConocoPhillips Gas Company, Spectra Energy DEFS Holding, LLC, and Spectra Energy DEFS Holding Corp.	10	10.14	03/01/2012	001-35349
10.10	Third Amendment to Second Amended and Restated Limited Liability Company Agreement of DCP Midstream, LLC (formerly Duke Energy Field Services, LLC), dated April 30, 2009, by and between ConocoPhillips Gas Company, Spectra Energy DEFS Holding, LLC, and Spectra Energy DEFS Holding Corp.	10	10.15	03/01/2012	001-35349
10.11	Fourth Amendment to Second Amended and Restated Limited Liability Company Agreement of DCP Midstream, LLC (formerly Duke Energy Field Services, LLC), dated November 9, 2010, by and between ConocoPhillips Gas Company, Spectra Energy DEFS Holding, LLC, and Spectra Energy DEFS Holding Corp.	10	10.16	03/01/2012	001-35349
10.12	Fifth Amendment to July 5, 2005 Second Amended and Restated Limited Liability Company Agreement of DCP Midstream, LLC (formerly Duke Energy Field Services, LLC) dated September 9, 2014, by and between Phillips Gas Company (formerly ConocoPhillips Gas Company), Spectra Energy DEFS Holding, LLC, and Spectra Energy DEFS Holding II, LLC.	10-Q	10.1	10/30/2014	001-35349
10.13	Indemnification and Release Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.1	05/01/2012	001-35349
10.14	Intellectual Property Assignment and License Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.2	05/01/2012	001-35349
10.15	Tax Sharing Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.3	05/01/2012	001-35349
10.16	Employee Matters Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.4	05/01/2012	001-35349
10.17	Amendment to the Employee Matters Agreement by and between ConocoPhillips and Phillips 66, dated April 26, 2012.	10-Q	10.1	05/02/2013	001-35349
10.18	Transition Services Agreement between ConocoPhillips and Phillips 66, dated April 26, 2012.	8-K	10.5	05/01/2012	001-35349
10.19	2013 Omnibus Stock and Performance Incentive Plan of Phillips 66.**	DEF14A	App. A	03/27/2013	001-35349
10.20	Phillips 66 Key Employee Supplemental Retirement Plan.**	10-Q	10.15	08/03/2012	001-35349

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
10.21	First Amendment to the Phillips 66 Key Employee Supplemental Retirement Plan.**	10-K	10.18	02/22/2013	001-35349
10.22	Phillips 66 Amended and Restated Executive Severance Plan.**	10-Q	10.1	07/29/2016	001-35349
10.23	Phillips 66 Deferred Compensation Plan for Non-Employee Directors.**	10-Q	10.17	08/03/2012	001-35349
10.24	Phillips 66 Key Employee Deferred Compensation Plan-Title I.**	10-Q	10.18	08/03/2012	001-35349
10.25	Phillips 66 Key Employee Deferred Compensation Plan-Title II.**	10-Q	10.19	08/03/2012	001-35349
10.26	First Amendment to the Phillips 66 Key Employee Deferred Compensation Plan Title II.**	10-K	10.24	02/22/2013	001-35349
10.27	Phillips 66 Defined Contribution Make-Up Plan Title I.**	10-Q	10.20	08/03/2012	001-35349
10.28	Phillips 66 Defined Contribution Make-Up Plan Title II.**	10-K	10.26	02/22/2013	001-35349
10.29	Phillips 66 Key Employee Change in Control Severance Plan.**	10-K	10.27	02/22/2013	001-35349
10.30	First Amendment to Phillips 66 Key Employee Change in Control Severance Plan, Effective October 2, 2015.**	8-K	10.1	11/08/2013	001-35349
10.31	Annex to the Phillips 66 Nonqualified Deferred Compensation Arrangements.**	10-Q	10.23	08/03/2012	001-35349
10.32	Form of Stock Option Award Agreement under the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66.**	10-K	10.29	02/22/2013	001-35349
10.33	Form of Restricted Stock or Restricted Stock Unit Award Agreement under the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66.**	10-K	10.30	02/22/2013	001-35349
10.34	Form of Performance Share Unit Award Agreement under the 2013 Omnibus Stock and Performance Incentive Plan of Phillips 66.**	10-K	10.31	02/22/2013	001-35349
12*	Computation of Ratio of Earnings to Fixed Charges.				
21*	List of Subsidiaries of Phillips 66.				
23.1*	Consent of Ernst & Young LLP, independent registered public accounting firm.				
23.2*	Consent of Ernst & Young LLP, independent auditors for Chevron Phillips Chemicals Company LLC.				
31.1*	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.				
31.2*	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.				
32*	Certifications pursuant to 18 U.S.C. Section 1350.				

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	Exhibit Number	Filing Date	SEC File No.
99.1*	The financial statements of Chevron Phillips Chemical Company, LLC, pursuant to Rule 3-09 of Regulation S-X.				
101.INS*	XBRL Instance Document.				
101.SCH*	XBRL Schema Document.				
101.CAL*	XBRL Calculation Linkbase Document.				
101.LAB*	XBRL Labels Linkbase Document.				
101.PRE*	XBRL Presentation Linkbase Document.				
101.DEF*	XBRL Definition Linkbase Document.				

* Filed herewith.

** Management contracts and compensatory plans or arrangements.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PHILLIPS 66

Date: February 23, 2018

/s/ Greg C. Garland
Greg C. Garland
 Chairman of the Board of Directors
 and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below, as of February 23, 2018, by the following persons on behalf of the registrant, and in the capacities indicated.

Signature

Title

/s/ Greg C. Garland
Greg C. Garland

Chairman of the Board of Directors
 and Chief Executive Officer
 (Principal executive officer)

/s/ Kevin J. Mitchell
Kevin J. Mitchell

Executive Vice President, Finance
 and Chief Financial Officer
 (Principal financial officer)

/s/ Chukwuemeka A. Oyolu
Chukwuemeka A. Oyolu

Vice President and Controller
 (Principal accounting officer)

/s/ Gary K. Adams
Gary K. Adams

Director

/s/ J. Brian Ferguson
J. Brian Ferguson

Director

/s/ William R. Loomis Jr.
William R. Loomis Jr.

Director

/s/ John E. Lowe
John E. Lowe

Director

/s/ Harold W. McGraw III
Harold W. McGraw III

Director

/s/ Denise L. Ramos
Denise L. Ramos

Director

/s/ Glenn F. Tilton
Glenn F. Tilton

Director

/s/ Victoria J. Tschinkel
Victoria J. Tschinkel

Director

/s/ Marna C. Whittington
Marna C. Whittington

Director

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