





Revenue
\$11.7 billion

Net Income
\$217 million

Adjusted EBITDA
Excluding Special Items*
\$2.35 billion





Cash on Hand
\$1.36 billion

Free Cash Flow*
\$819 million

Number of Employees 14,600

Who We Are

Alcoa is a global industry leader in bauxite, alumina and aluminum products. Our Company is built on a foundation of strong values and operating excellence dating back nearly 130 years to the world-changing discovery that made aluminum an affordable and vital part of modern life. Since developing the aluminum industry, and throughout our history, our talented Alcoans have followed on with breakthrough innovations and best practices that have led to efficiency, safety, sustainability, and stronger communities wherever we operate.

In 2017, Alcoa relocated its global headquarters back to Pittsburgh from New York City as part of the Company's initiative to reduce and simplify the organization's structure.

Pictured: Alcoa corporate headquarters

* Please see Calculation of Financial Measures at the end of this Annual Report for a description and reconciliation of Adjusted EBITDA Excluding Special Items and Free Cash Flow



Letter to Stockholders



Alcoa Corporation's first full year as an independent, publicly-traded company was a success by many measures. However, by the most critical one — safety — we failed. In 2017, three workers at Alcoa facilities, two in Brazil and one in Spain, died from injuries sustained in our operations. That they did not return home safely is deeply painful to the entire Alcoa family.

Because nothing is more valuable than human life, we continued to refine our safety systems and programs, and made further changes in our quest for continuous improvement. In 2017, we welcomed a new Vice President of Environment, Health and Safety to the Executive Team. Additionally, our Board of Directors reinforced the Company's commitment to safety and corporate values by renaming the former "Public Issues Committee" the "Safety, Sustainability and Public Issues Committee," and amending the scope of that committee accordingly. In 2018, we will remain focused on the safety of every employee, contractor, temporary worker and visitor who walks through our doors as our most important priority.

While acknowledging that we need to do better with safety, we also want to recognize the successes we achieved in 2017.

Following the separation from our parent company, we introduced three strategic priorities—reduce complexity, drive returns and strengthen the balance sheet—as the building blocks for a strong and bright Alcoa future. These strategic priorities guided our decisions during the year and, equipped with these priorities, our employees across the globe eliminated waste, streamlined processes and improved organizational structures. They implemented new ideas, carefully managed costs and assets, addressed legacy liabilities and ultimately drove significant value creation for our stockholders.

Our initiatives to reduce complexity included consolidating our business units to focus on bauxite, alumina and aluminum products, and partially restarting our Warrick smelter in Indiana to gain efficiencies with the rolling mill and power plant at that location. And, of course, Alcoa returned its global headquarters back to Pittsburgh, Pennsylvania, demonstrating a commitment to reducing and simplifying our overhead structure.

We drove stockholder returns by initiating and completing returning-seeking capital projects across our three businesses—Bauxite, Alumina and Aluminum. In Bauxite, we grew exports to third-party customers and made third-party sales from all our major mining operations. Alumina continued to realize greater value from our low-cost plants, achieving production records at our three largest refineries. Several successful creep projects in Aluminium also resulted in production records at three of our plants, increasing that business's capacity for additional profitability. And, we continued to problem-solve and innovate for the future at our world-class technology centers, supporting the smelting operations from the Alcoa Technical Center in New Kensington

Pennsylvania, and the refining operations from our Center of Excellence in Western Australia.

To strengthen the balance sheet, we grew our cash balance in 2017 while resolving legacy liabilities in the United States and in Italy. Our stronger financial position allowed us to successfully renegotiate our revolving credit agreement to gain greater flexibility in executing our capital allocation strategy. Rating agencies Standard & Poor's and Moody's each upgraded Alcoa's credit rating in recognition of the Company's improving financial profile.

To strengthen the Company for the future, we made the difficult decision to change retirement benefits in North America, which represent Alcoa's largest liability. Beginning in 2021, salaried employees in the United States and Canada will stop accruing retirement benefits for future service under our defined benefit pension plans and will instead move to defined contribution retirement savings plans. However, in accordance with our values, we will honor all vested and current obligations under those plans and will continue to provide competitive benefits for all employees.

Our disciplined focus on our strategic priorities, solid execution by our three businesses and a favorable market environment, produced strong first full-year financial results for Alcoa and positioned us well for whatever the future may bring.

Aluminum and alumina realized prices, which rose 19 percent and 34 percent, respectively, helped to significantly grow Alcoa's 2017 profits compared to 2016. China's policy to close illegal capacity and curb production for environmental reasons contributed to this market dynamic.

In 2017, Alcoa earned net income of \$217 million and, excluding special items, adjusted net income of \$563 million. On an adjusted EBITDA


(earnings before interest, taxes, depreciation and amortization) excluding special items basis, Alcoa realized \$2.35 billion, more than doubling the 2016 result, which included the period before the separation from our former parent company.

Higher aluminum and alumina prices also grew revenue 25 percent year-on-year, to \$11.7 billion. Additionally, cash from operations and free cash flow were strong in 2017 at \$1.2 billion and \$819 million, respectively. While we used some cash to eliminate liabilities, including debt, we still grew our cash balance by more than \$500 million over the course of the year and closed 2017 with \$1.36 billion on hand.

And Alcoa's Total Stockholder Return was 92 percent in 2017, more than four times higher than both the Standard & Poor's 500® Index and the Standard & Poor's 500® Metals & Mining GICS Level 3 Index.

Now well into 2018, and with strong alignment between our management team and our Board of Directors, we will continue to use our strategic priorities to build upon the success of our first full year as Alcoa Corporation—finding new ways to reduce complexity, generate strong returns, increase cash and reduce liabilities. By continuously striving toward these goals, we will build a resurgent Alcoa that remains resilient through market cycles and rewards our stockholders.

We appreciate the confidence that you, our stockholders, have placed in Alcoa over the past year, and we look forward to continued success in 2018.


Michael G. Morris
 CHAIRMAN OF THE BOARD


Roy C. Harvey
 PRESIDENT AND
 CHIEF EXECUTIVE OFFICER





Alcoa's Strategic Priorities

Reduce Complexity

Drive Returns

Strengthen the Balance Sheet

We have defined three strategic priorities as the building blocks for a resurgent Alcoa Corporation — one that is resilient through market cycles, provides our stockholders with a financial return, and allows all stakeholders to succeed. In 2017, our employees across the globe embraced these objectives. As a result, they eliminated waste and simplified our Company, drove returns from our assets, increased cash, and reduced liabilities.

We still have more to achieve. And by continuously working toward our strategic priorities, which are underpinned by our Values, we will have a strong foundation from which to create the Alcoa of the future.

OUR VALUES

Act with Integrity

Operate with Excellence

Care for People

Alcoa World Alumina Brasil employees from our Juruti mine prepare to load a ship with bauxite.

Bauxite

Our Bauxite segment remains a source of excitement.

With quality bauxite reserves across Australia, Brazil, Guinea and Saudi Arabia, this segment grew revenue 13.3 percent, adjusted EBITDA 13.9 percent, and adjusted EBITDA margin 10 basis points in 2017. Already a world-leading bauxite producer, we have additional opportunities to meet increasing demand. In Brazil, our Juruti location mined a record 5.6 million dry metric tons of bauxite in 2017, with plans to grow in 2018 at a low capital cost. In Western Australia (WA),

our Huntly and Willowdale mines also achieved annual production records. Additionally, the WA State Government granted Alcoa of Australia approval to export bauxite through the Port of Bunbury for an initial two-year period. Combined with existing infrastructure capabilities and prior approval to export bauxite through the Kwinana Bulk Terminal, the additional approval supports our plan to export up to 2.5 million dry metric tons annually of WA bauxite to third-party customers, while still supplying our refineries.

PRODUCTION

45.8 million
dry metric tons

TOTAL SHIPMENTS

47.7 million
dry metric tons

3RD-PARTY SHIPMENTS

6.6 million
dry metric tons

TOTAL REVENUE

\$1.2 billion

ADJUSTED EBITDA

\$427 million

ADJUSTED EBITDA MARGIN

35.3%



In an important step toward establishing a sustainable share of the commercial bauxite market, Alcoa of Australia received approval from the Western Australia State Government to export bauxite through the Port of Bunbury.

Alumina

We are a world leader in alumina. Our Alumina segment operates low cost assets and has a very competitive cost position. In 2017, our refineries capitalized on a favorable alumina market to drive returns. The segment grew revenue 34.6 percent, adjusted EBIDTA more than twofold, adjusted EBITDA margin more than two-and-one-half times, and increased third-party shipments 1.6 percent from the previous year. We produced 13.1 million metric tons of alumina in 2017 with annual production records at

our Alumar refinery in Brazil and at our Wagerup and Pinjarra refineries in Western Australia. We shipped approximately two-thirds of our alumina to third-party customers. To support further growth in 2018, we made improvements to debottleneck our system and increase overall tons at a low capital cost. As part of an overarching goal to work sustainably, we also continued to introduce technology that reduces the amount of water and land required to store bauxite residue.

PRODUCTION

13.1 million
metric tons

TOTAL SHIPMENTS

13.7 million
metric tons

3RD-PARTY SHIPMENTS

9.2 million
metric tons

TOTAL REVENUE

\$4.9 billion

ADJUSTED EBITDA

\$1,289 million

ADJUSTED EBITDA MARGIN

26.5%



Alcoa of Australia's Wagerup alumina refinery achieved record production in 2017.

Aluminum

Our Aluminum segment strengthened its portfolio.

In 2017, our aluminum portfolio benefitted from improved market conditions and grew revenues 22.4 percent, adjusted EBITDA 41.8 percent, and adjusted EBITDA margin 170 basis points. In our smelting operations, three facilities achieved annual production records through projects with low capital costs: Baie Comeau and Deschambault, both in Canada, and Fjardaál in Iceland. At the Portland Aluminum smelter in Australia,

we restored capacity lost from a 2016 power outage and remain focused on seeking a longer-term energy solution for the plant. In the United States, we restarted our Lake Charles calciner in Louisiana that enables Alcoa to produce more calcined coke internally, reducing the cost to make anodes for the smelting process. Also, the partial restart of the Warrick smelter in Indiana will support production growth for the adjacent rolling mill with improved profitability at the integrated site.

PRIMARY ALUMINUM PRODUCTION

2.3 million
metric tons

3RD-PARTY ALUMINUM PRODUCT SHIPMENTS

3.4 million
metric tons

TOTAL REVENUE


\$8.0 billion

ADJUSTED EBITDA

\$964 million

ADJUSTED EBITDA MARGIN

12.0%



A stunning night view of the Alcoa Mosjøen aluminum smelter and casthouse in Norway, one of the largest aluminum plants in Europe.

Today, former mining sites, including this one at our Huntly mine in Western Australia, have been successfully rehabilitated with species native to the region, such as the unique jarrah tree.



Sustainability and Alcoa Foundation

At Alcoa, we take pride in being good corporate citizens—conducting business ethically, bringing value to communities where we operate, and being a leader in our industry for a more sustainable future.

Throughout the world, sustainability drives us to minimize our impacts and maximize our value. Our company continued to focus in 2017 on reducing our carbon footprint, improving energy efficiency, reducing fresh water use and diverting material from landfills. We also work to reduce the land required to manage bauxite residue, and we actively rehabilitate mine lands.

Alcoa Foundation invested \$2.85 million in global programs focused on climate change and biodiversity and \$2.95 million in our communities.

We also made progress against many of the United Nations' 17 Sustainable Development Goals.

Key achievements in 2017 included:

- Alcoa's partnership with SENAI in Juruti provided residents in this remote Amazonian region access to nearly 90 professional and technical courses.
- In Australia, the Company's four-year apprenticeship program continued to be a pathway to a trade certificate in a variety of vocations.
- Alcoa Foundation's Waste-Water-Watts program provided hands-on Science, Technology, Engineering and Math (STEM) education to more than 14,500 students in five countries.
- We formed an internal Human Rights Working Group.
- Our chief executive officer signed the CEO Action for Diversity & Inclusion™ pledge.
- In Australia, Alcoa was recognized by the government as an Employer of Choice for Gender Equality, for the 15th consecutive year.

Full details on our Alcoa Foundation investments will be available in the Foundation's annual report. Progress on our sustainability performance, including the United Nations' 17 Sustainable Development Goals, will be available in the 2017 Alcoa Sustainability Report.



In 2017, our Deschambault smelter in Québec celebrated its 25-year anniversary with an ACTION grant to a local community organization. This was one of more than 200 ACTION grants provided by Alcoa in 2017.

Ethics and Compliance

Our unwavering commitment to doing business ethically gives us a competitive advantage. We maintain a world-class ethics and compliance program, which ensures that we meet or exceed legal requirements where we operate around the world. In 2017, we enhanced our program by initiating in-person road shows at select Alcoa locations, where employees can attend training and participate in confidential discussions with our ethics and compliance personnel. Also, we centralized our charitable contributions procedure and implemented a policy on issues reporting. We relaunched the Integrity Champion Network, which expands the reach of our ethics and compliance program through high integrity liaisons at our locations. Additionally, we updated our compliance-related self-assessment to monitor the effectiveness of the program.

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

[x] 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

Commission File Number 1-37816

ALCOA CORPORATION

(Exact Name of Registrant as Specified in Charter)

Delaware (State of incorporation) 81-1789115 (I.R.S. Employer Identification No.)

201 Isabella Street, Suite 500, Pittsburgh, Pennsylvania 15212-5858

(Address of principal executive offices) (Zip code)

412-315-2900

(Registrant's telephone number, including area code)

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

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.01 per share	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 Exchange 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, 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 Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No .

Indicate by check mark 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 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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth 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 Exchange Act). Yes No .

As of February 20, 2018, there were 186,175,616 shares of the registrant's common stock, par value \$0.01 per share, outstanding.

The aggregate market value of the Registrant's voting stock held by non-affiliates at June 30, 2017 was approximately \$6.0 billion, based on the closing price per share of Common Stock on June 30, 2017 of \$32.65 as reported on the New York Stock Exchange.

Documents incorporated by reference.

Part III of this Form 10-K incorporates by reference certain information from the registrant's Definitive Proxy Statement for its 2018 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A.

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Note on Incorporation by Reference

In this Form 10-K, selected items of information and data are incorporated by reference to portions of Alcoa Corporation’s Definitive Proxy Statement for its 2018 Annual Meeting of Stockholders (“Proxy Statement”), which will be filed with the Securities and Exchange Commission within 120 days after the end of Alcoa Corporation’s fiscal year ended December 31, 2017. Unless otherwise provided herein, any reference in this Form 10-K to disclosures in the Proxy Statement shall constitute incorporation by reference of only that specific disclosure into this Form 10-K.

Forward-Looking Statements

This report contains statements that relate to future events and expectations and, as such, constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as “anticipates,” “believes,” “could,” “estimates,” “expects,” “forecasts,” “intends,” “may,” “outlook,” “plans,” “projects,” “seeks,” “sees,” “should,” “targets,” “will,” “would,” or other words of similar meaning. All statements that reflect the Company’s expectations, assumptions or projections about the future, other than statements of historical fact, are forward-looking statements. Forward-looking statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties, and changes in circumstances that are difficult to predict. Although the Company believes that the expectations reflected in any forward-looking statements are based on reasonable assumptions, it can give no assurance that these expectations will be attained and it is possible that actual results may differ materially from those indicated by these forward-looking statements due to a variety of risks and uncertainties.

For a discussion of some of the specific factors that may cause Alcoa’s actual results to differ materially from those projected in any forward-looking statements, see the following sections of this report: Part I, Item 1A. (Risk Factors), Part II, Item 7. (Management’s Discussion and Analysis of Financial Condition and Results of Operations), including the disclosures under Segment Information and Critical Accounting Policies and Estimates, and the Derivatives Section of Note O to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data). The Company disclaims any obligation to update publicly any forward-looking statements, whether in response to new information, future events or otherwise, except as required by applicable law. Market projections are subject to the risks discussed above and other risks in the market.

PART I

Item 1. Business.

General

Alcoa Corporation, a Delaware corporation, became an independent, publicly traded company on November 1, 2016, as explained below under “Separation Transaction.” Alcoa Corporation has its principal office in Pittsburgh, Pennsylvania. In this report, unless the context otherwise requires, “Alcoa” or the “Company,” “we,” “us,” and “our” means Alcoa Corporation and all subsidiaries consolidated for the purposes of its financial statements.

Alcoa is a global industry leader in the production of bauxite, alumina, and aluminum. Alcoa is built on a foundation of strong values and operating excellence dating back nearly 130 years to the world-changing discovery that made aluminum an affordable and vital part of modern life. Since inventing the aluminum industry, and throughout our history, our talented Alcoans have followed on with breakthrough innovations and best practices that have led to efficiency, safety, sustainability, and stronger communities wherever we operate.

Aluminum is a commodity traded on the London Metal Exchange (“LME”) and priced daily. Alumina is subject to market pricing against the Alumina Price Index (“API”). As a result, the prices of both aluminum and alumina are subject to significant volatility and, therefore, influence the operating results of Alcoa.

Alcoa is a global company with 40 operating locations across 10 countries. In March 2017, the aluminum smelting, cast products and rolled products businesses, along with the majority of the energy segment assets, were combined into a new Aluminum business unit. As a result, Alcoa’s operations consisted of three reportable segments for 2017: Bauxite, Alumina, and Aluminum. Segment information for all prior periods presented was revised to reflect the new segment structure, as well as the new measure of profit and loss.

The Company’s Internet address is <http://www.alcoa.com>. Alcoa makes available free of charge on or through its website its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (“Exchange Act”) as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the Securities and Exchange Commission (“SEC”). The information on the Company’s Internet site is not a part of, or incorporated by reference in, this annual report on Form 10-K. The SEC maintains an Internet site that contains these reports at <http://www.sec.gov>.

Separation Transaction in 2016

Alcoa Corporation became an independent, publicly-traded company on November 1, 2016, following its separation from its former parent company, Alcoa Inc. (“ParentCo” or “Arconic”). Alcoa Upstream Corporation was formed for the purpose of holding ParentCo’s Alcoa Corporation Business (as defined below), and was renamed Alcoa Corporation in connection with the Separation Transaction and the Distribution (both of which are defined and described below).

On September 28, 2015, ParentCo announced its intention to separate ParentCo into two standalone, publicly traded companies (“Separation Transaction”). Alcoa Corporation was formed to hold ParentCo’s Bauxite, Alumina, Aluminum, Cast Products and Energy businesses, as well as ParentCo’s rolling mill operations in Warrick, Indiana, and ParentCo’s 25.1% interest in the Ma’aden Rolling Company in Saudi Arabia (“Alcoa Corporation Business”). Following the Separation Transaction, Alcoa Corporation holds the assets and liabilities of ParentCo relating to those businesses and the direct and indirect subsidiary entities that operated the Alcoa Corporation Business, subject to certain exceptions. Upon completion of the Separation Transaction, ParentCo was renamed Arconic Inc. (“Arconic”) and now holds ParentCo’s Engineered Products and Solutions, Global Rolled Products (other than the rolling mill operations in Warrick, Indiana, and the 25.1% interest in the Ma’aden Rolling Company in Saudi Arabia) and Transportation and Construction Solutions businesses (“Arconic Business”), including those assets and liabilities of ParentCo and its direct and indirect subsidiary entities that operated the Arconic Business, subject to certain exceptions.

On September 29, 2016, the ParentCo Board of Directors approved the distribution of 80.1% of Alcoa Corporation's issued and outstanding shares of common stock on the basis of one share of Alcoa Corporation common stock for every three shares of ParentCo common stock held as of the close of business on October 20, 2016, the record date for the distribution ("Distribution").

The Separation Transaction and the Distribution were subject to a number of conditions, including, but not limited to, the SEC declaring effective a Registration Statement on Form 10, as amended, filed with the SEC on October 11, 2016 (effectiveness was declared by the SEC on October 17, 2016).

On November 1, 2016, the Separation Transaction was completed and became effective at 12:01 a.m. Eastern Standard Time, at which time Alcoa Corporation became an independent, publicly traded company. To effect the Separation Transaction, ParentCo undertook a series of transactions to separate the net assets and certain legal entities of ParentCo, resulting in a cash payment of approximately \$1.1 billion to ParentCo by Alcoa Corporation using the net proceeds of a debt offering. Also at 12:01 a.m. Eastern Standard Time on November 1, 2016, the Distribution occurred. Immediately following the Distribution, Alcoa Corporation stockholders owned directly 80.1% of the outstanding shares of common stock of Alcoa Corporation, and Arconic retained 19.9% of the outstanding shares of common stock of Alcoa Corporation. 146,159,428 shares of Alcoa Corporation common stock were distributed to ParentCo stockholders, and Arconic retained 36,311,767 shares of Alcoa Corporation common stock representing its 19.9% retained interest (In 2017, ParentCo divested itself of its entire interest in Alcoa Corporation). ParentCo stockholders received cash in lieu of any fractional shares of Alcoa Corporation common stock that they would have received after application of the distribution ratio. Upon completion of the Separation Transaction and the Distribution, each ParentCo stockholder as of the record date continued to own shares of ParentCo (which, as a result of ParentCo's name change to Arconic, are Arconic shares) and owned a proportionate share of the outstanding common stock of Alcoa Corporation that was distributed. ParentCo stockholders were not required to make any payment, surrender or exchange their ParentCo common stock or take any other action to receive their shares of Alcoa Corporation common stock in the Distribution. "Regular-way" trading of Alcoa Corporation's common stock began with the opening of the New York Stock Exchange ("NYSE") on November 1, 2016 under the ticker symbol "AA." Alcoa Corporation's common stock has a par value of \$0.01 per share.

Formation of Alcoa Corporation

Alcoa Upstream Corporation was formed in Delaware on March 10, 2016 for the purpose of holding ParentCo's Alcoa Corporation Business, and it was renamed Alcoa Corporation in connection with the Separation Transaction and the Distribution.

As part of the Separation Transaction, and prior to the Distribution, ParentCo and its subsidiaries completed an internal reorganization in order to transfer the Alcoa Corporation Business to Alcoa Corporation. Among other things and subject to limited exceptions, the internal reorganization resulted in Alcoa Corporation owning, directly or indirectly, the operations comprising, and the entities that conduct, the Alcoa Corporation Business. The internal reorganization included various restructuring transactions pursuant to which the operations, assets, liabilities and investments of ParentCo and its subsidiaries used to conduct the Alcoa Corporation Business were separated from the operations, assets, liabilities and investments of ParentCo and its subsidiaries used to conduct the Arconic Business. Such restructuring transactions took the form of asset transfers, dividends, contributions and similar transactions, and involved the formation of new subsidiaries in U.S. and non-U.S. jurisdictions to own and operate the Alcoa Corporation Business or the Arconic Business in such jurisdictions.

Following the completion of the internal reorganization and immediately prior to the Distribution, Alcoa Corporation became the parent company of the entities that conduct the Alcoa Corporation Business, and ParentCo (through subsidiaries other than Alcoa Corporation and its subsidiaries) remained the parent company of the entities that conduct the Arconic Business.

In connection with the Separation Transaction, as of October 31, 2016, Alcoa Corporation entered into certain agreements with Arconic to implement the legal and structural separation between the two companies to govern the

relationship between Alcoa Corporation and Arconic after the completion of the Separation Transaction and allocate between Alcoa Corporation and Arconic various assets, liabilities and obligations, including, among other things, employee benefits, environmental liabilities, intellectual property, and tax-related assets and liabilities. These agreements included a Separation and Distribution Agreement, Tax Matters Agreement, Employee Matters Agreement, Transition Services Agreement, Stockholder and Registration Rights Agreement, and certain Patent, Know-How, Trade Secret License, and Trademark License Agreements.

Joint Ventures

AWAC

Alcoa World Alumina and Chemicals (“AWAC”) is an unincorporated global joint venture between Alcoa Corporation and Alumina Limited, a company incorporated under the laws of the Commonwealth of Australia and listed on the Australian Securities Exchange. AWAC consists of a number of affiliated entities that own, operate or have an interest in bauxite mines and alumina refineries, as well as certain aluminum smelters, in seven countries. Alcoa Corporation owns 60% and Alumina Limited owns 40% of these entities, directly or indirectly, with such entities being consolidated by Alcoa Corporation for financial reporting purposes.

The scope of AWAC generally includes:

- *Bauxite and Alumina*: The mining of bauxite and other aluminous ores as well as the refining and other processing of these ores into alumina and other ancillary operations;
- *Non-Metallurgical Alumina*: The production and sale of non-metallurgical alumina and other alumina-based chemicals; and
- *Integrated Operations*: Ownership and operation of certain primary aluminum smelting and other ancillary facilities.

Alcoa is the industrial leader of AWAC and provides the operating management for all of the operating entities forming AWAC. The operating management is subject to direction provided by the Strategic Council of AWAC, which is the principal forum for Alcoa and Alumina Limited to provide direction and counsel to the AWAC companies regarding strategic and policy matters. The Strategic Council consists of five members, three of whom are appointed by Alcoa (of which one is the Chairman of the Strategic Council), and two of whom are appointed by Alumina Limited (of which one is the Deputy Chairman of the Strategic Council).

All matters before the Strategic Council are decided by a majority vote of the members, except for certain matters which require approval by at least 80% of the members, including changes to the scope of AWAC; changes in the dividend policy; equity calls in aggregate greater than \$1 billion in any year; sales of all or a majority of the AWAC assets; loans from AWAC companies to Alcoa or Alumina Limited; certain acquisitions, divestitures, expansions, curtailments or closures; certain related-party transactions; financial derivatives, hedges or swap transactions; a decision by AWAC companies to file for insolvency; and changes to pricing formula in certain offtake agreements which may be entered into between AWAC companies and Alcoa or Alumina Limited.

AWAC Operations

AWAC entities’ assets include the following interests:

- 100% of the bauxite mining, alumina refining, and aluminium smelting operations of Alcoa’s affiliate, Alcoa of Australia Limited (“AofA”);
- 100% of the refinery assets at Point Comfort, Texas, United States (“Point Comfort”);
- 100% interest in various mining and refining assets and the hydro-electric facilities in Suriname;
- 39% interest in the São Luis refinery in Brazil;

- 9.62% interest in the bauxite mining operations in Brazil of Mineração Rio Do Norte, an international mining consortium;
- 100% of the Juruti bauxite deposit and mine in Brazil;
- 100% of the refinery and alumina-based chemicals assets at San Ciprián, Spain;
- 45% interest in Halco (Mining) Inc., a bauxite consortium that owns a 51% interest in Compagnie des Bauxites de Guinée, a bauxite mine in Guinea;
- 100% of Alcoa Steamship Company Inc.;
- 25.1% interest in the mine and refinery in Ras Al Khair, Saudi Arabia; and
- 55% interest in the Portland, Australia smelter that AWAC manages on behalf of the joint venture partners.

Exclusivity

Under the terms of their joint venture agreements, Alcoa and Alumina Limited have agreed that, subject to certain exceptions, AWAC is their exclusive vehicle for their investments, operations or participation in the bauxite and alumina business, and they will not compete with AWAC in those businesses. In the event of a change of control of either Alcoa or Alumina Limited, this exclusivity and non-compete restriction will terminate, and the partners will then have opportunities to unilaterally pursue bauxite or alumina projects outside of or within AWAC, subject to certain conditions provided in the Amended and Restated Charter of the Strategic Council.

Equity Calls

The cash flow of AWAC and borrowings are the preferred sources of funding for the needs of AWAC. Should the aggregate annual capital budget of AWAC require an equity contribution from Alcoa and Alumina Limited, an equity call can be made on 30 days' notice, subject to certain limitations.

Dividend Policy

AWAC will generally be required to distribute at least 50% of the prior calendar quarter's net income of each AWAC company, and certain AWAC companies will also be required to pay a distribution every three months equal to the amount of available cash above specified thresholds and subject to the forecast cash needs of the company. Alcoa will obtain a limited amount of debt funding for the AWAC companies to fund growth projects, subject to certain restrictions.

Leveraging Policy

Debt of AWAC is subject to a limit of 30% of total capital (defined as the sum of debt (net of cash) plus any minority interest plus shareholder equity). The AWAC joint venture will raise a limited amount of debt to fund growth projects within 12 months of it becoming permissible under Alcoa's revolving credit line, provided that the amount of debt does not trigger a credit rating downgrade for Alcoa.

Other

In December 2009, we entered into a joint venture with Saudi Arabian Mining Company ("Ma'aden"), which was formed by the government of Saudi Arabia to develop its mineral resources and is listed on the Saudi Stock Exchange (Tadawul), to develop a fully integrated aluminum complex in the Kingdom of Saudi Arabia. This project is one of the most efficient integrated aluminum production complexes within the worldwide Alcoa system. In its initial phases, the complex includes a bauxite mine with an initial capacity of 4 million bone dry metric tons per year; an alumina refinery with an initial capacity of 1.8 million metric tons per year ("mtpy"); an aluminum smelter with an initial capacity of ingot, slab and billet of 740,000 mtpy; and a rolling mill with initial capacity of 380,000 mtpy. The smelter, refinery and mine are fully operational. Ma'aden owns a 74.9% interest in the joint venture. Alcoa owns a 25.1% interest in the smelter and in the rolling mill; AWAC holds a 25.1% interest in the mine and refinery.

The Aluminerie de Bécancour Inc. (“ABI”) smelter is a joint venture between Alcoa and Rio Tinto located in Bécancour, Quebec. Alcoa is the operating partner and owns 74.95% of the joint venture.

The Machadinho Hydro Power Plant (“HPP”) is a consortium between Alcoa Alumínio (25.8%), Votorantim Energia (33.1%), Tractebel (19.3%), Vale (8.3%) and other partners (CEEE, InterCement and DME Energetica) located in the Pelotas River, southern Brazil.

Barra Grande HPP is a joint venture between Alcoa Alumínio (42.2%), CPFL Energia (25%), Votorantim Energia (15%), InterCement (9%) and DME Energetica (8.8%) located in the Pelotas River, southern Brazil.

Estreito HPP is a consortium between Alcoa Alumínio (25.5%), Tractebel (40.1%), Vale (30%) and InterCement (4.4%) located in the Tocantins River, northern Brazil.

Serra do Facão HPP is a consortium between Alcoa Alumínio (34.9%), Furnas (49.4%), Dme Energetica (10%) and Camargo Correa Energia (5.4%) located in the Sao Marcos River, central Brazil.

Manicouagan Power Limited Partnership (“Manicouagan”) is a joint venture between Alcoa Corporation and Hydro-Québec. Manicouagan owns and operates the 335 megawatt McCormick hydroelectric project, which is located on the Manicouagan River in the Province of Quebec. Manicouagan supplies approximately 27% of the electricity requirements of Alcoa’s Baie-Comeau, Quebec, smelter. Alcoa owns 40% of the joint venture.

Strathcona calciner is a joint venture between Alcoa and Rio Tinto. The calciner purchases green coke from the petroleum industry and converts it into calcined coke. The calcined coke is then used as a raw material in an aluminum smelter. Alcoa owns 39% of the joint venture.

Description of the Business

Information describing Alcoa’s businesses can be found on the indicated pages of this report:

<u>Item</u>	<u>Page(s)</u>
Discussion of Recent Business Developments:	
Management’s Discussion and Analysis of Financial Condition and Results of Operations:	
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Aluminum is one of the most abundant elements in the earth’s crust. Aluminum metal is produced by smelting alumina using large amounts of electricity, and can be cast and rolled into many shapes and forms. Alumina is an intermediary product produced primarily from refining bauxite. The following tables and related discussion provide additional description of Alcoa’s businesses along this value chain.

The Company’s business segments in 2017 were Bauxite, Alumina, and Aluminum. In the first quarter of 2017, management initiated a realignment of the Company’s internal business and organizational structure, which consisted of combining the Company’s aluminum smelting, casting, and rolling businesses, along with the majority of the energy business, into a new Aluminum business unit, which now is managed as a single operating segment. Prior to this

change, each of these businesses that now comprise the Aluminum segment were managed as individual operating segments and constituted the Aluminum, Cast Products, Energy, and Rolled Products segments. For more information regarding the segment reorganization, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Segment Information—Aluminum.”

The existing Bauxite and Alumina segments and the new Aluminum segment represent the Company’s operating and reportable segments. The Bauxite and Alumina segments primarily consist of a series of affiliated operating entities in a joint venture collectively referred to as AWAC. Alcoa ultimately owns 60% and Alumina Limited, an unrelated third party, ultimately owns 40% of these individual entities.

Bauxite

This segment represents the Company’s global bauxite mining operations. Bauxite is Alcoa’s basic raw material input for its alumina refining process and is also sold into the third-party market. Bauxite contains various aluminum hydroxide minerals, the most important of which are gibbsite and boehmite. Alcoa processes most of the bauxite that it mines into alumina and sells the remainder to third parties. The Company obtains bauxite from its own resources and from those belonging to the AWAC enterprise, located in the countries listed in the table below, as well as pursuant to both long-term and short-term contracts and mining leases. Tons of bauxite are reported as dry metric tons (“dmt”) unless otherwise stated. See the glossary of bauxite mining-related terms at the end of this section.

During 2017, mines operated by Alcoa produced 39.0 million dmt and separately mines operated by partnerships or consortiums that include Alcoa and AWAC equity interests produced 6.8 million dmt on a proportional equity basis for a total bauxite production of 45.8 million dmt.

Based on the terms of its bauxite supply contracts, AWAC bauxite purchases from Mineração Rio do Norte S.A. (“MRN”) and Compagnie des Bauxites de Guinée (“CBG”) differ from its proportional equity in those mines. Therefore during 2017, including those purchases, AWAC had access to 47.7 million dmt of production from its portfolio of bauxite interests.

During 2017, AWAC sold 6.6 million dmt of bauxite to third parties and purchased 0.1 million dmt from third parties. The bauxite delivered to Alcoa and AWAC refineries amounted to 41.0 million dmt during 2017.

The Company is growing its third-party bauxite sales business. For example, in December 2016, Alcoa’s affiliate, AofA, received permission from the Government of Western Australia to export up to 2.5 million dmt per year of bauxite for five years to third-party customers. Contracts for bauxite have generally been short-term contracts (two years or less in duration) with spot pricing and adjustments for quality and logistics, although the Company is currently pursuing long-term contracts with potential customers. The primary customer base for third-party bauxite is located in Asia—particularly China. The Company has access to large bauxite deposit areas with mining rights that extend in most cases more than 20 years from the date of this report. For purposes of evaluating the amount of bauxite that will be available to supply its refineries, the Company considers both estimates of bauxite resources as well as calculated bauxite reserves. Bauxite resources represent deposits for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence based on the amount of exploration sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. Bauxite reserves represent the economically mineable part of resource deposits, and include diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out to define the reserves, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Alcoa employs a conventional approach (including additional drilling with successive tightening of the drilling grid) with customized techniques to define and characterize its various bauxite deposit types allowing us to confidently establish the extent of its bauxite resources and their ultimate conversion to reserves.

The following table only includes the amount of proven and probable reserves controlled by the Company. While the level of reserves may appear low in relation to annual production levels, they are consistent with historical levels of

reserves for the Company's mining locations and consistent with the Company reserves strategy. Given the Company's extensive bauxite resources, the abundant supply of bauxite globally and the length of the Company's rights to bauxite, it is not cost-effective to invest the significant funds and efforts necessary to establish bauxite reserves that reflect the total size of the bauxite resources available to the Company. Rather, bauxite resources are upgraded annually to reserves as needed by the location. Detailed assessments are progressively undertaken within a proposed mining area and mine activity is then planned to achieve a uniform quality in the supply of blended feedstock to the relevant refinery. Alcoa believes its present sources of bauxite on a global basis are sufficient to meet the forecasted requirements of its alumina refining operations for the foreseeable future.

Bauxite Resource and Reserve Development Guidelines

Alcoa has adopted best practice guidelines for bauxite reserve and resource classification at its operating bauxite mines. Alcoa's reserves are declared in accordance with its internal guidelines as administered by the Alcoa Ore Reserves Committee ("AORC") and certified by Joint Ore Reserves Committee Code ("JORC Code"). The reported ore reserves set forth in the table below are those that we estimated could be extracted economically with current technology and in current market conditions. We do not use a price for bauxite, alumina or aluminum to determine our bauxite reserves. The primary criteria for determining bauxite reserves are the feed specifications required by the receiving alumina refinery. More specifically, reserves are set based on the chemical composition of the bauxite in order to minimize bauxite processing cost and maximize refinery economics for each individual refinery. The primary specifications that are important to this analysis are the "available alumina" and "reactive silica" content of the bauxite. Each alumina refinery will have a target specification for these parameters, but may receive bauxite within a range that allows blending in stockpiles to achieve the receiving refinery's target.

In addition to these chemical specifications, a number of other ore reserve design factors have been applied to differentiate bauxite reserves from other mineralized material. The contours of the bauxite reserves are designed using parameters such as available alumina content cutoff grade, reactive silica cutoff grade, ore density, overburden thickness, ore thickness and mine access considerations. These parameters are generally determined by using infill drilling or geological modeling.

Further, our mining locations utilize annual in-fill drilling or geological modeling programs designed to progressively upgrade the reserve and resource classification of their bauxite based on the above-described factors.

Bauxite Interests, Share of Reserves and Annual Production¹

Country	Project	Owners' Mining Rights Entitlement (%)	Expiration Date of Mining Rights	Probable Reserves ² (million dmt)	Proven Reserves ² (million dmt)	Available Alumina Content (%) AvAl ₂ O ₃	Reactive Silica Content (%) R _x SiO ₂	2017 Annual Production (million dmt)	Ore Reserve Design Factors
Australia	Darling Range Mines ML1SA	Alcoa of Australia Limited ("AofA") ³ (100%)	2024	109.2	70.0	32.8	1.0	33.2	<ul style="list-style-type: none"> • A.Al₂O₃ ≥ 27.5% • R.SiO₂ ≤ 3.5% • Minimum mineable thickness 2m • Minimum bench widths of 45m
Brazil	Poços de Caldas	Alcoa Alumínio S.A. ("Alumínio") ⁴ (100%)	2020 ⁵	0.2	1.5	39.3	4.6	0.3	<ul style="list-style-type: none"> • A.Al₂O₃ ≥ 30% • R.SiO₂ ≤ 7%
	Juruti ⁵ RN101, RN102, RN103, RN104, #34	Alcoa World Alumina Brasil Ltda. ("AWA Brasil") ³ (100%)	2100 ⁵	22	3.8	46.6	4.4	5.6	<ul style="list-style-type: none"> • A.Al₂O₃ ≥ 35% • R.SiO₂ ≤ 10% • Wash Recovery: ≥ 30% • Overburden/Ore (m/m) = 10/1
Equity Interests :									
Brazil	Trombetas	Mineração Rio do Norte S.A. ("MRN") ⁷ (18.2%)	2046 ⁵	2.7	6.1	49.0	5.1	2.7	<ul style="list-style-type: none"> • A.Al₂O₃ ≥ 46% • R.SiO₂ ≤ 7% • Wash Recovery: ≥ 30%
Guinea	Boké	Compagnie des Bauxites de Guinée ("CBG") ⁸ (22.95%)	2038 ⁹	36.0	37.8	TAI ₂ O ₃ ¹⁰ 48.8	TSiO ₂ ¹⁰ 1.7	3.2	<ul style="list-style-type: none"> • A.Al₂O₃ ≥ 44% • R.SiO₂ ≤ 10% • Minimum mineable thickness 2m • Smallest Mining Unit size (SMU) 50m x 50m
Kingdom of Saudi Arabia	Al Ba'itha	Ma'aden Bauxite & Alumina Company (25.1%) ¹¹	2037	33.8	18.1	TAA ¹² 49.4	TSiO ₂ ¹² 8.7	0.9	<ul style="list-style-type: none"> • A.Al₂O₃ ≥ 40% • Mining dilution modeled as a skin of 12.5cm around the ore • Mining recovery applied as a skin loss of 7.5 cm on each side of the mineralisation • Mineralisation less than 1m thick excluded

¹ This table shows only the AWAC and/or Alcoa share (proportion) of reserve and annual production tonnage.

² Reserves are in place for all mines other than Juruti and Trombetas, where the ore is beneficiated and a wash recovery factor is applied.

³ This entity is part of the AWAC group of companies and is ultimately owned 60% by Alcoa and 40% by Alumina Limited.

⁴ Alumínio is ultimately owned 100% by Alcoa.

⁵ Brazilian mineral legislation does not establish the duration of mining concessions. The concession remains in force until the exhaustion of the deposit. The company estimates that (i) the concessions at Poços de Caldas will last at least until 2020, (ii) the concessions at Trombetas will last until 2046 and (iii) the concessions at Juruti will last until 2100. Depending, however, on actual and future needs, the rate at which the deposits are exploited and government approval is obtained, the concessions may be extended to (or expire at) a later (or an earlier) date.

- ⁶ Alcoa World Alumina LLC (“AWA LLC”) owns 100% of N.V. Alcoa Minerals of Suriname (“AMS”). Suralco and AMS are part of the AWAC group of companies which are ultimately owned 60% by Alcoa Corporation and 40% by Alumina Limited.
- ⁷ Alumínio holds an 8.58% total interest, AWA Brasil holds a 4.62% total interest and AWA LLC holds a 5% total interest in MRN. MRN is jointly owned with affiliates of Rio Tinto Alcan Inc., Companhia Brasileira de Alumínio, Vale, South32, and Norsk Hydro. Alumínio, AWA Brasil, and AWA LLC purchase bauxite from MRN under long-term supply contracts.
- ⁸ AWA LLC owns a 45% interest in Halco (Mining), Inc. (“Halco”). Halco owns 100% of Boké Investment Company, a Delaware company, which owns 51% of CBG. The Guinean Government owns 49% of CBG, which has the exclusive right through 2038 to develop and mine bauxite in certain areas within an approximately 2939 square-kilometer concession in northwestern Guinea.
- ⁹ AWA LLC and Alumina Española, S.A. have bauxite purchase contracts with CBG that expire in 2033. Before that expiration date, AWA LLC and Alumina Española, S.A. expect to negotiate extensions of their contracts as CBG will have concession rights until 2038. The CBG concession can be renewed beyond 2038 by agreement of the Government of Guinea and CBG should more time be required to commercialize the remaining economic bauxite within the concession.
- ¹⁰ Guinea—Boké: CBG prices bauxite and plans the mine based on the bauxite content of total alumina (“ $\text{TA}_{\text{Al}_2\text{O}_3}$ ”) and total silica (“ TSiO_2 ”).
- ¹¹ Ma’aden Bauxite & Alumina Company is a joint venture owned by Saudi Arabian Mining Company (“Ma’aden”) (74.9%) and AWA Saudi Limited (25.1%). AWA Saudi Limited is part of the AWAC group of companies and is ultimately owned 60% by Alcoa Corporation and 40% by Alumina Limited.
- ¹² Kingdom of Saudi Arabia—Al Ba’itha: Bauxite reserves and mine plans are based on the bauxite qualities of total available alumina (“ $\text{TA}_{\text{Al}_2\text{O}_3}$ ”) and total silica (“ TSiO_2 ”).

Qualifying statements relating to the table above:

Australia—Darling Range Mines: Huntly and Willowdale are the two active AWAC mines in the Darling Range of Western Australia. The mineral lease issued by the State of Western Australia to Alcoa Corporation’s majority owned subsidiary, AofA is known as ML1SA and encompasses a gross area of 712,881 hectares (including private land holdings, state forests, national parks and conservation areas) in the Darling Range and extends from east of Perth to east of Bunbury (“ML1SA Area”). The ML1SA lease provides AofA with various rights, including certain exclusivity rights to explore for and mine bauxite, rights to deny third party mining tenements in limited circumstances, rights to mining leases for other minerals in the ML1SA Area, and the right to prevent certain governmental actions from interfering with or prejudicially affecting AofA’s rights. The ML1SA lease term extends to 2024; however, it can be renewed for an additional 21-year period to 2045. The above-declared reserves are current as of December 31, 2017. The amount of reserves reflects the total AWAC share. Additional resources are routinely upgraded by additional exploration and development drilling to reserve status. The Huntly and Willowdale mines supply bauxite to three local AWAC alumina refineries.

Brazil—Poços de Caldas: The above-declared reserves are current as of December 31, 2017. Tonnage is total Alcoa share. Additional resources are being upgraded to reserves as needed.

Brazil—Juruti RN101, RN102, RN103, RN104, #34: The above-declared reserves are current as of December 31, 2017. All reserves are on Capiroanga Plateau. Declared reserves are total AWAC share. Declared reserve tonnages and the annual production tonnage are washed and unwashed product tonnages. The Juruti mine’s operating license is periodically renewed.

Brazil—Trombetas-MRN: The above-declared reserves are as of December 31, 2017. Declared and annual production tonnages reflect the total for Alumínio and AWAC shares (18.2%). Declared tonnages are washed product tonnages.

Guinea—Boké-CBG: The above-declared reserves are based on export quality bauxite reserves and are current as of December 31, 2017. Declared tonnages reflect only the AWAC share of CBG’s reserves. Annual production tonnage is reported based on AWAC’s 22.95% share. Declared reserves quality is reported based on total alumina (“ TAI_2O_3 ”) and total silica (“ TSiO_2 ”) because CBG export bauxite is sold on this basis. Additional resources are being routinely drilled and modeled to upgrade to reserves as needed.

Kingdom of Saudi Arabia—Al Ba’itha: The Al Ba’itha Mine began production during 2014 and production was increased in 2016. Declared reserves are as of November 30, 2017. The declared reserves are located in the South Zone of the Az Zabirah Bauxite Deposit. The reserve tonnage in this declaration is AWAC share only (25.1%).

The following table provides additional information regarding the Company’s bauxite mines:

Mine & Location	Means of Access	Operator	Title, Lease or Options	History	Type of Mine Mineralization Style	Power Source	Facilities, Use & Condition
Australia—Darling Range; Huntly and Willowdale.	Mine locations accessed by roads. Ore is transported to refineries by long distance conveyor and rail.	Alcoa	Mining lease from the Western Australia Government. ML1SA. Expires in 2024, with option to renew.	Mining began in 1963.	Open-cut mines. Bauxite is derived from the weathering of Archean granites and gneisses and Precambrian dolerite.	Electrical energy from natural gas is supplied by the refinery.	Infrastructure includes buildings for administration and services; workshops; power distribution; water supply; crushers; long distance conveyors. Mines and facilities are operating.
Brazil—Poços de Caldas. Closest town is Poços de Caldas, MG, Brazil.	Mine locations are accessed by road. Ore transport to the refinery is by road.	Alcoa	Mining licenses from the Government of Brazil and Minas Gerais. Company claims and third-party leases. Expires in 2020.	Mining began in 1965.	Open-cut mines. Bauxite derived from the weathering of nepheline syenite and phonolite.	Commercial grid power.	Mining offices and services are located at the refinery. Numerous small deposits are mined by contract miners and the ore is trucked to either the refinery stockpile or intermediate stockpile area. Mines and facilities are operating. Mine production has been reduced to align with the reduced production of the Poços refinery which is now producing specialty alumina.
Brazil—Juruti. Closest town is Juruti located on the Amazon River.	The mine’s port at Juruti is located on the Amazon River and accessed by ship. Ore is transported from the mine site to the port by company owned rail.	Alcoa	Mining licenses from the Government of Brazil and Pará. Mining rights do not have a legal expiration date. See footnote 5 to the table above. Operating licenses for the mine, washing plant and exploration are in the process of being renewed. Operating license for the port remains valid until the government agency formalizes the renewal.	The Juruti deposit was systematically evaluated by Reynolds Metals Company beginning in 1974. ParentCo merged Reynolds into the Company in 2000. ParentCo then executed a due diligence program and expanded the exploration area. Mining began in 2009.	Open-cut mines. Bauxite derived from weathering during the Tertiary of Cretaceous fine to medium grained feldspathic sandstones. The deposits are covered by the Belterra clays.	Electrical energy from fuel oil is generated at the mine site. Commercial grid power at the port.	At the mine site: Fixed plant facilities for crushing and washing the ore; mine services offices and workshops; power generation; water supply; stockpiles; rail sidings. At the port: Mine and rail administrative offices and services; port control facilities with stockpiles and ship loader. Mine and port facilities are operating.

Mine & Location	Means of Access	Operator	Title, Lease or Options	History	Type of Mine Mineralization Style	Power Source	Facilities, Use & Condition
Brazil—MRN Closest town is Trombetas in the State of Pará, Brazil.	The mine and port areas are connected by sealed road and company owned rail. Washed ore is transported to Porto Trombetas by rail. Trombetas is accessed by river and by air at the airport.	MRN	Mining rights and licenses from the Government of Brazil. Concession rights expire in 2046.	Mining began in 1979. Major expansion in 2003.	Open-cut mines. Bauxite derived from weathering during the Tertiary of Cretaceous fine to medium grained feldspathic sandstones. The deposits are covered by the Belterra clays.	MRN generates its own electricity from fuel oil.	Ore mined from several plateaus is crushed and transported to the washing plant by long-distance conveyors. The washing plant is located in the mining zone. Washed ore is transported to the port area by company-owned and operated rail. At Porto Trombetas the ore is loaded onto customer ships berthed in the Trombetas River. Some ore is dried and the drying facilities are located in the port area. Mine planning and services and mining equipment workshops are located in the mine zone. The main administrative, rail and port control offices and various workshops are located in the port area. MRN's main housing facilities, "the city", are located near the port. The mines, port and all facilities are operating.
Guinea—CBG. Closest town to the mine is Sangaredi. Closest town to the port is Kamsar. The CBG Lease is located within the Boké, Telimele and Gaoual administrative regions.	The mine and port areas are connected by sealed road and company-operated rail. Ore is transported to the port at Kamsar by rail. There are air strips near both the mine and port. These are not operated by the company.	CBG	CBG Lease expires in 2038. The lease is renewable in 25-year increments. CBG's rights are specified within the Basic Agreement and Amendment 1 to the Basic Agreement with the Government of Guinea.	Construction began in 1969. First export ore shipment was in 1973.	Open-cut mines. The bauxite deposits within the CBG lease are of two general types. TYPE 1: In-situ laterization of Ordovician and Devonian plateau sediments locally intruded by dolerite dikes and sills. TYPE 2: Sangaredi type deposits are derived from clastic deposition of material eroded from the Type 1 laterite deposits and possibly some of the protholiths from the TYPE 1 plateaus deposits.	The company generates its own electricity from fuel oil at both Kamsar and Sangaredi.	Mine offices, workshops, power generation and water supply for the mine and company mine city are located at Sangaredi. The main administrative offices, port control, railroad control, workshops, power generation and water supply are located in Kamsar. Ore is crushed, dried and exported from Kamsar. CBG has company cities within both Kamsar and Sangaredi. The mines, railroad, driers, port and other facilities are operating.
Kingdom of Saudi Arabia—Al Ba'itha Mine. Qibah is the closest regional center to the mine, located in the Qassim province.	The mine and refinery are connected by road and rail. Ore is transported to the refinery at Ras Al Khair by rail.	Ma'aden Bauxite & Alumina Company	The current mining lease will expire in 2037.	The initial discovery and delineation of bauxite resources was carried out between 1979 and 1984. The southern zone of the Az Zabirah deposit was granted to Ma'aden in 1999. Mine construction was completed in the second quarter of 2015, and the mining operations continued at planned levels.	Open-cut mine. Bauxite occurs as a paleolaterite profile developed at an angular unconformity between underlying late Triassic to early Cretaceous sediments (parent rock sequence Biyadh Formation) and the overlying late Cretaceous Wasia Formation (overburden sequence).	The company generates electricity at the mine site from fuel oil.	The mine includes fixed plants for crushing and train loading; workshops and ancillary services; power plant; and water supply. There is a company village with supporting facilities. Mining operations commenced in 2014. Mine construction was completed in the second quarter of 2015 and the mining operations continued at planned levels.

Kingdom of Saudi Arabia Joint Venture

In December 2009, ParentCo and Saudi Arabian Mining Company (“Ma’aden”), which was formed by the government of Saudi Arabia to develop its mineral resources and is listed on the Saudi Stock Exchange (Tadawul), entered into a joint venture to develop a fully integrated aluminum complex in the Kingdom of Saudi Arabia. In its initial phases, the complex includes a bauxite mine with an initial capacity of 4 million dmt per year; an alumina refinery with an initial capacity of 1.8 million mtpy; an aluminum smelter with an initial ingot, slab and billet capacity of 740,000 mtpy; and a rolling mill with initial capacity of 380,000 mtpy. The smelter, refinery and mine are fully operational. Ma’aden owns a 74.9% interest in the joint venture. Alcoa owns a 25.1% interest in the smelter and in the rolling mill; and AWAC holds a 25.1% interest in the mine and refinery.

The refinery, smelter and rolling mill are located within the Ras Al Khair industrial zone on the east coast of the Kingdom of Saudi Arabia.

For additional information regarding the joint venture, see the Equity Investments section of Note H to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data).

Glossary of Bauxite Mining Related Terms

Term	Abbreviation	Definition
Alcoa Ore Reserves Committee	AORC	The group within Alcoa, which is comprised of geologists and engineers, that specifies the guidelines by which bauxite reserves and resources are classified. These guidelines are used by Alcoa-managed mines.
Alumina	Al ₂ O ₃	A compound of aluminum and oxygen. Alumina is extracted from bauxite using the Bayer process. Alumina is a raw material for smelters to produce aluminum metal.
AORC Guidelines		The guidelines used by Alcoa-managed mines to classify reserves and resources. These guidelines are issued by the Alcoa Ore Reserves Committee.
Available alumina content	A.Al ₂ O ₃	The amount of alumina extractable from bauxite using the Bayer process.
Bauxite		The principal raw material (mineral) used to produce alumina. Bauxite is refined using the Bayer process to extract alumina.
Bayer process		The principal industrial chemical process for refining bauxite to produce alumina.
Dry metric ton	dmt	Tonnage reported on a zero moisture basis.
Competent Persons Report	CP Report	Joint Ore Reserves Committee (“JORC”) Code compliant Reserves and Resources Report.
Juruti RN101, RN102, RN103, RN104,#34		Mineral claim areas in Brazil associated with the Juruti mine, within which Alcoa has mining operating licenses issued by the state.
ML1SA		The Mineral lease issued by the State of Western Australia to Alcoa’s majority owned subsidiary, Alcoa of Australia (“AofA”). AofA mines located at Huntly and Willowdale operate within ML1SA.

Term	Abbreviation	Definition
Open-cut mine		The type of mine in which an excavation is made at the surface to extract mineral ore (bauxite). The mine is not underground and the sky is viewable from the mine floor.
Probable reserve		That portion of a reserve, i.e. bauxite reserve, where the physical and chemical characteristics and limits are known with sufficient confidence for mining and to which various mining modifying factors have been applied. Probable reserves are at a lower confidence level than proven reserves.
Proven reserve		That portion of a reserve, i. e. bauxite reserve, where the physical and chemical characteristics and limits are known with high confidence and to which various mining modifying factors have been applied.
Reactive silica	R.SiO ₂	The amount of silica contained in the bauxite that is reactive within the Bayer process.
Reserve		That portion of mineralized material, i.e. bauxite, that Alcoa has determined to be economically feasible to mine and supply to an alumina refinery.
Resources		Bauxite occurrences and/or concentrations of economic interest that are in such form, quality and quantity that are reasonable prospects for economic extraction.
Silica	SiO ₂	A compound of silicon and oxygen.
Total alumina content	TAI ₂ O ₃	The total amount of alumina in bauxite. Not all of this alumina is extractable or available in the Bayer process.
Total available alumina	TA.Al ₂ O ₃	The total amount of alumina extractable from bauxite by the Bayer process. This term is commonly used when there is a hybrid or variant Bayer process that will refine the bauxite.
Total silica	TSiO ₂	The total amount of silica contained in the bauxite.

Alumina

This segment represents the Company's worldwide refining system, which processes bauxite into alumina. Alcoa's largest customer for smelter grade alumina is its own aluminum smelters, which in 2017 accounted for approximately 35% of its total alumina sales. A portion of the alumina is sold to external customers who process it into industrial chemical products. Remaining sales are made to customers all over the world and are typically priced by reference to published spot market prices.

This segment also includes AWAC's 25.1% share of the results of a mining and re-finishing joint venture company in Saudi Arabia.

In 2010, a number of key commodity information service providers began publishing daily and weekly alumina (spot) pricing assessments or indices rather than calculating alumina price as a percentage of the LME aluminum price, as had been done traditionally. Since that time, Alcoa has been systematically moving its third-party alumina sales contracts away from LME aluminum-based pricing to published alumina spot or index pricing, thus de-linking the price for alumina from the aluminum price to better reflect alumina's distinct fundamentals. Contracts for smelter grade alumina are often multi-year, although contract structures have evolved from primarily long-term contracts with fixed or LME-based pricing to shorter-term contracts with more frequent pricing adjustment to reflect this change in pricing structure. In 2017, approximately 86% of Alcoa Corporation's smelter grade alumina shipments to third parties were sold at published spot/index prices.

Alcoa’s alumina refining facilities and its worldwide alumina capacity are shown in the following table:

Country	Facility¹	Nameplate Capacity² (000 MTPY)	Alcoa Corporation Consolidated Capacity³ (000 MTPY)
Australia	Kwinana ⁴	2,190	2,190
	Pinjarra ⁴	4,234	4,234
	Wagerup ⁴	2,555	2,555
Brazil	Poços de Caldas	390 ⁵	390
	São Luís (“Alumar”) ⁶	3,500	1,890
Spain	San Ciprián	1,500	1,500
United States	Point Comfort, TX ⁷	2,305 ⁸	2,305
TOTAL		16,674	15,064

Equity Interests:

Country	Facility¹	Nameplate Capacity² (000 MTPY)
Kingdom of Saudi Arabia	Ras Al Khair ⁹	1,800

¹ Each facility is 100% owned by Alcoa, unless otherwise noted.

² Nameplate Capacity is an estimate based on design capacity and normal operating efficiencies and does not necessarily represent maximum possible production.

³ The figures in this column reflect Alcoa’s share of production from these facilities. For facilities wholly-owned by AWAC entities, Alcoa takes 100% of the production.

⁴ These facilities are wholly-owned by Alcoa of Australia Limited, which is part of the AWAC group of companies and is ultimately owned 60% by Alcoa and 40% by Alumina Limited.

⁵ As a result of the decision to fully curtail the Poços de Caldas smelter, management initiated a reduction in alumina production at this refinery. The capacity that is operating at this refinery is producing at an approximately 45% output level.

⁶ The Alumar facility is owned by AWA Brasil (39%), Rio Tinto Alcan Inc. (10%), Alumínio (15%), and South32 (36%). AWA Brasil is part of the AWAC group of companies and is ultimately owned 60% by Alcoa and 40% by Alumina Limited. With respect to Rio Tinto Alcan Inc. and South32, the named company or an affiliate thereof holds the interest.

⁷ The Point Comfort facility is 100% owned by AWA LLC. This entity is part of the AWAC group of companies and is ultimately owned 60% by Alcoa and 40% by Alumina Limited.

⁸ The Point Comfort alumina refinery has been fully curtailed (see below).

⁹ The Ras Al Khair facility is 100% owned by Ma’aden Bauxite & Alumina Company, a joint venture owned by Ma’aden (74.9%) and AWA Saudi Limited (25.1%). AWA Saudi Limited is part of the AWAC group of companies and is ultimately owned 60% by Alcoa and 40% by Alumina Limited.

As of December 31, 2017, Alcoa had approximately 2,305,000 mtpy of idle capacity relative to total Alcoa consolidated capacity of 15,064,000 mtpy. As noted above, Alcoa and Ma’aden developed an alumina refinery in the Kingdom of Saudi Arabia. Initial capacity of the refinery is 1,800,000 mtpy, and it produced approximately 1,474,000 metric tons (mt) in 2017. For additional information regarding the joint venture, see Note H to the Consolidated Financial Statements under the caption “Investments—Equity Investments.”

In March 2015, ParentCo initiated a 12-month review of 2,800,000 mtpy in refining capacity for possible curtailment (partial or full), permanent closure or divestiture, as part of an effort to lower the position of the Company’s refining operations on the global alumina cost curve. The review resulted in the curtailment of the remaining capacity at the Suralco refinery (1,330,000 mtpy) in 2015 and the commencement of the curtailment of the remaining capacity of the Point Comfort, TX refinery (2,010,000 mtpy), which curtailment was completed in the first half of 2016. In the fourth quarter of 2016, Alcoa determined to close the Suralco alumina refinery and bauxite mines in Suriname, which have been fully curtailed since November 2015. For additional information regarding the curtailments, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Segment Information—Alumina.”

Aluminum

In the first quarter of 2017, Alcoa Corporation realigned the Company’s internal business and organizational structure. This realignment consisted of combining Alcoa Corporation’s aluminum smelting, casting, and rolling businesses, along with the majority of the energy business, into a new Aluminum business unit.

This segment’s combined smelting and casting operations produce primary aluminum. The smelting operations produce molten primary aluminum, which is then formed by the casting operations into either foundry ingot or into value-add ingot products, including billet, rod, and slab. The primary purpose of the energy assets is to supply power to certain of this segment’s smelting operations, as well as to the rolling mill. However, these energy assets provide operational flexibility to maximize operating results during market cyclicity through the sale of excess energy. The rolling mill produces aluminum sheet primarily sold directly to customers in the packaging end market for the production of aluminum cans. This segment also includes Alcoa’s 25.1% share of the results of a both a smelting and rolling mill joint venture company in Saudi Arabia.

Smelting Operations

Alcoa’s primary aluminum smelting and casting facilities are shown in the following table:

Country	Facility ¹	Nameplate Capacity ² (000 MTPY)	Alcoa Corporation Consolidated Capacity ³ (000 MTPY)
Australia	Portland ⁴	358	197 ^{5,6}
Brazil	Poços de Caldas ⁷	N/A	N/A
	São Luís (“Alumar”) ⁸	447	268 ⁹
Canada	Baie Comeau, Québec	280	280
	Bécancour, Québec ¹⁰	413	310 ¹¹
	Deschambault, Québec	260	260
Iceland	Fjarðaál	344	344
Norway	Lista	94	94
	Mosjøen	188	188
Spain	Avilés	93 ¹²	93
	La Coruña	87 ¹²	87
	San Ciprián	228	228

Country	Facility¹	Nameplate Capacity² (000 MTPY)	Alcoa Corporation Consolidated Capacity³ (000 MTPY)
United States	Massena West, NY	130	130
	Ferndale, WA (“Intalco”)	279 ¹³	279
	Wenatchee, WA	184 ¹⁴	184
	Evansville, IN (“Warrick”) ¹⁵	269 ¹⁶	269
TOTAL		3,654	3,211

Equity Interests:

Country	Facility	Nameplate Capacity² (000 MTPY)
Kingdom of Saudi Arabia	Ras Al Khair ¹⁷	740

¹ Facilities include casthouse and smelters, unless otherwise indicated. Each facility is 100% owned by Alcoa, unless otherwise noted.

² Nameplate Capacity is shown for Alcoa’s primary smelters. Nameplate Capacity is an estimate based on design capacity and normal operating efficiencies and does not necessarily represent maximum possible production.

³ The figures in this column reflect Alcoa’s share of production based on Nameplate Capacity from the smelter facilities.

⁴ The Portland facility is owned by AofA (55%), CITC (22.5%), and Marubeni (25%).

⁵ This figure includes the minority interest of Alumina Limited in the Portland facility, which is owned by AofA, an AWAC company. From this facility, AWAC takes 100% of the production allocated to AofA.

⁶ The Portland smelter has approximately 30,000 mtpy of idle capacity.

⁷ The Poços de Caldos facility is a casthouse and does not include a smelter.

⁸ The Alumar facility is owned by Alumínio (60%) and South32 (40%).

⁹ The Alumar smelter and casthouse have been fully curtailed since April 2015.

¹⁰ The Bécancour facility is owned by Alcoa (74.95%) and Rio Tinto Alcan Inc. (“Rio Tinto”) (25.05%) (owned through Rio Tinto’s interest in Pechiney Reynolds Québec, Inc. (“PRQ”); PRQ is owned by Rio Tinto and Alcoa).

¹¹ On January 11, 2018, a lockout of the bargained hourly employees commenced at the Bécancour smelter (see Employees below). As a result, only one of the three potlines at this smelter is operating. The idle capacity described below does not include any capacity related to the Bécancour smelter.

¹² The Avilés and La Coruña smelters have approximately 56,000 mtpy of idle capacity combined.

¹³ The Intalco smelter has approximately 49,000 mtpy of idle capacity.

¹⁴ The curtailment of remaining capacity at Wenatchee was completed by the end of 2015. The casthouse has been fully curtailed since the end of December 2015.

¹⁵ The Warrick casthouse is dedicated to supplying rolling slab to the Warrick rolling mill.

¹⁶ In July 2017, the Company announced that it would restart three of five potlines at the Warrick smelter by the end of the second quarter of 2018. The Warrick smelter had been fully curtailed since the end of 2015.

¹⁷ The Ras Al Khair facility includes a rolling mill.

As of December 31, 2017, Alcoa Corporation had approximately 856,000 mtpy of idle capacity relative to total Alcoa consolidated capacity of 3,211,000 mtpy.

In July 2017, Alcoa announced plans to restart three (approximately 161,000 mtpy of capacity) of the five potlines (269,000 mtpy of capacity) at the Warrick smelter, which is expected to be complete in the second quarter of 2018. This smelter was previously permanently closed in March 2016. The capacity identified for restart will directly supply the existing rolling mill at the Warrick location, to improve efficiency of the integrated site and provide an additional source of metal to help meet an anticipated increase in production volumes. Because the smelter will be partially restarted, the capacity of the Warrick smelter was included in the Alcoa's consolidated capacity at December 31, 2017. Additionally, until the partial restart is completed, the capacity of the Warrick smelter was included in idle capacity at December 31, 2017. Once the partial restart of the Warrick smelter occurs, approximately 161,000 mtpy will be removed from idle capacity.

In October 2017, Alcoa and Luminant Generation Company LLC (Luminant) executed an early termination agreement of a power contract (see Energy Sources—Electricity—North America below), as well as other related fuel and lease agreements, effective October 1, 2017, related to the Company's Rockdale smelter, which had been fully curtailed since the end of 2008. As a result of the early termination of the power contract, Alcoa initiated a strategic review of the remaining buildings and equipment associated with the smelter, casthouse, and the aluminum powder plant at the Rockdale location. ParentCo previously decided to curtail the operating capacity of the Rockdale smelter in 2008 as a result of an uncompetitive power supply and then-overall unfavorable market conditions. Under this review, which was completed in December 2017, management determined that the Rockdale operations have limited economic prospects. Consequently, management approved the permanent closure and demolition of the Rockdale smelter (capacity of approximately 191,000 mtpy) and related operations effective immediately. Accordingly, the Rockdale smelter has been removed from the preceding table.

Contracts for primary aluminum vary widely in duration, from multi-year supply contracts to monthly or weekly spot purchases. Pricing for primary aluminum products is typically comprised of three components: (i) the published LME aluminum price for commodity grade P1020 aluminum, (ii) the published regional premium applicable to the delivery locale and (iii) a negotiated product premium which accounts for factors such as shape and alloy. In recent years, we have seen increasing trade flows of commodity and higher value-added products between regions, with surplus regions supplying missing volumes to deficit regions. The flow patterns consider shipping costs, import duties, and premiums in the importing regions.

For additional information regarding the curtailments and closures, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Restructuring and Other Charges."

Rolled Products

The Aluminum segment's rolled products business consists of the Company's rolling mill in Warrick, Indiana, which produces aluminum sheet primarily sold directly to customers in the packaging end market for the production of aluminum cans (beverage and food) and Alcoa's investment in a rolling mill in Saudi Arabia through its Ma'aden joint venture. For additional information about the Ma'aden joint venture, see the Equity Investments section of Note H to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data).

Alcoa's rolled products business participates in several market segments, including beverage can sheet, food can sheet, lithographic sheet, and industrial products. The term "RCS" or Rigid Container Sheet is commonly used for both beverage and food can sheet. This includes the material used to produce the body of beverage containers (body stock), the lid of beverage containers (end stock and tab stock), the material to produce food can body and lids (food stock), and the material to produce aluminum bottles (bottle stock) and bottle closures (closure sheet). The U.S. aluminum can business consists of approximately 96% beverage can sheet and approximately 4% food can sheet. Alcoa is one of the largest food can sheet producers in North America. Alcoa intends to suspend supply of lithographic sheet in the second quarter of 2018.

Buyers of RCS products in North America are large and concentrated and have significant market power. There are essentially five buyers of all the U.S. beverage can sheet sold in the beverage industry (three can makers and the two

beverage companies). In 2017, we estimate the North American aluminum can sheet buyers and their respective shares of the industry are: AB-Inbev (>39%), Coca-Cola (>21%), Ball Corporation (>18%), Crown Cork & Seal Company (>15%), Ardagh Group (>5%) and others (2%). Buyers traditionally buy RCS in proportions that represent the full aluminum can (80% body stock, 20% end and tab stock). In addition, as the aluminum can sheet represents approximately 60% of their manufacturing costs, there is a heavy focus on cost.

The market for aluminum food can sheet in North America is also very concentrated. In 2017, we estimate the following market shares of aluminum food can producers in North America: Silgan (>85%), Crown (>12%), Ardagh (>2%) and others (1%).

In 2017, our Warrick facility produced and sold 317 kilo metric tons (“kMT”) of RCS, lithographic sheet, and industrial products, of which over 98% was sold to customers in North America. The majority of its sales were coated RCS products (food stock, beverage end and tab stock). Following the Separation Transaction, both Warrick and Ma’aden supply body stock material, temporarily supplemented by Arconic’s Tennessee Operations under a transition supply agreement. Seasonal increases in can sheet sales are generally expected in the second and third quarters of the year.

Can sheet demand is a function of consumer demand for beverages in aluminum packaging. Aluminum cans have a number of functional advantages for beverage companies, including product shelf life, carbonation retention, and logistics/distribution efficiency. Demand is mostly affected by overall demand for carbonated soft drinks (“CSDs”) and beer. CSDs and beer compose approximately 60% and 40%, respectively, of overall aluminum can demand. In 2017, the U.S./Canada aluminum can shipments reached 93.5 billion cans, a decline of 0.9% over 2016. Alcoholic can shipments reached 36.5 billion cans, declining 3.8% year over year, while non-alcoholic can shipments were 57.0 billion, growing 1.0% year over year.

Energy Facilities and Sources

Employing the Bayer process, Alcoa refines alumina from bauxite ore. We then produce aluminum from the alumina by an electrolytic process requiring substantial amounts of electric power. Energy accounts for approximately 20% of the Company’s total alumina refining production costs. Electric power accounts for approximately 24% of the Company’s primary aluminum production costs.

Electricity markets are regional. They are limited in size by physical and regulatory constraints, including the physical inability to transport electricity efficiently over long distances, the design of the electric grid, including interconnections, and by the regulatory structure imposed by various federal and state entities.

Electricity contracts may be very short term (real-time), short term (day ahead) or years in duration, and contracts can be executed for immediate delivery or years in advance. Pricing may be fixed, indexed to an underlying fuel source or other index such as LME, cost-based or based on regional market pricing. Pricing may be all inclusive on a per energy unit delivered basis (e.g., dollars per megawatt hour) or the components may be separated and include a demand or capacity charge, an energy charge, an ancillary services charge and a transmission charge to make the delivered energy conform to customer requirements. In 2017, Alcoa generated approximately 3% of the power used at its smelters worldwide and generally purchased the remainder under long-term arrangements.

The sections below provide an overview of our energy facilities and summarize the sources of energy for our smelters and refineries.

The following table sets forth the electricity generation capacity and 2017 generation of facilities in which Alcoa Corporation has an ownership interest:

Alcoa Corporation Consolidated			
Country	Facility¹	Capacity (MW)²	2017 Generation (MWh)³
Brazil	Barra Grande	156	1,131,394
	Estreito	157	858,604
	Machadinho	119	1,068,977
	Serra do Facão	60	77,205
Canada	Manicouagan	132	1,160,504
Suriname	Afobaka	189	919,085
United States	Warrick ⁴	657	1,895,681
TOTAL		1,470	7,111,450

¹ Each listed facility generates hydroelectric power except the Warrick facility, which generates substantially all of the power used at the Warrick facility using nearby coal reserves (see below).

² The consolidated capacity of the Brazilian energy facilities represented here in megawatts (“MW”), is the assured energy that is approximately 55% of hydropower plant nominal capacity.

³ The figures in this column are presented in megawatt hours (“MWh”).

⁴ The Warrick smelter had been permanently closed since March 2016. In July 2017, the Company announced that it would restart three of five potlines at the Warrick smelter by the end of the second quarter of 2018.

Alumínio owns a 25.74% stake in Consórcio Machadinho, which is the owner of the Machadinho hydroelectric power plant located in southern Brazil. Alumínio also has a 42.18% interest in Energética Barra Grande S.A. (“BAESA”), which built the Barra Grande hydroelectric power plant in southern Brazil. In addition, Alumínio also has a 34.97% share in Serra do Facão Energia S.A., which built the Serra do Facão hydroelectric power plant in the southeast of Brazil. Alumínio is also participating in the Estreito hydropower project in northern Brazil, through Estreito Energia S.A. (an Alumínio wholly owned company) holding a 25.49% stake in Consórcio Estreito Energia, which is the owner of the hydroelectric power plant.

Since May 2015 (after curtailment of the Poços de Caldas and São Luís smelters), the excess generation capacity from the above Brazilian hydroelectric projects, of around 480MW annually, has been sold into the market.

Power generated from Afobaka is sold to the Government of Suriname under a bilateral contract.

In February 2017, Alcoa Corporation’s wholly-owned subsidiary, Alcoa Power Generating Inc. (“APGI”), completed the sale of its 215-megawatt Yadkin Hydroelectric Project (“Yadkin”) to Cube Hydro Carolinas, LLC. In accordance with the Separation and Distribution Agreement (see Note A), Alcoa Corporation remitted a portion of the proceeds to Arconic. Yadkin encompasses four hydroelectric power developments (reservoirs, dams, and powerhouses), known as High Rock, Tuckertown, Narrows, and Falls, situated along a 38-mile stretch of the Yadkin River through the central part of North Carolina. Prior to the divestiture, the power generated by Yadkin was primarily sold into the open market. Accordingly, the Yadkin energy facilities have been removed from the preceding table.

APGI’s Warrick power plant generates substantially all of the power used at the Warrick smelter and rolling mill using nearby coal reserves. Alcoa owns the nearby Liberty Mine, which is operated by Vigo Coal Company, Inc. at a level of approximately 1.2 million tons per year. Liberty Mine supplies all of the power plant’s coal needs. A public process is currently underway before the Indiana Department of Natural Resources to permit an additional 3,500 acres south of the existing Liberty Mine permit. The expansion will secure a continued source of fuel for the Warrick power plant. During 2017, approximately 26% of the capacity from the Warrick power plant was sold into the market under its current operating permits. APGI also owns certain Federal Energy Regulatory Commission (“FERC”)-regulated transmission assets in Indiana, Tennessee, New York, and Washington.

Electricity

North America

The Deschambault, Baie Comeau, and Bécancour smelters in Québec purchase all or a majority of their electricity under contracts with Hydro-Québec that expire on December 31, 2029. The smelter located in Baie Comeau, Québec purchases approximately 73% of its power needs under the Hydro-Québec contract, and the remainder from a 40% owned hydroelectric generating company, Manicouagan Power Limited Partnership. For the Baie Comeau smelter, the Hydro-Québec contract can be extended until February 23, 2036.

In the State of Washington, Alcoa's Wenatchee smelter is served by a contract with Chelan County Public Utility District No. 1 ("Chelan PUD") under which Alcoa receives 26% of the hydropower output of Chelan PUD's Rocky Reach and Rock Island dams. The Wenatchee smelter was curtailed in 2015.

Starting on January 1, 2013, the Intalco smelter began receiving physical power under a contract with the Bonneville Power Administration ("BPA") at the Northwest Power Act mandated industrial firm power ("IP") rate through September 30, 2022. Additional power is purchased from the market as needed. In May 2015, the contract was amended to reduce the amount of physical power received from BPA and allow for additional purchases of market power. In February and April 2016, the contract was amended again to reduce the contractual amount through February 2018, following which Intalco will resume receiving physical contracted quantities of power at the mandated IP rate.

Luminant supplied all of the Rockdale smelter's electricity requirements under a long-term power contract that was not set to expire before the end of 2038, except for limited circumstances in which one or both parties could elect to early terminate without penalty for which conditions had not been met. As discussed above, in October 2017, Alcoa Corporation and Luminant reached agreement on restructuring their relationship at Rockdale, including agreeing upon the terms for termination of the electricity contract between the parties. On December 21, 2017 Alcoa announced the permanent closure of the Rockdale smelter and related operations, which has been curtailed since 2008.

In the Northeast, the Massena West smelter in New York receives power from the New York Power Authority ("NYPA") pursuant to a contract between Alcoa and NYPA that will expire in 2019.

Australia

The Portland smelter purchased electricity from the State Electricity Commission of Victoria ("SECV") under a contract with Alcoa Portland Aluminium Pty Ltd, a wholly-owned subsidiary of AofA, that extended to October 2016. Upon the expiration of this contract, the Portland smelter commenced to purchase power from the National Electricity Market ("NEM") variable spot market. In March 2010, AofA and Eastern Aluminium (Portland) Pty Ltd separately entered into fixed for floating swap contracts with Loy Yang (now AGL Energy Ltd) in order to manage their exposure to the variable energy rates from the NEM. The fixed for floating swap contract with AGL for the Portland smelter commenced operating from the date of expiration of the contract with the SECV and was terminated in accordance with its terms, effective July 31, 2017. A new fixed for floating swap contract for the Portland smelter was entered into with AGL in January 2017 that commenced on August 1, 2017 and will expire on July 31, 2021.

Europe

Alcoa's smelters at San Ciprián, La Coruña and Avilés, Spain purchase electricity under bilateral power contracts that expire December 31, 2018.

As a large consumer of electricity, Alcoa participates in a demand response program in Spain, agreeing to reduce usage of electricity for a specific period of time, in return for compensation, which allows the utility or grid operator to divert electricity during times of peak demand. A competitive bidding mechanism to allocate these "interruptibility rights" in

Spain was settled during 2014 to be applied starting from January 1, 2015 and with several auctions to allocate annual rights taking place since then. The last auction process to allocate rights took place in December 2017, where Alcoa secured 595MW of interruptibility rights for the period of January to May 2018 for the three Spanish smelters.

Alcoa owns two smelters in Norway, Lista and Mosjøen, which have long-term power arrangements in place that continue until the end of 2019. During 2017, Alcoa entered into several power purchase agreements, securing approximately 75% and 25% of the necessary power for the Norway smelters in 2020 and for 2021 through 2034, respectively. The Company continues to seek and negotiate additional power contracts for years subsequent to 2019. In addition, for Alcoa's smelters in Norway, the financial compensation of the indirect carbon emissions costs passed through in the electricity bill is received in accordance with EU Commission Guidelines and Norwegian compensation regime.

Iceland

Landsvirkjun, the Icelandic national power company, supplies competitively priced electricity to Alcoa's Fjarðaál smelter in eastern Iceland under a 40-year power contract, which will expire in 2047.

Natural Gas

Spain

To facilitate the full conversion of the San Ciprián, Spain alumina refinery from fuel oil to natural gas, in October 2013, Alúmina Española S.A. ("AE") and Gas Natural Transporte SDG SL ("GN") signed a take-or-pay gas pipeline utilization agreement. Pursuant to that agreement, the ultimate shareholders of AE, ParentCo and Alumina Limited, agreed to guarantee the payment of AE's contracted gas pipeline utilization over the four years of the commitment period; in the event AE fails to do so, each shareholder is responsible for its respective proportionate share (i.e., 60/40). Such commitment came into force six months after the gas pipeline was put into operation by GN. The gas pipeline was completed in January 2015 and the refinery has switched to natural gas consumption for 100% of its needs. The ParentCo guarantee has been replaced with an Alcoa Corporation guarantee.

In 2017, natural gas was supplied to the San Ciprián, Spain alumina refinery pursuant to two supply contracts with Endesa, expiring in June and December 2017, and one supply contract with Gas Natural Fenosa ("GNF"), expiring in December 2017. Following expiration of those contracts, natural gas is now supplied pursuant to two supply contracts with Endesa, expiring in June and December 2018, a supply contract with BP expiring in June 2018 and an additional supply contract with Axpo expiring in December 2018.

North America

In order to supply its refinery and smelters in the U.S. and Canada, Alcoa generally procures natural gas on a competitive bid basis from a variety of sources including producers in the gas production areas and independent gas marketers. Pipeline transportation may be procured directly or via the local distribution companies. Contract pricing for gas is typically based on a published industry index such as the New York Mercantile Exchange ("NYMEX") price. The Company may choose to reduce its exposure to NYMEX pricing by hedging a portion of required natural gas consumption.

Australia

AofA uses gas to co-generate steam and electricity for its alumina refining processes at the Kwinana, Pinjarra and Wagerup refineries. More than 90% of AofA's gas requirements for the remainder of the decade are secured under long-term contracts. In 2015, AofA secured a significant portion of its gas supplies to 2032.

Other

The Company has a calciner facility located in Lake Charles, Louisiana. This facility converts green coke into calcined coke, which is used as a raw material for the anode formation process at an aluminum smelter. The Lake Charles facility was curtailed in December 2015 due to an equipment failure and restarted again in July 2017. In addition, the Company's Gum Springs facility processes spent potlining and is located in Arkansas.

Sources and Availability of Raw Materials

Generally, materials are purchased from third-party suppliers under competitively priced supply contracts or bidding arrangements. The Company believes that the raw materials necessary to its business are and will continue to be available.

For each metric ton (mt) of alumina produced, Alcoa Corporation consumes the following amounts of the identified raw material inputs (approximate range across relevant facilities):

Raw Material	Units	Consumption per MT of Alumina
Bauxite	mt	2.2 – 3.7
Caustic soda	kg	60 – 100
Electricity	kWh	0 to 210 imported
Fuel oil and natural gas	GJ	6.2 – 12.2
Lime (CaO)	kg	6 – 60

For each metric ton of aluminum produced, Alcoa Corporation consumes the following amounts of the identified raw material inputs (approximate range across relevant facilities):

Raw Material	Units	Consumption per MT of Primary Aluminum
Alumina	mt	1.92 ± 0.02
Aluminum fluoride	kg	17.1 ± 5.0
Calcined petroleum coke	mt	0.37 ± 0.05
Cathode blocks	mt	0.005 ± 0.002
Electricity	kWh	12900 – 17000
Liquid pitch	mt	0.10 ± 0.03
Natural gas	mcf	3.0 ± 1.0

Certain aluminum we produce includes alloying materials. Because of the number of different types of elements that can be used to produce our various alloys, providing a range of such elements would not be meaningful. With the exception of a very small number of internally used products, Alcoa produces its alloys in adherence to an Aluminum Association standard. The Aluminum Association, of which Alcoa Corporation is an active member, uses a specific designation system to identify alloy types. In general, each alloy type has a major alloying element other than aluminum but will also have other constituents as well, but of lesser amounts.

Competition

Alcoa is subject to highly competitive conditions in all aspects of the aluminum supply chain in which it competes. Competitors include a variety of both U.S. and non-U.S. companies in all major markets. Brand name recognition and loyalty also play a role. In addition, Alcoa's competitive position depends, in part, on the Company's access to an economical power supply to sustain its operations in various countries.

Bauxite:

The third-party market for metallurgical grade bauxite is relatively new and growing quickly as global demand for bauxite increases—particularly in China. The majority of bauxite mined globally is converted to alumina for the production of aluminum metal. While Alcoa has historically mined bauxite for internal consumption in our alumina refineries, we are focused on building our third-party bauxite business to meet growing demand.

Our principal competitors in the third-party bauxite market include Rio Tinto, Norsk Hydro and multiple suppliers from Guinea, Malaysia, India and other countries. We compete largely based on bauxite quality, price and proximity to customers and end markets. Alcoa has a strong competitive position in this market for the following reasons:

- **Low cost production:** Alcoa is among the world’s largest bauxite miners, holding a strong global cost curve position, with best practices in efficient mining operations and sustainability.
- **Reliable, long-term bauxite resources:** Alcoa’s strategic bauxite mine locations include Australia and Brazil as well as Guinea, which is home to the world’s largest reserves of high-quality metallurgical grade bauxite. Alcoa has a long history of stable operations in these countries and has access to large bauxite deposits with mining rights that extend in most cases more than 20 years from the date of this report.
- **Access to markets:** Alcoa’s Australian bauxite mines are located in close proximity to the largest third-party customer base in China and our facilities are also accessible to a significant and growing alumina refining base in the Middle East.

Alumina:

The alumina market is global and highly competitive, with many active suppliers including producers as well as commodity traders. Alcoa faces competition from a number of companies in all of the regions in which we operate, including Aluminum Corporation of China Limited, China Hongqiao Group Limited, Hindalco Industries Ltd., Hangzhou Jinjiang Group, National Aluminium Company Limited (“NALCO”), Noranda Aluminum Holding Corporation, Norsk Hydro ASA, Rio Tinto, South32 Limited, State Power Investment Corporation, United Company RUSAL Plc, and Chiping Xinfu Alumina Product Co., Ltd. In recent years, there has been significant growth in alumina refining in China and India. The majority of our product is sold in the form of smelter grade alumina, with 5% to 10% of total global alumina production being produced for non-metallurgical applications.

Key factors influencing competition in the alumina market include: cost position, price, reliability of bauxite supply, quality and proximity to customers and end markets. While we face competition from many industry players, we have several competitive advantages:

- **Proximity to bauxite:** Our refineries are strategically located next to low cost bauxite mines, and our alumina refineries are tuned to maximize efficiency with the exact bauxite qualities from these internal mines. In addition to refining efficiencies, vertical integration affords a stable and consistent long-term supply of bauxite to our refining portfolio.
- **Low cost production:** As the world’s largest alumina producer outside of China, Alcoa has competitive, efficient assets across its refining portfolio, with a 2017 average cost position in the first quartile of global alumina production. Contributing to this cost position is our experienced workforce and sophistication in refining technology and process automation.
- **Access to markets:** Alcoa is a global supplier of alumina with refining operations in the key markets of North America (curtailed), South America, Europe, the Middle East, and Australia, enabling us to meet customer demand in the Atlantic and Pacific basins, including China.

Aluminum

In our Aluminum segment, competition is dependent upon the type of product we are selling.

The market for primary aluminum is global, and demand for aluminum varies widely from region to region. We compete with commodity traders and aluminum producers such as Aluminum Corporation of China Limited, China Hongqiao Group Limited, East Hope Group Co. Ltd., Emirates Global Aluminum, Norsk Hydro, Rio Tinto, Shandong Xinfu Aluminum & Power Group, State Power Investment Co. (“SPIC”), and United Company RUSAL Plc, as well as with alternative materials such as steel, titanium, copper, carbon fiber, composites, plastic and glass, each of which may be substituted for aluminum in certain applications.

The aluminum industry itself is highly competitive; some of the most critical competitive factors in our industry are product quality, production costs (including source and cost of energy), price, proximity to raw materials, customers and end markets, timeliness of delivery, customer service (including technical support), and product innovation and breadth of offerings. Where aluminum products compete with other materials, the diverse characteristics of aluminum are also a significant factor, particularly its light weight, strength and recyclability.

In addition, in some end-use markets, competition is also affected by customer requirements that suppliers complete a qualification process to supply their plants. This process can be rigorous and may take many months to complete. However, the ability to obtain and maintain these qualifications can represent a competitive advantage.

The strength of our position in the primary aluminum market is largely attributable to the following factors:

- Value-added product portfolio: Alcoa’s casthouses supply global customers with a diverse product portfolio, both in terms of shapes and alloys. We offer differentiated products that are cast into specific shapes to meet customer demand, with 65% of 2017 smelter shipments representing value-added products.
- Low cost production: Alcoa leverages significant economies of scale to continuously reduce costs. As a result, Alcoa operates competitive, efficient assets across its aluminum smelting and casting portfolios, with its 2017 average smelting cost position in the second quartile of global aluminum smelters. This cost position is supported by long-term energy arrangements at many locations; Alcoa has secured approximately 57% of its smelter power needs through 2022.
- Access to markets: Alcoa is a global supplier of aluminum with smelting and casting operations in the key markets of North America, Europe, the Middle East, and Australia, enabling us to access a broad customer base with competitive logistics costs.
- Sustainability: As of December 31, 2017, approximately 70% of our aluminum smelting portfolio runs on clean hydroelectric power, lessening our demand for fossil fuels and potentially mitigating the risk to the Company from future carbon tax legislation.

Alcoa owns generation and transmission assets that produce and sell electric energy and ancillary services in the United States and Brazilian wholesale energy markets. Our competitors include integrated electric utilities that may be owned by governments (either fully or partially), cooperatives or investors, independent power producers and energy brokers and traders.

Competition factors in open power markets include fuel supply, production costs, operational reliability, access to the power grid, and environmental attributes (e.g., green power and renewable energy credits). As electricity is difficult and cost prohibitive to store, there are no electricity inventories to cushion the impact of supply and demand factors and the resultant pricing in electricity markets may be volatile. Demand for power varies greatly both seasonally and by time of day. Supply may be impacted in the short term by unplanned generator outages or transmission congestion and longer term by planned generator outages, droughts, high precipitation levels and fuel pricing (coal and/or natural gas).

Alcoa's energy assets enjoy several competitive advantages, when compared to other power suppliers:

- **Reliability:** In the United States, we have operated our thermal energy assets for over 50 years with a high degree of reliability and expect to continue this level of performance. In Brazil, our ownership provides for assured energy from hydroelectric operations through 2032 to 2037.
- **Access and proximity to markets:** Our U.S. assets are positioned to take advantage of sales into some of the more liquid power markets, including sales of both energy and capacity.
- **Sustainable ("green") energy sources:** A majority of our generating assets use renewable (hydroelectric) sources of fuel for generation.

Our rolled products business participates in various market segments, including beverage can sheet, food can sheet, lithographic sheet, aluminum bottle sheet, and industrial products and in the U.S. competes with other North American producers of RCS products, namely Novelis Corp, Tri-Arrows Aluminum, and Constellium NV. There is also import supply of RCS from China (Nanshan) and Western Europe (Hydro and Eval) mainly for the beverage market.

We also compete against package types made of other materials including polyethylene terephthalate ("PET") bottles, glass bottles, steel tin plate and other materials. In the U.S., aluminum cans, PET bottles and glass bottles represent approximately 69%, 29% and 2%, respectively, of the CSDs segment. In the beer segment, aluminum cans, glass bottles, and aluminum bottles represent approximately 74%, 22% and 5%, respectively, of the business. In the food can segment, steel tin plate cans and aluminum food cans represent approximately 83% and 17%, respectively, with aluminum cans representing approximately 52% of the pet food segment.

We compete on cost, quality, and service. The Company intends to continue to improve our cost position by increasing recycled aluminum content in our metal feedstock as well as continuing to focus on capacity utilization. We believe our team of technical and operational resources provides distinctive quality and customer service.

Patents, Trade Secrets and Trademarks

The Company believes that its domestic and international patent, trade secret and trademark assets provide it with a significant competitive advantage. The Company's rights under its intellectual property, as well as the products made and sold under them, are important to the Company as a whole and, to varying degrees, important to each business segment. Alcoa's business as a whole is not, however, materially dependent on any single patent, trade secret or trademark. As a result of product development and technological advancement, the Company continues to pursue patent protection in jurisdictions throughout the world. As of December 31, 2017, Alcoa's worldwide patent portfolio consisted of approximately 675 granted patents and 300 pending patent applications. The Company also has a number of domestic and international registered trademarks that have significant recognition within the markets that are served, including the name "Alcoa" and the Alcoa symbol for aluminum products.

As part of the Separation Transaction, Alcoa Corporation and Arconic entered into certain intellectual property license agreements between them. These agreements provide for a license of certain patents, trademarks and know-how from Arconic to Alcoa Corporation, as applicable, to the other on a perpetual, royalty-free, non-exclusive basis, subject to certain exceptions. In June 2017, Alcoa entered into an Amended and Restated Trademark License Agreement with Arconic. See "Certain Relationships and Related Party Transactions, and Director Independence—Agreements with Arconic—Intellectual Property License Agreements."

Research and Development

Expenditures for research and development activities ("R&D") were \$32 million in 2017, \$33 million in 2016, and \$69 million in 2015.

Environmental Matters

Alcoa is subject to extensive federal, state and local environmental laws and regulations, including those relating to the release or discharge of materials into the air, water and soil, waste management, pollution prevention measures, the generation, storage, handling, use, transportation and disposal of hazardous materials, the exposure of persons to hazardous materials, greenhouse gas emissions, and the health and safety of our employees. We participate in environmental assessments and cleanups at approximately 60 locations. These include owned or operating facilities and adjoining properties, previously owned or operating facilities and adjoining properties, and waste sites, including Superfund (Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”)) sites. Approved capital expenditures for new or expanded facilities for environmental control were approximately \$92 million for 2017 and are approximately \$150 million for 2018. Additional information relating to environmental matters is included in Note R to the Consolidated Financial Statements under the caption “Contingencies and Commitments—Environmental Matters.”

Employees

At the end of 2017, Alcoa had approximately 14,600 employees in 15 countries. Approximately 9,600 of these employees are represented by labor unions. In the U.S., approximately 2,300 employees are represented by various labor unions. The largest collective bargaining agreement is the master collective bargaining agreement with the United Steelworkers (“USW”). The USW master agreement covers approximately 1,600 employees at six U.S. locations. There are three other collective bargaining agreements in the U.S. with varying expiration dates. On a regional basis, collective bargaining agreements with varying expiration dates cover approximately 2,100 employees in Europe, 1,600 employees in Canada, 900 employees in Central and South America, and 2,600 employees in Australia.

On January 11, 2018, a lockout of the bargained hourly employees commenced at the Bécancour smelter, impacting approximately 1,000 employees at this facility. The Bécancour facility is owned by Alcoa (74.95%) and Rio Tinto (25.05%). For additional information, see footnote 10 to the table in “Smelting Operations” under the Aluminum segment above.

Executive Officers of the Registrant

The names, ages, positions and areas of responsibility of the executive officers of the Company as of March 1, 2018 are listed below.

Roy C. Harvey, 44, is President and Chief Executive Officer of Alcoa Corporation. He became Chief Executive Officer in November 2016 and assumed the role of President in May 2017. Mr. Harvey served as Executive Vice President of ParentCo and President of ParentCo’s Global Primary Products from October 2015 to November 2016. From June 2014 to October 2015, he was Executive Vice President, Human Resources and Environment, Health, Safety and Sustainability at ParentCo. Prior to that, Mr. Harvey was Chief Operating Officer for Global Primary Products at ParentCo from July 2013 to June 2014, and was Chief Financial Officer for Global Primary Products from December 2011 to July 2013. In addition to these roles, Mr. Harvey served as Director of Investor Relations at ParentCo from September 2010 to November 2011 and was Director of Corporate Treasury from January 2010 to September 2010. Mr. Harvey joined ParentCo in 2002 as a business analyst for Global Primary Products in Knoxville, Tennessee.

William F. Oplinger, 51, is Executive Vice President and Chief Financial Officer of Alcoa Corporation. Mr. Oplinger served as Executive Vice President and Chief Financial Officer of ParentCo from April 1, 2013 to November 2016. Mr. Oplinger joined ParentCo in 2000 and held key corporate positions in financial analysis and planning and as Director of Investor Relations. Mr. Oplinger also held key positions in the ParentCo’s Global Primary Products business, including as Controller, Operational Excellence Director, Chief Financial Officer, and Chief Operating Officer.

Tómas M. Sigurðsson, 50, is Executive Vice President and Chief Operating Officer of Alcoa Corporation. Mr. Sigurðsson served as Chief Operating Officer of ParentCo’s Global Primary Products business from 2014 to

November 2016. Mr. Sigurðsson was President of ParentCo's European Region and Global Primary Products Europe from 2012 to 2014. From 2004 to 2011, Mr. Sigurðsson was Managing Director of ParentCo's Iceland operations.

Leigh Ann Fisher, 52, has served as Executive Vice President and Chief Administrative Officer since November 2016. She has responsibility for the Human Resources, Shared Services, Procurement and Information Technology functions of Alcoa Corporation. Ms. Fisher served as Chief Financial Officer of ParentCo's Global Primary Products business from July 2013 to November 2016. Ms. Fisher was Group Controller for Global Primary Products at ParentCo from 2011 to 2013. From 2008 to 2011, Ms. Fisher was Group Controller for ParentCo's Engineered Products and Solutions business.

Jeffrey D. Heeter, 52, is Executive Vice President, General Counsel and Secretary of Alcoa Corporation. Mr. Heeter served as Assistant General Counsel of ParentCo from 2014 to November 2016. Mr. Heeter was Group Counsel for Global Primary Products at ParentCo from 2010 to 2014. From 2008 to 2010, Mr. Heeter was General Counsel of Alcoa of Australia in Perth, Australia.

Molly S. Beerman, 54, has been Vice President and Controller of Alcoa Corporation since December 2016. Ms. Beerman previously served as the Director, Global Shared Services Strategy and Solutions for Alcoa Corporation from November to December 2016. From January through October of 2016, prior to the Company's Separation Transaction from ParentCo, Ms. Beerman was a consultant to ParentCo's finance department and provided services in support of the Separation Transaction. From 2012 to 2015, she served as Vice President, Finance and Administration for a non-profit organization focused on community issues. Ms. Beerman first joined ParentCo in 2001, and was the director of ParentCo's global procurement center of excellence from 2008 to 2012.

Item 1A. Risk Factors.

Alcoa's business, financial condition and results of operations may be impacted by a number of factors. In addition to the factors discussed elsewhere in this report, the following risks and uncertainties could materially harm its business, financial condition or results of operations, including causing Alcoa's actual results to differ materially from those projected in any forward-looking statements. The following list of significant risk factors is not all-inclusive or necessarily in order of importance. Additional risks and uncertainties not presently known to Alcoa or that Alcoa currently deems immaterial also may materially adversely affect us in future periods. See the discussion under "Forward-Looking Statements" in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, in this Annual Report on Form 10-K.

Risks Related to Our Business

The aluminum industry and aluminum end-use markets are highly cyclical and are influenced by a number of factors, including global economic conditions.

The cyclical nature of the industries in which our customers operate causes demand for our products to be cyclical, creating potential uncertainty regarding future profitability. The demand for aluminum is sensitive to, and quickly impacted by, demand for the finished goods manufactured by our customers in industries that are cyclical, such as the commercial construction, transportation, and automotive industries, which may change as a result of changes in the global economy, currency exchange rates, energy prices or other factors beyond our control. Various changes in general economic conditions may affect the industries in which our customers operate. The demand for aluminum is highly correlated to economic growth. The Chinese market is a significant source of global demand for, and supply of, commodities, including aluminum. A sustained slowdown in Chinese aluminum demand due to slower economic growth or change in government policies, or a significant slowdown in other markets, that is not offset by decreases in supply of aluminum or increased aluminum demand in emerging economies, such as India, Brazil, and several Southeast Asian countries, could have an adverse effect on the global supply and demand for aluminum and aluminum prices. As a result of these factors, our profitability is subject to significant fluctuation.

While we believe the long-term prospects for aluminum and aluminum products are positive, we are unable to predict the future course of industry variables or the strength of the global economy and the effects of government intervention. Negative economic conditions, such as a major economic downturn, a prolonged recovery period, a downturn in the commodity sector, or disruptions in the financial markets, could have a material adverse effect on our business, financial condition or results of operations.

While the aluminum market is often the leading cause of changes in the alumina and bauxite markets, those markets also have industry-specific risks including, but not limited to, global freight markets, energy markets, and regional supply-demand imbalances. The aluminum industry specific risks can have a material effect on profitability for the alumina and bauxite markets.

We could be materially adversely affected by declines in aluminum and alumina prices, including global, regional and product-specific prices.

The overall price of primary aluminum consists of several components: (i) the underlying base metal component, which is typically based on quoted prices from the LME; (ii) the regional premium, which comprises the incremental price over the base LME component that is associated with the physical delivery of metal to a particular region (e.g., the Midwest premium for metal sold in the United States); and (iii) the product premium, which represents the incremental price for receiving physical metal in a particular shape (e.g., coil, billet, slab, rod, etc.) or alloy. Each of the above three components has its own drivers of variability. The LME price is typically driven by macroeconomic factors, global supply and demand of aluminum (including expectations for growth and contraction and the level of global inventories), and trading activity of financial investors. An imbalance in global supply and demand of aluminum, such as decreasing demand without corresponding supply declines, could have a negative impact on aluminum pricing. In 2017, the cash LME price of aluminum reached a high of \$2,246 per metric ton and a low of \$1,701 per metric ton. High LME inventories, or the release of substantial inventories into the market, could lead to a reduction in the price of aluminum. Declines in the LME price have had a negative impact on our results of operations. Additionally, our results could be adversely affected by decreases in regional premiums that participants in the physical metal market pay for immediate delivery of aluminum. Regional premiums tend to vary based on the supply of and demand for metal in a particular region and associated transportation costs. LME warehousing rules and surpluses have caused regional premiums to decrease, which would have a negative impact on our results of operations. Product premiums generally are a function of supply and demand for a given primary aluminum shape and alloy combination in a particular region. Periods of industry overcapacity may also result in a weak aluminum pricing environment. A sustained weak LME aluminum pricing environment, deterioration in LME aluminum prices, or a decrease in regional premiums or product premiums could have a material adverse effect on our business, financial condition, and results of operations or cash flow.

Most of our alumina contracts contain two pricing components: (1) the API price basis, and (2) a negotiated adjustment basis that takes into account various factors, including freight, quality, customer location and market conditions. Because the API component can exhibit significant volatility due to market exposure, revenue associated with our alumina operations are exposed to market pricing. Our bauxite-related contracts are typically one to two-year contracts with very little, if any, market exposure; however, we intend to enter into long-term bauxite contracts and therefore, our revenue associated with our bauxite operations may become further exposed to market pricing.

Changes to LME policies could cause aluminum prices to decrease.

In 2013, the LME undertook a program aimed at reforming the rules under which registered warehouses in its global network operate. The initial rule changes took effect on February 1, 2015. Additional changes occurred throughout 2015 and 2016, culminating in an increased minimum daily load-out rate and caps on warehouse charges. These rule changes, and any subsequent changes the exchange chooses to make, could impact the supply/demand balance in the primary aluminum physical market and may impact regional delivery premiums and LME aluminum prices. Decreases in regional delivery premiums and/or decreases in LME aluminum prices could have a material adverse effect on our business, financial condition, and results of operations or cash flow.

We may not be able to realize the expected benefits from our strategy of creating a lower cost, competitive commodity business by optimizing our portfolio.

We are continuing to execute a strategy of creating a lower cost, competitive integrated aluminum production business by optimizing our portfolio of assets. We are taking decisive actions to lower the cost base of our operations, including closing, selling or curtailing high-cost global smelting capacity, optimizing alumina refining capacity, and pursuing the sale of our interest in certain other operations. We may not be able to realize the expected benefits from this strategy.

We have made, and may continue to plan and execute, acquisitions and divestitures and take other actions to grow or streamline our portfolio. There is no assurance that anticipated benefits of our strategic actions will be realized. With respect to portfolio optimization actions such as divestitures, curtailments and closures, we may face barriers to exit from unprofitable businesses or operations, including high exit costs or objections from various stakeholders. In addition, we may incur unforeseen liabilities for divested entities if a buyer fails to honor all commitments. Our business operations are capital intensive, and curtailment or closure of operations or facilities may include significant charges, including asset impairment charges and other measures. There can be no assurance that divestitures or closures will be undertaken or completed in their entirety as planned at the anticipated cost, or that such actions will be beneficial to the Company.

Market-driven balancing of global aluminum supply and demand may be disrupted by non-market forces.

In response to market-driven factors relating to the global supply and demand of aluminum and alumina, we have curtailed or closed portions of our aluminum and alumina production capacity. Certain other industry producers have independently undertaken to reduce production as well. Reductions in production may be delayed or impaired by the terms of long-term contracts to buy power or raw materials.

The existence of non-market forces on global aluminum industry capacity, such as political pressures in certain countries to keep jobs or to maintain or further develop industry self-sufficiency, may prevent or delay the closure or curtailment of certain producers' smelters, irrespective of their position on the industry cost curve. For example, Chinese excess capacity and increased exports from China of heavily subsidized aluminum products could materially disrupt world aluminum markets causing pricing deterioration. If industry overcapacity exists due to the disruption by such non-market forces on the market-driven balancing of the global supply and demand of aluminum, a resulting weak pricing environment and margin compression may adversely affect the operating results of the Company.

Our operations consume substantial amounts of energy; profitability may decline if energy costs rise or if energy supplies are interrupted.

Although we generally expect to meet the energy requirements for our alumina refineries and primary aluminum smelters from internal sources or from long-term contracts, certain conditions could negatively affect our results of operations, including the following:

- significant increases in electricity costs rendering smelter operations uneconomic;
- significant increases in fuel oil or natural gas prices;
- unavailability of electrical power or other energy sources due to droughts, hurricanes or other natural causes;
- unavailability of energy due to local or regional energy shortages resulting in insufficient supplies to serve consumers;
- interruptions in energy supply or unplanned outages due to equipment failure or other causes;
- curtailment of one or more refineries or smelters due to the inability to extend energy contracts upon expiration or to negotiate new arrangements on cost-effective terms or due to the unavailability of energy at competitive rates; or

- curtailment of one or more smelters due to discontinuation of power supply interruptibility rights granted to us under an interruptibility regime in place under the laws of the country in which the smelter is located, or due to a determination that such arrangements do not comply with applicable laws, thus rendering the smelter operations that had been relying on such country's interruptibility regime uneconomic.

If events such as those listed above were to occur, the resulting high energy costs or the disruption of an energy source or the requirement to repay all or a portion of the benefit we received under a power supply interruptibility regime could have a material adverse effect on our business and results of operations.

Our global operations expose us to risks that could adversely affect our business, financial condition, operating results or cash flows.

We have operations or activities in numerous countries and regions outside the United States, including Australia, Brazil, Canada, Europe, Guinea, Suriname, and the Kingdom of Saudi Arabia. The risks associated with the Company's global operations include:

- economic and commercial instability risks, including those caused by sovereign and private debt default, corruption, and changes in local government laws, regulations and policies, such as those related to tariffs and trade barriers, taxation, exchange controls, employment regulations and repatriation of earnings;
- geopolitical risks, such as political instability, civil unrest, expropriation, nationalization of properties by a government, imposition of sanctions, changes to import or export regulations and fees, renegotiation or nullification of existing agreements, mining leases and permits;
- war or terrorist activities;
- major public health issues, such as an outbreak of a pandemic or epidemic, which could cause disruptions in our operations or workforce;
- difficulties enforcing intellectual property and contractual rights in certain jurisdictions; and
- unexpected events, including fires or explosions at facilities, and natural disasters.

While the impact of any of the foregoing factors is difficult to predict, any one or more of them could adversely affect our business, financial condition, operating results or cash flows. Existing insurance arrangements may not provide protection for the costs that may arise from such events.

Our global operations expose us to various legal and regulatory systems, and changes in conditions beyond our control in foreign countries.

In addition to the business risks inherent in operating outside the United States, legal and regulatory systems may be less developed and predictable and the possibility of various types of adverse governmental action more pronounced. Unexpected or uncontrollable events or circumstances in any of these foreign markets, including actions by foreign governments such as changes in fiscal regimes, termination of our agreements with such foreign governments or increased government regulation could materially and adversely affect our business, financial condition, results of operations or cash flows.

Substantial changes to fiscal, tax and trade policies and executive and legislative actions could adversely affect our business, financial condition, and results of operations.

The U.S. presidential administration has called for substantial changes to U.S. trade policy and proposed imposing significant increases in U.S. import tariffs. Changes in international trade agreements, regulations, restrictions, and tariffs may increase our operating costs and make it more difficult for us to compete in the U.S. and overseas markets, and our business, financial condition and results of operations could be adversely impacted.

We face significant competition, which may have an adverse effect on profitability.

We compete with a variety of both U.S. and non-U.S. aluminum industry competitors as well as with producers of other materials, such as steel, titanium, plastics, composites, ceramics, and glass, among others. Technological advancements or other developments by or affecting Alcoa's competitors or customers could affect our results of operations. In addition, our competitive position depends, in part, on our ability to leverage innovation expertise across businesses and key end markets and us having access to an economical power supply to sustain our operations in various countries. See "Business—Competition."

Our business is capital intensive, and if there are downturns in the industries that we serve, we may be forced to significantly curtail or suspend operations with respect to those industries, which could result in our recording asset impairment charges or taking other measures that may adversely affect our results of operations and profitability.

Our business operations are capital intensive. If there are downturns in the industries that we serve, we may be forced to significantly curtail or suspend our operations with respect to those industries, including laying-off employees, recording asset impairment charges and other measures. In addition, we may not realize the benefits or expected returns from announced plans, programs, initiatives and capital investments. Any of these events could adversely affect our results of operations and profitability.

Our business and growth prospects may be negatively impacted by limits in our capital expenditures.

We require substantial capital to invest in growth opportunities and to maintain and prolong the life and capacity of our existing facilities. Insufficient cash generation or capital project overruns may negatively impact our ability to fund as planned our sustaining and return-seeking capital projects. We may also need to address commercial and political issues in relation to reductions in capital expenditures in certain of the jurisdictions in which we operate. If our interest in our joint ventures is diluted or we lose key concessions, our growth could be constrained. Any of the foregoing could have a material adverse effect on our business, results of operations, financial condition and prospects.

Our capital resources may not be adequate to provide for all of our cash requirements, and we are exposed to risks associated with financial, credit, capital, and banking markets.

In the ordinary course of business, we expect to seek to access competitive financial, credit, capital and/or banking markets. Currently, we believe we have adequate access to these markets to meet our reasonably anticipated business needs based on our historic financial performance and strong financial position. To the extent our access to competitive financial, credit, capital and/or banking markets was to be impaired, our operations, financial results and cash flows could be adversely impacted.

Deterioration in our credit profile could increase our costs of borrowing money and limit our access to the capital markets and commercial credit.

The major credit rating agencies evaluate our creditworthiness and give us specified credit ratings. These ratings are based on a number of factors, including our financial strength and financial policies as well as our strategies, operations and execution. These credit ratings are limited in scope, and do not address all material risks related to investment in us, but rather reflect only the view of each rating agency at the time the rating is issued. Nonetheless, the credit ratings we receive impact our borrowing costs as well as our access to sources of capital on terms that will be advantageous to our business. Failure to obtain sufficiently high credit ratings could adversely affect the interest rate in future financings, our liquidity or our competitive position and could also restrict our access to capital markets. In addition, our 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, our borrowing costs would increase, and our funding sources could decrease. As a result of these factors, a downgrade of our credit ratings could have a materially adverse impact on our future operations and financial position.

Our indebtedness restricts our current and future operations, which could adversely affect our ability to respond to changes in our business and manage our operations.

In 2016, Alcoa and Alcoa Nederland Holding B.V. (“ANHBV”), a wholly-owned subsidiary of Alcoa, entered into a revolving credit agreement with a syndicate of lenders and issuers named therein, (as subsequently amended, the “Revolving Credit Agreement”). The terms of the Revolving Credit Agreement and the indenture governing our notes contain covenants that impose significant operating and financial restrictions on us, including on our ability to, among other things:

- make investments, loans, advances, and acquisitions;
- dispose of assets;
- incur or guarantee additional debt and issue certain disqualified equity interests and preferred stock;
- make certain restricted payments, including by limiting the amount of dividends on equity securities and payments to redeem, repurchase or retire equity securities or other indebtedness;
- engage in transactions with affiliates;
- materially alter the business we conduct;
- enter into certain restrictive agreements;
- create liens on assets to secure debt;
- consolidate, merge, sell or otherwise dispose of all or substantially all of Alcoa’s, ANHBV’s or a subsidiary guarantor’s assets; and
- take any actions that would reduce our ownership of AWAC entities below an agreed level.

The Revolving Credit Agreement requires us to comply with financial covenants. The Revolving Credit Agreement requires that we maintain an interest expense coverage ratio of not less than 5.00 to 1.00, and a leverage ratio for any period of four consecutive fiscal quarters that is not greater than 2.25 to 1.00, although, under the Revolving Credit Agreement, such leverage ratio may be increased to a level not higher than 2.50 to 1.00 in certain circumstances.

In addition, all obligations of Alcoa Corporation or a domestic entity under the Revolving Credit Facility are secured by, subject to certain exceptions, a first priority lien on substantially all assets of Alcoa Corporation and the material domestic wholly-owned subsidiaries of Alcoa Corporation and certain equity interests of specified non-U.S. subsidiaries. Our ability to comply with these agreements may be affected by events beyond our control, including prevailing economic, financial and industry conditions. These covenants could have an adverse effect on our business by limiting our ability to take advantage of financing, merger and acquisition or other opportunities. The breach of any of these covenants or restrictions could result in a default under the Revolving Credit Agreement or the indenture governing our notes.

For more information on the restrictive covenants in the Revolving Credit Agreement, see Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Financing Activities.”

Our failure to comply with the agreements relating to our outstanding indebtedness, including as a result of events beyond our control, could result in an event of default that could materially and adversely affect our business, financial condition, results of operations or cash flows.

If there were an event of default under any of the agreements relating to our outstanding indebtedness, including the Revolving Credit Agreement and the indenture governing our notes, we may not be able to incur additional indebtedness under the Revolving Credit Agreement and the holders of the defaulted debt could cause all amounts outstanding with respect to that debt to be due and payable immediately. We cannot assure that our assets or cash flow

would be sufficient to fully repay borrowings under our outstanding debt instruments if accelerated upon an event of default, which could have a material adverse effect on our ability to continue to operate as a going concern. Further, if we are unable to repay, refinance or restructure our secured indebtedness, the holders of such indebtedness could proceed against the collateral securing that indebtedness. In addition, any event of default or declaration of acceleration under one debt instrument also could result in an event of default under one or more of our other debt instruments.

We may not realize expected benefits from our productivity and cost-reduction initiatives.

We have undertaken, and may continue to undertake, productivity and cost-reduction initiatives to improve performance and conserve cash, including procurement strategies for raw materials, labor productivity, improving operating performance, deployment of Company-wide business process models, such as our degrees of implementation process in which ideas are executed in a disciplined manner to generate savings, and overhead cost reductions. There is no assurance that these initiatives will be successful or beneficial to us or that estimated cost savings from such activities will be realized.

Cyber-attacks and security breaches may threaten the integrity of our intellectual property and other sensitive information, disrupt our business operations, and result in reputational harm and other negative consequences that could have a material adverse effect on our financial condition and results of operations.

We face global cybersecurity threats, which may range from uncoordinated individual attempts to sophisticated and targeted measures, known as advanced persistent threats, directed at the Company. Cyber-attacks and other cyber incidents are occurring more frequently, constantly evolving in nature, becoming more sophisticated, and being made by groups and individuals with a wide range of expertise and motives. Cyber-attacks and security breaches may include, but are not limited to, attempts to access information or digital infrastructure, computer viruses, denial of service and other electronic security breaches.

We believe that we face a heightened threat of cyber-attacks due to the industries we serve and the locations of our operations. Due to the evolving nature of cybersecurity threats, the scope and impact of any incident cannot be predicted. While the Company continually works to safeguard our systems and mitigate potential risks, there is no assurance that such actions will be sufficient to prevent cyber-attacks or security breaches that manipulate or improperly use our systems or networks, compromise confidential or otherwise protected information, destroy or corrupt data, or otherwise disrupt our operations. The occurrence of such events could negatively impact our reputation and our competitive position and could result in litigation with third parties, regulatory action, loss of business, potential liability and increased remediation costs, any of which could have a material adverse effect on our financial condition and results of operations. In addition, such attacks or breaches could require significant management attention and resources, and result in the diminution of the value of our investment in research and development. Furthermore, while we have disaster recovery and business continuity plans in place, if our information technology systems are damaged, breached or cease to function properly for any reason, including the poor performance of, failure of or cyber-attack on third-party service providers, catastrophic events, power outages, cyber-security breaches, network outages, failed upgrades or other similar events and, if the disaster recovery and business continuity plans do not effectively resolve such issues on a timely basis, we may suffer interruptions in our ability to manage or conduct business as well as reputational harm, and may be subject to governmental investigations and litigation, any of which may adversely impact our business, results of operations, cash flows and financial condition.

Our profitability could be adversely affected by increases in the cost of raw materials, by significant lag effects of decreases in commodity or LME-linked costs or by large or sudden shifts in the global inventory of aluminum and the resulting market price impacts.

Our results of operations are affected by changes in the cost of raw materials, including energy, carbon products, caustic soda and other key inputs, as well as freight costs associated with transportation of raw materials to refining and smelting locations. We may not be able to fully offset the effects of higher raw material costs or energy costs through price increases, productivity improvements or cost reduction programs. Similarly, our operating results are affected by significant lag effects of declines in key costs of production that are commodity or LME-linked. For example, declines

in the costs of alumina and power during a particular period may not be adequate to offset sharp declines in metal price in that period. We could also be adversely affected by large or sudden shifts in the global inventory of aluminum and the resulting market price impacts. Increases in the cost of raw materials or decreases in input costs that are disproportionate to concurrent sharper decreases in the price of aluminum, or shifts in global inventory of aluminum that result in changes to market prices, could have a material adverse effect on our operating results.

Joint ventures and other strategic alliances may not be successful.

We participate in joint ventures and have formed strategic alliances and may enter into other similar arrangements in the future. For example, AWAC is an unincorporated global joint venture between Alcoa and Alumina Limited. AWAC consists of a number of affiliated entities, which own, operate or have an interest in, bauxite mines and alumina refineries, as well as an aluminum smelter, in seven countries. In addition, Alcoa is party to a joint venture with Ma'aden, the Saudi Arabian Mining Company, to develop a fully integrated aluminum complex (including a bauxite mine, alumina refinery, aluminum smelter and rolling mill) in the Kingdom of Saudi Arabia. Although the Company has, in connection with these and our other existing joint ventures and strategic alliances, sought to protect our interests, joint ventures and strategic alliances inherently involve special risks. Whether or not the Company holds majority interests or maintains operational control in such arrangements, our partners may:

- have economic or business interests or goals that are inconsistent with or opposed to those of the Company;
- exercise veto rights so as to block actions that we believe to be in our or the joint venture's or strategic alliance's best interests;
- take action contrary to our policies or objectives with respect to our investments; or
- as a result of financial or other difficulties, be unable or unwilling to fulfill their obligations under the joint venture, strategic alliance or other agreements, such as contributing capital to expansion or maintenance projects.

There can be no assurance that our joint ventures or strategic alliances will be beneficial to us, whether due to the above-described risks, unfavorable global economic conditions, increases in construction costs, currency fluctuations, political risks, or other factors.

We could be adversely affected by changes in the business or financial condition of a significant customer or joint venture partner.

A significant downturn or deterioration in the business or financial condition of a key customer or joint venture partner could affect our results of operations in a particular period. Our customers may experience delays in the launch of new products, labor strikes, diminished liquidity or credit unavailability, weak demand for their products, or other difficulties in their businesses. If we are not successful in replacing business lost from such customers, profitability may be adversely affected. Our joint venture partners could be rendered unable to contribute their share of operating or capital costs, having an adverse impact on our business.

An adverse decline in the liability discount rate, lower-than-expected investment return on pension assets and other factors could affect our results of operations or amount of pension funding contributions in future periods.

Our results of operations may be negatively affected by the amount of expense we record for our pension and other post-retirement benefit plans, reductions in the fair value of plan assets, and other factors. We calculate income or expense for our plans using actuarial valuations in accordance with accounting principles generally accepted in the United States of America ("GAAP").

These valuations reflect assumptions about financial market and other economic conditions, which may change based on changes in key economic indicators. The most significant year-end assumptions used by the Company to estimate

pension or other postretirement benefit income or expense for the following year are the discount rate applied to plan liabilities and the expected long-term rate of return on plan assets. In addition, the Company is required to make an annual measurement of plan assets and liabilities, which may result in a significant charge to stockholders' equity. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates—Pension and Other Postretirement Benefits" and Note N to the Consolidated Financial Statements under the caption "Pension and Other Postretirement Benefits." Although GAAP expense and pension funding contributions are impacted by different regulations and requirements, the key economic factors that affect GAAP expense would also likely affect the amount of cash or securities we would contribute to the pension plans.

Potential pension contributions include both mandatory amounts required under federal law and discretionary contributions to improve the plans' funded status. Higher than expected pension contributions due to a decline in the plans' funded status as a result of declines in the discount rate or lower-than-expected investment returns on plan assets could have a material negative effect on our cash flows. Adverse capital market conditions could result in reductions in the fair value of plan assets and increase our liabilities related to such plans, adversely affecting our liquidity and results of operations.

We are exposed to fluctuations in foreign currency exchange rates and interest rates, as well as inflation, and other economic factors in the countries in which we operate.

Economic factors, including inflation and fluctuations in foreign currency exchange rates and interest rates, competitive factors in the countries in which we operate, and continued volatility or deterioration in the global economic and financial environment could affect our revenues, expenses and results of operations. Changes in the valuation of the U.S. dollar against other currencies, particularly the Australian dollar, Brazilian real, Canadian dollar, Euro, and Norwegian kroner, may affect our profitability as some important inputs are purchased in other currencies, while our products are generally sold in U.S. dollars. In addition, although a strong U.S. dollar generally has a positive impact on our near-term profitability, over a longer term, a strong U.S. dollar may have an unfavorable impact on our position on the global aluminum cost curve due to the company's U.S. smelting portfolio. As the U.S. dollar strengthens, the cost curve shifts down for smelters outside the United States but costs for our U.S. smelting portfolio may not decline.

Weakness in global economic conditions or in any of the industries or geographic regions in which we or our customers operate, as well as the cyclical nature of our customers' businesses generally or sustained uncertainty in financial markets, could adversely impact our revenues and profitability by reducing demand and margins.

Our results of operations may be materially affected by the conditions in the global economy generally and in global capital markets. There has been extreme volatility in the capital markets and in the end markets and geographic regions in which we or our customers operate, which has negatively affected our revenues. Many of the markets in which our customers participate are also cyclical in nature and experience significant fluctuations in demand for our products based on economic conditions, consumer demand, raw material and energy costs, and government actions. Many of these factors are beyond our control.

A decline in consumer and business confidence and spending, severe reductions in the availability and cost of credit, and volatility in the capital and credit markets, could adversely affect the business and economic environment in which we operate and the profitability of our business. We are also exposed to risks associated with the creditworthiness of our suppliers and customers. If the availability of credit to fund or support the continuation and expansion of our customers' business operations is curtailed or if the cost of that credit is increased, the resulting inability of our customers or of their customers to either access credit or absorb the increased cost of that credit could adversely affect our business by reducing our sales or by increasing our exposure to losses from uncollectible customer accounts. These conditions and a disruption of the credit markets could also result in financial instability of some of our suppliers and customers. The consequences of such adverse effects could include the interruption of production at the facilities of our customers, the reduction, delay or cancellation of customer orders, delays or interruptions of the supply of raw materials we purchase, and bankruptcy of customers, suppliers or other creditors. Any of these events could adversely affect our profitability, cash flow and financial condition.

Unanticipated changes in our tax provisions or exposure to additional tax liabilities could affect our future profitability.

We are subject to income taxes in both the United States and various non-U.S. jurisdictions. Unanticipated changes in our tax provisions or exposure to additional tax liabilities could affect our future profitability. Our domestic and international tax liabilities are dependent upon the distribution of income among these different jurisdictions. Changes in applicable domestic or foreign tax laws and regulations, or their interpretation and application, including the possibility of retroactive effect, could affect the Company's tax expense and profitability. Our tax expense includes estimates of additional tax that may be incurred for tax exposures and reflects various estimates and assumptions. The assumptions include assessments of future earnings of the Company that could impact the valuation of our deferred tax assets. Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings in countries with differing statutory tax rates, changes in the overall profitability of the company, changes in tax legislation and rates, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, the results of tax audits and examinations of previously filed tax returns or related litigation and continuing assessments of our tax exposures. Significant changes to the U.S. corporate tax system in particular could have a substantial impact, positive or negative, on our effective tax rate, cash tax expenditures and deferred tax assets and liabilities. For example, the Tax Cuts and Jobs Act, which was enacted in the United States on December 22, 2017, reduces the U.S. corporate statutory tax rate, eliminates or limits tax deductions for several expenses that previously were deductible, imposes a mandatory deemed repatriation tax on undistributed historic earnings of foreign subsidiaries, requires a minimum tax on earnings generated by foreign subsidiaries and permits a tax-free repatriation of foreign earnings through a dividends received deduction. As discussed further in the Management Discussion and Analysis and the Company's financial statement, we continue to evaluate the overall impact of the Tax Cuts and Jobs Act on our effective tax rate and balance sheet.

We may be exposed to significant legal proceedings, investigations or changes in U.S. federal, state or foreign law, regulation or policy.

Our results of operations or liquidity in a particular period could be affected by new or increasingly stringent laws, regulatory requirements or interpretations, or outcomes of significant legal proceedings or investigations adverse to the Company. We may become subject to unexpected or rising costs associated with business operations or provision of health or welfare benefits to employees due to changes in laws, regulations or policies. We are also subject to a variety of legal compliance risks. These risks include, among other things, potential claims relating to health and safety, environmental matters, intellectual property rights, product liability, taxes and compliance with U.S. and foreign export laws, anti-bribery laws, competition laws and sales and trading practices. We could be subject to fines, penalties or damages (in certain cases, treble damages). In addition, if we violate the terms of our agreements with governmental authorities, we may face additional monetary sanctions and such other remedies as a court deems appropriate.

While we believe we have adopted appropriate risk management and compliance programs to address and reduce these risks, the global and diverse nature of our operations means that these risks will continue to exist, and additional legal proceedings and contingencies may arise from time to time. In addition, various factors or developments can lead the Company to change current estimates of liabilities or make such estimates for matters previously not susceptible of reasonable estimates, such as a significant judicial ruling or judgment, a significant settlement, significant regulatory developments or changes in applicable law. A future adverse ruling or settlement or unfavorable changes in laws, regulations or policies, or other contingencies that the company cannot predict with certainty could have a material adverse effect on our results of operations or cash flows in a particular period. See "Item 3, Legal Proceedings" and Note R under the caption "Contingencies and Commitments—Contingencies—Litigation" to the Consolidated Financial Statements.

We are subject to a broad range of health, safety and environmental laws and regulations in the jurisdictions in which we operate and may be exposed to substantial costs and liabilities associated with such laws and regulations.

Our operations worldwide are subject to numerous complex and increasingly stringent health, safety and environmental laws and regulations and may be exposed to substantial costs and liabilities associated with such laws and

regulations. The costs of complying with such laws and regulations, including participation in assessments and cleanups of sites, as well as internal voluntary programs, are significant and will continue to be so for the foreseeable future. Environmental laws may impose cleanup liability on owners and occupiers of contaminated property, including past or divested properties, regardless of whether the owners and occupiers caused the contamination or whether the activity that caused the contamination was lawful at the time it was conducted. Environmental matters for which we may be liable may arise in the future at our present sites, where no problem is currently known, at previously owned sites, at sites previously operated by the Company, at sites owned by our predecessors or at sites that we may acquire in the future. Compliance with environmental, health and safety legislation and regulatory requirements may prove to be more limiting and costly than we anticipate. Our results of operations or liquidity in a particular period could be affected by certain health, safety or environmental matters, including remediation costs and damages related to certain sites. Additionally, evolving regulatory standards and expectations can result in increased litigation and/or increased costs, all of which can have a material and adverse effect on earnings and cash flows.

Our operations may impact the environment or cause exposure to hazardous substances, and our properties may have environmental contamination, which could result in material liabilities to us. We may be subject to claims under federal and state statutes and/or common law doctrines for toxic torts and other damages as well as for natural resource damages and the investigation and clean-up of soil, surface water, groundwater, and other media under laws such as the federal Comprehensive Environmental Response, Compensation and Liabilities Act (“CERCLA”, commonly known as “Superfund”). Such claims may arise, for example, out of current or former conditions at sites that we own or operate currently, as well as at sites that we and companies we acquired owned or operated in the past, and at contaminated sites that have always been owned or operated by third parties. Liability may be without regard to fault and may be joint and several, so that we may be held responsible for more than our share of the contamination or other damages, or even for the entire share.

These and other similar unforeseen impacts that our operations may have on the environment, as well as exposures to hazardous substances or wastes associated with our operations, could result in costs and liabilities that could materially and adversely affect us.

Climate change, climate change legislation or regulations, extreme weather conditions, and greenhouse effects may adversely impact our operations and markets.

Energy is a significant input in a number of our operations. There is growing recognition that consumption of energy derived from fossil fuels is a contributor to global warming.

A number of governments or governmental bodies in areas of the world where we operate have introduced or are contemplating legislative and regulatory change in response to the potential impacts of climate change. We will likely see changes in the margins of greenhouse gas-intensive assets and energy-intensive assets as a result of regulatory impacts in the countries in which we operate. These regulatory mechanisms may be either voluntary or legislated and may impact our operations directly or indirectly through customers or our supply chain. Inconsistency of regulations may also change the attractiveness of the locations of some of the Company’s assets. Assessments of the potential impact of future climate change legislation, regulation and international treaties and accords are uncertain, given the wide scope of potential regulatory change in countries in which we operate. We may realize increased capital expenditures resulting from required compliance with revised or new legislation or regulations, costs to purchase or profits from sales of, allowances or credits under a “cap and trade” system, increased insurance premiums and deductibles as new actuarial tables are developed to reshape coverage, a change in competitive position relative to industry peers and changes to profit or loss arising from increased or decreased demand for goods produced by the Company and, indirectly, from changes in costs of goods sold.

The potential physical impacts of climate change or extreme weather conditions on the Company’s operations are highly uncertain, and will be particular to the geographic circumstances. These may include changes in rainfall patterns, shortages of water or other natural resources, changing sea levels, changing storm patterns, increased frequency and intensities of storms, and changing temperature levels. For example, our Trombetas mine experienced

disruption to its normal operations due to separate weather events that impacted the tailing ponds (bauxite waste storage areas) and the washing plant in the first half (heavy rain) and the second half (drought conditions) of 2017, respectively. Effects such as these may adversely impact the cost, production and financial performance of our operations.

Loss of key personnel may adversely affect our business.

Our success greatly depends on the performance of our executive management team. The loss of the services of any member of our executive management team or other key persons could have a material adverse effect on our business, results of operations and financial condition.

Union disputes and other employee relations issues could adversely affect our financial results.

A significant portion of our employees are represented by labor unions in a number of countries under various collective bargaining agreements with varying durations and expiration dates. See “Business—Employees.” Union disputes and other employee relations issues could adversely affect our financial results. We may not be able to satisfactorily renegotiate collective bargaining agreements when they expire. In addition, existing collective bargaining agreements may not prevent a strike or work stoppage at our facilities in the future. We may also be subject to general country strikes or work stoppages unrelated to our business or collective bargaining agreements. A labor dispute or work stoppage by employees covered by collective bargaining agreements could have a material adverse effect on production at one or more of our facilities, and depending on the length of work stoppage, on our financial results.

We have only operated as an independent company since November 1, 2016, and our historical financial information is not necessarily representative of the results that we would have achieved as a separate, publicly traded company during the time periods represented and may not be a reliable indicator of our future results.

The historical information about Alcoa Corporation in this report refers to Alcoa Corporation’s businesses as operated by and integrated with ParentCo prior to November 1, 2016. Some of the historical financial information included in this report is derived from the consolidated financial statements and accounting records of ParentCo. Accordingly, the historical financial information relating to 2016 and earlier years included in this report does not necessarily reflect the financial condition, results of operations or cash flows that we would have achieved as a separate, publicly traded company during those particular periods presented or those that we will achieve in the future primarily as a result of significant changes in our cost structure, management, financing and business operations as a result of operating as a company separate from ParentCo. For additional information about the past financial performance of our business and the basis of presentation of the historical consolidated financial statements, see “Selected Financial Data of Alcoa Corporation,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the historical financial statements and accompanying notes included elsewhere in this report.

In connection with our Separation Transaction from ParentCo, Arconic agreed to indemnify us for certain liabilities and we agreed to indemnify Arconic for certain liabilities. If we are required to pay under these indemnities to Arconic, our financial results could be negatively impacted. The Arconic indemnity may not be sufficient to hold us harmless from the full amount of liabilities for which Arconic may be allocated responsibility, and Arconic may not be able to satisfy its indemnification obligations in the future.

In connection with the Separation Transaction, Arconic agreed to indemnify us for certain liabilities, and we agreed to indemnify Arconic for certain liabilities, in each case for uncapped amounts, as discussed further in “Certain Relationships and Related Party Transactions.” Indemnities that we may be required to provide Arconic are not subject to any cap, may be significant and could negatively impact our business. Third parties could also seek to hold us responsible for any of the liabilities that Arconic has agreed to retain. Any amounts we are required to pay pursuant to these indemnification obligations and other liabilities could require us to divert cash that would otherwise have been used in furtherance of our operating business. Further, the indemnity from Arconic may not be sufficient to protect us against the full amount of such liabilities, and Arconic may not be able to fully satisfy its indemnification obligations.

Moreover, even if we ultimately succeed in recovering from Arconic 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.

Risks Related to Our Common Stock

Anti-takeover provisions could enable our management to resist a takeover attempt by a third party and limit the power of our stockholders, which could decrease the trading price of our common stock.

Alcoa's amended and restated certificate of incorporation and amended bylaws contain, and Delaware law contains, provisions that are intended to deter coercive takeover practices and inadequate takeover bids by making such practices or bids unacceptably expensive to the bidder and to encourage prospective acquirers to negotiate with Alcoa's Board of Directors rather than to attempt a hostile takeover. These provisions include, among others:

- the inability of our stockholders to act by written consent unless such written consent is unanimous;
- the ability of our remaining directors to fill vacancies on our Board of Directors;
- limitations on stockholders' ability to call a special stockholder meeting;
- rules regarding how stockholders may present proposals or nominate directors for election at stockholder meetings; and
- the right of our Board of Directors to issue preferred stock without stockholder approval.

In addition, we are subject to Section 203 of the Delaware General Corporation Law ("DGCL"), which provides that, subject to limited exceptions, persons that acquire, or are affiliated with persons that acquire, more than 15% of the outstanding voting stock of a Delaware corporation may not engage in a business combination with that corporation, including by merger, consolidation or acquisitions of additional shares, for a three-year period following the date on which that person or any of its affiliates becomes the holder of more than 15% of the corporation's outstanding voting stock.

We believe these provisions protect our stockholders from coercive or otherwise unfair takeover tactics by requiring potential acquirers to negotiate with our Board of Directors and by providing our Board of Directors with more time to assess any acquisition proposal. These provisions are not intended to make Alcoa immune from takeovers; however, these provisions will apply even if the offer may be considered beneficial by some stockholders and could delay or prevent an acquisition that our Board of Directors determines is not in the best interests of Alcoa and our stockholders. These provisions may also prevent or discourage attempts to remove and replace incumbent directors. These provisions of our certificate of incorporation and bylaws, and Delaware law, that have the effect of delaying or deterring a change in control of the Company could limit the opportunity for our stockholders to receive a premium for their shares and could affect the price that some investors are willing to pay for Alcoa stock.

In addition, an acquisition or further issuance of our stock could trigger the application of Section 355(e) of the Code. Under the tax matters agreement, Alcoa is required to indemnify Arconic for the resulting tax, and this indemnity obligation might discourage, delay or prevent a change of control that our stockholders may consider favorable.

Our amended and restated certificate of incorporation designates the state courts within the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could discourage lawsuits against Alcoa and our directors and officers.

Our amended and restated certificate of incorporation provides that unless the Board of Directors otherwise determines, a state court located within the State of Delaware will be the sole and exclusive forum for any derivative action or proceeding brought on behalf of Alcoa, any action asserting a claim for or based on a breach of a fiduciary duty owed by any current or former director or officer of Alcoa to Alcoa or to Alcoa stockholders, any action asserting a claim

against Alcoa or any current or former director or officer of Alcoa arising pursuant to any provision of the DGCL or our amended and restated certificate of incorporation or bylaws, any action asserting a claim relating to or involving Alcoa governed by the internal affairs doctrine, or any action asserting an “internal corporate claim” as that term is defined in Section 115 of the DGCL. However, if a Delaware state court dismisses any such action for lack of subject matter jurisdiction, the action may be brought in the federal court for the District of Delaware. This exclusive forum provision may limit the ability of our stockholders to bring a claim in a judicial forum that such stockholders find favorable for disputes with Alcoa or our directors or officers, which may discourage such lawsuits against Alcoa and our directors and officers. Alternatively, if a court were to find this exclusive forum provision inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings described above, we may incur additional costs associated with resolving such matters in other jurisdictions, which could negatively affect our business, results of operations and financial condition.

Your percentage of ownership in Alcoa may be diluted in the future.

In the future, your percentage ownership in Alcoa may be diluted because of equity issuances for acquisitions, capital market transactions or otherwise, including any equity awards that we will grant to our directors, officers and employees. Our employees have stock-based awards that correspond to shares of our common stock as a result of conversion of their ParentCo stock-based awards. The Compensation and Benefits Committee of the Board of Directors has granted stock-based awards to our employees, and we anticipate that it will grant additional stock-based awards to our employees in the future. Such awards will have a dilutive effect on our earnings per share, which could adversely affect the market price of our common stock.

We cannot guarantee the existence, timing, amount or payment of dividends on our common stock.

The existence, timing, declaration, amount and payment of future dividends to our stockholders falls within the discretion of our Board of Directors. The Board of Directors’ decisions regarding the payment of dividends will depend on many factors, such as our financial condition, earnings, capital requirements, debt service obligations, covenants associated with certain of our debt service obligations, industry practice, legal requirements, regulatory constraints and other factors that our Board of Directors deems relevant. For more information, see Item 5 “Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.” Our ability to pay dividends will depend on our ongoing ability to generate cash from operations and on our access to the capital markets. We cannot guarantee that we will pay a dividend in the future or continue to pay any dividend if we commence paying dividends.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Alcoa Corporation’s principal executive offices, located at 201 Isabella Street, Suite 500, Pittsburgh, Pennsylvania 15212-5858, are leased.

In addition, Alcoa leases some of its facilities; however, it is the opinion of management that the leases do not materially affect the continued use of the properties or the properties’ values.

Although our facilities vary in terms of age and condition, Alcoa believes that its facilities are suitable and adequate for its operations. See Notes B and J to the financial statements for information on properties, plants and equipment.

Alcoa has active plants and holdings under the following segments:

Bauxite—See the tables and related text in the **Bauxite** section on pages 6-14 of this report.

Alumina—See the table and related text in the **Alumina** section on pages 14-15 of this report.

Aluminum— See the table and related text in the **Aluminum** section on pages 16-17 of this report.

Item 3. Legal Proceedings.

In the ordinary course of its business, Alcoa is involved in a number of lawsuits and claims, both actual and potential.

Litigation

Italian Energy Matter

In 2002, for its operations in Italy, ParentCo left the regulated energy market to purchase energy in the unregulated energy market following the Italian Energy Authority's publication of an Energy Authority Resolution in 2001. This Resolution stated that a drawback of a portion of the price of power under a special tariff would be calculated in the same manner, and in the same amount, in either the regulated or unregulated market. In 2004, the Energy Authority introduced regulation no. 148/2004 which set forth a different method for calculating the special tariff that would result in a different drawback for the regulated and unregulated markets. In 2006, ParentCo challenged the new regulation in the Administrative Court of Milan and received a favorable judgment. Following this ruling, ParentCo continued to receive the power price drawback in accordance with the original calculation method, through 2009, when the European Commission declared all such special tariffs to be impermissible "state aid." In 2010, the Energy Authority appealed the favorable 2006 ruling to the Consiglio di Stato (final court of appeal). On December 2, 2011, the Consiglio di Stato ruled in favor of the Energy Authority and against ParentCo, which presented the opportunity for the energy regulators to seek reimbursement from ParentCo of an amount equal to the difference between the actual drawback amounts received over the relevant time period, and the drawback as it would have been calculated in accordance with regulation 148/2004. On February 23, 2012, ParentCo filed its appeal of the decision of the Consiglio di Stato (this appeal was subsequently withdrawn in March 2013). On March 26, 2012, ParentCo received a letter from the agency (Cassa Conguaglio per il Settore Elettrico (CCSE)) responsible for making and collecting payments on behalf of the Energy Authority demanding payment in the amount of approximately \$110 million (€85 million), including interest. By letter dated April 5, 2012, ParentCo informed CCSE that it disputed the payment demand of CCSE. On April 29, 2012, Law No. 44 of 2012 ("44/2012") came into effect, changing the method to calculate the drawback. On February 21, 2013, ParentCo received a revised request letter from CCSE demanding ParentCo's subsidiary, Alcoa Trasformazioni S.r.l. (Trasformazioni is now a subsidiary of Alcoa Corporation), make a payment in the amount of \$97 million (€76 million), including interest, which reflected a revised calculation methodology by CCSE and represented the high end of the range of reasonably possible loss associated with this matter of \$0 to \$97 million (€76 million). ParentCo rejected that demand and formally challenged it through an appeal before the Administrative Court on April 5, 2013. On June 19, 2014, the Administrative Court heard ParentCo's oral argument, and on September 2, 2014, rendered its decision, declaring the payment request of CCSE and the Energy Authority to ParentCo to be unsubstantiated. On December 18, 2014, the CCSE and the Energy Authority appealed the Administrative Court's September 2, 2014 decision; a hearing date has been scheduled for May 2018. ParentCo's management modified its outlook with respect to a portion of the pending legal proceedings related to this matter. As such a charge of \$37 million (€34 million) was recorded at the end of 2015 to establish a partial reserve for this matter.

In December 2017, through an agreement with Invitalia, which is an Italian government agency responsible for managing economic development, Alcoa Corporation settled this matter with CCSE and the Energy Authority for \$18 (€15 million) (paid in January 2018). Accordingly, the Company recorded a reduction of \$22 million (€19 million) (the U.S. dollar amount reflects the effects of foreign currency movements since 2015) to its previously established reserve in Restructuring and other charges (see Note D) on the accompanying Statement of Consolidated Operations. In January 2018, subsequent to making the previously referenced payment, Alcoa Corporation and the respective state attorney in Italy filed a joint request with the Administrative Court to have this matter formally dismissed, for which the parties are awaiting notice. Additional terms of the agreement include the transfer of ownership of the Portovesme smelter (permanently closed in 2014) from the Company to Invitalia and the settlement of a groundwater remediation

project (see Fusina and Portovesme, Italy in Environmental Matters below). Also, Alcoa will retain previously accrued asset retirement obligations related to ParentCo's previous decision to demolish the Portovesme smelter; however, such liabilities may be reduced upon Invitalia achieving certain milestones related to the future of the smelter. The carrying value of the assets related to the Portovesme site were previously written down to zero as a result of ParentCo's decision in 2014 to permanently close the smelter.

Environmental Matters

Alcoa is involved in proceedings under the Comprehensive Environmental Response, Compensation and Liability Act, also known as Superfund (CERCLA) or analogous state provisions regarding the usage, disposal, storage or treatment of hazardous substances at a number of sites in the U.S. The Company has committed to participate, or is engaged in negotiations with federal or state authorities relative to its alleged liability for participation, in clean-up efforts at several such sites. The most significant of these matters are discussed in Note R to the Consolidated Financial Statements under the caption "Contingencies and Commitments—Environmental Matters."

The Separation and Distribution Agreement (see Note A) includes provisions for the assignment or allocation of environmental liabilities between Alcoa Corporation and Arconic, including certain remediation obligations associated with environmental matters. In general, the respective parties will be responsible for the environmental matters associated with their operations, and with the properties and other assets assigned to each. Additionally, the Separation and Distribution Agreement lists environmental matters with a shared responsibility between the two companies with an allocation of responsibility and the lead party responsible for management of each matter. For matters assigned to Alcoa Corporation under the Separation and Distribution Agreement, Alcoa Corporation has agreed to indemnify Arconic in whole or in part for environmental liabilities arising from operations prior to the Separation Date. The following discussion provides details regarding the current status of certain matters related to current or former Alcoa Corporation sites. With the exception of the Fusina, Italy matter, Alcoa Corporation assumed full responsibility of the matters described below.

In August 2005, Dany Lavoie, a resident of Baie Comeau in the Canadian Province of Québec, filed a Motion for Authorization to Institute a Class Action and for Designation of a Class Representative against Alcoa Canada Ltd., Alcoa Limitée, Société Canadienne de Metaux Reynolds Limitée and Canadian British Aluminum in the Superior Court of Québec in the District of Baie Comeau. Plaintiff sought to institute the class action on behalf of a putative class consisting of all past, present and future owners, tenants and residents of Baie Comeau's St. Georges neighborhood, alleging that defendants, as the present and past owners and operators of an aluminum smelter in Baie Comeau, had negligently allowed the emission of certain contaminants from the smelter on the lands and houses of the St. Georges neighborhood and its environs causing property damage and health concerns. In May 2007, the court authorized a class action suit to include only people who suffered property damage or personal injury damages caused by the emission of Polycyclic Aromatic Hydrocarbons, or "PAHs" from the smelter. In September 2007, plaintiffs filed the claim against the original defendants. ParentCo filed its Statement of Defense and plaintiffs filed an Answer to that Statement. In response, ParentCo filed a Motion for Particulars and a Motion to Strike, each with respect to certain paragraphs of the Answer. In late 2010, the court denied these motions. The Soderberg smelting process that plaintiffs allege to be the source of emissions of concern has ceased operations and has been dismantled. Plaintiffs filed a motion seeking appointment of an expert to advise the court on matters of sampling of homes and standards for interior home remediation. After a March 25, 2016 hearing on the motion, which ParentCo opposed, the court granted the motion in a ruling dated April 8, 2016 and directed the parties to confer on potential experts and protocols for residential sampling. The court has identified a sampling expert and the parties are advising the expert on their respective views on the appropriate sampling protocol. Further proceedings in the case will await the independent expert's report. At this stage of the proceeding, we are unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

In 1996, ParentCo acquired the Fusina, Italy smelter and rolling operations and the Portovesme, Italy smelter (both of which are owned by Alcoa's subsidiary, Alcoa Trasformazioni S.r.l.) from Alumix, an entity owned by the Italian Government. ParentCo also acquired the extrusion plants located in Feltre and Bolzano, Italy. At the time of the acquisition, Alumix indemnified ParentCo for pre-existing environmental contamination at the sites. In 2004, the

Italian Ministry of Environment (MOE) issued orders to Alcoa Trasformazioni S.r.l. and Alumix for the development of a clean-up plan related to soil contamination in excess of allowable limits under legislative decree and to institute emergency actions and pay natural resource damages. On April 5, 2006, Alcoa Trasformazioni S.r.l.'s Fusina site was also sued by the MOE and Minister of Public Works (MOPW) in the Civil Court of Venice for an alleged liability for environmental damages, in parallel with the orders already issued by the MOE. Alcoa Trasformazioni S.r.l. appealed the orders, defended the civil case for environmental damages and filed suit against Alumix, as discussed below. Similar issues also existed with respect to the Bolzano and Feltre plants, based on orders issued by local authorities in 2006. Most, if not all, of the underlying activities occurred during the ownership of Alumix, the governmental entity that sold the Italian plants to ParentCo.

As noted above, in response to the 2006 civil suit by the MOE and MOPW, Alcoa Trasformazioni S.r.l. filed suit against Alumix claiming indemnification under the original acquisition agreement, but brought that suit in the Court of Rome due to jurisdictional rules. In June 2008, the parties (ParentCo and subsequently Ligestra S.r.l. ("Ligestra"), the successor to Alumix) signed a preliminary agreement by which they have committed to pursue a settlement. The Court of Rome accepted the request, and postponed the Court's expert technical assessment, reserving its ability to fix the deadline depending on the development of negotiations. ParentCo and Ligestra agreed to a settlement in December 2008 with respect to the Feltre site. Ligestra paid the sum of 1.08 million Euros and ParentCo committed to clean up the site. Further postponements were granted by the Court of Rome, and the next hearing was fixed for December 20, 2016. In the meantime, Alcoa Trasformazioni S.r.l. and Ligestra reached a preliminary agreement for settlement of the liabilities related to Fusina, allocating 80% and 20% of the remediation costs to Ligestra and ParentCo, respectively. In January 2014, a final agreement with Ligestra was signed, and on February 5, 2014, ParentCo signed a final agreement with the MOE and MOPW settling all environmental issues at the Fusina site. As set out in the agreement between ParentCo and Ligestra, the parties will share the remediation costs and environmental damages claimed by the MOE and MOPW. The remediation project filed by ParentCo and Ligestra has been approved by the MOE. See Note R to the Consolidated Financial Statements under the caption "Fusina and Portovesme, Italy." To provide time for settlement with Ligestra, the MOE and ParentCo jointly requested and the Civil Court of Venice has granted a series of postponements of hearings in the Venice trial, assuming that the case will be closed. Following the settlement, the parties caused the Court to dismiss the proceedings. The proceedings were, however, restarted in April 2015 by the MOE and MOPW because the Ministers had not ratified the settlement of February 5, 2014. In April 2016, the settlement was ratified by the Ministers and the court case has been finally dismissed.

ParentCo and Ligestra have signed a similar agreement relating to the Portovesme site. However, that agreement is contingent upon final acceptance of the proposed soil remediation project for Portovesme. In agreement with Ligestra, ParentCo submitted proposals in May 2014 and February 2015. The MOE issued a Ministerial Decree approving the final project in October 2015. Work on the soil remediation project is expected to commence in 2018. After further discussions with the MOE regarding the groundwater component of the remediation project, Alcoa Corporation and Ligestra are now working to find a common remedial solution, based on a shared project involving all the industries of the area. The extent and duration of a groundwater remedy as well as the allocation of costs among the responsible local industries remains undetermined. As a result, Alcoa Corporation's costs remain uncertain and not capable of estimation.

On November 30, 2010, Alcoa World Alumina Brasil Ltda. ("AWAB") received notice of a lawsuit that had been filed by the public prosecutors of the State of Pará in Brazil in November 2009 regarding the impact of the new bauxite mine in Juruti, alleging that certain conditions of the original installation license were not met by AWAB, a subsidiary of Alcoa. The suit additionally names the State of Pará, which, through its Environmental Agency, had issued the operating license for ParentCo's new bauxite mine in Juruti. On April 14, 2010, the court denied plaintiffs' request for a preliminary injunction suspending the operating license and ordering payment of compensation. In March 2011, AWAB defended itself on grounds that it was in compliance with the terms and conditions of its operating license. In April 2011, the State of Pará defended itself in the case asserting that the operating license contains the necessary plans to mitigate such impact, that the State monitors the performance of AWAB's obligations arising out of such license, that the licensing process is valid and legal, and that the suit is meritless. Our position is that any impact from the project had been fully repaired when the suit was filed. We believe that Jará Lake has not been affected by any project

activity and any evidence of pollution from the project would be unreliable. Following the preliminary injunction request, the plaintiffs took no further action until October 2014, when in response to the court's request and as required by statute, they restated the original allegations in the lawsuit. We are not certain whether or when the action will proceed. Given that this proceeding is in its preliminary stage and the current uncertainty in this case, we are unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

Other Matters

St. Croix Proceedings

Abednego and Abraham cases. On January 14, 2010, ParentCo was served with a multi-plaintiff action complaint involving several thousand individual persons claiming to be residents of St. Croix alleging personal injury or property damage from Hurricane Georges or winds blowing material from the St. Croix Alumina, L.L.C. ("SCA") facility on the island of St. Croix (U.S. Virgin Islands) since the time of the hurricane. This complaint, *Abednego, et al. v. Alcoa, et al.* was filed in the Superior Court of the Virgin Islands, St. Croix Division. Following an unsuccessful attempt by ParentCo and SCA to remove the case to federal court, the case has been lodged in the Superior Court. The complaint names as defendants the same entities that were sued in a February 1999 action arising out of the impact of Hurricane Georges on the island and added as a defendant the current owner of the alumina facility property.

On March 1, 2012, ParentCo was served with a separate multi-plaintiff action complaint involving approximately 200 individual persons alleging claims essentially identical to those set forth in the *Abednego v. Alcoa* complaint. This complaint, *Abraham, et al. v. Alcoa, et al.*, was filed on behalf of plaintiffs previously dismissed in the federal court proceeding involving the original litigation over Hurricane Georges impacts. The matter was originally filed in the Superior Court of the Virgin Islands, St. Croix Division, on March 30, 2011.

ParentCo and other defendants in the *Abraham* and *Abednego* cases filed or renewed motions to dismiss each case in March 2012 and August 2012 following service of the *Abraham* complaint on ParentCo and remand of the *Abednego* complaint to Superior Court, respectively. By order dated August 10, 2015, the Superior Court dismissed plaintiffs' complaints without prejudice to re-file the complaints individually, rather than as a multi-plaintiff filing. The order also preserves the defendants' grounds for dismissal if new, individual complaints are filed. As of June 10, 2016, approximately 100 separate complaints had been filed in Superior Court, which alleged claims by about 400 individuals. On June 1, 2016, counsel representing plaintiffs filed a motion seeking additional time to file new complaints. On July 7, 2017, the Virgin Islands Superior Court issued an Order that accepted as timely Complaints that had already been filed or would be filed by the end of July 2017. The Court also consolidated all such complaints into the Red Dust Claims docket (Master Case No.: SX-15-CV-620). Following the court's July 7, 2017 order, a total of 430 complaints were filed and accepted by the court by the deadline. These complaints include claims of about 1,360 individuals. Alcoa filed its answers to the complaints on January 2, 2018 as directed by the court's most recent scheduling order. At a status conference on January 18, the court directed the parties to meet and confer on a partial discovery plan and set the next status conference for July 26, 2018. On February 5, 2018, the parties advised the court of their progress in resolving discovery issues and reported on remaining disagreements. We are unable to reasonably predict an outcome or to estimate a range of reasonably possible loss.

Glencore Contractual Indemnity Claim. On June 5, 2015, Alcoa World Alumina LLC ("AWA") and St. Croix Alumina, L.L.C. ("SCA") filed a complaint in Delaware Chancery Court for a declaratory judgment and injunctive relief to resolve a dispute between ParentCo and Glencore Ltd. ("Glencore") with respect to claimed obligations under a 1995 asset purchase agreement between ParentCo and Glencore. The dispute arose from Glencore's demand that ParentCo indemnify it for liabilities it may have to pay to Lockheed Martin ("Lockheed") related to the St. Croix alumina refinery. Lockheed had earlier filed suit against Glencore in federal court in New York seeking indemnity for liabilities it had incurred and would incur to the U.S. Virgin Islands to remediate certain properties at the refinery property and claimed that Glencore was required to indemnify it. Glencore had demanded that ParentCo indemnify and defend it in the Lockheed case and threatened to claim against ParentCo in the New York action despite exclusive jurisdiction for resolution of disputes under the 1995 purchase agreement being in Delaware. After Glencore conceded

that it was not seeking to add ParentCo to the New York action, AWA and SCA dismissed their complaint in the Chancery Court case and on August 6, 2015 filed a complaint for declaratory judgment in Delaware Superior Court. AWA and SCA filed a motion for judgment on the pleadings on September 16, 2015. Glencore answered AWA's and SCA's complaint and asserted counterclaims on August 27, 2015, and on October 2, 2015 filed its own motion for judgment on the pleadings. Argument on the parties' motions was held by the court on December 7, 2015, and by order dated February 8, 2016, the court granted ParentCo's motion and denied Glencore's motion, resulting in ParentCo not being liable to indemnify Glencore for the Lockheed action. The decision also leaves for pretrial discovery and possible summary judgment or trial Glencore's claims for costs and fees it incurred in defending and settling an earlier Superfund action brought against Glencore by the Government of the Virgin Islands. On February 17, 2016, Glencore filed notice of its application for interlocutory appeal of the February 8 ruling. AWA and SCA filed an opposition to that application on February 29, 2016. On March 10, 2016, the court denied Glencore's motion for interlocutory appeal and on the same day entered judgment on claims other than Glencore's claims for costs and fees it incurred in defending and settling the earlier Superfund action brought against Glencore by the Government of the Virgin Islands. On March 29, 2016, Glencore filed a withdrawal of its notice of interlocutory appeal and on April 6, 2016, Glencore filed an appeal of the court's March 10, 2016 judgment to the Delaware Supreme Court, which set the appeal for argument for November 2, 2016. On November 4, 2016, the Delaware Supreme Court affirmed the judgment of the Delaware Superior Court granting our motion. Remaining in the case were Glencore's claims for costs and fees it incurred related to the previously described Superfund action. On March 7, 2017, Alcoa and Glencore agreed to settle these claims and expect to ask the court to dismiss the case prior to the court's March 21, 2017 scheduled conference. On April 5, 2017, Alcoa and Glencore entered into a settlement agreement to resolve these remaining claims. Accordingly, on April 24, 2017, the court dismissed the case at the request of the parties. The amount of the proposed settlement was not material. This matter is now closed.

Some of our subsidiaries as premises owners are defendants in active lawsuits filed on behalf of persons alleging injury as a result of occupational exposure to asbestos at various facilities. A former affiliate of a subsidiary has been named, along with a large common group of industrial companies, in a pattern complaint where our involvement is not evident. Since 1999, several thousand such complaints have been filed. To date, the former affiliate has been dismissed from almost every case that was actually placed in line for trial. Our subsidiaries and acquired companies, all have had numerous insurance policies over the years that provide coverage for asbestos based claims. Many of these policies provide layers of coverage for varying periods of time and for varying locations. We have significant insurance coverage and believes that its reserves are adequate for its known asbestos exposure related liabilities. The costs of defense and settlement have not been and are not expected to be material to the results of operations, cash flows, and financial position of Alcoa Corporation.

Yadkin

On August 2, 2013, the State of North Carolina, through its agency, the North Carolina Department of Administration, filed a lawsuit against Alcoa Power Generating Inc. ("APGI") in Superior Court, Wake County, North Carolina (Docket No. 13-CVS-10477) asserting ownership of certain submerged lands and hydropower generating structures situated at ParentCo's Yadkin Hydroelectric Project ("Yadkin Project"). The suit seeks declaratory relief regarding North Carolina's alleged ownership interests in the submerged riverbed of the Yadkin River and the hydroelectric dams and further declaration that APGI has no right to operate the Yadkin Project. APGI removed the matter to the U.S. District Court for the Eastern District of North Carolina (Docket No. Civil Action No. 5: 13-cv-633) on September 3, 2013. On that same date, the Yadkin Riverkeeper sought permission to intervene. On September 25, 2013, APGI filed its answer and its opposition to the Yadkin Riverkeeper's intervention. The Court denied the State's Motion to Remand and permitted the Riverkeeper to intervene. The Riverkeeper has since voluntarily withdrawn.

On November 20, 2014, in response to both parties' motions for summary judgment, the Court denied APGI's motion for summary judgment and denied in part and granted in part the State of North Carolina's motions. Following a trial on navigability on April 21-22, 2015, the court ruled in APGI's favor that the state "failed to meet its burden to prove that the Relevant Segment...was navigable for commerce at statehood." Subsequently, APGI filed a motion for summary judgment as to title and the state opposed. On September 28, 2015, the Court granted summary judgment in

APGI's favor, finding that APGI holds title to the riverbed. The Court further directed judgment to be entered in APGI's favor and closed the case.

On February 2, 2017, APGI completed the sale of its Yadkin Project to a subsidiary of Cube Hydro in a transaction that transferred to the buyer all responsibility and liability for the Project, including any arising out of the case brought by the State of North Carolina. Upon the closing of the sale, APGI asked the court to substitute the buyer in the case because APGI had transferred all of its interest in the disputed property to the buyer. The State of North Carolina opposed that substitution on February 9, 2017. On April 3, 2017, in a split decision (2-1), the United States Court of Appeals for the Fourth Circuit affirmed the district court's conclusion that APGI had proved its title to the relevant river bed segment. The court's decision also denied Alcoa's request that Cube Hydro be substituted in the case in place of Alcoa. On June 15, 2017, Alcoa filed a motion, consented to by the State, to add Cube Hydro as a party. The motion was granted on June 19, 2017. The State has sought review by the U.S. Supreme Court in a petition for certiorari filed November 7, 2017. Cube Hydro filed an opposition to the petition on January 8, 2018. On the same date, Alcoa filed a letter with the Court informing the Court that it no longer has any interest in the outcome of the proceedings because it sold the property at issue to respondent Cube Yadkin Generation LLC ("Cube") effective February 1, 2017 and that Alcoa would not file a response to North Carolina's petition for a writ of certiorari. On February 20, 2018, the Court denied the State's petition. This matter is now closed.

Tax

Between 2000 and 2002, Alcoa Alumínio (Alumínio), an indirect wholly-owned subsidiary of Alcoa Corporation, sold approximately 2,000 metric tons of metal per month from its Poços de Caldas facility, located in the State of Minas Gerais (the "State"), Brazil, to Alfio, a customer also located in the State. Sales in the State were exempted from value-added tax (VAT) requirements. Alfio subsequently sold metal to customers outside of the State, but did not pay the required VAT on those transactions. In July 2002, Alumínio received an assessment from State auditors on the theory that Alumínio should be jointly and severally liable with Alfio for the unpaid VAT. In June 2003, the administrative tribunal found Alumínio liable, and Alumínio filed a judicial case in the State in February 2004 contesting the finding. In May 2005, the Court of First Instance found Alumínio solely liable, and a panel of a State appeals court confirmed this finding in April 2006. Alumínio filed a special appeal to the Superior Tribunal of Justice (STJ) in Brasília (the federal capital of Brazil) later in 2006. In 2011, the STJ (through one of its judges) reversed the judgment of the lower courts, finding that Alumínio should neither be solely nor jointly and severally liable with Alfio for the VAT, which ruling was then appealed by the State. In August 2012, the STJ agreed to have the case reheard before a five-judge panel. On February 21, 2017, the lead judge of the STJ issued a ruling confirming that Alumínio should be held liable in this matter. On March 16, 2017, Alumínio filed an appeal to have its case reheard before the five-judge panel as originally agreed to by the STJ in August 2012. Separately, in the 2017 second quarter, the State opened a tax amnesty program. At the end of August 2017, Alumínio elected to submit this matter for consideration into the amnesty program, which the State approved. As a result, this matter was settled for an immaterial amount during the 2017 third quarter. The matter is now closed.

In September 2010, following a corporate income tax audit covering the 2003 through 2005 tax years, an assessment was received as a result of Spain's tax authorities disallowing certain interest deductions claimed by a Spanish consolidated tax group owned by ParentCo. An appeal of this assessment in Spain's Central Tax Administrative Court by the ParentCo was denied in October 2013. In December 2013, ParentCo filed an appeal of the assessment in Spain's National Court.

Additionally, following a corporate income tax audit of the same Spanish tax group for the 2006 through 2009 tax years, Spain's tax authorities issued an assessment in July 2013 similarly disallowing certain interest deductions. In August 2013, ParentCo filed an appeal of this second assessment in Spain's Central Tax Administrative Court, which was denied in January 2015. ParentCo filed an appeal of this second assessment in Spain's National Court in March 2015.

At December 31, 2016, the combined assessments, including interest, total \$258 million (€246 million). On January 16, 2017, Spain's National Court issued a decision in favor of the Company related to the assessment received in

September 2010. On March 6, 2017, the Company was notified that Spain's tax authorities did not file an appeal, for which the deadline has passed. As a result, the assessment related to the 2003 through 2005 tax years is null and void. Spain's National Court has not yet rendered a decision related to the assessment received in July 2013 for the 2006 through 2009 tax years. The amount of this assessment on a standalone basis, including interest, was \$136 million (€130 million) as of December 31, 2016.

The Company believes it has meritorious arguments to support its tax position and intends to vigorously litigate the remaining assessment through Spain's court system. However, in the event the Company is unsuccessful, a portion of the remaining assessment may be offset with existing net operating losses available to the Spanish consolidated tax group, which would be shared between the Company and Arconic as provided for in the Tax Matters Agreement related to the Separation Transaction. Additionally, it is possible that the Company may receive similar assessments for tax years subsequent to 2009. Despite the favorable decision received on the first assessment, at this time, the Company is unable to reasonably predict the ultimate outcome for this matter.

This Spanish consolidated tax group had been under audit (began in September 2015) for the 2010 through 2013 tax years. As Spain's tax authorities neared the end of the audit, they informed both Alcoa Corporation and Arconic of their intent to issue an assessment similarly disallowing certain interest deductions as the two assessments described above. On August 3, 2017, in lieu of receiving a formal assessment, all parties agreed to a settlement related to the 2010 through 2013 tax years. For Alcoa Corporation, this settlement is not material to the Company's Consolidated Financial Statements. Given the stage of the appeal of the assessment for the 2006 through 2009 tax years in Spain's National Court, the settlement of the 2010 through 2013 tax years will not impact the ultimate outcome of that proceeding.

Other

On October 19, 2015, a subsidiary of Alcoa, Alúmina Española S.A., received a request by the Court of Vivero, Spain to provide the names of the "manager," as well as those of the "environmental managers," of the San Ciprián alumina refinery from 2009 to the present date. Upon reviewing the documents filed with the Court, ParentCo learned for the first time that the request is the result of a criminal proceeding that began in 2010 after the filing of a claim by two San Ciprián neighbors alleging that the plant's activities had adverse effects on vegetation, crops and human health. In 2011 and 2012, some neighbors claimed individually in the criminal court for caustic spill damages to vehicles, and the judge decided to administer all issues in the court proceeding (865/2011). Currently, that court proceeding is in its first phase (preliminary investigation phase) led by the judge. The purpose of that investigation is to determine whether there has been a criminal offense for actions against natural resources and the environment. The Spanish public prosecutor is also involved in the case, having requested technical reports. To date, only "Alcoa-Alúmina Española S.A." has been identified as a potential defendant and no Alcoa representative has yet been required to appear before the judge. Monetary sanctions for an offense in the form of a fine could range from 30 to 5,000 euros per day, for a maximum period of three years. The environmental experts appointed by the public prosecutor have submitted their report to the court, and while favorable to the Company, the court has not rendered a ruling in that respect.

Other Contingencies

On January 11, 2016, Sherwin Alumina Company, LLC ("Sherwin"), the current owner of a refinery previously owned by ParentCo (see below), and one of its affiliate entities, filed bankruptcy petitions in Corpus Christi, Texas for reorganization under Chapter 11 of the U.S. Bankruptcy Code. Sherwin informed the bankruptcy court that it intends to cease operations because it is not able to continue its bauxite supply agreement. On November 23, 2016, the bankruptcy court approved Sherwin's plans for cessation of its operations. On February 16, 2017, Sherwin filed a bankruptcy Chapter 11 Plan (the "Plan") and on February 17, 2017 the court approved that Plan.

In 2000, ParentCo acquired Reynolds Metals Company ("Reynolds," a subsidiary of Alcoa Corporation), which included an alumina refinery in Gregory, Texas. As a condition of the Reynolds acquisition, ParentCo was required to divest this alumina refinery. In accordance with the terms of the divestiture in 2000, ParentCo agreed to retain

responsibility for certain environmental obligations (see Environmental Matters above) and assigned to the buyer an Energy Services Agreement (“ESA”) with Gregory Power Partners (“Gregory Power”) for purchase of steam and electricity by the refinery.

As a result of Sherwin’s initial bankruptcy filing, separate legal actions were initiated against Reynolds by Gregory Power and Sherwin as follows.

Gregory Power. On January 26, 2016, Gregory Power delivered notice to Reynolds that Sherwin’s bankruptcy filing constitutes a breach of the ESA; on January 29, 2016, Reynolds responded that the filing does not constitute a breach. On September 16, 2016, Gregory Power filed a complaint in the bankruptcy case against Reynolds alleging breach of the ESA. In response to this complaint, on November 10, 2016, Reynolds filed both a motion to dismiss, including a jury demand, and a motion to withdraw the reference to the bankruptcy court based on the jury demand. On July 18, 2017, the district court ordered that any trial would be held to a jury in district court, but that the bankruptcy court would retain jurisdiction on all pre-trial matters. At this time, Alcoa Corporation is unable to reasonably predict the ultimate outcome of this matter.

Sherwin. On October 4, 2016, the state of Texas filed suit against Sherwin in the bankruptcy proceeding seeking to hold Sherwin responsible for remediation of alleged environmental conditions at the facility. On October 11, 2016, Sherwin filed a similar suit against Reynolds in the case. As provided in the Plan, Sherwin, including certain affiliated companies, and Reynolds are negotiating an allocation among them as to the ownership of and responsibility for certain areas of the refinery and related bauxite residue waste disposal areas. Upon agreed stipulations filed by the parties, the bankruptcy court has extended the deadline to negotiate and file a settlement several times and is currently scheduled for March 12, 2018. At this time, Alcoa Corporation is unable to reasonably predict the ultimate outcome of this matter.

General

In addition to the matters discussed above, various other lawsuits, claims, and proceedings have been or may be instituted or asserted against Alcoa Corporation, including those pertaining to environmental, product liability, safety and health, and tax matters. While the amounts claimed in these other matters may be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that exist. Therefore, it is possible that the Company’s liquidity or results of operations in a particular period could be materially affected by one or more of these other matters. However, based on facts currently available, management believes that the disposition of these other matters that are pending or asserted will not have a material adverse effect, individually or in the aggregate, on the financial position of the Company.

Item 4. Mine Safety Disclosures.

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17 CFR 229.104) is included in Exhibit 95.1 of this report, which is incorporated herein by reference.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Shares of the Company’s common stock are listed on the New York Stock Exchange and trade under the symbol “AA” in “regular-way” trading, which began on November 1, 2016 immediately following the Separation Transaction. The Company’s high and low trading stock prices for the reporting periods since that time are shown below.

	High	Low
2017		
First Quarter	\$39.78	\$28.17
Second Quarter	37.20	29.55
Third Quarter	47.95	32.92
Fourth Quarter	54.61	40.22
Year	54.61	28.17
2016		
Fourth Quarter (beginning November 1, 2016)	\$32.35	\$21.78

Alcoa Corporation did not pay dividends in 2017 or in 2016 (beginning November 1, 2016). Dividends on Alcoa Corporation common stock are subject to authorization by the Company’s Board of Directors. The payment and amount of dividends, if any, depends upon matters deemed relevant by the Company’s Board of Directors, such as Alcoa Corporation’s results of operations, financial condition, cash requirements, future prospects, any limitations imposed by law, credit agreements or senior securities, and other factors deemed relevant and appropriate. The Company’s senior secured revolving credit facility and the indenture governing our senior unsecured notes restrict our ability to pay dividends in certain circumstances. For more information, see Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Financing Activities.”

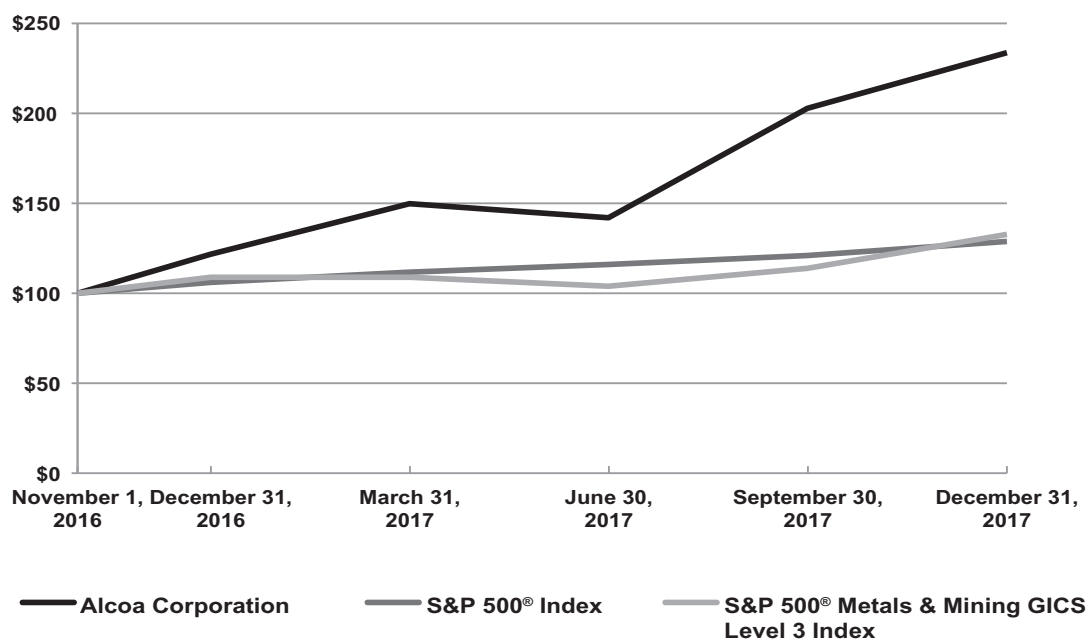
As of February 20, 2018, there were approximately 11,800 holders of record of shares of the Company’s common stock. Because many of Alcoa Corporation’s shares are held by brokers and other institutions on behalf of stockholders, the Company is unable to estimate the total number of stockholders represented by these recordholders.

Stock Performance Graph

The following graph compares Alcoa Corporation's cumulative 14-month total shareholder return with (1) the Standard & Poor's (S&P) 500® Index and (2) the S&P 500® Metals & Mining GICS Level 3 Index, a group of companies categorized by S&P as active in the "Metals and Mining" industry within the "Materials" market sector. This comparison was based on an initial investment of \$100, including the reinvestment of any dividends from November 1, 2016 (beginning of "regular way" trading for Alcoa Corporation) through December 31, 2017. Such information shall not be deemed to be "filed."

14-MONTH CUMULATIVE TOTAL RETURN

Based on an initial investment of \$100 on November 1, 2016 with dividends reinvested



	November 1, 2016	December 31, 2016	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017
Alcoa Corporation	\$100	\$122	\$150	\$142	\$203	\$234
S&P 500® Index	100	106	112	116	121	129
S&P 500® Metals & Mining GICS Level 3 Index	100	109	109	104	114	133

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Source: Research Data Group, Inc. (www.researchdatagroup.com/S&P.htm)

Unregistered Sales of Equity Securities

On March 14, 2016, Alcoa Corporation issued 1,000 shares of its common stock to ParentCo pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended. The Company did not register the issuance of these shares under the Securities Act of 1933, as amended, because such issuance did not constitute a public offering.

Item 6. Selected Financial Data.

(dollars in millions, except per-share amounts and average realized prices; metric tons in thousands (kmt))

For the year ended December 31,	2017	2016	2015	2014	2013 ⁽³⁾
Sales	\$11,652	\$ 9,318	\$11,199	\$13,147	\$12,573
Restructuring and other charges	309	318	983	863	712
Net income (loss)	559	(346)	(739)	(347)	(2,870)
Net income (loss) attributable to Alcoa Corporation	217	(400)	(863)	(256)	(2,909)
Earnings per share attributable to Alcoa Corporation common shareholders ⁽¹⁾ :					
Basic	\$ 1.18	\$ (2.19)	\$ (4.73)	\$ (1.40)	\$ (15.94)
Diluted	1.16	(2.19)	(4.73)	(1.40)	(15.94)
Shipments of alumina (kmt)	9,220	9,071	10,755	10,652	9,966
Shipments of aluminum products (kmt)	3,356	3,147	3,227	3,518	3,742
Alcoa Corporation's average realized price per metric ton of alumina	\$ 340	\$ 253	\$ 311	\$ 320	\$ 319
Alcoa Corporation's average realized price per metric ton of primary aluminum	2,224	1,862	2,092	2,396	2,280
Cash dividends declared per common share ⁽²⁾	\$ -	\$ -	\$ *	\$ *	\$ *
Total assets	17,447	16,741	16,413	18,680	21,126
Total debt	1,412	1,445	225	342	420
Cash provided from operations	1,224	(311)	875	842	452
Capital expenditures	(405)	(404)	(391)	(444)	(567)

- (1) For all periods presented prior to 2016, earnings per share was calculated based on the 182,471,195 shares of Alcoa Corporation common stock distributed on November 1, 2016 in conjunction with the completion of the Separation Transaction and is considered pro forma in nature.
- (2) Dividends on common stock are subject to authorization by Alcoa Corporation's Board of Directors. Alcoa Corporation did not declare any dividends in 2017 and from November 1, 2016 through December 31, 2016.
- (3) In 2013, Alcoa Corporation recognized an impairment of goodwill in the amount of \$1,731 (\$1,719 after noncontrolling interest) related to the annual impairment review of its former Primary Metals reporting unit (comprised of both the primary aluminum and the majority of energy operations).
- * Prior to November 1, 2016, Alcoa Corporation was not a standalone publicly-traded company with issued and outstanding common stock.

Prior to the Separation Date, Alcoa Corporation did not operate as a separate, standalone entity. Alcoa Corporation's operations were included in ParentCo's financial results. Accordingly, for all periods prior to the Separation Date, Alcoa Corporation's Consolidated Financial Statements were prepared from ParentCo's historical accounting records and were presented on a standalone basis as if Alcoa Corporation's operations had been conducted independently from ParentCo. Such Consolidated Financial Statements include the historical operations that were considered to comprise Alcoa Corporation's businesses, as well as certain assets and liabilities that were historically held at ParentCo's corporate level but were specifically identifiable or otherwise attributable to Alcoa Corporation.

The selected Statement of Consolidated Operations and Consolidated Balance Sheet information in the table above for all periods was derived from Alcoa Corporation's audited Consolidated Financial Statements.

The data presented in the Selected Financial Data table should be read in conjunction with the information provided in Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II Item 7 and the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.

**(dollars in millions, except per-share amounts, average realized prices, and average cost amounts;
dry metric tons in millions (mdmt); metric tons in thousands (kmt))**

Overview

Our Business

Alcoa Corporation (or the “Company”) is a vertically integrated aluminum company comprised of bauxite mining, alumina refining, aluminum production (smelting, casting, and rolling), and energy generation. Aluminum is a commodity that is traded on the London Metal Exchange (LME) and priced daily. Additionally, alumina is subject to market pricing through the Alumina Price Index (API), which is calculated by the Company based on spot prices. As a result, the price of both aluminum and alumina is subject to significant volatility and, therefore, influences the operating results of Alcoa Corporation.

The Company has more than 40 operating locations (through direct and indirect ownership) in 10 countries around the world, situated primarily in Australia, Brazil, Canada, Europe, and the United States. Governmental policies, laws and regulations, and other economic factors, including inflation and fluctuations in foreign currency exchange rates and interest rates, affect the results of operations in these countries.

Separation Transaction

References in this Management’s Discussion and Analysis of Financial Condition and Results of Operations to “ParentCo” refer to Alcoa Inc., a Pennsylvania corporation, and its consolidated subsidiaries (through October 31, 2016, at which time was renamed Arconic Inc. (Arconic)).

On September 28, 2015, ParentCo’s Board of Directors preliminarily approved a plan to separate ParentCo into two standalone, publicly-traded companies (the “Separation Transaction”). One company, later named Alcoa Corporation, was to include the Alumina and Primary Metals segments, which comprised the bauxite mining, alumina refining, aluminum production, and energy operations of ParentCo, as well as the Warrick, Indiana rolling operations and the 25.1% equity interest in the rolling mill at the joint venture in Saudi Arabia, both of which were part of ParentCo’s Global Rolled Products segment. ParentCo was to continue to own the operations that comprise the Global Rolled Products (except for the aforementioned rolling operations that were to be included in Alcoa Corporation), Engineered Products and Solutions, and Transportation and Construction Solutions segments.

The Separation Transaction was subject to a number of conditions, including, but not limited to: final approval by ParentCo’s Board of Directors (see below); the continuing validity of the private letter ruling from the Internal Revenue Service regarding certain U.S. federal income tax matters relating to the transaction; receipt of an opinion of legal counsel regarding the qualification of the distribution, together with certain related transactions, as a transaction that is generally tax-free for U.S. federal income tax purposes; and the U.S. Securities and Exchange Commission (the “SEC”) declaring effective a Registration Statement on Form 10, as amended, filed with the SEC on October 11, 2016 (effectiveness was declared by the SEC on October 17, 2016).

On September 29, 2016, ParentCo’s Board of Directors approved the completion of the Separation Transaction by means of a pro rata distribution by ParentCo of 80.1% of the outstanding common stock of Alcoa Corporation to ParentCo shareholders of record as of the close of business on October 20, 2016 (the “Record Date”). Arconic was to retain the remaining 19.9% of Alcoa Corporation common stock. At the time of the Separation Transaction, ParentCo shareholders were to receive one share of Alcoa Corporation common stock for every three shares of ParentCo common stock held as of the close of business on the Record Date. ParentCo shareholders were to receive cash in lieu of fractional shares.

In connection with the Separation Transaction, as of October 31, 2016, Alcoa Corporation entered into certain agreements with Arconic to implement the legal and structural separation between the two companies, govern the relationship between Alcoa Corporation and Arconic after the completion of the Separation Transaction, and allocate between Alcoa Corporation and Arconic various assets, liabilities and obligations, including, among other things, employee benefits, environmental liabilities, intellectual property, and tax-related assets and liabilities. These agreements included a Separation and Distribution Agreement, Tax Matters Agreement, Employee Matters Agreement, Transition Services Agreement, certain Patent, Know-How, Trade Secret License and Trademark License Agreements, and Stockholder and Registration Rights Agreement.

On November 1, 2016 (the “Separation Date”), the Separation Transaction was completed and became effective at 12:01 a.m. Eastern Standard Time. To effect the Separation Transaction, ParentCo undertook a series of transactions to separate the net assets and certain legal entities of ParentCo, resulting in a cash payment of \$1,072 to ParentCo by Alcoa Corporation (an additional \$247 was paid to Arconic by Alcoa Corporation in 2017 – see Financing Activities in Liquidity and Capital Resources below) with the net proceeds of a previous debt offering (see Financing Activities in Liquidity and Capital Resources below). In conjunction with the Separation Transaction, 146,159,428 shares of Alcoa Corporation common stock were distributed to ParentCo shareholders. Additionally, Arconic retained 36,311,767 shares of Alcoa Corporation common stock representing its 19.9% retained interest (Arconic sold all of these shares in 2017). “Regular-way” trading of Alcoa Corporation’s common stock began with the opening of the New York Stock Exchange on November 1, 2016 under the ticker symbol “AA.” Alcoa Corporation’s common stock has a par value of \$0.01 per share.

ParentCo incurred costs to evaluate, plan, and execute the Separation Transaction, and Alcoa Corporation was allocated a pro rata portion of those costs based on segment revenue (see Cost Allocations below). ParentCo recognized \$152 from January 2016 through October 2016 and \$24 in 2015 for costs related to the Separation Transaction, of which \$68 and \$12, respectively, was allocated to Alcoa Corporation. The allocated amounts were included in Selling, general administrative, and other expenses on Alcoa Corporation’s Statement of Consolidated Operations.

Basis of Presentation. The Consolidated Financial Statements of Alcoa Corporation are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) and require management to make certain judgments, estimates, and assumptions. These may affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. They also may affect the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates upon subsequent resolution of identified matters.

Prior to the Separation Date, Alcoa Corporation did not operate as a separate, standalone entity. Alcoa Corporation’s operations were included in ParentCo’s financial results. Accordingly, for all periods prior to the Separation Date, Alcoa Corporation’s Consolidated Financial Statements were prepared from ParentCo’s historical accounting records and were presented on a standalone basis as if Alcoa Corporation’s operations had been conducted independently from ParentCo. Such Consolidated Financial Statements include the historical operations that were considered to comprise Alcoa Corporation’s businesses, as well as certain assets and liabilities that were historically held at ParentCo’s corporate level but were specifically identifiable or otherwise attributable to Alcoa Corporation.

Cost Allocations. The description and information on cost allocations is applicable for all periods included in Alcoa Corporation’s Consolidated Financial Statements prior to the Separation Date.

The Consolidated Financial Statements of Alcoa Corporation include general corporate expenses of ParentCo that were not historically charged to Alcoa Corporation for certain support functions that were provided on a centralized basis, such as expenses related to finance, audit, legal, information technology, human resources, communications, compliance, facilities, employee benefits and compensation, and research and development activities. These general corporate expenses were included on Alcoa Corporation’s Statement of Consolidated Operations within Cost of goods sold, Selling, general administrative and other expenses, and Research and development expenses. These expenses

were allocated to Alcoa Corporation on the basis of direct usage when identifiable, with the remainder allocated based on Alcoa Corporation's segment revenue as a percentage of ParentCo's total segment revenue for both Alcoa Corporation and Arconic.

All external debt not directly attributable to Alcoa Corporation was excluded from Alcoa Corporation's Consolidated Balance Sheet. Financing costs related to these debt obligations were allocated to Alcoa Corporation based on the ratio of capital invested in Alcoa Corporation to the total capital invested by ParentCo in both Alcoa Corporation and Arconic, and were included on Alcoa Corporation's Statement of Consolidated Operations within Interest expense.

The following table reflects the allocations described above:

	2016	2015
Cost of goods sold ⁽¹⁾	\$ 40	\$ 93
Selling, general administrative, and other expenses ⁽²⁾	150	146
Research and development expenses	2	17
Provision for depreciation, depletion, and amortization	18	22
Restructuring and other charges ⁽³⁾	1	32
Interest expense	198	245
Other (income) expenses, net	\$ (7)	\$ 12

(1) Allocation principally relates to expenses for ParentCo's retained pension and other postretirement benefits associated with closed and sold operations.

(2) Allocation includes costs incurred by ParentCo associated with the Separation Transaction (see above).

(3) Allocation primarily relates to layoff programs for ParentCo corporate employees.

Management believes the assumptions regarding the allocation of ParentCo's general corporate expenses and financing costs were reasonable.

Nevertheless, the Consolidated Financial Statements of Alcoa Corporation may not include all of the actual expenses that would have been incurred and may not reflect Alcoa Corporation's consolidated results of operations, financial position, and cash flows had it been a standalone company during the periods prior to the Separation Date. Actual costs that would have been incurred if Alcoa Corporation had been a standalone company would depend on multiple factors, including organizational structure, capital structure, and strategic decisions made in various areas, including information technology and infrastructure. Transactions between Alcoa Corporation and ParentCo, including sales to Arconic, were included as related party transactions on Alcoa Corporation's Consolidated Financial Statements and are considered to be effectively settled for cash at the time the transaction was recorded. The total net effect of the settlement of these transactions is reflected on Alcoa Corporation's Statement of Consolidated Cash Flows as a financing activity and on the Company's Consolidated Balance Sheet as Parent Company net investment.

Results of Operations

Earnings Summary

Net income attributable to Alcoa Corporation for 2017 was \$217 compared with Net loss attributable to Alcoa Corporation of \$400 in 2016. The change of \$617 was primarily due to a higher average realized price for each of primary aluminum and alumina and the absence of allocated interest expense and costs related to the Separation Transaction. These positive impacts were partially offset by both a higher income tax provision and net income attributable to a noncontrolling interest partner in certain of Alcoa Corporation's operations, increased raw materials, maintenance, and transportation costs, and net unfavorable foreign currency movements.

Net loss attributable to Alcoa Corporation for 2016 was \$400 compared with \$863 in 2015. The change of \$463 was mostly due to lower restructuring-related charges, net productivity improvements, a smaller income tax provision, gains on the sales of multiple assets, and decreases in ongoing overhead and research and development expenses. These positive impacts were partially offset by lower pricing in most operations and costs associated with the Separation Transaction.

Sales—Sales for 2017 were \$11,652 compared with sales of \$9,318 in 2016, an improvement of \$2,334, or 25%. The increase was primarily due to a higher average realized price for each of primary aluminum and alumina and increased shipments for each of aluminum products, alumina, and bauxite. These positive impacts were slightly offset by realized losses from embedded derivatives (designated as cash flow hedges of forward aluminum sales) in energy supply contracts due to the rise in LME aluminum prices.

Sales for 2016 were \$9,318 compared with sales of \$11,199 in 2015, a decline of \$1,881, or 17%. The decrease was mainly the result of a lower average realized price for each of alumina, aluminum (primary and rolled), and energy, lower volume for alumina, and the absence of sales related to capacity that was curtailed. These negative impacts were slightly offset by higher bauxite sales.

Cost of Goods Sold—COGS as a percentage of Sales was 77.9% in 2017 compared with 84.8% in 2016. The percentage was positively impacted by a higher average realized price for each of primary aluminum and alumina, somewhat offset by several factors as follows: higher input costs, particularly for energy (including \$21 related to a financial contract—see below) and caustic soda; net unfavorable foreign currency movements due to a weaker U.S. dollar; increased maintenance and transportation expenses; an unfavorable last in, first out (LIFO) inventory adjustment (difference of \$81—see Reconciliation of Total Segment Adjusted EBITDA to Consolidated Net Income (Loss) Attributable to Alcoa Corporation in Segment Information below); and costs related to the partial restart of the Warrick (Indiana) smelter (\$46—see Aluminum in Segment Information below).

COGS as a percentage of Sales was 84.8% in 2016 compared with 80.7% in 2015. The percentage was negatively impacted by a lower average realized price for each of alumina, aluminum (primary and rolled), and energy, and an unfavorable LIFO inventory adjustment (difference of \$117—see Reconciliation of Total Segment Adjusted EBITDA to Consolidated Net Income (Loss) Attributable to Alcoa Corporation in Segment Information below). These negative impacts were partially offset by net productivity improvements across all segments and lower inventory write-downs related to the decisions to permanently close and/or curtail capacity (difference of \$85—see Restructuring and Other Charges below).

Alcoa Corporation has purchased electricity in the spot market for one of its smelters since the Company's contract with a local energy provider expired in October 2016, as a new energy contract was not able to be negotiated. In order to manage the Company's exposure against the variable energy rates that occur in the spot market, Alcoa Corporation had previously entered into a financial contract with a counterparty to effectively convert the Company's variable power price to a fixed power price. At the beginning of 2017, Alcoa Corporation held a favorable position in the financial contract, which was scheduled to early terminate in August 2017, as a result of a decision made by management in August 2016.

In January 2017, Alcoa Corporation began the process of restarting capacity at this smelter, which was halted due to an unexpected power outage that occurred in December 2016. As a result, Alcoa Corporation and the same counterparty to the existing financial contract entered into a new financial contract to effectively convert the Company's variable power price to a fixed power price from August 2017 through July 2021. Additionally, the effective termination of the existing financial contract was moved up to July 31, 2017. In order to obtain the most favorable terms under the new financial contract that could be negotiated, Alcoa Corporation conceded a portion of the existing financial contract that was favorable to the Company for the April through July 2017 period.

As a result of this concession, Alcoa Corporation sought an additional financial contract to cover the exposure to variable power rates for the April through July 2017 period. In March 2017, Alcoa Corporation secured such a contract with a different counterparty; however, the price of power in the spot market rose significantly between January and March 2017. Consequently, the fixed power price secured by this additional financial contract was significantly higher than the fixed power price previously secured by the existing financial contract described above. Accordingly, Alcoa Corporation realized higher energy costs (included in COGS) of \$21 and mark-to-market losses (included in Other income, net) related to the financial contracts of \$13 in 2017.

Selling, General Administrative, and Other Expenses—SG&A expenses were \$284, or 2.4% of Sales, in 2017 compared with \$359, or 3.9% of Sales, in 2016. The decrease of \$75 was mostly attributable to the absence of costs related to the Separation Transaction (\$73), which includes an allocation of \$68 from ParentCo prior to the Separation Date.

SG&A expenses were \$359, or 3.9% of Sales, in 2016 compared with \$353, or 3.2% of Sales, in 2015. The increase of \$6 was largely related to higher costs associated with the Separation Transaction (\$61), which includes a higher allocation of \$56 from ParentCo prior to the Separation Date, mostly offset by a decrease in corporate overhead expenses, the absence of SG&A related to closed and sold locations (\$17), and favorable foreign currency movements due to a stronger U.S. dollar.

Research and Development Expenses—R&D expenses were \$32 in 2017 compared with \$33 in 2016 and \$69 in 2015. The decrease in 2016 as compared to 2015 was mainly driven by lower spending related to break-through smelting technology, as Alcoa Corporation worked towards completion of the R&D phase.

Provision for Depreciation, Depletion, and Amortization—The provision for DD&A was \$750 in 2017 compared with \$718 in 2016. The increase of \$32, or 4%, was mostly due to unfavorable foreign currency movements due to a weaker U.S. dollar, particularly against the Brazilian real and Australian dollar, and incremental expense due to the capitalization in 2017 of new bauxite residue storage areas.

The provision for DD&A was \$718 in 2016 compared with \$780 in 2015. The decline of \$62, or 8%, was principally caused by favorable foreign currency movements due to a stronger U.S. dollar, particularly against the Brazilian real and Australian dollar, and the absence of DD&A (\$23) related to capacity reductions at a refinery and smelter in South America that occurred at different points during 2015 (see 2015 Actions in Restructuring and Other Charges below) and a smelter in the United States that occurred in March 2016 (see 2016 Actions in Restructuring and Other Charges below).

Restructuring and Other Charges—Restructuring and other charges for each year in the three-year period ended December 31, 2017 were comprised of the following:

	2017	2016	2015
Early termination of a power contract	\$244	\$ -	\$ -
Asset impairments	40	155	311
Layoff costs	23	32	199
Legal matters in Italy	(22)	-	201
Asset retirement obligations	10	97	76
Environmental remediation	8	26	86
Net (gain) loss on divestitures of businesses	-	(3)	25
Other	49	47	92
Reversals of previously recorded layoff and other costs	(43)	(36)	(7)
Restructuring and other charges	\$309	\$318	\$983

* In 2016 and 2015, Other includes \$1 and \$32, respectively, related to the allocation of restructuring charges to Alcoa Corporation from ParentCo (see Cost Allocations under Separation Transaction above).

Layoff costs were recorded based on approved detailed action plans submitted by the operating locations that specified positions to be eliminated, benefits to be paid under existing severance plans, union contracts or statutory requirements, and the expected timetable for completion of the plans.

2017 Actions. In 2017, Alcoa Corporation recorded Restructuring and other charges of \$309, which were comprised of the following components: \$244 related to the early termination of a power contract (see below); \$49 for exit costs related to a decision to permanently close and demolish a smelter (see below); \$41 for additional contract costs related to the curtailed Wenatchee (Washington) and São Luís (Brazil) smelters; \$22 for layoff costs, including the separation

of approximately 130 employees (115 in the Aluminum segment), mostly for voluntary separation programs; a reversal of \$22 to reduce a reserve previously established at the end of 2015 related to a legal matter in Italy; a net charge of \$18 for other miscellaneous items, including the relocation of the Company's headquarters and principal executive office from New York, New York to Pittsburgh, Pennsylvania; and a reversal of \$43 associated with several reserves related to prior periods (see below).

In October 2017, Alcoa Corporation and Luminant Generation Company LLC (Luminant) executed an early termination agreement of a power contract, as well as other related fuel and lease agreements, effective October 1, 2017, related to the Company's Rockdale (Texas) smelter, which has been fully curtailed since the end of 2008. In accordance with the terms of the early termination agreement, Alcoa made a cash payment of \$238 and transferred approximately 2,200 acres of related land and other assets and liabilities to Luminant (net asset carrying value of \$6).

Since the curtailment of the Rockdale smelter, the Company had been selling surplus electricity into the energy market. The power contract was set to expire no earlier than 2038, except for limited circumstances in which one or both parties could elect to early terminate without penalty for which conditions had never been met. In 2017 (through September 30), 2016, and 2015, Alcoa Corporation recognized \$105, \$141, and \$147, respectively, in Sales and \$148, \$210, and \$201, respectively, in Cost of goods sold on the accompanying Statement of Consolidated Operations related to the sale of the surplus electricity and the cost of the Luminant power contract.

As a result of the early termination of the power contract, Alcoa initiated a strategic review of the remaining buildings and equipment associated with the smelter, casthouse, and the aluminum powder plant at the Rockdale location. ParentCo previously decided to curtail the operating capacity of the Rockdale smelter in 2008 as a result of an uncompetitive power supply and then-overall unfavorable market conditions. Under this review, which was completed in December 2017, management determined that the Rockdale operations have limited economic prospects. Consequently, management approved the permanent closure and demolition of the Rockdale smelter (capacity of 191 kmt-per-year) and related operations effective immediately. Demolition and remediation activities related to this action will begin in 2018 and are expected to be completed by the end of 2022. Separately, the Company continues to own more than 30,000 acres of land surrounding the Rockdale operations.

In 2017, costs related to this decision included asset impairments of \$32, representing the write-off of the remaining book value of all related properties, plants, and equipment; \$1 for the layoff of approximately 10 employees (Corporate); and \$16 in other costs. Additionally in 2017, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value, resulting in a charge of \$6, which was recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations. The other costs of \$16 represent \$8 in asset retirement obligations and \$8 in environmental remediation, both of which were triggered by the decisions to permanently close and demolish the Rockdale facilities.

In July 2017, Alcoa Corporation announced plans to restart three (161,400 metric tons of capacity) of the five potlines (268,800 metric tons of capacity) at the Warrick (Indiana) smelter, which is expected to be complete in the second quarter of 2018. This smelter was previously permanently closed in March 2016 by ParentCo (see 2016 Actions below). The capacity identified for restart will directly supply the existing rolling mill at the Warrick location to improve efficiency of the integrated site and provide an additional source of metal to help meet an anticipated increase in production volumes. As a result of the decision to reopen this smelter, in 2017, Alcoa Corporation reversed \$33 in remaining liabilities related to the original closure decision. These liabilities consisted of \$20 in asset retirement obligations and \$4 in environmental remediation obligations, which were necessary due to the previous decision to demolish the smelter, and \$9 in severance and contract termination costs. Additionally, the carrying value of the smelter and related assets was reduced to zero as the smelter ramped down between the permanent closure decision date (end of 2015) and the end of March 2016. Once these assets are placed back into service in conjunction with the restart, their carrying value will remain zero. As such, only newly acquired or constructed assets related to the Warrick smelter will be depreciated.

As of December 31, 2017, approximately 90 of the 140 employees were separated. The remaining separations for 2017 restructuring programs are expected to be completed by the end of 2018. In 2017, cash payments of \$9 were made against layoff reserves related to 2017 restructuring programs.

2016 Actions. In 2016, Alcoa Corporation recorded Restructuring and other charges of \$318, which were comprised of the following components: \$131 for exit costs related to a decision to permanently close and demolish a refinery (see below); \$87 for additional net costs related to decisions made in late 2015 to permanently close and demolish the Warrick smelter and to curtail the Wenatchee smelter and Point Comfort (Texas) refinery (see 2015 Actions below); \$72 for the impairment of an interest in gas exploration assets in Western Australia (see below); \$32 for layoff costs related to cost reduction initiatives, including the separation of approximately 75 employees (60 in the Aluminum segment and 15 in the Bauxite segment) and related pension settlement costs; a net charge of \$8 for other miscellaneous items; and a reversal of \$12 associated with a number of small layoff reserves related to prior periods.

In December 2016, management approved the permanent closure of the Suralco refinery (capacity of 2,207 kmt-per-year) in Suriname. The Suralco refinery had been fully curtailed since November 2015 (see 2015 Actions below). Management of ParentCo decided to curtail the remaining operating capacity of the Suralco refinery during 2015 in an effort to improve the position of ParentCo's refining operations on the global alumina cost curve. Since that time, management of ParentCo (through October 31, 2016) and then separately management of Alcoa Corporation (from November 1, 2016 through the end of 2016) had been in discussions with the Government of the Republic of Suriname to determine the best long-term solution for Suralco due to limited bauxite reserves and the absence of a long-term energy alternative. The decision to permanently close the Suralco refinery was based on the ultimate conclusion of those discussions. Demolition and remediation activities related to this action began in 2017 and are expected to be completed by the end of 2021. The related bauxite mines in Suriname will also be permanently closed while the hydroelectric facility that supplied power to the Suralco refinery, known as Afobaka, will continue to operate and supply power to the Government of the Republic of Suriname.

In 2016, costs related to the closure and curtailment actions included accelerated depreciation of \$70 related to the Warrick smelter as it continued to operate through March 2016; asset impairments of \$16, representing the write-off of the remaining book value of various assets; a reversal of \$24 associated with severance costs initially recorded in late 2015; and \$156 in other costs. Additionally in 2016, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value, resulting in a charge of \$5, which was recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations. The other costs of \$156 represent \$94 in asset retirement obligations and \$26 in environmental remediation, both of which were triggered by the decisions to permanently close and demolish the Suralco refinery (includes the rehabilitation of related bauxite mines) and the rehabilitation of a coal mine related to the Warrick smelter, \$32 for contract terminations, and \$4 in other related costs.

Also in December 2016, management of Alcoa Corporation concluded that an interest in certain gas exploration assets in Western Australia has been impaired. AofA owns an interest in a gas exploration project that was initially entered into in 2007 as a potential source of low-cost gas to supply AofA's refineries in Western Australia. This interest, now at 43% (as of December 31, 2016), relates to four separate gas wells. In late 2016, AofA received the results of a technical analysis performed earlier in the year for two of the wells and an updated analysis for a third well that concluded that the cost of gas recovery would be significantly higher than the market price of gas. For the fourth well, the results of a technical analysis performed prior to 2016 indicated that the cost of gas recovery would be lower than the market price of gas and, therefore, would require additional investment to move to the next phase of commercial evaluation, which management previously supported. In late 2016, management re-evaluated its options related to the fourth well and decided it is not economical to make such a commitment for the foreseeable future. As a result, AofA fully impaired its \$72 interest.

As of June 30, 2017, the separations associated with 2016 restructuring programs were essentially complete. In 2017 and 2016, cash payments of \$2 and \$7, respectively, were made against layoff reserves related to 2016 restructuring programs.

2015 Actions. In 2015, Alcoa Corporation recorded Restructuring and other charges of \$983, which were comprised of the following components: \$418 for exit costs related to decisions to permanently close and demolish three smelters and a power station (see below); \$238 for the curtailment of two refineries and two smelters (see below); \$201 related to legal matters in Italy; a \$24 net loss primarily related to post-closing adjustments associated with two December 2014 divestitures; \$45 for layoff costs, including the separation of approximately 465 employees; \$33 for asset impairments related to prior capitalized costs for an expansion project at a refinery in Australia that is no longer being pursued; a net credit of \$1 for other miscellaneous items; a reversal of \$7 associated with a number of small layoff reserves related to prior periods; and \$32 related to Corporate restructuring allocated to Alcoa Corporation (see Cost Allocations under Separation Transaction above).

During 2015, management initiated various alumina refining and aluminum smelting capacity curtailments and/or closures. The curtailments were composed of the remaining capacity at all of the following: the São Luís smelter in Brazil (74 kmt-per-year); the Suriname refinery (1,330 kmt-per-year); the Point Comfort refinery (2,010 kmt-per-year); and the Wenatchee smelter (143 kmt-per-year). All of the curtailments were completed in 2015 except for 1,635 kmt-per-year at the Point Comfort refinery, which was completed by the end of June 2016. The permanent closures were composed of the capacity at the Warrick smelter (269 kmt-per-year) (includes the closure of a related coal mine) and the infrastructure of the Massena East (New York) smelter (potlines were previously shut down in both 2013 and 2014), as the modernization of this smelter is no longer being pursued. The closure of the Warrick smelter was completed by the end of March 2016 (see 2017 Actions above).

The decisions on the above actions were part of a separate 12-month review in refining (2,800 kmt-per-year) and smelting (500 kmt-per-year) capacity initiated by management in March 2015 for possible curtailment (partial or full), permanent closure or divestiture. While many factors contributed to each decision, in general, these actions were initiated to maintain competitiveness amid prevailing market conditions for both alumina and aluminum.

Separate from the actions initiated under the reviews described above, in mid-2015, management approved the permanent closure and demolition of the Poços de Caldas smelter (capacity of 96 kmt-per-year) in Brazil and the Anglesea power station (includes the closure of a related coal mine) in Australia. The entire capacity at Poços de Caldas had been temporarily idled since May 2014 and the Anglesea power station was shut down at the end of August 2015. Demolition and remediation activities related to the Poços de Caldas smelter and the Anglesea power station began in late 2015 and are expected to be completed by the end of 2026 and 2020, respectively.

The decision on the Poços de Caldas smelter was due to management's conclusion that the smelter was no longer competitive as a result of challenging global market conditions for primary aluminum, which led to the initial curtailment, that have not dissipated and higher costs. For the Anglesea power station, the decision was made because a sale process did not result in a sale and there would have been imminent operating costs and financial constraints related to this site in the remainder of 2015 and beyond, including significant costs to source coal from available resources, necessary maintenance costs, and a depressed outlook for forward electricity prices. The Anglesea power station previously supplied approximately 40 percent of the power needs for the Point Henry smelter, which was closed in August 2014.

In 2015, costs related to the closure and curtailment actions included asset impairments of \$226, representing the write-off of the remaining book value of all related properties, plants, and equipment; \$154 for the layoff of approximately 3,100 employees (1,800 in the Aluminum segment and 1,300 in the Alumina segment), including \$30 in pension costs; accelerated depreciation of \$85 related to certain facilities as they continued to operate during 2015; and \$222 in other exit costs. Additionally in 2015, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value, resulting in a charge of \$90, which was recorded in Cost of goods sold on the accompanying Statement of Combined Operations. The other exit costs of \$222 represent \$72 in asset retirement obligations and \$85 in environmental remediation, both of which were triggered by the decisions to permanently close and demolish the aforementioned structures in the United States, Brazil, and Australia (includes the rehabilitation of a related coal mine in each of Australia and the United States), and \$65 in supplier and customer contract-related costs.

As of June 30, 2017, the separations associated with 2015 restructuring programs were essentially complete. In 2017, 2016, and 2015, cash payments of \$18, \$65, and \$26, respectively, were made against layoff reserves related to 2015 restructuring programs.

Alcoa Corporation does not include Restructuring and other charges in the results of its reportable segments. The impact of allocating such charges to segment results would have been as follows:

	2017	2016	2015
Bauxite	\$ 2	\$ (5)	\$ 8
Alumina	3	72	102
Aluminum	51	75	100
Segment total	56	142	210
Corporate	253	176	773
Total restructuring and other charges	\$309	\$318	\$983

Interest Expense—Interest expense was \$104 in 2017 compared with \$243 in 2016. The decline of \$139, or 57%, was primarily related to the absence of an allocation (\$198) to Alcoa Corporation of ParentCo’s interest expense related to the Separation Transaction, somewhat offset by higher interest expense (\$64) associated with \$1,250 of debt issued by Alcoa Corporation in September 2016 (see Financing Activities in Liquidity and Capital Resources below).

Interest expense was \$243 in 2016 compared with \$270 in 2015. The decline of \$27, or 10%, was primarily related to two less months of allocated interest (\$47) from ParentCo in 2016 as a result of the Separation Transaction, partially offset by interest expense (\$22) associated with \$1,250 of debt issued by Alcoa Corporation in September 2016 (see Financing Activities in Liquidity and Capital Resources below).

Other (Income) Expenses, net—Other income, net was \$58 in 2017 compared with \$89 in 2016. The change of \$31 was mostly attributable to the absence of gains on the sales of several assets as follows: wharf property near the Intalco (Washington) smelter (\$118), an equity interest in a natural gas pipeline in Australia (\$27), and several parcels of land (\$19); a net unfavorable change in mark-to-market derivative instruments (\$15) (see Cost of Goods Sold above); and the absence of a benefit for an arbitration recovery related to a 2010 fire at the Iceland smelter (\$14). These items were mostly offset by a gain (\$122) on the sale of the Yadkin Hydroelectric Project (Yadkin —see Aluminum in Segment Information below) and a smaller equity loss related to Alcoa Corporation’s share of the aluminum complex joint venture in Saudi Arabia (\$42).

Other income, net was \$89 in 2016 compared with Other expenses, net of \$42 in 2015. The change of \$131 was mostly attributable to gains on the sales of several assets as follows: wharf property near the Intalco smelter (\$118), an equity interest in a natural gas pipeline in Australia (\$27), and several parcels of land (\$19); a lower equity loss related to Alcoa Corporation’s equity investments (\$19); a net favorable change in mark-to-market derivative instruments (\$17); and a benefit for an arbitration recovery related to a 2010 fire at the Iceland smelter (\$14). These items were somewhat offset by net unfavorable foreign currency movements (\$47) and the absence of a gain on the sale of land around the Lake Charles, Louisiana anode facility (\$29).

Income Taxes—Alcoa Corporation’s effective tax rate was 51.8% (provision on income) in 2017 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs (by 16.8 percentage points) from the U.S. federal statutory rate mainly due to domestic losses not tax benefitted, including a \$244 charge for the early termination of a power contract (see Restructuring and Other Charges above), a \$60 discrete income tax charge for a valuation allowance on the remaining deferred tax assets in Iceland (see Income Taxes in Critical Accounting Policies and Estimates below), a \$26 discrete income charge for the remeasurement of certain deferred tax assets in Brazil due to a tax rate change (see below), and a \$22 discrete income charge associated with U.S. tax legislation enacted in December 2017 (see U.S. Tax Cuts and Jobs Act below). The domestic losses not tax benefitted are net of a \$122 gain on the sale of Yadkin (see Other (Income) Expenses, net above and Aluminum in Segment Information below).

In mid-2017, AWAB received approval for a tax holiday related to the operation of the Juruti (Brazil) bauxite mine. This tax holiday is effective as of January 1, 2017 (retroactively) and decreases AWAB’s tax rate on income generated by the Juruti mine from 34% to 15.25%, which will result in future cash tax savings over a 10-year period. As a result

of this income tax rate change, AWAB's existing deferred tax assets that are expected to reverse during the holiday period were remeasured at the lower tax rate. This remeasurement resulted in both a decrease to AWAB's deferred tax assets and a discrete income tax charge of \$26 (\$15 after noncontrolling interest).

Alcoa Corporation's effective tax rate was 113.6% (provision on a loss) in 2016 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs (by (148.6) percentage points) from the U.S. federal statutory rate primarily related to U.S. losses and tax credits with no tax benefit realizable in Alcoa Corporation.

Alcoa Corporation's effective tax rate was 119.3% (provision on a loss) in 2015 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs (by (154.3) percentage points) from the U.S. federal statutory rate principally driven by U.S. losses and tax credits with no tax benefit realizable in Alcoa Corporation, a \$141 discrete income tax charge for valuation allowances on certain deferred tax assets in Suriname (\$85, \$51 after noncontrolling interest) and Iceland (\$56) (see Income Taxes in Critical Accounting Policies and Estimates below), a \$201 charge for legal matters in Italy (see Restructuring and Other Charges above) that is nondeductible for income tax purposes, and restructuring charges related to the curtailment of a refinery in Suriname (see Restructuring and Other Charges above), a portion for which no tax benefit was recognized.

Management anticipates that the effective tax rate in 2018 will be between 35% and 40%. However, business portfolio actions, changes in the current economic environment, tax legislation or rate changes, currency fluctuations, ability to realize deferred tax assets, and the results of operations in certain taxing jurisdictions may cause this estimated rate to fluctuate.

U.S. Tax Cuts and Jobs Act of 2017. On December 22, 2017, U.S. tax legislation known as the U.S. Tax Cuts and Jobs Act of 2017 (the "TCJA") was enacted. For corporations, the TCJA amends existing U.S. Internal Revenue Code by reducing the corporate income tax rate and modifying several business deduction and international tax provisions. Specifically, the corporate income tax rate was reduced to 21% from 35%. Other significant changes, in general, include the following, among others: (i) a mandatory one-time deemed repatriation of accumulated foreign earnings at either an 8% or 15.5% tax rate; (ii) dividends received from foreign subsidiaries can be deducted in full regardless of ownership interest (previously such dividends were fully taxable), however, a foreign withholding tax on any foreign earnings not asserted as indefinitely reinvested as of December 31, 2017 must be accrued; (iii) a 10.5% tax (effective in 2018) on a new category of income, referred to as global intangible low tax income, related to earnings taxed at a low rate of foreign entities without a significant fixed asset base; (iv) a 5% to 10% tax (effective in 2018) on base erosion payments (deductible cross-border payments to related parties) that exceed 3% of a company's deductible expenses; and (v) net operating losses have an unlimited carryforward period (previously 20 years) and no carryback period (previously 2 years), but deductions for such losses are limited to 80% of taxable income (previously 100% of taxable income) beginning with the 2018 tax year.

As a result of the close proximity of the enactment date of the TCJA in relation to the Company's calendar year-end, management elected January 17, 2018 as a cut-off date for purposes of recognizing any impacts from the TCJA in Alcoa Corporation's 2017 Consolidated Financial Statements. This date coincided with the Company's public release of its preliminary financial results for the fourth quarter and year ended December 31, 2017. Accordingly, the Company's preliminary analysis of the provisions of the TCJA resulted in a charge of \$22, which was reflected in the Provision for income taxes on Alcoa Corporation's Statement of Consolidated Operations for 2017, as described below. The Company expects to finalize its analyses of the TCJA provisions in 2018.

The \$22 charge relates specifically to management's reasonable estimate of the corporate income tax rate change, which resulted in the remeasurement of the Company's deferred income tax accounts. On a gross basis, the Company reduced its deferred tax assets, valuation allowance, and deferred tax liabilities by \$506, \$433, and \$51, respectively.

Management also completed a preliminary analysis of the remaining provisions of the TCJA, including those specifically described above, in order to make a reasonable estimate as of the cut-off date, which resulted in no additional impact to the Company's 2017 Consolidated Financial Statements. Specifically, the reasonable estimate for the TCJA provisions described above was based on the following: for (i), (ii), and (iii) the Company's existing tax profile, which includes significant current U.S. tax losses that would be applied against such taxable income, as well as

significant foreign tax credits that can be applied against these taxes; for (iv) management estimates that the Company will be under the 3% threshold; and for (v) the Company's deferred income tax assets related to U.S. net operating losses are fully reserved as of December 31, 2017.

The Company's preliminary analyses and provisional estimates of the financial statement impacts of the TCJA were completed in accordance with guidance issued by the SEC under Staff Accounting Bulletin No. 118, *Income Tax Accounting Implications of the Tax Cuts and Jobs Act*.

Noncontrolling Interest—Net income attributable to noncontrolling interest was \$342 in 2017 compared with \$54 in 2016 and \$124 in 2015. These amounts are entirely related to Alumina Limited of Australia's (Alumina Limited) 40% ownership interest in several affiliated operating entities, which own, or have an interest in, or operate the bauxite mines and alumina refineries within Alcoa Corporation's Bauxite and Alumina segments (except for the Poços de Caldas mine and refinery and a portion of the São Luís refinery, all in Brazil) and the Portland smelter (Aluminum segment) in Australia. These individual entities comprise an unincorporated global joint venture between Alcoa Corporation and Alumina Limited known as Alcoa World Alumina and Chemicals (AWAC). Alcoa Corporation owns 60% of these individual entities, which are consolidated by the Company for financial reporting purposes and include Alcoa of Australia Limited (AofA), Alcoa World Alumina LLC (AWA), and Alcoa World Alumina Brasil Ltda. (AWAB) Alumina Limited's 40% interest in the earnings of such entities is reflected as Noncontrolling interest on Alcoa Corporation's Statement of Consolidated Operations. These combined entities generated income in 2017, 2016, and 2015.

In 2017, these combined entities generated higher net income compared to 2016. The favorable change in earnings was principally due to an improvement in operating results (see Bauxite and Alumina in Segment Information below) and the absence of both restructuring charges related to the permanent closure of the Suralco refinery and related bauxite mines (see Restructuring and Other Charges above) and a charge for the impairment of an interest in certain gas exploration assets in Western Australia (see Restructuring and Other Charges above). These positive impacts were somewhat offset by a higher income tax provision as a result of the improved operating results, \$34 (\$10 was noncontrolling interest's share) in combined higher energy costs and mark-to-market losses (see Cost of Goods Sold above), the absence of a \$27 (\$8 was noncontrolling interest's share) gain on the sale of an equity interest in a natural gas pipeline in Australia, and a discrete income tax charge of \$26 (\$15 was noncontrolling interest's share) for the remeasurement of certain deferred tax assets (see Income Taxes above).

In 2016, these combined entities generated lower net income compared to 2015. The unfavorable change in earnings was primarily related to a decline in operating results (see Bauxite and Alumina in Segment Information below), restructuring charges related to the permanent closure of the Suralco refinery and related bauxite mines (see Restructuring and Other Charges above), and a charge for the impairment of an interest in certain gas exploration assets in Western Australia (see Restructuring and Other Charges above). These negative impacts were partially offset by the absence of restructuring charges related to the curtailment of both the Suralco and Point Comfort refineries and the permanent closure of the Anglesea power station and coal mine (see Restructuring and Other Charges above), the absence of an \$85 (\$34 was noncontrolling interest's share) discrete income tax charge for a valuation allowance on certain deferred tax assets (see Income Taxes above), and a \$27 (\$8 was noncontrolling interest's share) gain on the sale of an equity interest in a natural gas pipeline in Australia.

Segment Information

Alcoa Corporation is a producer of bauxite, alumina, and aluminum products (primary and flat-rolled). The Company's operations consist of three worldwide reportable segments. Segment performance under the Company's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is the Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) (see below) of each segment.

Effective in the first quarter of 2017, management elected to change the profit and loss measure of Alcoa Corporation's reportable segments from After-tax operating income (ATOI) to Adjusted EBITDA for internal reporting and performance measurement purposes. This change was made to enhance the transparency and visibility of the underlying operating performance of each segment. Alcoa Corporation calculates segment Adjusted EBITDA as Total

sales (third-party and intersegment) minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; and Research and development expenses. Previously, Alcoa Corporation calculated segment ATOI as segment Adjusted EBITDA minus (plus) the following items: Provision for depreciation, depletion, and amortization; Equity loss (income); Loss (gain) on certain asset sales; and Income taxes. Alcoa Corporation's Adjusted EBITDA may not be comparable to similarly titled measures of other companies.

Also effective in the first quarter of 2017, management initiated a realignment of the Company's internal business and organizational structure. This realignment consisted of combining Alcoa Corporation's aluminum smelting, casting, and rolling businesses, along with the majority of the energy business, into a new Aluminum business unit, as well as moving the financial results of previously closed operations, such as the Warrick smelter and Suriname refinery, into Corporate. The realignment was executed to align strategic, operational, and commercial activities, as well as to take advantage of synergies and reduce costs. The new Aluminum business unit is managed as a single operating segment. Prior to this change, each of these businesses were managed as individual operating segments and comprised the Aluminum, Cast Products, Energy, and Rolled Products segments. The existing Bauxite and Alumina segments and the new Aluminum segment represent Alcoa Corporation's operating and reportable segments. The chief operating decision maker function regularly reviews the financial information, including Sales and Adjusted EBITDA, of these three operating segments to assess performance and allocate resources.

Segment information for all prior periods presented was revised to reflect the new segment structure, as well as the new measure of profit and loss.

Adjusted EBITDA for all reportable segments totaled \$2,680 in 2017, \$1,433 in 2016, and \$2,179 in 2015. The following information provides production, shipments, sales, and Adjusted EBITDA data for each reportable segment, as well as certain realized price and average cost data, for each of the three years in the period ended December 31, 2017. See Note E to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K for additional information.

Bauxite

	2017	2016	2015
Production ⁽¹⁾ (mdmt)	45.8	45.0	43.7
Third-party shipments (mdmt)	6.6	6.4	2.0
Average cost per dry metric ton of bauxite ⁽²⁾	\$ 18	\$ 16	\$ 17
Third-party sales	\$ 333	\$ 315	\$ 71
Intersegment sales	875	751	1,076
Total sales	\$1,208	\$1,066	\$1,147
Adjusted EBITDA	\$ 427	\$ 375	\$ 454

⁽¹⁾ The production amounts do not include additional bauxite (approximately 3 million dry metric tons per annum) that Alcoa Corporation is entitled to receive (i.e. an amount in excess of its equity ownership interest) from certain other partners at the mine in Guinea.

⁽²⁾ Includes all production-related costs, including conversion costs, such as labor, materials, and utilities; depreciation, depletion, and amortization; and plant administrative expenses.

This segment represents the Company's global bauxite mining operations. A portion of this segment's production represents the offtake from certain equity method investments in Brazil, Guinea, and Saudi Arabia. The bauxite mined by this segment is sold primarily to internal customers within the Alumina segment; a portion of the bauxite is sold to external customers. Bauxite mined by this segment and used internally is transferred to the Alumina segment at negotiated terms that are intended to approximate market prices; sales to third-parties are conducted on a contract basis. Generally, the sales of this segment are transacted in U.S. dollars while costs and expenses of this segment are transacted in the local currency of the respective operations, which are the Australian dollar and the Brazilian real. Most of the operations that comprise the Bauxite segment are part of AWAC (see Noncontrolling Interest in Earnings Summary above).

In 2017, bauxite production increased by 0.8 mdmt compared to 2016. The improvement was principally due to a planned increase in production at the Juruti (Brazil) mine and higher production at the Huntly (Australia) mine, somewhat offset by lower production at both the Trombetas (Brazil) mine and the Boké (Guinea) mine. The Trombetas mine experienced disruption to its normal operations due to separate weather events that impacted the tailing ponds (bauxite waste storage areas) and the washing plant in the first half (heavy rain) and the second half (drought conditions) of 2017, respectively. The Boké mine experienced disruption to its normal operations as a result of two separate force majeure events (civil unrest) during 2017.

In 2016, bauxite production increased by 1.3 mdmt compared to 2015. The improvement was mostly the result of higher production across the bauxite portfolio as this segment expands its third-party bauxite business.

Third-party sales for the Bauxite segment increased \$18 in 2017 compared with 2016, mainly due to higher volume as this segment expands its third-party bauxite business.

Third-party sales for this segment improved \$244 in 2016 compared with 2015, largely attributable to significantly higher volume as this segment expands its third-party bauxite business.

Intersegment sales for the Bauxite segment increased 17% in 2017 compared with 2016, principally the result of a higher average realized price. Intersegment sales for this segment declined 30% in 2016 compared with 2015, primarily driven by lower demand from the Alumina segment and a lower average realized price.

Adjusted EBITDA for the Bauxite segment improved \$52 in 2017 compared with 2016, mainly related to the previously mentioned higher average realized price for intersegment sales and increased third-party shipments. These positive impacts were partially offset by higher costs for energy (including the absence of a one-time tax credit), transportation (exports from Western Australia to third-party customers), and royalties (higher third-party sales); unfavorable impacts from the previously mentioned disruptions in Brazil and Guinea; and net unfavorable foreign currency movements due to a weaker U.S. dollar against the Australian dollar and Brazilian real.

Adjusted EBITDA for this segment declined \$79 in 2016 compared with 2015, mainly caused by a lower average realized price for intersegment sales, partially offset by net productivity improvements and the previously mentioned higher third-party volume.

In 2018, higher production at the Huntly and Juruti mines and increased total shipments are anticipated.

Alumina

	2017	2016	2015
Production (kmt)	13,096	13,251	14,940
Third-party shipments (kmt)	9,220	9,071	10,755
Average realized third-party price per metric ton of alumina	\$ 340	\$ 253	\$ 311
Average cost per metric ton of alumina*	\$ 256	\$ 231	\$ 264
Third-party sales	\$ 3,133	\$ 2,300	\$ 3,341
Intersegment sales	1,723	1,307	1,727
Total sales	\$ 4,856	\$ 3,607	\$ 5,068
Adjusted EBITDA	\$ 1,289	\$ 378	\$ 958

* Includes all production-related costs, including raw materials consumed; conversion costs, such as labor, materials, and utilities; depreciation and amortization; and plant administrative expenses.

This segment represents the Company's worldwide refining system, which processes bauxite into alumina. The alumina produced by this segment is sold primarily to internal and external aluminum smelter customers; a portion of the alumina is sold to external customers who process it into industrial chemical products. Approximately two-thirds of Alumina's production is sold under supply contracts to third parties worldwide, while the remainder is used internally by the Aluminum segment. Alumina produced by this segment and used internally is transferred to the Aluminum segment at prevailing market prices. A portion of this segment's third-party sales are completed through the use of agents, alumina traders, and distributors. Generally, the sales of this segment are transacted in U.S. dollars while costs and expenses of this segment are transacted in the local currency of the respective operations, which are the Australian dollar, the Brazilian real, the U.S. dollar, and the euro. Most of the operations that comprise the Alumina segment are part of AWAC (see Noncontrolling Interest in Earnings Summary above). This segment also includes AWAC's 25.1% share of the results of a mining and refining joint venture company in Saudi Arabia.

At December 31, 2017, the Alumina segment had 2,305 kmt of idle capacity on a base capacity of 15,064 kmt. Both idle and base capacity were unchanged compared to December 31, 2016.

At December 31, 2016, this segment had 2,305 kmt of idle capacity on a base capacity of 15,064 kmt. In 2016, idle capacity increased 1,635 kmt compared to 2015, due to the curtailment of the remaining capacity at the Point Comfort (Texas) refinery (2,305 kmt-per-year). Base capacity was unchanged between December 31, 2016 and 2015.

In 2017, alumina production declined by 155 kmt compared to 2016, mostly the result of the absence of production from the remaining operating capacity at the Point Comfort refinery, which was fully curtailed by the end of June 2016 (670 kmt was curtailed at the end of 2015) as described above.

In 2016, alumina production declined by 1,689 kmt compared to 2015, mostly the result of lower production at the Point Comfort refinery due to the curtailment action described above.

Third-party sales for the Alumina segment improved 36% in 2017 compared with 2016, largely attributable to a 34% rise in average realized price and a 2% increase in volume. The change in average realized price was mainly driven by a 44% higher average alumina index price (on 30-day lag). In 2017, 86% of smelter-grade third-party shipments were based on the alumina index/spot price compared with 84% in 2016.

Third-party sales for this segment decreased 31% in 2016 compared with 2015, largely attributable to an 18% drop in average realized price and a 16% decline in volume. The change in average realized price was mainly driven by a 23% lower average alumina index price.

Intersegment sales for the Alumina segment increased 32% in 2017 compared with 2016, principally caused by a higher average realized price, slightly offset by lower demand from the Aluminum segment, including as a result of a power outage at a smelter in Australia (see Aluminum below).

Intersegment sales for this segment declined 24% in 2016 compared with 2015, principally caused by lower demand from the Aluminum segment, as a result of the closure or curtailment of three smelters (see Aluminum below) that occurred at different points in 2016 and 2015, and a lower average realized price.

Adjusted EBITDA for the Alumina segment improved \$911 in 2017 compared with 2016, primarily due to the previously mentioned higher average realized price, somewhat offset by higher costs for bauxite and caustic soda, net unfavorable foreign currency movements due to a weaker U.S. dollar, especially against the Australian dollar, and an increase in maintenance expense (including outages in Western Australia).

Adjusted EBITDA for this segment decreased \$580 in 2016 compared with 2015, primarily due to the previously mentioned lower average realized alumina price and higher costs for caustic soda and other inputs, including labor, somewhat offset by net productivity improvements and lower cost for bauxite.

In 2018, higher costs for both caustic soda and bauxite are expected.

Aluminum

	2017	2016	2015
Primary aluminum production (kmt)	2,328	2,368	2,552
Third-party aluminum shipments ⁽¹⁾ (kmt)	3,356	3,147	3,223
Average realized third-party price per metric ton of primary aluminum ⁽²⁾	\$2,224	\$1,862	\$2,092
Average cost per metric ton of primary aluminum ⁽³⁾	\$2,001	\$1,763	\$2,060
Third-party sales	\$8,027	\$6,531	\$7,557
Intersegment sales	21	42	175
Total sales	\$8,048	\$6,573	\$7,732
Adjusted EBITDA	\$ 964	\$ 680	\$ 767

- (1) Third-party aluminum shipments are composed of both primary aluminum and flat-rolled aluminum.
- (2) Average realized price per metric ton of primary aluminum includes three elements: a) the underlying base metal component, based on quoted prices from the LME; b) the regional premium, which represents the incremental price over the base LME component that is associated with the physical delivery of metal to a particular region (e.g., the Midwest premium for metal sold in the United States); and c) the product premium, which represents the incremental price for receiving physical metal in a particular shape (e.g., billet, slab, rod, etc.) or alloy.
- (3) Includes all production-related costs, including raw materials consumed; conversion costs, such as labor, materials, and utilities; depreciation and amortization; and plant administrative expenses.

This segment consists of (i) the Company's worldwide smelting and casthouse system, (ii) portfolio of energy assets in Brazil and the United States, and (iii) a rolling mill in the United States. This segment's combined smelting and casting operations produce primary aluminum products, virtually all of which is sold to external customers and traders; a small portion of this primary aluminum is consumed by the rolling mill. The smelting operations produce molten primary aluminum, which is then formed by the casting operations into either common alloy ingot (e.g., t-bar, sow, standard ingot) or into value-add ingot products, including foundry, billet, rod, and slab. A variety of external customers purchase the primary aluminum products for use in fabrication operations, which produce products primarily for the transportation, building and construction, packaging, wire, and other industrial markets. The energy assets supply power to external customers in Brazil and to this segment's rolling mill in the United States. The rolling mill produces aluminum sheet primarily sold directly to customers in the packaging market for the production of aluminum cans (beverage, and food). Additionally, Alcoa Corporation has a tolling arrangement with Arconic whereby Arconic's rolling mill in Tennessee produces can sheet products for certain customers of the Company's rolling operations. Alcoa Corporation supplies all of the raw materials to the Tennessee facility and pays Arconic for the tolling service. Depending on certain factors, this arrangement concludes at the end of 2018. Seasonal increases in can sheet sales are generally experienced in the second and third quarters of the year. Results from the sale of aluminum powder and scrap are also included in this segment, as well as the impacts of embedded aluminum derivatives related to energy supply contracts. Generally, this segment's sales of aluminum are transacted in U.S. dollars while costs and expenses of this segment are transacted in the local currency of the respective operations, which are the U.S. dollar, the euro, the Norwegian krone, Icelandic krona, the Canadian dollar, the Brazilian real, and the Australian dollar. This segment also includes Alcoa Corporation's 25.1% share of the results of both a smelting and rolling mill joint venture company in Saudi Arabia.

In February 2017, Alcoa Corporation's wholly-owned subsidiary, Alcoa Power Generating Inc., completed the sale of a 215-megawatt hydroelectric project, Yadkin, to Cube Hydro Carolinas, LLC (see Other (income) expenses, net in Earnings Summary above). Yadkin encompasses four hydroelectric power developments (reservoirs, dams, and powerhouses), known as High Rock, Tuckertown, Narrows, and Falls, situated along a 38-mile stretch of the Yadkin River through the central part of North Carolina. Prior to the divestiture, the power generated by Yadkin was primarily sold into the open market. Yadkin generated sales of \$29 in 2016, and had approximately 30 employees as of December 31, 2016.

On July 11, 2017, Alcoa Corporation announced plans to restart three (161 kmt of capacity) of the five potlines (269 kmt of capacity) at the Warrick (Indiana) smelter, which is expected to be complete in the second quarter of 2018. This smelter was permanently closed in March 2016. The capacity identified for restart will directly supply the existing rolling mill at the Warrick location, to improve efficiency of the integrated site and provide an additional source of metal to help meet an anticipated increase in production volumes. See COGS and Restructuring and other charges in Earnings Summary above.

At December 31, 2017, the Aluminum segment had 856 kmt of idle capacity on a base capacity of 3,211 kmt. In 2017, both idle and base capacity increased 269 kmt compared to 2016 related to the Warrick smelter. At the end of March 2016, the capacity of the Warrick smelter was removed from this segment's base capacity due to the permanent closure of the facility at that time. As a result of the decision to partially restart the smelter, the capacity of the Warrick smelter was included in the base capacity at December 31, 2017. Additionally, until the partial restart is completed, the

capacity of the Warrick smelter was included in idle capacity at December 31, 2017. Once the partial restart of the Warrick smelter occurs, 161 kmt will be removed from idle capacity.

At December 31, 2016, this segment had 587 kmt of idle capacity on a base capacity of 2,942 kmt. Both idle and base capacity were unchanged compared to December 31, 2015.

In 2017, aluminum production declined by 40 kmt compared to 2016, mostly the result of lower production at the Portland (Australia) smelter due to an unexpected power outage that occurred in December 2016 as a result of a fault in the Victorian transmission network. This event resulted in management halting production of one of the potlines at that time; ramp up to full production was completed in mid-2017.

In 2016, aluminum production declined by 184 kmt compared to 2015, mostly the result of the absence of production at both the Wenatchee (Washington) and São Luís (Brazil) smelters due to decisions in 2015 to curtail these facilities.

Third-party sales for the Aluminum segment improved 23% in 2017 compared with 2016, primarily related to a 19% rise in average realized price of primary aluminum and a 7% increase in overall aluminum volume, slightly offset by realized losses from embedded derivatives (designated as cash flow hedges of forward aluminum sales) in energy supply contracts due to the rise in LME aluminum prices. The change in average realized price of primary aluminum was mainly driven by a 22% higher average LME price (on 15-day lag). The higher overall aluminum volume was related to this segment's rolling operations, largely due to a tolling arrangement with Arconic (began on November 1, 2016).

Third-party sales for this segment declined 14% in 2016 compared with 2015, primarily related to an 11% drop in average realized price of primary aluminum, a 2% decrease in overall aluminum volume, and lower energy sales in Brazil due to lower prices. The change in average realized price of primary aluminum was mainly driven by lower regional premiums, which dropped by an average of 40% in the United States and Canada, 44% in Europe, and 53% in the Pacific region, and a 5% lower average LME price (on 15-day lag). The lower overall aluminum volume was mostly due to decreased demand for primary aluminum, slightly offset by higher shipments related to this segment's rolling operations due to a tolling arrangement with Arconic (began on November 1, 2016).

Intersegment sales for the Aluminum segment declined 50% in 2017 compared with 2016, mainly due to the absence of energy sales to the Warrick smelter (included in Corporate—see description of segment realignment above), which was permanently closed at the end of March 2016 (see above).

Intersegment sales for this segment declined 76% in 2016 compared with 2015, mainly due to decreased energy sales related to the Warrick smelter and the Suriname refinery (included in Corporate—see description of segment realignment above), which was fully curtailed in November 2015 (portions of capacity were curtailed throughout 2015).

Adjusted EBITDA for the Aluminum segment improved \$284 in 2017 compared with 2016, primarily caused by the previously mentioned higher average realized price of primary aluminum, partially offset by higher costs for both alumina and energy.

Adjusted EBITDA for this segment decreased \$87 in 2016 compared with 2015, primarily caused by the previously mentioned lower average realized price of primary aluminum and higher costs (\$53) from operating the Warrick rolling mill as a cold metal plant (previously was a hot metal plant) due to the permanent closure of the Warrick smelter in March 2016 (see above). These negative impacts were mostly offset by all of the following: lower costs for all major inputs (alumina, energy, and carbon); net productivity improvements; and net favorable foreign currency movements due to a stronger U.S. dollar, especially against the Icelandic króna and Norwegian krone.

In 2018, higher costs for both alumina and carbon materials are expected. Also, the partial restart of the Warrick smelter is expected to be complete in the second quarter of 2018.

Reconciliation of Total Segment Adjusted EBITDA to Consolidated Net Income (Loss) Attributable to Alcoa Corporation

	2017	2016	2015
Net income (loss) attributable to Alcoa Corporation:			
Total segment Adjusted EBITDA	\$2,680	\$1,433	\$2,179
Unallocated amounts:			
Impact of LIFO	(91)	(10)	107
Metal price lag ⁽¹⁾	26	9	(30)
Corporate expense ⁽²⁾	(136)	(177)	(173)
Provision for depreciation, depletion, and amortization	(750)	(718)	(780)
Restructuring and other charges	(309)	(318)	(983)
Interest expense	(104)	(243)	(270)
Other income (expenses), net	58	89	(42)
Other ⁽³⁾	(215)	(227)	(345)
Consolidated income (loss) before income taxes	1,159	(162)	(337)
Provision for income taxes	(600)	(184)	(402)
Net income attributable to noncontrolling interest	(342)	(54)	(124)
Consolidated net income (loss) attributable to Alcoa Corporation	\$ 217	\$ (400)	\$ (863)

(1) Metal price lag describes the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by Alcoa Corporation's rolled aluminum operations. In general, when the price of metal increases, metal price lag is favorable, and when the price of metal decreases, metal price lag is unfavorable.

(2) Corporate expense is primarily composed of general administrative and other expenses of operating the corporate headquarters and other global administrative facilities.

(3) Other includes, among other items, the Adjusted EBITDA of previously closed operations as applicable, pension and other postretirement benefit expenses associated with closed and sold operations, and intersegment profit elimination.

The changes in the Impact of LIFO, Metal price lag, and Corporate expense reconciling items (see Earnings Summary above for significant changes in the remaining reconciling items) for 2017 compared with 2016 consisted of:

- a change in the Impact of LIFO, mostly due to a further increase in the price of alumina at December 31, 2017 indexed to December 31, 2016 compared to an increase in the price of alumina at December 31, 2016 indexed to December 31, 2015;
- a change in Metal price lag, the result of a further increase in the price of aluminum at December 31, 2017 indexed to December 31, 2016 compared to an increase in the price of aluminum at December 31, 2016 indexed to December 31, 2015 (the increase in the price of aluminum in both periods was mostly driven by higher base metal prices (LME)); and
- a decrease in Corporate expense, largely attributable to the absence of costs related to the Separation Transaction (\$73), which includes an allocation of \$68 from ParentCo prior to the Separation Date, mostly offset by a decrease in corporate overhead expenses.

The changes in the Impact of LIFO, Metal price lag, and Corporate expense reconciling items (see Earnings Summary above for significant changes in the remaining reconciling items) for 2016 compared with 2015 consisted of:

- a change in the Impact of LIFO, mostly due to an increase in the price of alumina at December 31, 2016 indexed to December 31, 2015 compared to a decrease in the price of alumina at December 31, 2015 indexed to December 31, 2014 (overall, the price of alumina in 2016 was lower compared with 2015);
- a change in Metal price lag, the result of an increase in the price of aluminum (driven by higher base metal prices (LME), partially offset by lower regional premiums) at December 31, 2016 indexed to December 31, 2015 compared to a decrease in the price of aluminum (both lower base metal prices (LME) and regional

premiums) at December 31, 2015 indexed to December 31, 2014 (overall, the price of aluminum in 2016 was lower compared with 2015); and

- an increase in Corporate expense, largely attributable to higher costs associated with the Separation Transaction (\$61), which includes an allocation of \$56 from ParentCo prior to the Separation Date, mostly offset by a decrease in corporate overhead expenses.

Environmental Matters

See the Environmental Matters section of Note R to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Liquidity and Capital Resources

Alcoa Corporation's primary future cash needs are centered on operating activities, particularly working capital, as well as sustaining and return-seeking capital expenditures. The Company's ability to fund its cash needs depends on Alcoa Corporation's ongoing ability to generate and raise cash in the future. Although management believes that Alcoa Corporation's future cash from operations, together with the Company's access to capital markets, will provide adequate resources to fund Alcoa Corporation's operating and investing needs, the Company's access to, and the availability of, financing on acceptable terms in the future will be affected by many factors, including: (i) Alcoa Corporation's credit rating; (ii) the liquidity of the overall capital markets; and (iii) the current state of the economy and commodity markets. There can be no assurances that Alcoa Corporation will continue to have access to capital markets on terms acceptable to the Company.

For all periods prior to the Separation Date, ParentCo provided capital, cash management, and other treasury services to Alcoa Corporation. Only cash amounts specifically attributable to Alcoa Corporation were reflected in the Company's Consolidated Financial Statements. Transfers of cash, both to and from ParentCo's centralized cash management system, were reflected as a component of Parent Company net investment in Alcoa Corporation's Consolidated Financial Statements.

Cash provided from operations and financing activities is expected to be adequate to cover Alcoa Corporation's operational and business needs over the next 12 months. For an analysis of long-term liquidity, see Contractual Obligations and Off-Balance Sheet Arrangements below.

At December 31, 2017, cash and cash equivalents of Alcoa Corporation were \$1,358, of which \$1,309 was held outside the United States. Alcoa Corporation has a number of commitments and obligations related to the Company's operations in various foreign jurisdictions, resulting in the need for cash outside the United States. Alcoa Corporation continuously evaluates its local and global cash needs for future business operations, which may influence future repatriation decisions.

Cash from Operations

Cash provided from operations in 2017 was \$1,224 compared with cash used for operations of \$311 in 2016. The improvement of \$1,535 was due to higher operating results (net income (loss) plus net add-back for noncash transactions in earnings), a positive change associated with working capital of \$359, and a favorable change in noncurrent assets of \$85. These items were slightly offset by an unfavorable change in noncurrent liabilities of \$119 and higher pension plan contributions of \$40 (U.S. defined benefit plans were sponsored by ParentCo through July 31, 2016). The favorable change in noncurrent assets was mainly the result of the absence of a \$200 prepayment made under a natural gas supply agreement in Australia (see below).

On October 10, 2017, Alcoa Corporation paid \$238 to early terminate a power contract related to the Company's Rockdale smelter (see Restructuring and Other Charges in Earnings Summary above).

Cash used for operations in 2016 was \$311 compared with cash provided from operations of \$875 in 2015. The decrease of \$1,186 was due to lower operating results (net loss plus net add-back for noncash transactions in earnings) and a negative change associated with working capital of \$648. These items were slightly offset by a positive change in both noncurrent assets of \$172 and noncurrent liabilities of \$60, and lower pension contributions of \$3. The favorable change in noncurrent assets was mainly the result of a \$100 smaller prepayment made under a natural gas supply agreement in Australia (see below).

On April 8, 2015, AofA secured a new 12-year gas supply agreement to power its three alumina refineries in Western Australia beginning in July 2020. This agreement was conditional on the completion of a third-party acquisition of the related energy assets from the then-current owner, which occurred in June 2015. The terms of the gas supply agreement required AofA to make a prepayment of \$500 in two installments. The first installment of \$300 was made at the time of the completion of the third-party acquisition in June 2015 and the second installment of \$200 was made in April 2016.

Financing Activities

Cash used for financing activities was \$506 in 2017 compared with \$483 in 2016 and \$162 in 2015.

The use of cash in 2017 was largely attributable to a cash payment of \$247 to Arconic related to the Separation Transaction, mostly representing \$243 of the net proceeds (see Investing Activities below) from the sale of Yadkin (see Aluminum in Segment Information above) in accordance with the Separation and Distribution Agreement, and \$262 in net cash paid to Alumina Limited (see Noncontrolling Interest in Earnings Summary above).

The use of cash in 2016 was principally the result of \$1,072 in cash provided to ParentCo in conjunction with the completion of the Separation Transaction, \$185 in net cash paid to Alumina Limited (see Noncontrolling Interest in Earnings Summary above), and \$34 in payments on debt. These items were partially offset by \$802 in net transfers from ParentCo prior to the Separation Date.

The use of cash in 2015 was due to net cash paid to Alumina Limited (see Noncontrolling Interest in Earnings Summary above) of \$104, net transfers to ParentCo of \$34, and payments on debt of \$24.

Credit Facility. On September 16, 2016, Alcoa Corporation and Alcoa Nederland Holding B.V. (ANHBV), a wholly-owned subsidiary of Alcoa Corporation, entered into a revolving credit agreement with a syndicate of lenders and issuers named therein, as amended, (the "Revolving Credit Agreement"). On November 14, 2017, these same parties and two additional lenders entered into an Amendment and Restatement Agreement to revise certain terms and provisions of the Revolving Credit Agreement (the Revolving Credit Agreement as revised by the Amendment and Restatement Agreement, the "Amended Revolving Credit Agreement"). Unless noted otherwise, the terms and provisions described below for the Amended Revolving Credit Agreement were applicable to the Revolving Credit Agreement prior to November 14, 2017.

The Amended Revolving Credit Agreement provides a \$1,500 senior secured revolving credit facility (the "Revolving Credit Facility") to be used for working capital and/or other general corporate purposes of Alcoa Corporation and its subsidiaries. Subject to the terms and conditions of the Amended Revolving Credit Agreement, ANHBV may from time to time request the issuance of letters of credit up to \$750 under the Revolving Credit Facility, subject to a sublimit of \$400 for any letters of credit issued for the account of Alcoa Corporation or any of its domestic subsidiaries. Additionally, ANHBV may from time to time request that each of the lenders provide one or more additional tranches of term loans and/or increase the aggregate amount of revolving commitments, together in an aggregate principal amount of up to \$500 (previously \$0).

The Revolving Credit Facility is scheduled to mature on November 14, 2022 (previously November 1, 2021), unless extended or earlier terminated in accordance with the provisions of the Amended Revolving Credit Agreement. ANHBV may make extension requests during the term of the Revolving Credit Facility, subject to the lender consent requirements set forth in the Amended Revolving Credit Agreement. Under the provisions of the Amended Revolving Credit Agreement, ANHBV will pay a quarterly commitment fee ranging from 0.225% to 0.450% (based on Alcoa Corporation's leverage ratio) on the unused portion of the Revolving Credit Facility.

A maximum of \$750 in outstanding borrowings under the Revolving Credit Facility may be denominated in euros. Loans will bear interest at a rate per annum equal to an applicable margin plus, at ANHBV's option, either (a) an adjusted LIBOR rate or (b) a base rate determined by reference to the highest of (1) the prime rate of JPMorgan Chase Bank, N.A., (2) the greater of the federal funds effective rate and the overnight bank funding rate, plus 0.5%, and (3) the one month adjusted LIBOR rate plus 1% per annum. The applicable margin for all loans will vary based on Alcoa Corporation's leverage ratio and will range from 1.75% to 2.50% for LIBOR loans and 0.75% to 1.50% for base rate loans. Outstanding borrowings may be prepaid without premium or penalty, subject to customary breakage costs.

All obligations of Alcoa Corporation or a domestic entity under the Revolving Credit Facility are secured by, subject to certain exceptions (including a limitation of pledges of equity interests in certain foreign subsidiaries to 65%, and certain thresholds with respect to real property), a first priority lien on substantially all assets of Alcoa Corporation and the material domestic wholly-owned subsidiaries of Alcoa Corporation and certain equity interests of specified non-U.S. subsidiaries. All other obligations under the Revolving Credit Facility are secured by, subject to certain exceptions (including certain thresholds with respect to real property), a first priority security interest in substantially all assets of Alcoa Corporation, ANHBV, the material domestic wholly-owned subsidiaries of Alcoa Corporation, and the material foreign wholly-owned subsidiaries of Alcoa Corporation located in Australia, Brazil, Canada, Luxembourg, the Netherlands, and Norway, including equity interests of certain subsidiaries that directly hold equity interests in AWAC entities. However, no AWAC entity is a guarantor of any obligation under the Revolving Credit Facility and no asset of any AWAC entity, or equity interests in any AWAC entity, will be pledged to secure the obligations under the Revolving Credit Facility.

The Amended Revolving Credit Agreement includes a number of customary affirmative covenants. Additionally, the Amended Revolving Credit Agreement contains a number of negative covenants (applicable to Alcoa Corporation and certain subsidiaries described as restricted), that, subject to certain exceptions, include limitations on (among other things): liens; fundamental changes; sales of assets; indebtedness (see below); entering into restrictive agreements; restricted payments (see below), including repurchases of common stock and shareholder dividends (see below); investments (see below), loans, advances, guarantees, and acquisitions; transactions with affiliates; amendment of certain material documents; and a covenant prohibiting reductions in the ownership of AWAC entities, and certain other specified restricted subsidiaries of Alcoa Corporation, below an agreed level. The Amended Revolving Credit Agreement also includes financial covenants requiring the maintenance of a specified interest expense coverage ratio of not less than 5.00 to 1.00, and a leverage ratio for any period of four consecutive fiscal quarters that is not greater than 2.25 to 1.00 (may be increased to a level not higher than 2.50 to 1.00). As of December 31, 2017 and 2016, Alcoa Corporation was in compliance with all such covenants.

The indebtedness, restricted payments, and investments negative covenants include general exceptions to allow for potential future transactions incremental to those specifically provided for in the Amended Revolving Credit Agreement. The indebtedness negative covenant provides for an incremental amount not to exceed the greater of \$1,000 (previously \$500) and 6.0% (previously 3.0%) of Alcoa Corporation's consolidated total assets. Additionally, the restricted payments negative covenant provides for an aggregate amount not to exceed \$100 (previously \$0) and the investments negative covenant provides for an aggregate amount not to exceed \$400 (previously \$250), both of which contain two conditions in which these limits may increase. First, in any fiscal year, the thresholds for the restricted payments and investments negative covenants increase by \$250 (previously \$0) and \$200 (previously \$0), respectively, if the consolidated net leverage ratio is not greater than 1.20 to 1.00 and 1.30 to 1.00, respectively, as of the end of the prior fiscal year. Secondly, in regards to both the \$100 and \$250 for restricted payments and the \$200 for investments, 50% of any unused amount of these base amounts in any fiscal year may be used in the next succeeding fiscal year.

The following describes the specific restricted payment negative covenant for share repurchases and the application of the restricted payments general exception (described above) to both share repurchases and ordinary dividend payments.

Alcoa Corporation may repurchase shares of its common stock pursuant to stock option exercises and benefit plans in an aggregate amount not to exceed \$25 during any fiscal year, except that 50% of any unused amount of the base amount in any fiscal year may be used in the next succeeding fiscal year following the use of the base amount in said fiscal year. Additionally, as described above, the Amended Revolving Credit Agreement provides general exceptions to the restricted payments negative covenant that would allow Alcoa Corporation to exceed this specified threshold for share repurchases in any fiscal year by an aggregate amount of up to \$100 (see above for conditions that provide for this limit to increase), assuming no other restricted payments have reduced, in part or whole, the available limit.

Also, the Amended Revolving Credit Agreement rescinded the specific terms included in the Revolving Credit Agreement related to ordinary dividend payments. Previously, Alcoa Corporation was able to declare and make annual ordinary dividends in an aggregate amount not to exceed \$38 in each of the November 1, 2016 through December 31, 2017 time period (no such dividends were made) and annual 2018, \$50 in each of annual 2019 and 2020, and \$75 in the January 1, 2021 through November 1, 2021 time period, except that 50% of any unused amount of the base amount in any of the specified time periods may be used in the next succeeding period following the use of the base amount in said time period. Under the Amended Revolving Credit Agreement, any ordinary dividend payments made by Alcoa Corporation are only subject to the general exception for restricted payments described above. Accordingly, Alcoa Corporation may make annual ordinary dividends in any fiscal year by an aggregate amount of up to \$100 (see above for conditions that provide for this limit to increase), assuming no other restricted payments have reduced, in part or whole, the available limit. The limits of the restricted payments negative covenant under the Notes indenture (see 144A Debt below) would govern the amount of ordinary dividend payments the Company could make in a given timeframe if the allowed amount is less than the limits of the restricted payments negative covenant under the Amended Revolving Credit Agreement.

The Amended Revolving Credit Agreement contains customary events of default, including with respect to a failure to make payments under the Revolving Credit Facility, cross-default and cross-judgment default, and certain bankruptcy and insolvency events.

There were no amounts outstanding at December 31, 2017 and 2016 and no amounts were borrowed during 2017 and 2016 (September 16th through December 31st) under the Revolving Credit Facility.

144A Debt. In September 2016, ANHBV completed a Rule 144A (U.S. Securities Act of 1933, as amended) debt offering for \$750 of 6.75% Senior Notes due 2024 (the “2024 Notes”) and \$500 of 7.00% Senior Notes due 2026 (the “2026 Notes” and, collectively with the 2024 Notes, the “Notes”). ANHBV received \$1,228 in net proceeds (see below) from the debt offering reflecting a discount to the initial purchasers of the Notes. The net proceeds were used to make a payment to ParentCo to fund the transfer of certain assets from ParentCo to Alcoa Corporation in connection with the Separation Transaction, and the remaining net proceeds were used for general corporate purposes. The discount to the initial purchasers, as well as costs to complete the financing, was deferred and is being amortized to interest expense over the respective terms of the Notes. Interest on the Notes is paid semi-annually in March and September, which commenced March 31, 2017.

ANHBV has the option to redeem the Notes on at least 30 days, but not more than 60 days, prior notice to the holders of the Notes under multiple scenarios, including, in whole or in part, at any time or from time to time after September 2019, in the case of the 2024 Notes, or after September 2021, in the case of the 2026 Notes, at a redemption price specified in the indenture (up to 105.063% of the principal amount for the 2024 Notes and up to 103.500% of the principal amount of the 2026 Notes, plus any accrued and unpaid interest in each case). Also, the Notes are subject to repurchase upon the occurrence of a change in control repurchase event (as defined in the indenture) at a repurchase price in cash equal to 101% of the aggregate principal amount of the Notes repurchased, plus any accrued and unpaid interest on the Notes repurchased.

The Notes are senior unsecured obligations of ANHBV and do not entitle the holders to any registration rights pursuant to a registration rights agreement. ANHBV does not intend to file a registration statement with respect to resales of or an exchange offer for the Notes. The Notes are guaranteed on a senior unsecured basis by Alcoa Corporation and its subsidiaries that are guarantors under the Revolving Credit Agreement (the “subsidiary guarantors” and, together with Alcoa Corporation, the “guarantors”). Each of the subsidiary guarantors will be released from their Notes guarantees upon the occurrence of certain events, including the release of such guarantor from its obligations as a guarantor under the Revolving Credit Agreement.

The Notes indenture contains various restrictive covenants similar to those described above for the Amended Revolving Credit Agreement, including a limitation on restricted payments, with, among other exceptions, capacity to pay annual ordinary dividends. Under the indenture, Alcoa Corporation may declare and make annual ordinary dividends in an aggregate amount not to exceed \$38 in each of the November 1, 2016 through December 31, 2017 time period (no such dividends were made) and annual 2018, \$50 in each of annual 2019 and 2020, and \$75 in the January 1, 2021 through September 30, 2026 (maturity date of the 2026 Notes) time period, except that 50% of any unused amount of the base amount in any of the specified time periods may be used in the next succeeding period following the use of the base amount in said time period. Additionally, the restricted payments negative covenant includes a general exception to allow for potential future transactions incremental to those specifically provided for in the Notes indenture. This general exception provides for an aggregate amount of restricted payment not to exceed the greater of \$250 and 1.5% of Alcoa Corporation’s consolidated total assets. Accordingly, Alcoa Corporation may make annual ordinary dividends in any fiscal year by an aggregate amount of up to \$250, assuming no other restricted payments have reduced, in part or whole, the available limit. The limits of the restricted payments negative covenant under the Amended Revolving Credit Agreement (see Credit Facility above) would govern the amount of ordinary dividend payments the Company could make in a given timeframe if the allowed amount is less than the limits of the restricted payments negative covenant under the Notes indenture.

In conjunction with this debt offering, the net proceeds of \$1,228, plus an additional \$81 of ParentCo cash on hand, were required to be placed in escrow contingent on completion of the Separation Transaction. The \$81 represented the necessary cash to fund the redemption of the Notes, pay all regularly scheduled interest on the Notes through a specified date as defined in the indenture, and a premium on the principal of the Notes if the Separation Transaction had not been completed by a certain time as defined in the indenture. As a result, the \$1,228 of escrowed cash was recorded as restricted cash. The issuance of the Notes and the increase in restricted cash both in the amount of \$1,228 were not reflected in Alcoa Corporation’s Statement of Consolidated Cash Flows as these represent noncash financing and investing activities, respectively. The subsequent release of the \$1,228 from escrow occurred on October 31, 2016 in preparation for the Separation Transaction. This decrease in restricted cash was reflected in Alcoa Corporation’s Statement of Consolidated Cash Flows as a cash inflow in the Net change in restricted cash line item.

Ratings. Alcoa Corporation’s cost of borrowing and ability to access the capital markets are affected not only by market conditions but also by the short- and long-term debt ratings assigned to Alcoa Corporation’s debt by the major credit rating agencies.

On April 24, 2017, Fitch Ratings (Fitch) assigned a BB+ rating for Alcoa Corporation’s long-term debt. Additionally, Fitch assigned the current outlook as stable.

On June 20, 2017, Standard and Poor’s Global Ratings (S&P) affirmed a BB- rating for Alcoa Corporation’s long-term debt. Additionally, S&P raised the current outlook to positive from stable. On December 5, 2017, S&P upgraded its ratings for Alcoa Corporation’s long-term debt to BB from BB-. Additionally, S&P affirmed the current outlook as positive.

On September 5, 2017, Moody’s Investor Service (Moody’s) upgraded its ratings for Alcoa Corporation’s long-term debt to Ba2 from Ba3 and short-term debt to Speculative Grade Liquidity Rating-1 from Speculative Grade Liquidity Rating-2. Additionally, Moody’s affirmed the current outlook as stable.

Investing Activities

Cash used for investing activities was \$226 in 2017 compared with cash provided from investing activities of \$1,077 in 2016 and cash used for investing activities of \$384 in 2015.

The use of cash in 2017 was due to \$405 in capital expenditures (includes spend related to environmental control of \$92) and \$66 in contributions related to the aluminum complex joint venture in Saudi Arabia. These items were partially offset by \$245 in net proceeds received (see Financing Activities above) from the sale of Yadkin (see Aluminum in Segment Information above).

The source of cash in 2016 was primarily due to \$1,228 of net proceeds from newly issued debt (see Financing Activities above) released from escrow and \$265 in combined proceeds from the sale of an equity interest in a natural gas pipeline in Australia (\$145) and the sale of wharf property near the Intalco, Washington smelter (\$120). These items were somewhat offset by \$404 in capital expenditures (includes spend related to environmental control of \$83).

The use of cash in 2015 was due to \$391 in capital expenditures (includes spend related to environmental control of \$122) and \$63 in additions to investments, including equity contributions of \$29 related to the aluminum complex joint venture in Saudi Arabia. These items were slightly offset by \$70 in proceeds from the sale of assets and businesses, including the sale of land around the Lake Charles, Louisiana anode facility and post-closing adjustments related to both an ownership stake in a smelter and an ownership stake in a bauxite mine/alumina refinery divested in 2014.

Noncash Financing and Investing Activities

In September 2016, ANHBV issued \$1,250 in new senior notes (see Financing Activities above) in preparation for the Separation Transaction. The net proceeds of \$1,228 from the debt issuance were required to be placed in escrow contingent on completion of the Separation Transaction. As a result, the \$1,228 of escrowed cash was recorded as restricted cash. The issuance of the new senior notes and the increase in restricted cash both in the amount of \$1,228 were not reflected in Alcoa Corporation's Statement of Consolidated Cash Flows as these represent noncash financing and investing activities, respectively. The subsequent release of the \$1,228 from escrow occurred on October 31, 2016. This decrease in restricted cash was reflected in Alcoa Corporation's Statement of Consolidated Cash Flows as a cash inflow in the Net change in restricted cash line item.

Contractual Obligations and Off-Balance Sheet Arrangements

Contractual Obligations. Alcoa Corporation is required to make future payments under various contracts, including long-term purchase obligations, lease agreements, and financing arrangements. Alcoa Corporation also has commitments to fund its pension plans, provide payments for other postretirement benefit plans, and fund capital projects. As of December 31, 2017, a summary of Alcoa Corporation's outstanding contractual obligations is as follows (these contractual obligations are grouped in the same manner as they are classified in the Statement of Consolidated Cash Flows in order to provide a better understanding of the nature of the obligations and to provide a basis for comparison to historical information):

	Total	2018	2019-2020	2021-2022	Thereafter
Operating activities:					
Energy-related purchase obligations	\$16,577	\$ 948	\$2,242	\$2,293	\$11,094
Raw material purchase obligations	5,742	1,244	1,180	554	2,764
Other purchase obligations	1,256	280	388	189	399
Operating leases	308	94	131	62	21
Interest related to total debt	751	99	194	190	268
Estimated minimum required pension funding	1,540	290	635	615	-
Other postretirement benefit payments	1,030	125	245	235	425
Layoff and other restructuring payments	45	41	4	-	-
Deferred revenue arrangements	76	8	16	16	36
Uncertain tax positions	12	-	-	-	12
Liability related to the resolution of a legal matter	74	74	-	-	-
Financing activities:					
Total debt	1,437	16	45	30	1,346
Dividends to shareholders	-	-	-	-	-
Distributions to noncontrolling interest	-	-	-	-	-
Investing activities:					
Capital projects	375	268	51	44	12
Equity contributions	-	-	-	-	-
Totals	\$29,223	\$3,487	\$5,131	\$4,228	\$16,377

Obligations for Operating Activities

Energy-related purchase obligations consist primarily of electricity and natural gas contracts with expiration dates ranging from 1 year to 30 years. Raw material obligations consist mostly of bauxite (relates to Alcoa Corporation's bauxite mine interests in Guinea and Brazil), caustic soda, alumina, aluminum fluoride, calcined petroleum coke, and cathode blocks with expiration dates ranging from less than 1 year to 17 years. Other purchase obligations consist principally of freight for bauxite and alumina with expiration dates ranging from 1 to 14 years. Many of these purchase obligations contain variable pricing components, and, as a result, actual cash payments may differ from the estimates provided in the preceding table. In accordance with the terms of several of these supply contracts, obligations may be reduced as a result of an interruption to operations, such as a plant curtailment or a force majeure event. Operating leases represent multi-year obligations for certain land and buildings, alumina refinery process control technology, plant equipment, vehicles, and computer equipment.

Interest related to total debt is based on interest rates in effect as of December 31, 2017 and is calculated on debt with maturities that extend to 2029. As the contractual interest rates for certain debt are variable, actual cash payments may differ from the estimates provided in the preceding table.

Estimated minimum required pension funding and postretirement benefit payments are based on actuarial estimates using current assumptions for, among others, discount rates, long-term rate of return on plan assets, rate of compensation increases, and health care cost trend rates. The minimum required contributions for pension funding are estimated to be \$290 for 2018, \$285 for 2019, \$350 for 2020, \$315 for 2021, and \$300 for 2022. The U.S. portion of these expected pension contributions reflect the impacts of the Pension Protection Act of 2006; the Worker, Retiree, and Employer Recovery Act of 2008; the Moving Ahead for Progress in the 21st Century Act of 2012; the Highway and

Transportation Funding Act of 2015; and the Bipartisan Budget Act of 2016. Also, the Company expects to make discretionary contributions of approximately \$300 combined to the U.S. and Canadian pension plans in 2018 (see Pension and Other Postretirement Benefits in Critical Accounting Policies and Estimates below), which are not included in the preceding table. Other postretirement benefit payments are expected to approximate \$115 to \$125 annually for years 2018 through 2022 and \$85 annually for years 2023 through 2027. Such payments will be slightly offset by subsidy receipts related to Medicare Part D, which are estimated to approximate \$5 to \$10 annually for years 2018 through 2027. Alcoa Corporation has determined that it is not practicable to present pension funding and other postretirement benefit payments beyond 2022 and 2027, respectively.

Layoff and other restructuring payments expected to be paid within one year primarily relate to take-or-pay provisions of supply contracts associated with curtailed facilities and severance costs. Amounts scheduled to be paid beyond one year relate to the termination of an office lease contract and are expected to be paid by no later than the end of 2020.

Deferred revenue arrangements require Alcoa Corporation to deliver alumina to a certain customer over the specified contract period (through 2027). While this obligation is not expected to result in cash payments, it is included in the preceding table as the Company would have such an obligation if the specified product deliveries could not be made.

Uncertain tax positions taken or expected to be taken on an income tax return may result in additional payments to tax authorities. The amount in the preceding table includes interest and penalties accrued related to such positions as of December 31, 2017. The total amount of uncertain tax positions is included in the "Thereafter" column as the Company is not able to reasonably estimate the timing of potential future payments. If a tax authority agrees with the tax position taken or expected to be taken or the applicable statute of limitations expires, then additional payments will not be necessary.

In early 2014, ParentCo and one of Alcoa's Corporation's current subsidiaries, AWA, resolved violations of certain provisions of the Foreign Corrupt Practices Act of 1977 with the U.S. Department of Justice and U.S. Securities and Exchange Commission. Under the resolution, ParentCo and AWA agreed to pay a combined \$384 over a four-year timeframe. Prior to the Separation Transaction, ParentCo and AWA paid \$236 of the total amount. As part of the Separation and Distribution Agreement, Alcoa Corporation assumed ParentCo's portion of the \$148 remaining obligation. The \$148 was paid in equal installments of \$74 in January 2017 and January 2018.

Obligations for Financing Activities

Total debt amounts in the preceding table represent the principal amounts of all outstanding long-term debt, which have maturities that extend to 2029.

As of December 31, 2017, Alcoa Corporation had 185,200,713 issued and outstanding shares of common stock. Dividends on common stock are subject to authorization by Alcoa Corporation's Board of Directors. Alcoa Corporation did not declare or pay any dividends in 2017.

Effective on November 1, 2016, certain documents that govern the AWAC joint venture relationship between Alcoa Corporation and Alumina Limited were revised. One of the provisions of the revised documents relates to required cash distributions from the entities that comprise the joint venture to the two partners. On a quarterly basis, each of certain identified entities that comprise the AWAC joint venture must distribute (i) 50% of the entity's net income, if any, based on the previous quarter's results, and (ii) the available cash, if any, of each entity, subject to certain thresholds that the entities must maintain a minimum cash on hand that ranges from \$5 to \$85 depending on the entity. Available cash is defined as an entity's cash and cash equivalents less any projected negative free cash flow of the entity for the upcoming quarter. Free cash flow is defined as cash flow from operating activities less sustaining capital expenditures. Estimates of potential cash distributions to Alumina Limited have not been included in the preceding table since this would require Alcoa Corporation to provide proprietary information related to forecasted results of the entities that comprise the AWAC joint venture. In 2017, 2016, and 2015, Alumina Limited received distributions of \$342, \$233, and \$106, respectively, from the entities that comprise AWAC based on the provisions of the respective current or prior agreement applicable to these years.

Obligations for Investing Activities

Capital projects in the preceding table only include amounts approved by management as of December 31, 2017. Funding levels may vary in future years based on anticipated construction schedules of the projects. It is expected that significant expansion projects will be funded through various sources, including cash provided from operations. Total capital expenditures are anticipated to be approximately \$450 in 2018, comprised of \$300 for sustaining projects and \$150 for return-seeking projects.

Alcoa Corporation is a participant in a joint venture related to an integrated aluminum complex in Saudi Arabia, comprised of a bauxite mine, alumina refinery, aluminum smelter, and rolling mill, which requires the Company to contribute approximately \$1,100 (estimate of initial investment). As of December 31, 2017, Alcoa Corporation has made equity contributions of \$982. Based on changes to both the project's capital investment and equity and debt structure from the initial plans, the estimated \$1,100 equity contribution may be reduced. Alcoa Corporation does not anticipate making any additional equity contributions under the initial \$1,100 plan although a formal determination is yet to be made. Accordingly, further contribution amounts have not been included in the preceding table. Separate from the capital investment in the project, Alcoa Corporation contributed \$66 to the joint venture in 2017 for short-term funding purposes in accordance with the terms of the joint venture companies' financing arrangements. The Company may be required to make such additional contributions in future periods.

Off-Balance Sheet Arrangements. At December 31, 2017, Alcoa Corporation has maximum potential future payments for guarantees issued on behalf of a third party of \$177. These guarantees expire at various times between 2018 and 2024 and relate to project financing for the aluminum complex in Saudi Arabia. The borrowers are the three companies that comprise the joint venture in which Alcoa Corporation is a participant. In December 2017, the smelting company refinanced and/or amended all of its existing outstanding debt. The guarantees that were previously required of the Company were effectively terminated. The remaining issued guarantees relate to the existing outstanding debt of both the rolling mill company and the mining and refining company.

Alcoa Corporation has outstanding bank guarantees and letters of credit related to, among others, energy contracts, environmental obligations, legal and tax matters, outstanding debt, leasing obligations, workers compensation, and customs duties. The total amount committed under these instruments, which automatically renew or expire at various dates between 2018 and 2022, was \$543 (includes \$112 issued under a one-year agreement —see below) at December 31, 2017. Additionally, Arconic has outstanding bank guarantees and letters of credit related to Alcoa Corporation in the amount of \$29 at December 31, 2017. In the event Arconic would be required to perform under any of these instruments, Arconic would be indemnified by Alcoa Corporation in accordance with the Separation and Distribution Agreement. Likewise, Alcoa Corporation has outstanding bank guarantees and letters of credit related to Arconic in the amount of \$18 at December 31, 2017. In the event Alcoa Corporation would be required to perform under any of these instruments, Alcoa Corporation would be indemnified by Arconic in accordance with the Separation and Distribution Agreement.

In August 2017, Alcoa Corporation entered into a one-year standby letter of credit agreement with three financial institutions. The agreement provides for a \$150 facility, which will be used by Alcoa Corporation for matters in the ordinary course of business. Alcoa Corporation's obligations under this facility will be secured in the same manner as obligations under the Company's Amended Revolving Credit Agreement (see Financing Activities in Liquidity and Capital Resources above). Additionally, this facility contains similar representations and warranties and affirmative, negative, and financial covenants as the Company's Amended Revolving Credit Agreement (see Financing Activities in Liquidity and Capital Resources above). As of December 31, 2017, letters of credit aggregating \$112 were issued under this facility. These letters of credit were previously issued in 2017 on a standalone basis.

Alcoa Corporation also has outstanding surety bonds primarily related to tax matters, contract performance, workers compensation, environmental-related matters, and customs duties. The total amount committed under these bonds, which automatically renew or expire at various dates, mostly in 2018, was \$122 at December 31, 2017. Additionally, Arconic has outstanding surety bonds related to Alcoa Corporation in the amount of \$14 at December 31, 2017. In the

event Arconic would be required to perform under any of these instruments, Arconic would be indemnified by Alcoa Corporation in accordance with the Separation and Distribution Agreement.

Critical Accounting Policies and Estimates

The preparation of the Consolidated Financial Statements in accordance with accounting principles generally accepted in the United States of America requires management to make certain judgments, estimates, and assumptions regarding uncertainties that affect the amounts reported in the Consolidated Financial Statements and disclosed in the Notes to the Consolidated Financial Statements. Areas that require significant judgments, estimates, and assumptions include the review of properties, plants, and equipment, equity investments, and goodwill for impairment, and accounting for each of the following: asset retirement obligations; environmental and litigation matters; stock-based compensation; pension plans and other postretirement benefits obligations; derivatives and hedging activities; and income taxes.

Management uses historical experience and all available information to make these judgments, estimates, and assumptions, and actual results may differ from those used to prepare the Company's Consolidated Financial Statements at any given time. Despite these inherent limitations, management believes that Management's Discussion and Analysis of Financial Condition and Results of Operations and the Consolidated Financial Statements, including the Notes to the Consolidated Financial Statements, provide a meaningful and fair perspective of the Company.

A summary of the Company's significant accounting policies is included in Note B to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K. Management believes that the application of these policies on a consistent basis enables the Company to provide the users of the Consolidated Financial Statements with useful and reliable information about the Company's operating results and financial condition.

Prior to the Separation Date, Alcoa Corporation did not operate as a separate, standalone entity. Alcoa Corporation's operations were included in ParentCo's financial results. Accordingly, for all periods prior to the Separation Date, Alcoa Corporation's Consolidated Financial Statements were prepared from ParentCo's historical accounting records and were presented on a standalone basis as if Alcoa Corporation's operations had been conducted independently from ParentCo. Such Consolidated Financial Statements include the historical operations that were considered to comprise Alcoa Corporation's businesses, as well as certain assets and liabilities that were historically held at ParentCo's corporate level but were specifically identifiable or otherwise attributable to Alcoa Corporation. The Critical Accounting Policies described below reflect any incremental judgments, estimates, and assumptions made by management in the preparation of Alcoa's Consolidated Financial Statements prior to the Separation Date (see Separation Transaction in Overview above for additional information).

Properties, Plants, and Equipment. Properties, plants, and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (asset group) may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets (asset group) to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets (asset group) exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of the carrying value of the assets (asset group) over their fair value, with fair value determined using the best information available, which generally is a discounted cash flow (DCF) model. The determination of what constitutes an asset group, the associated estimated undiscounted net cash flows, and the estimated useful lives of assets also require significant judgments.

Equity Investments. Alcoa Corporation invests in a number of privately-held companies, primarily through joint ventures and consortia, which are accounted for using the equity method. The equity method is applied in situations where Alcoa Corporation has the ability to exercise significant influence, but not control, over the investee. Management reviews equity investments for impairment whenever certain indicators are present suggesting that the carrying value of an investment is not recoverable. This analysis requires a significant amount of judgment from management to identify events or circumstances indicating that an equity investment is impaired. The following items are examples of impairment indicators: significant, sustained declines in an investee's revenue, earnings, and cash flow

trends; adverse market conditions of the investee's industry or geographic area; the investee's ability to continue operations measured by several items, including liquidity; and other factors. Once an impairment indicator is identified, management uses considerable judgment to determine if the impairment is other than temporary, in which case the equity investment is written down to its estimated fair value. An impairment that is other than temporary could significantly and adversely impact reported results of operations.

Goodwill. Goodwill is not amortized; it is instead reviewed for impairment annually (in the fourth quarter) or more frequently if indicators of impairment exist or if a decision is made to sell or exit a business. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include, among others, deterioration in general economic conditions, negative developments in equity and credit markets, adverse changes in the markets in which an entity operates, increases in input costs that have a negative effect on earnings and cash flows, or a trend of negative or declining cash flows over multiple periods. The fair value that could be realized in an actual transaction may differ from that used to evaluate goodwill for impairment.

Goodwill is allocated among and evaluated for impairment at the reporting unit level, which is defined as an operating segment or one level below an operating segment. Alcoa Corporation has five reporting units of which three are included in the Aluminum segment (smelting/casting, energy generation, and rolling operations). The remaining two reporting units are the Bauxite and Alumina segments. Of these five reporting units, only Bauxite and Alumina contain goodwill. As of December 31, 2017, the carrying value of the goodwill for Bauxite and Alumina was \$51 and \$103, respectively. These amounts include an allocation of goodwill held at the corporate level (\$49 to Bauxite and \$99 to Alumina). Prior to 2017, the Company had six reporting units equivalent to its then six operating segments as follows: Bauxite, Alumina, Aluminum, Cast Products, Energy, and Rolled Products. In early 2017, management initiated a realignment of the Company's internal business and organizational structure resulting in a change to Alcoa Corporation's operating segments and reporting units (see Segment Information in Results of Operations above). Of the previous six reporting units, only Bauxite and Alumina contained goodwill.

In reviewing goodwill for impairment, an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (greater than 50%) that the estimated fair value of a reporting unit is less than its carrying amount. If an entity elects to perform a qualitative assessment and determines that an impairment is more likely than not, the entity is then required to perform the existing two-step quantitative impairment test (described below), otherwise no further analysis is required. An entity also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. The ultimate outcome of the goodwill impairment review for a reporting unit should be the same whether an entity chooses to perform the qualitative assessment or proceeds directly to the two-step quantitative impairment test.

Alcoa Corporation's policy for its annual review of goodwill is to perform the qualitative assessment for all reporting units not subjected directly to the two-step quantitative impairment test. Generally, management will proceed directly to the two-step quantitative impairment test for each of its two reporting units that contain goodwill at least once during every three-year period, as part of its annual review of goodwill.

Under the qualitative assessment, various events and circumstances (or factors) that would affect the estimated fair value of a reporting unit are identified (similar to impairment indicators above). These factors are then classified by the type of impact they would have on the estimated fair value using positive, neutral, and adverse categories based on current business conditions. Additionally, an assessment of the level of impact that a particular factor would have on the estimated fair value is determined using high, medium, and low weighting. Furthermore, management considers the results of the most recent two-step quantitative impairment test completed for a reporting unit and compares the weighted average cost of capital (WACC) between the current and prior years for each reporting unit.

During the 2017 annual review of goodwill, management performed the qualitative assessment for the Bauxite and Alumina reporting units. Management concluded it was not more likely than not that the respective estimated fair value of these reporting units was less than the respective carrying value. As such, no further analysis was required.

Under the two-step quantitative impairment test, the evaluation of impairment involves comparing the current fair value of each reporting unit to its carrying value, including goodwill. Alcoa Corporation uses a DCF model to estimate the current fair value of its reporting units when testing for impairment, as management believes forecasted cash flows are the best indicator of such fair value. A number of significant assumptions and estimates are involved in the application of the DCF model to forecast operating cash flows, including markets and market share, sales volumes and prices, production costs, tax rates, capital spending, discount rate, and working capital changes. Certain of these assumptions can vary significantly among the reporting units. Cash flow forecasts are generally based on approved business unit operating plans for the early years and historical relationships in later years. The betas used in calculating the individual reporting units' WACC rate are estimated for each business with the assistance of valuation experts.

In the event the estimated fair value of a reporting unit per the DCF model is less than the carrying value, additional analysis would be required. The additional analysis would compare the carrying amount of the reporting unit's goodwill with the implied fair value of that goodwill, which may involve the use of valuation experts. The implied fair value of goodwill is the excess of the fair value of the reporting unit over the fair value amounts assigned to all of the assets and liabilities of that unit as if the reporting unit was acquired in a business combination and the fair value of the reporting unit represented the purchase price. If the carrying value of goodwill exceeds its implied fair value, an impairment loss equal to such excess would be recognized.

Management last proceeded directly to the two-step quantitative impairment test for the Alumina reporting unit in 2016 and will do so for the Bauxite reporting unit in 2018. In 2016, the estimated fair value of the Alumina reporting unit was substantially in excess of its carrying value, resulting in no impairment. Additionally, in all prior years presented, there have been no triggering events that necessitated an impairment test for either the Bauxite or Alumina reporting units.

Asset Retirement Obligations. Alcoa Corporation recognizes asset retirement obligations (AROs) related to legal obligations associated with the standard operation of bauxite mines, alumina refineries, and aluminum smelters. These AROs consist primarily of costs associated with mine reclamation, closure of bauxite residue areas, spent pot lining disposal, and landfill closure. Alcoa Corporation also recognizes AROs for any significant lease restoration obligation, if required by a lease agreement, and for the disposal of regulated waste materials related to the demolition of certain power facilities. The fair values of these AROs are recorded on a discounted basis, at the time the obligation is incurred, and accreted over time for the change in present value. Additionally, Alcoa Corporation capitalizes asset retirement costs by increasing the carrying amount of the related long-lived assets and depreciating these assets over their remaining useful life.

Certain conditional asset retirement obligations (CAROs) related to alumina refineries, aluminum smelters, rolling mills, and energy generation facilities have not been recorded in the Consolidated Financial Statements due to uncertainties surrounding the ultimate settlement date. A CARO is a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are conditional on a future event that may or may not be within Alcoa Corporation's control. Such uncertainties exist as a result of the perpetual nature of the structures, maintenance and upgrade programs, and other factors. At the date a reasonable estimate of the ultimate settlement date can be made (e.g., planned demolition), Alcoa Corporation would record an ARO for the removal, treatment, transportation, storage, and/or disposal of various regulated assets and hazardous materials such as asbestos, underground and aboveground storage tanks, polychlorinated biphenyls, various process residuals, solid wastes, electronic equipment waste, and various other materials. Such amounts may be material to the Consolidated Financial Statements in the period in which they are recorded. If Alcoa Corporation was required to demolish all such structures immediately, the estimated CARO as of December 31, 2017 ranges from \$3 to \$28 per structure (24 structures) in today's dollars.

Environmental Matters. Expenditures for current operations are expensed or capitalized, as appropriate. Expenditures relating to existing conditions caused by past operations, which will not contribute to future revenues, are expensed. Liabilities are recorded when remediation costs are probable and can be reasonably estimated. The liability may include costs such as site investigations, consultant fees, feasibility studies, outside contractors, and monitoring

expenses. Estimates are generally not discounted or reduced by potential claims for recovery, which are recognized as agreements are reached with third parties. The estimates also include costs related to other potentially responsible parties to the extent that Alcoa Corporation has reason to believe such parties will not fully pay their proportionate share. The liability is continuously reviewed and adjusted to reflect current remediation progress, prospective estimates of required activity, and other factors that may be relevant, including changes in technology or regulations.

Litigation Matters. For asserted claims and assessments, liabilities are recorded when an unfavorable outcome of a matter is deemed to be probable and the loss is reasonably estimable. Management determines the likelihood of an unfavorable outcome based on many factors such as, among others, the nature of the matter, available defenses and case strategy, progress of the matter, views and opinions of legal counsel and other advisors, applicability and success of appeals processes, and the outcome of similar historical matters. Once an unfavorable outcome is deemed probable, management weighs the probability of estimated losses, and the most reasonable loss estimate is recorded. If an unfavorable outcome of a matter is deemed to be reasonably possible, then the matter is disclosed and no liability is recorded. With respect to unasserted claims or assessments, management must first determine that the probability that an assertion will be made is likely, then, a determination as to the likelihood of an unfavorable outcome and the ability to reasonably estimate the potential loss is made. Legal matters are reviewed on a continuous basis to determine if there has been a change in management's judgment regarding the likelihood of an unfavorable outcome or the estimate of a potential loss.

Stock-based Compensation. For all periods prior to the Separation Date, employees attributable to Alcoa Corporation operations participated in ParentCo's stock-based compensation plans. The compensation expense recorded by Alcoa Corporation included the expense associated with these employees, as well as the expense associated with the allocation of stock-based compensation expense for ParentCo's corporate employees. Beginning on the Separation Date and forward, Alcoa Corporation recorded stock-based compensation expense for all of the Company's employees. The following accounting policy describes how stock-based compensation expense is initially determined for both Alcoa Corporation and ParentCo.

Compensation expense for employee equity grants is recognized using the non-substantive vesting period approach, in which the expense (net of estimated forfeitures) is recognized ratably over the requisite service period based on the grant date fair value. The fair value of new stock options is estimated on the date of grant using a lattice-pricing model. Determining the fair value of stock options at the grant date requires judgment, including estimates for the average risk-free interest rate, dividend yield, volatility, annual forfeiture rate, and exercise behavior. These assumptions may differ significantly between grant dates because of changes in the actual results of these inputs that occur over time.

In 2017, 2016, and 2015, Alcoa Corporation recognized stock-based compensation expense of \$24, \$28, and \$35, respectively. Of the amounts in 2016 and 2015, \$16 and \$21, respectively, relates to the allocation of expense for ParentCo's corporate employees. As part of both Alcoa Corporation's and ParentCo's stock-based compensation plan design in the respective periods, individuals who are retirement-eligible have a six-month requisite service period in the year of grant. As a result, a larger portion of expense will be recognized in the first half of each year for these retirement-eligible employees. Of the total pretax stock-based compensation expense recognized in 2017, 2016, and 2015, \$4, \$7, and \$6, respectively, pertains to the acceleration of expense related to retirement-eligible employees.

Most plan participants can choose whether to receive their award in the form of stock options, stock awards, or a combination of both. This choice is made before the grant is issued and is irrevocable.

Pension and Other Postretirement Benefits. For all periods prior to August 1, 2016 (see below), certain employees attributable to Alcoa Corporation operations participated in defined benefit pension and other postretirement benefit plans (the "Shared Plans") sponsored by ParentCo, which also included participants attributable to non-Alcoa Corporation operations. Alcoa Corporation accounted for these Shared Plans as multiemployer benefit plans. Accordingly, Alcoa Corporation did not record an asset or liability to recognize the funded status of the Shared Plans. However, the related expense recorded by Alcoa Corporation was based primarily on pensionable compensation and estimated interest costs related to employees attributable to Alcoa Corporation operations.

Prior to the Separation Date, certain other plans that were entirely attributable to employees of Alcoa Corporation-related operations (the “Direct Plans”) were accounted for as defined benefit pension and other postretirement benefit plans. Accordingly, the funded and unfunded position of each Direct Plan was recorded in the Consolidated Balance Sheet. Actuarial gains and losses that had not yet been recognized through earnings were recorded in accumulated other comprehensive income, net of taxes, until they were amortized as a component of net periodic benefit cost. The determination of benefit obligations and recognition of expenses related to the Direct Plans is dependent on various assumptions (see below).

In preparation for the Separation Transaction, effective August 1, 2016, certain of the Shared Plans were separated into standalone plans for both Alcoa Corporation (the “New Direct Plans”) and ParentCo. Additionally, certain of the other remaining Shared Plans were assumed by Alcoa Corporation (the “Additional New Direct Plans”). Accordingly, beginning on August 1, 2016 and forward, the standalone plans and assumed plans were accounted for as defined benefit pension and other postretirement plans. Additionally, the Direct Plans continued to be accounted for as defined benefit pension and other postretirement plans.

Liabilities and expenses for pension and other postretirement benefits are determined using actuarial methodologies and incorporate significant assumptions, including the interest rate used to discount the future estimated liability, the expected long-term rate of return on plan assets, and several assumptions relating to the employee workforce (salary increases, health care cost trend rates, retirement age, and mortality).

The interest rate used to discount future estimated liabilities is determined using a Company-specific yield curve model (above-median) developed with the assistance of an external actuary. The cash flows of the plans’ projected benefit obligations are discounted using a single equivalent rate derived from yields on high quality corporate bonds, which represent a broad diversification of issuers in various sectors. The yield curve model parallels the plans’ projected cash flows, which have a weighted average duration of 12 years, and the underlying cash flows of the bonds included in the model exceed the cash flows needed to satisfy the Company’s plans’ obligations multiple times. If a deep market of high quality corporate bonds does not exist in a country, then the yield on government bonds plus a corporate bond yield spread is used. In 2017 and 2016, the weighted average discount rate used to determine benefit obligations for pension plans was 3.68% and 4.12%, respectively, and for other postretirement benefit plans was 3.54% and 3.93%, respectively. The impact on the combined pension and other postretirement liabilities of a change in the weighted average discount rate of 1/4 of 1% would be approximately \$220 and either a charge or credit of approximately \$5 to pretax earnings in the following year.

The decline in the discount rate in 2017 compared to 2016 for both pension and other postretirement benefit plans was due to a decrease in the effective yields of the bonds with a duration of greater than 10 years included in the model. As the average duration of the plans’ projected cash flows is greater than 10 years, changes in the discount rate tend to parallel changes in the effective yields of bonds with a duration of greater than 10 years. As a result, the effective yields of bonds with a duration of 10 years or less included in the model had a minimal impact on the change in the discount rate.

The expected long-term rate of return on plan assets is generally applied to a five-year market-related value of plan assets (a four-year average or the fair value at the plan measurement date is used for certain non-U.S. plans). The process used by management to develop this assumption is one that relies on forward-looking returns by asset class. Management incorporates expected future investment returns on current and planned asset allocations using information from various external investment managers and consultants, as well as management’s own judgment (see below). For 2017, 2016, and 2015, management used 7.47%, 7.31%, and 6.91% as its weighted-average expected long-term rate of return, which was based on the prevailing and planned strategic asset allocations, as well as estimates of future returns by asset class. For 2018, management anticipates that 6.89% will be the weighted-average expected long-term rate of return. A change in the assumption for the weighted average expected long-term rate of return on plan assets of 1/4 of 1% would impact pretax earnings by approximately \$15 for 2018.

On January 17, 2018, the Company communicated retirement benefit changes to certain U.S. and Canadian employees. Effective January 1, 2021, all salaried U.S. and Canadian employees that are participants in the Company’s defined

benefit pension plans will cease accruing retirement benefits for future service. This change will affect approximately 800 employees, who will be transitioned to country-specific defined contribution plans, in which the Company will contribute 3% of these participants' eligible earnings on an annual basis. Such contributions will be incremental to any employer savings match the employees may receive under existing defined contribution plans. Participants already collecting benefits under the defined benefit pension plans, as well as those currently covered by collective bargaining agreements, are not affected by these changes. Also, effective January 1, 2021, Alcoa Corporation will no longer contribute to pre-Medicare retiree medical coverage for U.S. salaried employees and retirees. As a result of these changes, Alcoa Corporation expects to record both a curtailment gain of approximately \$20 (pretax) in 2018 and a reduction to the Company's net pension and other postretirement benefits liability of approximately \$35.

Separately, Alcoa expects to make discretionary contributions of approximately \$300 combined to the U.S. and Canadian defined benefit pension plans in 2018. The Company intends these contributions to be used to purchase annuity contracts for approximately 9,000 retirees. Such instruments will allow the Company to transfer risk and lower its costs related to these defined benefit pension plans. At such time(s) annuity contracts are purchased, Alcoa Corporation will record a settlement charge as part of the net periodic benefit cost of these defined benefit pension plans.

Derivatives and Hedging. Derivatives are held for purposes other than trading and are part of a formally documented risk management program. For derivatives designated as fair value hedges, Alcoa Corporation measures hedge effectiveness by formally assessing, at inception and at least quarterly, the historical high correlation of changes in the fair value of the hedged item and the derivative hedging instrument. For derivatives designated as cash flow hedges, Alcoa Corporation measures hedge effectiveness by formally assessing, at inception and at least quarterly, the probable high correlation of the expected future cash flows of the hedged item and the derivative hedging instrument. The ineffective portions of both types of hedges are recorded in Sales or Other (income) expenses, net in the current period. If the hedging relationship ceases to be highly effective or it becomes probable that an expected transaction will no longer occur, future gains or losses on the derivative instrument are recorded in Other (income) expenses, net.

Alcoa Corporation accounts for hedges of firm customer commitments for aluminum as fair value hedges. As a result, the fair values of the derivatives and changes in the fair values of the underlying hedged items are reported as assets and liabilities in the Consolidated Balance Sheet. Changes in the fair values of these derivatives and underlying hedged items generally offset and are recorded each period in Sales, consistent with the underlying hedged item.

Alcoa Corporation accounts for hedges of foreign currency exposures and certain forecasted transactions as cash flow hedges. The fair values of the derivatives are recorded as assets and liabilities in the Consolidated Balance Sheet. The effective portions of the changes in the fair values of these derivatives are recorded in Other comprehensive (loss) income and are reclassified to Sales, Cost of goods sold, or Other (income) expenses, net in the period in which earnings are impacted by the hedged items or in the period that the transaction no longer qualifies as a cash flow hedge. These contracts cover the same periods as known or expected exposures, generally not exceeding five years.

If no hedging relationship is designated, the derivative is marked to market through Other (income) expenses, net.

Cash flows from derivatives are recognized in the Statement of Consolidated Cash Flows in a manner consistent with the underlying transactions.

Income Taxes. Beginning on the Separation Date and forward, the provision for income taxes was determined using the asset and liability approach of accounting for income taxes. Under this approach, the provision for income taxes represents income taxes paid or payable (or received or receivable) for the current year plus the change in deferred taxes during the year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid, and result from differences between the financial and tax bases of Alcoa Corporation's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted.

In all periods prior to the Separation Date, Alcoa Corporation’s operations were included in the income tax filings of ParentCo. The provision for income taxes in Alcoa Corporation’s Statement of Consolidated Operations was determined in the same manner described above, but on a separate return methodology as if the Company was a standalone taxpayer filing hypothetical income tax returns where applicable. Any additional accrued tax liability or refund arising as a result of this approach was assumed to be immediately settled with ParentCo as a component of Parent Company net investment. Deferred tax assets were also determined in the same manner described above and were reflected in the Consolidated Balance Sheet for net operating losses, credits or other attributes to the extent that such attributes were expected to transfer to Alcoa Corporation upon the Separation Transaction. Any difference from attributes generated in a hypothetical return on a separate return basis was adjusted as a component of Parent Company net investment.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not (greater than 50%) that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period, including from tax planning strategies, and Alcoa Corporation’s experience with similar operations. Existing favorable contracts and the ability to sell products into established markets are additional positive evidence. Negative evidence includes items such as cumulative losses, projections of future losses, or carryforward periods that are not long enough to allow for the utilization of a deferred tax asset based on existing projections of income. In certain jurisdictions, deferred tax assets related to cumulative losses exist without a valuation allowance where in management’s judgment the weight of the positive evidence more than offsets the negative evidence of the cumulative losses. Upon changes in facts and circumstances, management may conclude that deferred tax assets for which no valuation allowance is currently recorded may not be realized, resulting in a future charge to establish a valuation allowance. Existing valuation allowances are re-examined under the same standards of positive and negative evidence. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released. Deferred tax assets and liabilities are also re-measured to reflect changes in underlying tax rates due to law changes and the granting and lapse of tax holidays.

The composition of Alcoa Corporation’s net deferred tax asset by jurisdiction as of December 31, 2017 was as follows:

	Domestic	Foreign	Total
Deferred tax assets	\$ 1,164	\$1,948	\$ 3,112
Valuation allowance	(1,050)	(877)	(1,927)
Deferred tax liabilities	(108)	(560)	(668)
	<u>\$ 6</u>	<u>\$ 511</u>	<u>\$ 517</u>

The Company has several income tax filers in various foreign countries. The \$511 net deferred tax asset included under the “Foreign” column in the table above was comprised of the following (by income tax filer): a \$252 net deferred tax asset for Alumínio in Brazil; a \$153 net deferred tax asset for AWAB in Brazil; a \$112 deferred tax asset for Alúmina Española, S.A. (“Española” and collectively with Alumínio and AWAB, the “Foreign Filers”) in Spain; and a combined \$6 net deferred tax liability for several other foreign income tax filers.

The future realization of the net deferred tax asset for each of the Foreign Filers was based on projections of the respective future taxable income (defined as the sum of pretax income, other comprehensive income, and permanent tax differences), exclusive of reversing temporary differences and carryforwards. The realization of the net deferred tax assets of the Foreign Filers is not dependent on any tax planning strategies. The Foreign Filers each generated taxable income in the three-year cumulative period ending December 31, 2017. Management has also forecasted taxable income for each of the Foreign Filers in 2018 and for the foreseeable future. This forecast is based on macroeconomic indicators and involves assumptions related to, among others: commodity prices; volume levels;

and key inputs and raw materials, such as bauxite, caustic soda, alumina, calcined petroleum coke, liquid pitch, energy (fuel oil, natural gas, electricity), labor, and transportation costs. These are the same assumptions used by management to develop a financial and operating plan, which is used to run the Company and measure performance against actual results.

The majority of the Foreign Filers' net deferred tax assets relate to tax loss carryforwards. The Foreign Filers do not have a history of tax loss carryforwards expiring unused. Additionally, tax loss carryforwards have an infinite life under the respective income tax codes in Brazil and Spain. That said, utilization of an existing tax loss carryforward is limited to 30% and 25% of taxable income in a particular year in Brazil and Spain, respectively.

Accordingly, management concluded that the net deferred tax assets of the Foreign Filers will more likely than not be realized in future periods, resulting in no need for a partial or full valuation allowance as of December 31, 2017.

In 2017, Alcoa Corporation established a valuation allowance of \$94 related to the remaining deferred tax assets in Iceland (see below). This amount was comprised of a \$60 discrete income charge recognized in the Provision for income taxes on the Company's Consolidated Statement of Operations and a \$34 charge to Accumulated other comprehensive loss on Alcoa Corporation's Consolidated Balance Sheet. These deferred tax assets relate to tax loss carryforwards, which have an expiration period ranging from 2017 to 2026, and deferred losses associated with derivative and hedging activities. After weighing all available positive and negative evidence, management determined that it was no longer more likely than not that Alcoa Corporation will realize the tax benefit of these deferred tax assets. This conclusion was based on existing cumulative losses and a short expiration period. Such losses were generated as a result of intercompany interest expense under the Company's global treasury and cash management system and the realization of deferred losses associated with an LME-linked embedded derivative in a power contract. Such interest expense is expected to continue and additional deferred losses associated with the embedded derivative will be realized in future years. As a result, management estimates that there will not be sufficient taxable income available to utilize the operating losses during the expiration period. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, a portion or all of the allowance may be reversed based on changes in facts and circumstances.

In 2015, Alcoa Corporation recognized a \$141 discrete income tax charge for valuation allowances on certain deferred tax assets in Suriname and Iceland. Of this amount, an \$85 valuation allowance was established on the full value of the deferred tax assets in Suriname. These deferred tax assets relate to tax loss carryforwards and employee benefits have an expiration period ranging from 2016 to 2022. The remaining \$56 charge relates to a valuation allowance established on a portion of the deferred tax assets in Iceland, which were related to tax loss carryforwards that have an expiration period ranging from 2017 to 2019. After weighing all available positive and negative evidence, management determined that it was no longer more likely than not that Alcoa Corporation will realize the tax benefit of these deferred tax assets. This conclusion was mainly driven by a decline in the outlook of the former Primary Metals business (refers to the smelting and casting operations included in what is currently the Aluminum segment), combined with prior year cumulative losses and a short expiration period. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, a portion or all of the allowance may be reversed based on changes in facts and circumstances.

Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the statute of limitation has expired or the appropriate taxing authority has completed their examination even though the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

Related Party Transactions

Alcoa Corporation buys products from and sells products to various related companies, consisting of entities in which Alcoa Corporation retains a 50% or less equity interest, at negotiated prices between the two parties. These transactions were not material to the financial position or results of operations of Alcoa Corporation for all periods presented.

Transactions between Alcoa Corporation and Arconic have been presented as related party transactions on the Company's Consolidated Financial Statements. Sales to Arconic from Alcoa Corporation were \$864, \$958, and \$1,078 in 2017, 2016, and 2015, respectively. As of December 31, 2017 and 2016, outstanding receivables from Arconic were \$84 and \$67, respectively, and were included in Receivables from customers on Alcoa Corporation's Consolidated Balance Sheet.

Recently Adopted Accounting Guidance

See the Recently Adopted Accounting Guidance section of Note B to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Recently Issued Accounting Guidance

See the Recently Issued Accounting Guidance section of Note B to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

See the Derivatives section of Note O to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 8. Financial Statements and Supplementary Data.

Management's Reports to Alcoa Corporation Stockholders

Management's Report on Financial Statements and Practices

The accompanying Consolidated Financial Statements of Alcoa Corporation and its subsidiaries (the "Company") were prepared by management, which is responsible for their integrity and objectivity, in accordance with accounting principles generally accepted in the United States of America (GAAP) and include amounts that are based on management's best judgments and estimates. The other financial information included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 is consistent with that in the financial statements.

Management recognizes its responsibility for conducting the Company's affairs according to the highest standards of personal and corporate conduct. This responsibility is characterized and reflected in key policy statements issued from time to time regarding, among other things, conduct of its business activities within the laws of the host countries in which the Company operates and potentially conflicting outside business interests of its employees. The Company maintains a systematic program to assess compliance with these policies.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the U.S. Securities Exchange Act of 1934 (as amended), for the Company. The 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 GAAP. The Company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) 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.

Management conducted an assessment to evaluate the effectiveness of the Company's internal control over financial reporting as of December 31, 2017 using the criteria in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that the Company maintained effective internal control over financial reporting as of December 31, 2017.

PricewaterhouseCoopers LLP, an independent registered public accounting firm, audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, as stated in their report, which is included herein.



Roy C. Harvey
President and
Chief Executive Officer



William F. Oplinger
Executive Vice President and
Chief Financial Officer

February 23, 2018

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Alcoa Corporation:

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Alcoa Corporation and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of operations, comprehensive (loss) income, changes in equity and cash flows for each of the three years in the period ended December 31, 2017, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control—Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the

transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 23, 2018

We have served as the Company's auditor since 2015.

Alcoa Corporation and subsidiaries
Statement of Consolidated Operations
(in millions, except per-share amounts)

For the year ended December 31,	2017	2016	2015
Sales to unrelated parties	\$10,788	\$8,360	\$10,121
Sales to related parties	864	958	1,078
Total sales (E)	11,652	9,318	11,199
Cost of goods sold (exclusive of expenses below)	9,072	7,898	9,039
Selling, general administrative, and other expenses	284	359	353
Research and development expenses	32	33	69
Provision for depreciation, depletion, and amortization	750	718	780
Restructuring and other charges (D)	309	318	983
Interest expense (S)	104	243	270
Other (income) expenses, net (S)	(58)	(89)	42
Total costs and expenses	10,493	9,480	11,536
Income (Loss) before income taxes	1,159	(162)	(337)
Provision for income taxes (P)	600	184	402
Net income (loss)	559	(346)	(739)
Less: Net income attributable to noncontrolling interest	342	54	124
Net Income (Loss) Attributable to Alcoa Corporation	217	(400)	\$ (863)
Earnings per Share Attributable to Alcoa Corporation Common Shareholders (F):			
Basic	\$ 1.18	\$ (2.19)	\$ (4.73)
Diluted	\$ 1.16	\$ (2.19)	\$ (4.73)

The accompanying notes are an integral part of the consolidated financial statements.

Alcoa Corporation and subsidiaries
Statement of Consolidated Comprehensive (Loss) Income
(in millions)

For the year ended December 31,	Alcoa Corporation			Noncontrolling interest			Total		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
Net income (loss)	\$ 217	\$(400)	\$ (863)	\$342	\$ 54	\$ 124	\$ 559	\$(346)	\$ (739)
Other comprehensive (loss) income, net of tax (G):									
Change in unrecognized net actuarial loss and prior service cost/benefit related to pension and other postretirement benefits	(456)	(202)	72	9	-	8	(447)	(202)	80
Foreign currency translation adjustments	188	213	(1,183)	96	102	(428)	284	315	(1,611)
Net change in unrecognized gains/ losses on cash flow hedges	(1,139)	(346)	827	50	4	(1)	(1,089)	(342)	826
Total Other comprehensive (loss) income, net of tax	(1,407)	(335)	(284)	155	106	(421)	(1,252)	(229)	(705)
Comprehensive (loss) income	\$(1,190)	\$(735)	\$(1,147)	\$497	\$160	\$(297)	\$ (693)	\$(575)	\$(1,444)

The accompanying notes are an integral part of the consolidated financial statements.

Alcoa Corporation and subsidiaries
Consolidated Balance Sheet
(in millions)

December 31,	2017	2016
Assets		
Current assets:		
Cash and cash equivalents (O)	\$ 1,358	\$ 853
Receivables from customers	811	668
Other receivables	232	166
Inventories (I)	1,453	1,160
Fair value of derivative contracts (O)	113	51
Prepaid expenses and other current assets	271	283
Total current assets	4,238	3,181
Properties, plants, and equipment, net (J)	9,138	9,325
Investments (H)	1,410	1,358
Deferred income taxes (P)	814	741
Fair value of derivative contracts (O)	128	468
Other noncurrent assets (S)	1,719	1,668
Total Assets	\$17,447	\$16,741
Liabilities		
Current liabilities:		
Accounts payable, trade	\$ 1,898	\$ 1,455
Accrued compensation and retirement costs	459	456
Taxes, including income taxes	282	147
Fair value of derivative contracts (O)	185	35
Other current liabilities (C)	412	707
Long-term debt due within one year (L & O)	16	21
Total current liabilities	3,252	2,821
Long-term debt, less amount due within one year (L & O)	1,388	1,424
Accrued pension benefits (N)	2,341	1,851
Accrued other postretirement benefits (N)	1,100	1,166
Asset retirement obligations (Q)	617	604
Environmental remediation (R)	258	264
Fair value of derivative contracts (O)	1,105	234
Noncurrent income taxes (P)	309	310
Other noncurrent liabilities and deferred credits (S)	279	370
Total liabilities	10,649	9,044
Contingencies and commitments (R)		
Equity		
Alcoa Corporation shareholders' equity:		
Common stock (M)	2	2
Additional capital	9,590	9,531
Retained earnings (deficit)	113	(104)
Accumulated other comprehensive loss (G)	(5,182)	(3,775)
Total Alcoa Corporation shareholders' equity	4,523	5,654
Noncontrolling interest (A)	2,275	2,043
Total equity	6,798	7,697
Total Liabilities and Equity	\$17,447	\$16,741

The accompanying notes are an integral part of the consolidated financial statements.

Alcoa Corporation and subsidiaries
Statement of Consolidated Cash Flows
(in millions)

For the year ended December 31,	2017	2016	2015
Cash from Operations			
Net income (loss)	\$ 559	\$ (346)	\$ (739)
Adjustments to reconcile net income (loss) to cash from operations:			
Depreciation, depletion, and amortization	752	718	780
Deferred income taxes (P)	176	(46)	86
Equity earnings, net of dividends (H)	9	48	158
Restructuring and other charges (D)	309	318	983
Net gain from investing activities—asset sales (S)	(116)	(164)	(32)
Net periodic pension benefit cost (N)	111	66	67
Stock-based compensation (M)	24	28	35
Other	32	(16)	41
Changes in assets and liabilities, excluding effects of acquisitions, divestitures, and foreign currency translation adjustments:			
(Increase) Decrease in receivables	(118)	(234)	130
(Increase) Decrease in inventories	(238)	1	212
Decrease (Increase) in prepaid expenses and other current assets	43	(52)	58
Increase (Decrease) in accounts payable, trade	377	6	(156)
(Decrease) in accrued expenses	(563)	(320)	(311)
Increase (Decrease) in taxes, including income taxes	111	(148)	(32)
Pension contributions (N)	(106)	(66)	(69)
(Increase) in noncurrent assets (R)	(99)	(184)	(356)
(Decrease) Increase in noncurrent liabilities	(39)	80	20
Cash provided from (used for) operations	1,224	(311)	875
Financing Activities			
Net transfers from (to) former parent company	-	802	(34)
Cash paid to former parent company related to separation (A)	(247)	(1,072)	-
Net change in short-term borrowings (original maturities of three months or less)	7	(4)	-
Additions to debt (original maturities greater than three months)	21	-	-
Payments on debt (original maturities greater than three months) (L)	(60)	(34)	(24)
Proceeds from the exercise of employee stock options (M)	43	10	-
Contributions from noncontrolling interest (A)	80	48	2
Distributions to noncontrolling interest	(342)	(233)	(106)
Other	(8)	-	-
Cash used for financing activities	(506)	(483)	(162)
Investing Activities			
Capital expenditures	(405)	(404)	(391)
Proceeds from the sale of assets and businesses (C)	245	112	70
Additions to investments (H)	(66)	(3)	(63)
Sales of investments (H)	-	146	-
Net change in restricted cash (L)	-	1,226	-
Cash (used for) provided from investing activities	(226)	1,077	(384)
Effect of exchange rate changes on cash and cash equivalents	13	13	(38)
Net change in cash and cash equivalents	505	296	291
Cash and cash equivalents at beginning of year	853	557	266
Cash and cash equivalents at end of year	\$1,358	\$ 853	\$ 557

The accompanying notes are an integral part of the consolidated financial statements.

Alcoa Corporation and subsidiaries
Statement of Changes in Consolidated Equity
(in millions)

	Alcoa Corporation shareholders						
	Parent Company net investment	Common stock	Additional capital	Retained (deficit) earnings	Accumulated other compre- hensive loss	Noncontrolling interest	Total equity
Balance at December 31, 2014	\$11,915	\$ -	\$ -	\$ -	\$(1,316)	\$2,474	\$13,073
Net (loss) income	(863)	-	-	-	-	124	(739)
Other comprehensive loss (G)	-	-	-	-	(284)	(421)	(705)
Change in Parent Company net investment	(10)	-	-	-	-	-	(10)
Contributions (A)	-	-	-	-	-	2	2
Distributions	-	-	-	-	-	(106)	(106)
Other	-	-	-	-	-	(2)	(2)
Balance at December 31, 2015	11,042	-	-	-	(1,600)	2,071	11,513
Net (loss) income	(296)	-	-	(104)	-	54	(346)
Other comprehensive (loss) income (G)	-	-	-	-	(335)	106	(229)
Establishment of additional defined benefit plans (N)	176	-	-	-	(2,704)	-	(2,528)
Change in Parent Company net investment	(603)	-	-	-	-	-	(603)
Cash provided at separation to Parent Company (A)	(1,072)	-	-	-	-	-	(1,072)
Separation-related adjustments (A)	(9,247)	-	9,521	-	864	-	1,138
Issuance of common stock (M)	-	2	(2)	-	-	-	-
Stock-based compensation (M)	-	-	2	-	-	-	2
Common stock issued: compensation plans (M)	-	-	10	-	-	-	10
Contributions (A)	-	-	-	-	-	48	48
Distributions	-	-	-	-	-	(233)	(233)
Other	-	-	-	-	-	(3)	(3)
Balance at December 31, 2016	-	2	9,531	(104)	(3,775)	2,043	7,697
Net income	-	-	-	217	-	342	559
Other comprehensive (loss) income (G)	-	-	-	-	(1,407)	155	(1,252)
Stock-based compensation (M)	-	-	24	-	-	-	24
Common stock issued: compensation plans (M)	-	-	43	-	-	-	43
Contributions (A)	-	-	-	-	-	80	80
Distributions	-	-	-	-	-	(342)	(342)
Other	-	-	(8)	-	-	(3)	(11)
Balance at December 31, 2017	\$ -	\$2	\$9,590	\$ 113	\$(5,182)	\$2,275	\$ 6,798

The accompanying notes are an integral part of the consolidated financial statements.

Alcoa Corporation and subsidiaries
Notes to the Consolidated Financial Statements
(dollars in millions, except per-share amounts; metric tons in thousands (kmt))

A. Basis of Presentation

Alcoa Corporation (or the “Company”) is a vertically integrated aluminum company comprised of bauxite mining, alumina refining, aluminum production (smelting, casting, and rolling), and energy generation. The Company has more than 40 operating locations (through direct and indirect ownership) in 10 countries around the world, situated primarily in Australia, Brazil, Canada, Europe, and the United States.

References in these Notes to “ParentCo” refer to Alcoa Inc., a Pennsylvania corporation, and its consolidated subsidiaries (through October 31, 2016, at which time was renamed Arconic Inc. (Arconic)).

Separation Transaction. On September 28, 2015, ParentCo’s Board of Directors preliminarily approved a plan to separate ParentCo into two standalone, publicly-traded companies (the “Separation Transaction”). One company, later named Alcoa Corporation, was to include the Alumina and Primary Metals segments, which comprised the bauxite mining, alumina refining, aluminum production, and energy operations of ParentCo, as well as the Warrick, Indiana rolling operations and the 25.1% equity interest in the rolling mill at the joint venture in Saudi Arabia, both of which were part of ParentCo’s Global Rolled Products segment. ParentCo was to continue to own the operations that comprise the Global Rolled Products (except for the aforementioned rolling operations that were to be included in Alcoa Corporation), Engineered Products and Solutions, and Transportation and Construction Solutions segments.

The Separation Transaction was subject to a number of conditions, including, but not limited to: final approval by ParentCo’s Board of Directors (see below); the continuing validity of the private letter ruling from the Internal Revenue Service regarding certain U.S. federal income tax matters relating to the transaction; receipt of an opinion of legal counsel regarding the qualification of the distribution, together with certain related transactions, as a transaction that is generally tax-free for U.S. federal income tax purposes; and the U.S. Securities and Exchange Commission (the “SEC”) declaring effective a Registration Statement on Form 10, as amended, filed with the SEC on October 11, 2016 (effectiveness was declared by the SEC on October 17, 2016).

On September 29, 2016, ParentCo’s Board of Directors approved the completion of the Separation Transaction by means of a pro rata distribution by ParentCo of 80.1% of the outstanding common stock of Alcoa Corporation to ParentCo shareholders of record as of the close of business on October 20, 2016 (the “Record Date”). Arconic was to retain the remaining 19.9% of Alcoa Corporation common stock. At the time of the Separation Transaction, ParentCo shareholders were to receive one share of Alcoa Corporation common stock for every three shares of ParentCo common stock held as of the close of business on the Record Date. ParentCo shareholders were to receive cash in lieu of fractional shares.

In connection with the Separation Transaction, as of October 31, 2016, Alcoa Corporation entered into certain agreements with Arconic to implement the legal and structural separation between the two companies, govern the relationship between Alcoa Corporation and Arconic after the completion of the Separation Transaction, and allocate between Alcoa Corporation and Arconic various assets, liabilities and obligations, including, among other things, employee benefits, environmental liabilities, intellectual property, and tax-related assets and liabilities. These agreements included a Separation and Distribution Agreement, Tax Matters Agreement, Employee Matters Agreement, Transition Services Agreement, certain Patent, Know-How, Trade Secret License and Trademark License Agreements, and Stockholder and Registration Rights Agreement.

On November 1, 2016 (the “Separation Date”), the Separation Transaction was completed and became effective at 12:01 a.m. Eastern Standard Time. To effect the Separation Transaction, ParentCo undertook a series of transactions to separate the net assets and certain legal entities of ParentCo, resulting in a cash payment of \$1,072 to ParentCo by Alcoa Corporation (an additional \$247 was paid to Arconic by Alcoa Corporation in 2017, including \$243 associated

with the sale of certain of the Company's energy operations —see Note C) with the net proceeds of a previous debt offering (see Note L). In conjunction with the Separation Transaction, 146,159,428 shares of Alcoa Corporation common stock were distributed to ParentCo shareholders. Additionally, Arconic retained 36,311,767 shares of Alcoa Corporation common stock representing its 19.9% retained interest (Arconic sold all of these shares in 2017). "Regular-way" trading of Alcoa Corporation's common stock began with the opening of the New York Stock Exchange on November 1, 2016 under the ticker symbol "AA." Alcoa Corporation's common stock has a par value of \$0.01 per share.

ParentCo incurred costs to evaluate, plan, and execute the Separation Transaction, and Alcoa Corporation was allocated a pro rata portion of those costs based on segment revenue (see Cost Allocations below). ParentCo recognized \$152 from January 2016 through October 2016 and \$24 in 2015 for costs related to the Separation Transaction, of which \$68 and \$12, respectively, was allocated to Alcoa Corporation. The allocated amounts were included in Selling, general administrative, and other expenses on the accompanying Statement of Consolidated Operations.

Basis of Presentation. The Consolidated Financial Statements of Alcoa Corporation are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) and require management to make certain judgments, estimates, and assumptions. These may affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. They also may affect the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates upon subsequent resolution of identified matters.

Principles of Consolidation. The Consolidated Financial Statements of Alcoa Corporation include the accounts of Alcoa Corporation and companies in which Alcoa Corporation has a controlling interest, including those that comprise the Alcoa World Alumina & Chemicals (AWAC) joint venture (see below). Intercompany transactions have been eliminated. The equity method of accounting is used for investments in affiliates and other joint ventures over which Alcoa Corporation has significant influence but does not have effective control. Investments in affiliates in which Alcoa Corporation cannot exercise significant influence are accounted for on the cost method.

AWAC is an unincorporated global joint venture between Alcoa Corporation and Alumina Limited of Australia (Alumina Limited) and consists of several affiliated operating entities, which own, or have an interest in, or operate the bauxite mines and alumina refineries within Alcoa Corporation's Bauxite and Alumina segments (except for the Poços de Caldas mine and refinery and a portion of the São Luís refinery, all in Brazil) and the Portland smelter in Australia. Alcoa Corporation owns 60% and Alumina Limited owns 40% of these individual entities, which are consolidated by the Company for financial reporting purposes and include Alcoa of Australia Limited (AofA), Alcoa World Alumina LLC (AWA), and Alcoa World Alumina Brasil Ltda. (AWAB). Alumina Limited's interest in the equity of such entities is reflected as Noncontrolling interest on the accompanying Consolidated Balance Sheet. In 2017, 2016, and 2015, AWAC received \$80, \$48, and \$2, respectively, in contributions from Alumina Limited.

Management evaluates whether an Alcoa Corporation entity or interest is a variable interest entity and whether Alcoa Corporation is the primary beneficiary. Consolidation is required if both of these criteria are met. Alcoa Corporation does not have any variable interest entities requiring consolidation.

Prior to the Separation Date, Alcoa Corporation did not operate as a separate, standalone entity. Alcoa Corporation's operations were included in ParentCo's financial results. Accordingly, for all periods prior to the Separation Date, the accompanying Consolidated Financial Statements were prepared from ParentCo's historical accounting records and were presented on a standalone basis as if Alcoa Corporation's operations had been conducted independently from ParentCo. Such Consolidated Financial Statements include the historical operations that were considered to comprise Alcoa Corporation's businesses, as well as certain assets and liabilities that were historically held at ParentCo's corporate level but were specifically identifiable or otherwise attributable to Alcoa Corporation. ParentCo's net investment in these operations is reflected as Parent Company net investment on the accompanying Consolidated Financial Statements. All significant transactions and accounts within Alcoa Corporation have been eliminated. All

significant intercompany transactions between ParentCo and Alcoa Corporation were included within Parent Company net investment on the accompanying Consolidated Financial Statements.

Cost Allocations. The description and information on cost allocations is applicable for all periods included in the accompanying Consolidated Financial Statements prior to the Separation Date.

The Consolidated Financial Statements of Alcoa Corporation include general corporate expenses of ParentCo that were not historically charged to Alcoa Corporation for certain support functions that were provided on a centralized basis, such as expenses related to finance, audit, legal, information technology, human resources, communications, compliance, facilities, employee benefits and compensation, and research and development activities. These general corporate expenses were included on the accompanying Statement of Consolidated Operations within Cost of goods sold, Selling, general administrative and other expenses, and Research and development expenses. These expenses were allocated to Alcoa Corporation on the basis of direct usage when identifiable, with the remainder allocated based on Alcoa Corporation's segment revenue as a percentage of ParentCo's total segment revenue for both Alcoa Corporation and Arconic.

All external debt not directly attributable to Alcoa Corporation was excluded from Alcoa Corporation's Consolidated Balance Sheet. Financing costs related to these debt obligations were allocated to Alcoa Corporation based on the ratio of capital invested in Alcoa Corporation to the total capital invested by ParentCo in both Alcoa Corporation and Arconic, and were included on the accompanying Statement of Consolidated Operations within Interest expense.

The following table reflects the allocations described above:

	2016	2015
Cost of goods sold ⁽¹⁾	\$ 40	\$ 93
Selling, general administrative, and other expenses ⁽²⁾	150	146
Research and development expenses	2	17
Provision for depreciation, depletion, and amortization	18	22
Restructuring and other charges ⁽³⁾	1	32
Interest expense	198	245
Other (income) expenses, net	\$ (7)	\$ 12

⁽¹⁾ Allocation principally relates to expenses for ParentCo's retained pension and other postretirement benefits associated with closed and sold operations.

⁽²⁾ Allocation includes costs incurred by ParentCo associated with the Separation Transaction (see Separation Transaction above).

⁽³⁾ Allocation primarily relates to layoff programs for ParentCo corporate employees.

Management believes the assumptions regarding the allocation of ParentCo's general corporate expenses and financing costs were reasonable.

Nevertheless, the Consolidated Financial Statements of Alcoa Corporation may not include all of the actual expenses that would have been incurred and may not reflect Alcoa Corporation's consolidated results of operations, financial position, and cash flows had it been a standalone company during the periods prior to the Separation Date. Actual costs that would have been incurred if Alcoa Corporation had been a standalone company would depend on multiple factors, including organizational structure, capital structure, and strategic decisions made in various areas, including information technology and infrastructure. Transactions between Alcoa Corporation and ParentCo, including sales to Arconic, were included as related party transactions on the Consolidated Financial Statements and are considered to be effectively settled for cash at the time the transaction was recorded. The total net effect of the settlement of these transactions is reflected on the accompanying Statement of Consolidated Cash Flows as a financing activity and on Alcoa Corporation's Consolidated Balance Sheet as Parent Company net investment.

Cash Management. The description and information on cash management is applicable for all periods included in the Consolidated Financial Statements prior to the Separation Date.

Cash was managed centrally with certain net earnings reinvested locally and working capital requirements met from existing liquid funds. Accordingly, the cash and cash equivalents held by ParentCo at the corporate level were not attributed to Alcoa Corporation for any of the periods prior to the Separation Date. Only cash amounts specifically attributable to Alcoa Corporation were reflected in the Company's Consolidated Balance Sheet. Transfers of cash, both to and from ParentCo's centralized cash management system, were reflected as a component of Parent Company net investment on Alcoa Corporation's Consolidated Balance Sheet and as a financing activity on the accompanying Consolidated Statement of Cash Flows.

ParentCo had an arrangement with several financial institutions to sell certain customer receivables without recourse on a revolving basis. The sale of such receivables was completed through the use of a bankruptcy-remote special-purpose entity, which was a consolidated subsidiary of ParentCo. In connection with this arrangement, certain of Alcoa Corporation's customer receivables were sold on a revolving basis to this bankruptcy-remote subsidiary of ParentCo; these sales were reflected as a component of Parent Company net investment on Alcoa Corporation's Consolidated Balance Sheet.

ParentCo participated in several accounts payable settlement arrangements with certain vendors and third-party intermediaries. These arrangements provided that, at the vendor's request, the third-party intermediary advance the amount of the scheduled payment to the vendor, less an appropriate discount, before the scheduled payment date and ParentCo made payment to the third-party intermediary on the date stipulated in accordance with the commercial terms negotiated with its vendors. In connection with these arrangements, certain of Alcoa Corporation's accounts payable were settled, at the vendor's request, before the scheduled payment date; these settlements were reflected as a component of Parent Company net investment on Alcoa Corporation's Consolidated Balance Sheet.

Related Party Transactions. Alcoa Corporation buys products from and sells products to various related companies, consisting of entities in which Alcoa Corporation retains a 50% or less equity interest, at negotiated prices between the two parties. These transactions were not material to the financial position or results of operations of Alcoa Corporation for all periods presented.

Transactions between Alcoa Corporation and Arconic have been presented as related party transactions on the accompanying Consolidated Financial Statements. Sales to Arconic from Alcoa Corporation were \$864, \$958, and \$1,078 in 2017, 2016, and 2015, respectively. As of December 31, 2017 and 2016, outstanding receivables from Arconic were \$84 and \$67, respectively, and were included in Receivables from customers on the accompanying Consolidated Balance Sheet.

B. Summary of Significant Accounting Policies

Cash Equivalents. Cash equivalents are highly liquid investments purchased with an original maturity of three months or less.

Inventory Valuation. Inventories are carried at the lower of cost or market, with cost for a substantial portion of U.S. inventories and a small portion of Canadian inventories determined under the last-in, first-out (LIFO) method. The cost of other inventories is principally determined under the average-cost method.

Properties, Plants, and Equipment. Properties, plants, and equipment are recorded at cost. Also, interest related to the construction of qualifying assets is capitalized as part of the construction costs. Depreciation is recorded principally on the straight-line method at rates based on the estimated useful lives of the assets. For greenfield assets, which refer to the construction of new assets on undeveloped land, the units of production method is used to record depreciation. These assets require a significant period (generally greater than one-year) to ramp-up to full production capacity. As a result, the units of production method is deemed a more systematic and rational method for recognizing depreciation on these assets. Depreciation is recorded on temporarily idled facilities until such time management approves a permanent

closure. The following table details the weighted-average useful lives of structures and machinery and equipment by type of operation (numbers in years):

Segment	Structures	Machinery and equipment
Bauxite mining	35	17
Alumina refining	30	28
Aluminum smelting and casting	36	22
Energy generation	33	25
Aluminum rolling	31	17

Repairs and maintenance are charged to expense as incurred. Gains or losses from the sale of assets are generally recorded in Other (income) expenses, net.

Properties, plants, and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets (asset group) may not be recoverable. Recoverability of assets is determined by comparing the estimated undiscounted net cash flows of the operations related to the assets (asset group) to their carrying amount. An impairment loss would be recognized when the carrying amount of the assets (asset group) exceeds the estimated undiscounted net cash flows. The amount of the impairment loss to be recorded is calculated as the excess of the carrying value of the assets (asset group) over their fair value, with fair value determined using the best information available, which generally is a discounted cash flow (DCF) model. The determination of what constitutes an asset group, the associated estimated undiscounted net cash flows, and the estimated useful lives of assets also require significant judgments.

Equity Investments. Alcoa Corporation invests in a number of privately-held companies, primarily through joint ventures and consortia, which are accounted for using the equity method. The equity method is applied in situations where Alcoa Corporation has the ability to exercise significant influence, but not control, over the investee. Management reviews equity investments for impairment whenever certain indicators are present suggesting that the carrying value of an investment is not recoverable. This analysis requires a significant amount of judgment from management to identify events or circumstances indicating that an equity investment is impaired. The following items are examples of impairment indicators: significant, sustained declines in an investee's revenue, earnings, and cash flow trends; adverse market conditions of the investee's industry or geographic area; the investee's ability to continue operations measured by several items, including liquidity; and other factors. Once an impairment indicator is identified, management uses considerable judgment to determine if the impairment is other than temporary, in which case the equity investment is written down to its estimated fair value. An impairment that is other than temporary could significantly and adversely impact reported results of operations.

Deferred Mining Costs. Alcoa Corporation recognizes deferred mining costs during the development stage of a mine life cycle. Such costs include the construction of access and haul roads, detailed drilling and geological analysis to further define the grade and quality of the known bauxite, and overburden removal costs. These costs relate to sections of the related mines where Alcoa Corporation is either currently extracting bauxite or is preparing for production in the near term. These sections are outlined and planned incrementally and generally are mined over periods ranging from one to five years, depending on mine specifics. The amount of geological drilling and testing necessary to determine the economic viability of the bauxite deposit being mined is such that the reserves are considered to be proven, and the mining costs are amortized based on this level of reserves. Deferred mining costs are included in Other noncurrent assets on the accompanying Consolidated Balance Sheet.

Goodwill and Other Intangible Assets. Goodwill is not amortized; it is instead reviewed for impairment annually (in the fourth quarter) or more frequently if indicators of impairment exist or if a decision is made to sell or exit a business. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include, among others, deterioration in general economic conditions, negative developments in equity and credit markets, adverse changes in the markets in which an entity operates, increases in input costs that have a negative effect on earnings and cash flows, or a trend of negative or declining cash flows over multiple periods. The fair value that could be realized in an actual transaction may differ from that used to evaluate goodwill for impairment.

Goodwill is allocated among and evaluated for impairment at the reporting unit level, which is defined as an operating segment or one level below an operating segment. Alcoa Corporation has five reporting units, of which three are included in the Aluminum segment (smelting/casting, energy generation, and rolling operations). The remaining two reporting units are the Bauxite and Alumina segments. Of these five reporting units, only Bauxite and Alumina contain goodwill. As of December 31, 2017, the carrying value of the goodwill for Bauxite and Alumina was \$51 and \$103, respectively. These amounts include an allocation of goodwill held at the corporate level (see Note K). Prior to 2017, the Company had six reporting units equivalent to its then six operating segments as follows: Bauxite, Alumina, Aluminum, Cast Products, Energy, and Rolled Products. In early 2017, management initiated a realignment of the Company's internal business and organizational structure resulting in a change to Alcoa Corporation's operating segments and reporting units (see Note E). Of the previous six reporting units, only Bauxite and Alumina contained goodwill.

In reviewing goodwill for impairment, an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (greater than 50%) that the estimated fair value of a reporting unit is less than its carrying amount. If an entity elects to perform a qualitative assessment and determines that an impairment is more likely than not, the entity is then required to perform the existing two-step quantitative impairment test (described below), otherwise no further analysis is required. An entity also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. The ultimate outcome of the goodwill impairment review for a reporting unit should be the same whether an entity chooses to perform the qualitative assessment or proceeds directly to the two-step quantitative impairment test.

Alcoa Corporation's policy for its annual review of goodwill is to perform the qualitative assessment for all reporting units not subjected directly to the two-step quantitative impairment test. Generally, management will proceed directly to the two-step quantitative impairment test for each of its two reporting units that contain goodwill at least once during every three-year period, as part of its annual review of goodwill.

Under the qualitative assessment, various events and circumstances (or factors) that would affect the estimated fair value of a reporting unit are identified (similar to impairment indicators above). These factors are then classified by the type of impact they would have on the estimated fair value using positive, neutral, and adverse categories based on current business conditions. Additionally, an assessment of the level of impact that a particular factor would have on the estimated fair value is determined using high, medium, and low weighting. Furthermore, management considers the results of the most recent two-step quantitative impairment test completed for a reporting unit and compares the weighted average cost of capital (WACC) between the current and prior years for each reporting unit.

During the 2017 annual review of goodwill, management performed the qualitative assessment for the Bauxite and Alumina reporting units. Management concluded it was not more likely than not that the respective estimated fair value of these reporting units was less than the respective carrying value. As such, no further analysis was required.

Under the two-step quantitative impairment test, the evaluation of impairment involves comparing the current fair value of each reporting unit to its carrying value, including goodwill. Alcoa Corporation uses a DCF model to estimate the current fair value of its reporting units when testing for impairment, as management believes forecasted cash flows are the best indicator of such fair value. A number of significant assumptions and estimates are involved in the application of the DCF model to forecast operating cash flows, including markets and market share, sales volumes and prices, production costs, tax rates, capital spending, discount rate, and working capital changes. Certain of these assumptions can vary significantly among the reporting units. Cash flow forecasts are generally based on approved business unit operating plans for the early years and historical relationships in later years. The betas used in calculating the individual reporting units' WACC rate are estimated for each business with the assistance of valuation experts.

In the event the estimated fair value of a reporting unit per the DCF model is less than the carrying value, additional analysis would be required. The additional analysis would compare the carrying amount of the reporting unit's goodwill with the implied fair value of that goodwill, which may involve the use of valuation experts. The implied fair

value of goodwill is the excess of the fair value of the reporting unit over the fair value amounts assigned to all of the assets and liabilities of that unit as if the reporting unit was acquired in a business combination and the fair value of the reporting unit represented the purchase price. If the carrying value of goodwill exceeds its implied fair value, an impairment loss equal to such excess would be recognized.

Management last proceeded directly to the two-step quantitative impairment test for the Alumina reporting unit in 2016 and will do so for the Bauxite reporting unit in 2018. In 2016, the estimated fair value of the Alumina reporting unit was substantially in excess of its carrying value, resulting in no impairment. Additionally, in all prior years presented, there have been no triggering events that necessitated an impairment test for either the Bauxite or Alumina reporting units.

Intangible assets with finite useful lives are amortized generally on a straight-line basis over the periods benefited. The following table details the weighted-average useful lives of software and other intangible assets by type of operation (numbers in years):

Segment	Software	Other intangible assets
Bauxite mining	9	10
Alumina refining	6	20
Aluminum smelting and casting	5	36
Energy generation	3	29
Aluminum rolling	4	20

Asset Retirement Obligations. Alcoa Corporation recognizes asset retirement obligations (AROs) related to legal obligations associated with the standard operation of bauxite mines, alumina refineries, and aluminum smelters. These AROs consist primarily of costs associated with mine reclamation, closure of bauxite residue areas, spent pot lining disposal, and landfill closure. Alcoa Corporation also recognizes AROs for any significant lease restoration obligation, if required by a lease agreement, and for the disposal of regulated waste materials related to the demolition of certain power facilities. The fair values of these AROs are recorded on a discounted basis, at the time the obligation is incurred, and accreted over time for the change in present value. Additionally, Alcoa Corporation capitalizes asset retirement costs by increasing the carrying amount of the related long-lived assets and depreciating these assets over their remaining useful life.

Certain conditional asset retirement obligations (CAROs) related to alumina refineries, aluminum smelters, rolling mills, and energy generation facilities have not been recorded in the Consolidated Financial Statements due to uncertainties surrounding the ultimate settlement date. A CARO is a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are conditional on a future event that may or may not be within Alcoa Corporation's control. Such uncertainties exist as a result of the perpetual nature of the structures, maintenance and upgrade programs, and other factors. At the date a reasonable estimate of the ultimate settlement date can be made (e.g., planned demolition), Alcoa Corporation would record an ARO for the removal, treatment, transportation, storage, and/or disposal of various regulated assets and hazardous materials such as asbestos, underground and aboveground storage tanks, polychlorinated biphenyls (PCBs), various process residuals, solid wastes, electronic equipment waste, and various other materials. Such amounts may be material to the Consolidated Financial Statements in the period in which they are recorded.

Environmental Matters. Expenditures for current operations are expensed or capitalized, as appropriate. Expenditures relating to existing conditions caused by past operations, which will not contribute to future revenues, are expensed. Liabilities are recorded when remediation costs are probable and can be reasonably estimated. The liability may include costs such as site investigations, consultant fees, feasibility studies, outside contractors, and monitoring expenses. Estimates are generally not discounted or reduced by potential claims for recovery, which are recognized as agreements are reached with third parties. The estimates also include costs related to other potentially responsible parties to the extent that Alcoa Corporation has reason to believe such parties will not fully pay their proportionate share. The liability is continuously reviewed and adjusted to reflect current remediation progress, prospective estimates of required activity, and other factors that may be relevant, including changes in technology or regulations.

Litigation Matters. For asserted claims and assessments, liabilities are recorded when an unfavorable outcome of a matter is deemed to be probable and the loss is reasonably estimable. Management determines the likelihood of an unfavorable outcome based on many factors such as, among others, the nature of the matter, available defenses and case strategy, progress of the matter, views and opinions of legal counsel and other advisors, applicability and success of appeals processes, and the outcome of similar historical matters. Once an unfavorable outcome is deemed probable, management weighs the probability of estimated losses, and the most reasonable loss estimate is recorded. If an unfavorable outcome of a matter is deemed to be reasonably possible, then the matter is disclosed and no liability is recorded. With respect to unasserted claims or assessments, management must first determine that the probability that an assertion will be made is likely, then, a determination as to the likelihood of an unfavorable outcome and the ability to reasonably estimate the potential loss is made. Legal matters are reviewed on a continuous basis to determine if there has been a change in management's judgment regarding the likelihood of an unfavorable outcome or the estimate of a potential loss.

Revenue Recognition. Alcoa Corporation recognizes revenue when title, ownership, and risk of loss pass to the customer, all of which occurs upon shipment or delivery of the product and is based on the applicable shipping terms. The shipping terms vary across all businesses and depend on the product, the country of origin, and the type of transportation (truck, train, or vessel). Alcoa Corporation periodically enters into long-term supply contracts with alumina and aluminum customers and receives advance payments for product to be delivered in future periods. These advance payments are recorded as deferred revenue, and revenue is recognized as shipments are made and title, ownership, and risk of loss pass to the customer during the term of the contracts. Deferred revenue is included in Other current liabilities and Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet.

Stock-Based Compensation. For all periods prior to the Separation Date, employees attributable to Alcoa Corporation operations participated in ParentCo's stock-based compensation plans. The compensation expense recorded by Alcoa Corporation included the expense associated with these employees, as well as the expense associated with the allocation of stock-based compensation expense for ParentCo's corporate employees. Beginning on the Separation Date and forward, Alcoa Corporation recorded stock-based compensation expense for all of the Company's employees. The following accounting policy describes how stock-based compensation expense is initially determined for both Alcoa Corporation and ParentCo.

Compensation expense for employee equity grants is recognized using the non-substantive vesting period approach, in which the expense (net of estimated forfeitures) is recognized ratably over the requisite service period based on the grant date fair value. The fair value of new stock options is estimated on the date of grant using a lattice-pricing model. Determining the fair value of stock options at the grant date requires judgment, including estimates for the average risk-free interest rate, dividend yield, volatility, annual forfeiture rate, and exercise behavior. These assumptions may differ significantly between grant dates because of changes in the actual results of these inputs that occur over time.

Most plan participants can choose whether to receive their award in the form of stock options, stock awards, or a combination of both. This choice is made before the grant is issued and is irrevocable.

Pension and Other Postretirement Benefit Plans. For all periods prior to August 1, 2016 (see below), certain employees attributable to Alcoa Corporation operations participated in defined benefit pension and other postretirement benefit plans (the "Shared Plans") sponsored by ParentCo, which also included participants attributable to non-Alcoa Corporation operations. Alcoa Corporation accounted for these Shared Plans as multiemployer benefit plans. Accordingly, Alcoa Corporation did not record an asset or liability to recognize the funded status of the Shared Plans. However, the related expense recorded by Alcoa Corporation was based primarily on pensionable compensation and estimated interest costs related to employees attributable to Alcoa Corporation operations.

Prior to the Separation Date, certain other plans that were entirely attributable to employees of Alcoa Corporation-related operations (the "Direct Plans") were accounted for as defined benefit pension and other postretirement benefit plans. Accordingly, the funded and unfunded position of each Direct Plan was recorded in the Consolidated Balance

Sheet. Actuarial gains and losses that had not yet been recognized through earnings were recorded in accumulated other comprehensive income, net of taxes, until they were amortized as a component of net periodic benefit cost. The determination of benefit obligations and recognition of expenses related to the Direct Plans is dependent on various assumptions. The major assumptions primarily relate to discount rates, long-term expected rates of return on plan assets, and future compensation increases. ParentCo's management developed each assumption using relevant company experience in conjunction with market-related data for each individual location in which such plans exist.

In preparation for the Separation Transaction, effective August 1, 2016, certain of the Shared Plans were separated into standalone plans for both Alcoa Corporation and ParentCo (see Note N). Additionally, certain of the other remaining Shared Plans were assumed by Alcoa Corporation (See Note N). Accordingly, beginning on August 1, 2016 and forward, the standalone plans and assumed plans were accounted for as defined benefit pension and other postretirement plans. Additionally, the Direct Plans continued to be accounted for as defined benefit pension and other postretirement plans.

Derivatives and Hedging. Derivatives are held for purposes other than trading and are part of a formally documented risk management program. For derivatives designated as fair value hedges, Alcoa Corporation measures hedge effectiveness by formally assessing, at inception and at least quarterly, the historical high correlation of changes in the fair value of the hedged item and the derivative hedging instrument. For derivatives designated as cash flow hedges, Alcoa Corporation measures hedge effectiveness by formally assessing, at inception and at least quarterly, the probable high correlation of the expected future cash flows of the hedged item and the derivative hedging instrument. The ineffective portions of both types of hedges are recorded in Sales or Other (income) expenses, net in the current period. If the hedging relationship ceases to be highly effective or it becomes probable that an expected transaction will no longer occur, future gains or losses on the derivative instrument are recorded in Other (income) expenses, net.

Alcoa Corporation accounts for hedges of firm customer commitments for aluminum as fair value hedges. As a result, the fair values of the derivatives and changes in the fair values of the underlying hedged items are reported as assets and liabilities in the Consolidated Balance Sheet. Changes in the fair values of these derivatives and underlying hedged items generally offset and are recorded each period in Sales, consistent with the underlying hedged item.

Alcoa Corporation accounts for hedges of foreign currency exposures and certain forecasted transactions as cash flow hedges. The fair values of the derivatives are recorded as assets and liabilities in the Consolidated Balance Sheet. The effective portions of the changes in the fair values of these derivatives are recorded in Other comprehensive (loss) income and are reclassified to Sales, Cost of goods sold, or Other (income) expenses, net in the period in which earnings are impacted by the hedged items or in the period that the transaction no longer qualifies as a cash flow hedge. These contracts cover the same periods as known or expected exposures, generally not exceeding five years.

If no hedging relationship is designated, the derivative is marked to market through Other (income) expenses, net.

Cash flows from derivatives are recognized in the Statement of Consolidated Cash Flows in a manner consistent with the underlying transactions.

Income Taxes. Beginning on the Separation Date and forward, the provision for income taxes was determined using the asset and liability approach of accounting for income taxes. Under this approach, the provision for income taxes represents income taxes paid or payable (or received or receivable) for the current year plus the change in deferred taxes during the year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid, and result from differences between the financial and tax bases of Alcoa Corporation's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted.

In all periods prior to the Separation Date, Alcoa Corporation's operations were included in the income tax filings of ParentCo. The provision for income taxes in Alcoa Corporation's Statement of Consolidated Operations was determined in the same manner described above, but on a separate return methodology as if the Company was a standalone taxpayer filing hypothetical income tax returns where applicable. Any additional accrued tax liability or

refund arising as a result of this approach was assumed to be immediately settled with ParentCo as a component of Parent Company net investment. Deferred tax assets were also determined in the same manner described above and were reflected in the Consolidated Balance Sheet for net operating losses, credits or other attributes to the extent that such attributes were expected to transfer to Alcoa Corporation upon the Separation Transaction. Any difference from attributes generated in a hypothetical return on a separate return basis was adjusted as a component of Parent Company net investment.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not (greater than 50%) that a tax benefit will not be realized. In evaluating the need for a valuation allowance, management considers all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as all available positive and negative evidence. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period, including from tax planning strategies, and Alcoa Corporation's experience with similar operations. Existing favorable contracts and the ability to sell products into established markets are additional positive evidence. Negative evidence includes items such as cumulative losses, projections of future losses, or carryforward periods that are not long enough to allow for the utilization of a deferred tax asset based on existing projections of income. Deferred tax assets for which no valuation allowance is recorded may not be realized upon changes in facts and circumstances, resulting in a future charge to establish a valuation allowance. Existing valuation allowances are re-examined under the same standards of positive and negative evidence. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released. Deferred tax assets and liabilities are also re-measured to reflect changes in underlying tax rates due to law changes and the granting and lapse of tax holidays.

Tax benefits related to uncertain tax positions taken or expected to be taken on a tax return are recorded when such benefits meet a more likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, which means that the statute of limitation has expired or the appropriate taxing authority has completed their examination even though the statute of limitations remains open. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized.

Foreign Currency. The local currency is the functional currency for Alcoa Corporation's significant operations outside the United States, except for certain operations in Canada and Iceland, where the U.S. dollar is used as the functional currency. The determination of the functional currency for Alcoa Corporation's operations is made based on the appropriate economic and management indicators.

Recently Adopted Accounting Guidance. On January 1, 2017, Alcoa Corporation adopted changes issued by the Financial Accounting Standards Board (FASB) to the subsequent measurement of inventory. Prior to these changes, an entity was required to measure its inventory at the lower of cost or market, whereby market can be replacement cost, net realizable value, or net realizable value less an approximately normal profit margin. The changes require that inventory be measured at the lower of cost and net realizable value, thereby eliminating the use of the other two market methodologies. Net realizable value is defined as the estimated selling prices in the ordinary course of business less reasonably predictable costs of completion, disposal, and transportation. These changes do not apply to inventories measured using LIFO (last-in, first-out) or the retail inventory method. Prior to these changes, Alcoa Corporation already applied the net realizable value market option to measure non-LIFO inventories at the lower of cost or market. The adoption of these changes had no impact on the Consolidated Financial Statements.

On January 1, 2017, Alcoa Corporation adopted changes issued by the FASB to derivative instruments designated as hedging instruments. These changes clarify that a change in the counterparty to a derivative instrument that has been designated as a hedging instrument does not, in and of itself, require de-designation of that hedging relationship provided that all other hedge accounting criteria continue to be met. The adoption of these changes had no immediate impact on the Consolidated Financial Statements; however, this guidance will need to be considered in the event the existing counterparty to any of Alcoa Corporation's derivative instruments changes to a new counterparty.

On January 1, 2017, Alcoa Corporation adopted changes issued by the FASB to equity method investments. These changes eliminate the requirement for an investor to adjust an equity method investment, results of operations, and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment had been held as a result of an increase in the level of ownership interest or degree of influence. Additionally, an entity that has an available-for-sale equity security that becomes qualified for the equity method of accounting must recognize through earnings the unrealized holding gain or loss in accumulated other comprehensive income at the date the investment becomes qualified for use of the equity method. The adoption of these changes had no immediate impact on the Consolidated Financial Statements; however, this guidance will need to be considered in the event any of Alcoa Corporation's investments undergo a change as previously described.

On January 1, 2017, Alcoa Corporation adopted changes issued by the FASB to employee share-based payment accounting. Prior to these changes, an entity must determine for each share-based payment award whether the difference between the deduction for tax purposes and the compensation cost recognized for financial reporting purposes results in either an excess tax benefit or a tax deficiency. Excess tax benefits are recognized in additional paid-in capital; tax deficiencies are recognized either as an offset to accumulated excess tax benefits, if any, or in the income statement. Excess tax benefits are not recognized until the deduction reduces taxes payable. The changes require all excess tax benefits and tax deficiencies related to share-based payment awards to be recognized as income tax expense or benefit in the income statement. The tax effects of exercised or vested awards should be treated as discrete items in the reporting period in which they occur. An entity also should recognize excess tax benefits regardless of whether the benefit reduces taxes payable in the current period. Additionally, the presentation of excess tax benefits related to share-based payment awards in the statement of cash flows is changed. Prior to these changes, excess tax benefits must be separated from other income tax cash flows and classified as a financing activity. The changes require excess tax benefits to be classified along with other income tax cash flows as an operating activity. Also, the changes require cash paid by an employer when directly withholding shares for tax-withholding purposes to be classified as a financing activity. Prior to these changes, there was no specific guidance on the classification in the statement of cash flows of cash paid by an employer to the tax authorities when directly withholding shares for tax-withholding purposes. Additionally, for a share-based award to qualify for equity classification it cannot partially settle in cash in excess of the employer's minimum statutory withholding requirements. The changes permit equity classification of share-based awards for withholdings up to the maximum statutory tax rates in applicable jurisdictions. The adoption of these changes had an immaterial impact on the Consolidated Financial Statements.

On January 1, 2017, Alcoa Corporation adopted changes issued by the FASB to consolidation accounting. Prior to these changes, an entity was required to consider indirect economic interests in a variable interest entity held through related parties under common control as direct interests in their entirety in the entity's assessment of whether it is the primary beneficiary of the variable interest entity. The changes result in an entity considering such indirect economic interests only on a proportionate basis as indirect interests instead of as direct interests in their entirety. The adoption of these changes had no impact on the Consolidated Financial Statements; however, this guidance will need to be considered in future assessments of whether Alcoa Corporation is the primary beneficiary of a variable interest entity.

Recently Issued Accounting Guidance. In January 2017, the FASB issued changes to accounting for business combinations. These changes clarify the definition of a business for the purposes of evaluating whether a particular transaction should be accounted for as an acquisition or disposal of a business or an asset. Generally, a business is an integrated set of assets and activities that contain inputs, processes, and outputs, although outputs are not required. These changes provide a "screen" to determine whether an integrated set of assets and activities qualifies as a business. If substantially all of the fair value of the gross assets is concentrated in a single identifiable asset or a group of similar identifiable assets, the definition of a business has not been met and the transaction should be accounted for as an acquisition or disposal of an asset. Otherwise, an entity is required to evaluate whether the integrated set of assets and activities include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output and are no longer to consider whether a market participant could replace any missing elements. These changes also narrow the definition of an output. Currently, an output is defined as the ability to provide a return in the form of dividends, lower costs, or other economic benefits directly to investors, owners, members, or participants. An output would now be defined as the ability to provide goods or services to customers, investment income, or other

revenues. These changes become effective for Alcoa Corporation on January 1, 2018. Management has determined that the adoption of these changes will not have an immediate impact on the Consolidated Financial Statements. This guidance will need to be considered in the event Alcoa Corporation acquires or disposes of an integrated set of assets and activities.

In January 2017, the FASB issued changes to the assessment of goodwill for impairment as it relates to the quantitative test. Currently, there are two steps when performing a quantitative impairment test. The first step requires an entity to compare the current fair value of a reporting unit to its carrying value. In the event the reporting unit's estimated fair value is less than its carrying value, an entity performs the second step, which is to compare the carrying amount of the reporting unit's goodwill with the implied fair value of that goodwill. The implied fair value of goodwill is the excess of the fair value of the reporting unit over the fair value amounts assigned to all of the assets and liabilities of that unit as if the reporting unit was acquired in a business combination and the fair value of the reporting unit represented the purchase price. If the carrying value of goodwill exceeds its implied fair value, an impairment loss equal to such excess would be recognized. These changes eliminate the second step of the quantitative impairment test. Accordingly, an entity would recognize an impairment of goodwill for a reporting unit, if under what is currently referred to as the first step, the estimated fair value of the reporting unit is less than the carrying value. The impairment would be equal to the excess of the reporting unit's carrying value over its fair value not to exceed the total amount of goodwill applicable to that reporting unit. These changes become effective for Alcoa Corporation on January 1, 2020. Management has determined that the adoption of these changes will not have an immediate impact on the Consolidated Financial Statements. This guidance will need to be considered each time Alcoa Corporation performs an assessment of goodwill for impairment under the quantitative test.

In March 2017, the FASB issued changes to the presentation of net periodic benefit cost related to pension and other postretirement benefit plans. These changes require that an entity report the service cost component of net periodic benefit cost in the same line item(s) on the statement of operations as other compensation costs arising from services rendered by the pertinent employees during a reporting period. The other components of net periodic benefit cost (see Note N) are required to be presented separately from the service cost component. In other words, these other components may be aggregated and presented as a separate line item or they may be included in existing line items on the statement of operations other than such line items that include the service cost component. Currently, Alcoa Corporation includes all components of net periodic benefit cost, except for certain settlements, curtailments, and special termination benefits related to severance programs, in Cost of goods sold (business employees) and Selling, general administrative, and other expenses (corporate employees) consistent with the location of other compensation costs related to the respective employees. The non-service cost components noted as exceptions are included in Restructuring and other charges, as applicable. Additionally, these changes only allow the service cost component to be capitalized as applicable (e.g., as a cost of internally manufactured inventory). These changes become effective for Alcoa Corporation on January 1, 2018. Other than changing the presentation of non-service cost components of net periodic benefit cost on the statement of operations and providing additional disclosure, management has determined that the adoption of these changes will not have a material impact on the Consolidated Financial Statements. Upon adoption of these changes, management intends to classify the non-service cost components of net periodic benefit cost, except for certain settlements, curtailments, and special termination benefits related to severance programs that will continue to be reported in Restructuring and other charges, in Other (income) expenses, net on the Company's Statement of Consolidated Operations. Had this change been adopted in 2017, Cost of goods sold and Selling, general administrative, and other expenses would be lower by \$81 and \$4, respectively, and Other income, net of \$58 would change to Other expenses, net of \$27 on the accompanying Statement of Consolidated Operations.

In May 2017, the FASB issued changes to the accounting for stock-based compensation when there has been a modification to the terms or conditions of a share-based payment award. These changes require an entity to account for the modification only when there has been a substantive change to the terms or conditions of a share-based payment award. A substantive change occurs when the fair value, vesting conditions or balance sheet classification (liability or equity) of a share-based payment award is/are different immediately before and after the modification. Currently, an entity is required to account for any modification in the terms or conditions of a share-based payment award. These changes become effective for Alcoa Corporation on January 1, 2018. Management has determined that the adoption of

these changes will not have an immediate impact on the Consolidated Financial Statements. Additionally, the Company will no longer account for any future non-substantive change to the terms or conditions of a share-based payment award as a modification.

In August 2017, the FASB issued changes to the accounting for hedging activities. These changes permit hedge accounting for risk components in hedging relationships involving nonfinancial risk and interest rate risk; reduce current limitations on the designation and measurement of a hedged item in a fair value hedge of interest rate risk; remove the requirement to separately measure and report hedge ineffectiveness; provide an election to systematically and rationally recognize in earnings the initial value of any amount excluded from the assessment of hedge effectiveness for all types of hedges; and ease the requirements of effectiveness testing. Additionally, modifications to existing disclosures, as well as additional disclosures, will be required to reflect these changes regarding the measurement and recording of hedging activities. These changes become effective for Alcoa Corporation on January 1, 2019 (early adoption is permitted). Management is currently evaluating early adopting these changes and the potential impact of these changes on the Consolidated Financial Statements.

In January 2016, the FASB issued changes to the accounting and reporting of certain equity investments. These changes require equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. However, an entity may choose to measure equity investments that do not have readily determinable fair values at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment of the same issuer. Additionally, the impairment assessment of equity investments without readily determinable fair values has been simplified by requiring a qualitative assessment to identify impairment. These changes become effective for Alcoa Corporation on January 1, 2018. Management has determined that the adoption of these changes will not have an impact on the Consolidated Financial Statements, as all of Alcoa Corporation's equity investments are accounted for under the equity method of accounting.

In February 2016, the FASB issued changes to the accounting and presentation of leases. These changes require lessees to recognize a right of use asset and lease liability on the balance sheet for all leases with terms longer than 12 months. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize a right of use asset and lease liability. Additionally, when measuring assets and liabilities arising from a lease, optional payments should be included only if the lessee is reasonably certain to exercise an option to extend the lease, exercise a purchase option, or not exercise an option to terminate the lease. These changes become effective for Alcoa Corporation on January 1, 2019. The Company has established a cross-functional project team to lead the implementation effort. This team has determined that the Company requires information systems updates and incremental software to effectively implement these changes. Accordingly, the Company has selected a software vendor and is in the early stages of implementing lease management software. Upon adoption of these changes, management does expect to record a right of use asset and lease liability on Alcoa Corporation's Consolidated Balance Sheet. While the precise amount of this asset and liability will not be known until closer to the adoption date, management estimates the amount to be less than 5% of both total assets and total liabilities. This estimate is based on Alcoa Corporation's Consolidated Balance Sheet and lease portfolio, both as of December 31, 2017.

In June 2016, the FASB added a new impairment model (known as the current expected credit loss (CECL) model) that is based on expected losses rather than incurred losses. Under the new guidance, an entity recognizes as an allowance its estimate of expected credit losses. The CECL model applies to most debt instruments, trade receivables, lease receivables, financial guarantee contracts, and other loan commitments. The CECL model does not have a minimum threshold for recognition of impairment losses and entities will need to measure expected credit losses on assets that have a low risk of loss. These changes become effective for Alcoa Corporation on January 1, 2020. Management is currently evaluating the potential impact of these changes on the Consolidated Financial Statements.

In both August and November 2016, the FASB issued changes to the presentation of a number of items in the statement of cash flows. Specifically, the changes identify nine specific cash flow items and the sections where they must be

presented within the statement of cash flows, including distributions received from equity method investees, proceeds from the settlement of insurance claims, and restricted cash. These changes become effective for Alcoa Corporation on January 1, 2018. Management has determined that the adoption of these changes will not have a material impact on the Consolidated Financial Statements.

In October 2016, the FASB issued changes to the accounting for intra-entity transactions, other than inventory. Currently, no immediate tax impact is recognized in an entity's financial statements as a result of intra-entity transfers of assets. An entity is precluded from reflecting a tax benefit or expense from an intra-entity asset transfer between entities that file separate tax returns, whether or not such entities are in different tax jurisdictions, until the asset has been sold to a third party or otherwise recovered. The buyer of such asset is prohibited from recognizing a deferred tax asset for the temporary difference arising from the excess of the buyer's tax basis over the cost to the seller. The changes require the current and deferred income tax consequences of the intra-entity transfer to be recorded when the transaction occurs. The exception to defer the tax consequences of inventory transactions is maintained. These changes become effective for Alcoa Corporation on January 1, 2018. Management has determined that the adoption of these changes will not have a material impact on the Consolidated Financial Statements.

In May 2014, the FASB issued changes to the recognition of revenue from contracts with customers. These changes created a comprehensive framework for all entities in all industries to apply in the determination of when to recognize revenue, and, therefore, supersede virtually all existing revenue recognition requirements and guidance. This framework is expected to result in less complex guidance in application while providing a consistent and comparable methodology for revenue recognition. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this principle, an entity should apply the following steps: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract(s), (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract(s), and (v) recognize revenue when, or as, the entity satisfies a performance obligation. In August 2015, the FASB deferred the effective date by one year, making these changes effective for Alcoa Corporation on January 1, 2018. Through a previously established project team, the Company completed a detailed review of the terms and provisions of its customer contracts by mid-2017. The project team then evaluated these contracts under the new guidance throughout the remainder of 2017 and concluded that Alcoa Corporation's revenue recognition practices are in compliance with these changes. Alcoa Corporation recognizes revenue when title, ownership, and risk of loss pass to the customer, all of which occurs upon shipment or delivery of the product and is based on the applicable shipping terms. Additionally, the sale of Alcoa Corporation's products to its customers represent single performance obligations. That said, the Company did make some minor modifications to its internal accounting policies and internal control structure to ensure that any future customer contracts that may have different terms and conditions of those that the Company has today are properly evaluated under the new guidance. As a result, management has determined that the adoption of these changes will not have a material impact on the Consolidated Financial Statements.

C. Acquisitions and Divestitures

In February 2017, Alcoa Corporation's wholly-owned subsidiary, Alcoa Power Generating Inc., completed the sale of its 215-megawatt Yadkin Hydroelectric Project (Yadkin) to Cube Hydro Carolinas, LLC for \$249 in cash (\$8 of which was received in June and November 2017 combined as post-closing adjustments). In 2017, Alcoa Corporation recognized a gain of \$122 (pre- and after-tax) in Other income, net on the accompanying Statement of Consolidated Operations. In accordance with the Separation and Distribution Agreement (see Note A), Alcoa Corporation remitted \$243 of the proceeds to Arconic. At December 31, 2016, Alcoa Corporation had a liability of \$243, which was included in Other current liabilities on the accompanying Consolidated Balance Sheet. The sale of Yadkin is subject to further post-closing adjustments related to potential earnouts through January 31, 2027, unless the provisions of the earnouts are met earlier. Any such adjustment would result in Alcoa Corporation receiving additional cash (none of which would be remitted to Arconic) and recognizing nonoperating income. Yadkin encompasses four hydroelectric power developments (reservoirs, dams, and powerhouses), known as High Rock, Tuckertown, Narrows, and Falls, situated along a 38-mile stretch of the Yadkin River through the central part of North Carolina. Prior to the divestiture,

the power generated by Yadkin was primarily sold into the open market. Yadkin generated sales of \$29 in 2016, and had approximately 30 employees as of December 31, 2016.

In December 2014, Alcoa Corporation's majority-owned subsidiary (60%), Alcoa Minerals of Jamaica, LLC (part of AWAC), completed the sale of its 55% ownership stake in a bauxite mine and alumina refinery joint venture in Jamaica to Noble Group Ltd. Also in December 2014, Alcoa Corporation completed the sale of its 50.33% ownership stake in the Mt. Holly smelter located in Goose Creek, South Carolina to Century Aluminum Company. Combined, these transactions yielded net cash proceeds of \$185 and resulted in a net loss of \$240, which was recorded in Restructuring and other charges on the 2014 Statement of Consolidated Operations. In 2015, Alcoa Corporation had post-closing adjustments, as provided for in the respective purchase agreements, related to these two divestitures. The combined post-closing adjustments resulted in net cash received of \$41 and a net loss of \$24, which was recorded in Restructuring and other charges (see Note D) on the accompanying Statement of Consolidated Operations. These two divestitures are no longer subject to post-closing adjustments.

D. Restructuring and Other Charges

Restructuring and other charges for each year in the three-year period ended December 31, 2017 were comprised of the following:

	2017	2016	2015
Early termination of a power contract	\$244	\$ -	\$ -
Asset impairments	40	155	311
Layoff costs	23	32	199
Legal matters in Italy (R)	(22)	-	201
Asset retirement obligations (Q)	10	97	76
Environmental remediation (R)	8	26	86
Net (gain) loss on divestitures of businesses (C)	-	(3)	25
Other	49	47	92
Reversals of previously recorded layoff and other costs	(43)	(36)	(7)
Restructuring and other charges	\$309	\$318	\$983

* In 2016 and 2015, Other includes \$1 and \$32, respectively, related to the allocation of restructuring charges to Alcoa Corporation from ParentCo (see Note A).

Layoff costs were recorded based on approved detailed action plans submitted by the operating locations that specified positions to be eliminated, benefits to be paid under existing severance plans, union contracts or statutory requirements, and the expected timetable for completion of the plans.

2017 Actions. In 2017, Alcoa Corporation recorded Restructuring and other charges of \$309, which were comprised of the following components: \$244 related to the early termination of a power contract (see below); \$49 for exit costs related to a decision to permanently close and demolish a smelter (see below); \$41 for additional contract costs related to the curtailed Wenatchee (Washington) and São Luís (Brazil) smelters; \$22 for layoff costs, including the separation of approximately 130 employees (115 in the Aluminum segment), mostly for voluntary separation programs; a reversal of \$22 to reduce a reserve previously established at the end of 2015 related to a legal matter in Italy (see Litigation in Note R); a net charge of \$18 for other miscellaneous items, including the relocation of the Company's headquarters and principal executive office from New York, New York to Pittsburgh, Pennsylvania; and a reversal of \$43 associated with several reserves related to prior periods (see below).

In October 2017, Alcoa Corporation and Luminant Generation Company LLC (Luminant) executed an early termination agreement of a power contract, as well as other related fuel and lease agreements, effective October 1, 2017, related to the Company's Rockdale (Texas) smelter, which has been fully curtailed since the end of 2008. In accordance with the terms of the early termination agreement, Alcoa made a cash payment of \$238 and transferred approximately 2,200 acres of related land and other assets and liabilities to Luminant (net asset carrying value of \$6).

Since the curtailment of the Rockdale smelter, the Company had been selling surplus electricity into the energy market. The power contract was set to expire no earlier than 2038, except for limited circumstances in which one or both parties could elect to early terminate without penalty for which conditions had never been met. In 2017 (through September 30), 2016, and 2015, Alcoa Corporation recognized \$105, \$141, and \$147, respectively, in Sales and \$148, \$210, and \$201, respectively, in Cost of goods sold on the accompanying Statement of Consolidated Operations related to the sale of the surplus electricity and the cost of the Luminant power contract.

As a result of the early termination of the power contract, Alcoa initiated a strategic review of the remaining buildings and equipment associated with the smelter, casthouse, and the aluminum powder plant at the Rockdale location. ParentCo previously decided to curtail the operating capacity of the Rockdale smelter in 2008 as a result of an uncompetitive power supply and then-overall unfavorable market conditions. Under this review, which was completed in December 2017, management determined that the Rockdale operations have limited economic prospects. Consequently, management approved the permanent closure and demolition of the Rockdale smelter (capacity of 191 kmt-per-year) and related operations effective immediately. Demolition and remediation activities related to this action will begin in 2018 and are expected to be completed by the end of 2022. Separately, the Company continues to own more than 30,000 acres of land surrounding the Rockdale operations.

In 2017, costs related to this decision included asset impairments of \$32, representing the write-off of the remaining book value of all related properties, plants, and equipment; \$1 for the layoff of approximately 10 employees (Corporate); and \$16 in other costs. Additionally in 2017, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value, resulting in a charge of \$6, which was recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations. The other costs of \$16 represent \$8 in asset retirement obligations and \$8 in environmental remediation, both of which were triggered by the decisions to permanently close and demolish the Rockdale facilities.

In July 2017, Alcoa Corporation announced plans to restart three (161,400 metric tons of capacity) of the five potlines (268,800 metric tons of capacity) at the Warrick (Indiana) smelter, which is expected to be complete in the second quarter of 2018. This smelter was previously permanently closed in March 2016 by ParentCo (see 2016 Actions below). The capacity identified for restart will directly supply the existing rolling mill at the Warrick location to improve efficiency of the integrated site and provide an additional source of metal to help meet an anticipated increase in production volumes. As a result of the decision to reopen this smelter, in 2017, Alcoa Corporation reversed \$33 in remaining liabilities related to the original closure decision. These liabilities consisted of \$20 in asset retirement obligations and \$4 in environmental remediation obligations, which were necessary due to the previous decision to demolish the smelter, and \$9 in severance and contract termination costs. Additionally, the carrying value of the smelter and related assets was reduced to zero as the smelter ramped down between the permanent closure decision date (end of 2015) and the end of March 2016. Once these assets are placed back into service in conjunction with the restart, their carrying value will remain zero. As such, only newly acquired or constructed assets related to the Warrick smelter will be depreciated.

As of December 31, 2017, approximately 90 of the 140 employees were separated. The remaining separations for 2017 restructuring programs are expected to be completed by the end of 2018. In 2017, cash payments of \$9 were made against layoff reserves related to 2017 restructuring programs.

2016 Actions. In 2016, Alcoa Corporation recorded Restructuring and other charges of \$318, which were comprised of the following components: \$131 for exit costs related to a decision to permanently close and demolish a refinery (see below); \$87 for additional net costs related to decisions made in late 2015 to permanently close and demolish the Warrick smelter and to curtail the Wenatchee smelter and Point Comfort (Texas) refinery (see 2015 Actions below); \$72 for the impairment of an interest in gas exploration assets in Western Australia (see below); \$32 for layoff costs related to cost reduction initiatives, including the separation of approximately 75 employees (60 in the Aluminum segment and 15 in the Bauxite segment) and related pension settlement costs (see Note N); a net charge of \$8 for other miscellaneous items; and a reversal of \$12 associated with a number of small layoff reserves related to prior periods.

In December 2016, management approved the permanent closure of the Suralco refinery (capacity of 2,207 kmt-per-year) in Suriname. The Suralco refinery had been fully curtailed since November 2015 (see 2015 Actions below). Management of ParentCo decided to curtail the remaining operating capacity of the Suralco refinery during 2015 in an effort to improve the position of ParentCo's refining operations on the global alumina cost curve. Since that time, management of ParentCo (through October 31, 2016) and then separately management of Alcoa Corporation (from November 1, 2016 through the end of 2016) had been in discussions with the Government of the Republic of Suriname to determine the best long-term solution for Suralco due to limited bauxite reserves and the absence of a long-term energy alternative. The decision to permanently close the Suralco refinery was based on the ultimate conclusion of those discussions. Demolition and remediation activities related to this action began in 2017 and are expected to be completed by the end of 2021. The related bauxite mines in Suriname will also be permanently closed while the hydroelectric facility that supplied power to the Suralco refinery, known as Afobaka, will continue to operate and supply power to the Government of the Republic of Suriname.

In 2016, costs related to the closure and curtailment actions included accelerated depreciation of \$70 related to the Warrick smelter as it continued to operate through March 2016; asset impairments of \$16, representing the write-off of the remaining book value of various assets; a reversal of \$24 associated with severance costs initially recorded in late 2015; and \$156 in other costs. Additionally in 2016, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value, resulting in a charge of \$5, which was recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations. The other costs of \$156 represent \$94 in asset retirement obligations and \$26 in environmental remediation, both of which were triggered by the decisions to permanently close and demolish the Suralco refinery (includes the rehabilitation of related bauxite mines) and the rehabilitation of a coal mine related to the Warrick smelter, \$32 for contract terminations, and \$4 in other related costs.

Also in December 2016, management of Alcoa Corporation concluded that an interest in certain gas exploration assets in Western Australia has been impaired. AofA owns an interest in a gas exploration project that was initially entered into in 2007 as a potential source of low-cost gas to supply AofA's refineries in Western Australia. This interest, now at 43% (as of December 31, 2016), relates to four separate gas wells. In late 2016, AofA received the results of a technical analysis performed earlier in the year for two of the wells and an updated analysis for a third well that concluded that the cost of gas recovery would be significantly higher than the market price of gas. For the fourth well, the results of a technical analysis performed prior to 2016 indicated that the cost of gas recovery would be lower than the market price of gas and, therefore, would require additional investment to move to the next phase of commercial evaluation, which management previously supported. In late 2016, management re-evaluated its options related to the fourth well and decided it is not economical to make such a commitment for the foreseeable future. As a result, AofA fully impaired its \$72 interest.

As of June 30, 2017, the separations associated with 2016 restructuring programs were essentially complete. In 2017 and 2016, cash payments of \$2 and \$7, respectively, were made against layoff reserves related to 2016 restructuring programs.

2015 Actions. In 2015, Alcoa Corporation recorded Restructuring and other charges of \$983, which were comprised of the following components: \$418 for exit costs related to decisions to permanently close and demolish three smelters and a power station (see below); \$238 for the curtailment of two refineries and two smelters (see below); \$201 related to legal matters in Italy (see Litigation and European Commission Matter in Note R); a \$24 net loss primarily related to post-closing adjustments associated with two December 2014 divestitures (see Note C); \$45 for layoff costs, including the separation of approximately 465 employees; \$33 for asset impairments related to prior capitalized costs for an expansion project at a refinery in Australia that is no longer being pursued; a net credit of \$1 for other miscellaneous items; a reversal of \$7 associated with a number of small layoff reserves related to prior periods; and \$32 related to Corporate restructuring allocated to Alcoa Corporation (see Note A).

During 2015, management initiated various alumina refining and aluminum smelting capacity curtailments and/or closures. The curtailments were composed of the remaining capacity at all of the following: the São Luís smelter in Brazil (74 kmt-per-year); the Suriname refinery (1,330 kmt-per-year); the Point Comfort refinery (2,010 kmt-per-year);

and the Wenatchee smelter (143 kmt-per-year). All of the curtailments were completed in 2015 except for 1,635 kmt-per-year at the Point Comfort refinery, which was completed by the end of June 2016. The permanent closures were composed of the capacity at the Warrick smelter (269 kmt-per-year) (includes the closure of a related coal mine) and the infrastructure of the Massena East (New York) smelter (potlines were previously shut down in both 2013 and 2014), as the modernization of this smelter is no longer being pursued. The closure of the Warrick smelter was completed by the end of March 2016 (see 2017 Actions above).

The decisions on the above actions were part of a separate 12-month review in refining (2,800 kmt-per-year) and smelting (500 kmt-per-year) capacity initiated by management in March 2015 for possible curtailment (partial or full), permanent closure or divestiture. While many factors contributed to each decision, in general, these actions were initiated to maintain competitiveness amid prevailing market conditions for both alumina and aluminum.

Separate from the actions initiated under the reviews described above, in mid-2015, management approved the permanent closure and demolition of the Poços de Caldas smelter (capacity of 96 kmt-per-year) in Brazil and the Anglesea power station (includes the closure of a related coal mine) in Australia. The entire capacity at Poços de Caldas had been temporarily idled since May 2014 and the Anglesea power station was shut down at the end of August 2015. Demolition and remediation activities related to the Poços de Caldas smelter and the Anglesea power station began in late 2015 and are expected to be completed by the end of 2026 and 2020, respectively.

The decision on the Poços de Caldas smelter was due to management's conclusion that the smelter was no longer competitive as a result of challenging global market conditions for primary aluminum, which led to the initial curtailment, that have not dissipated and higher costs. For the Anglesea power station, the decision was made because a sale process did not result in a sale and there would have been imminent operating costs and financial constraints related to this site in the remainder of 2015 and beyond, including significant costs to source coal from available resources, necessary maintenance costs, and a depressed outlook for forward electricity prices. The Anglesea power station previously supplied approximately 40 percent of the power needs for the Point Henry smelter, which was closed in August 2014.

In 2015, costs related to the closure and curtailment actions included asset impairments of \$226, representing the write-off of the remaining book value of all related properties, plants, and equipment; \$154 for the layoff of approximately 3,100 employees (1,800 in the Aluminum segment and 1,300 in the Alumina segment), including \$30 in pension costs (see Note N); accelerated depreciation of \$85 related to certain facilities as they continued to operate during 2015; and \$222 in other exit costs. Additionally in 2015, remaining inventories, mostly operating supplies and raw materials, were written down to their net realizable value, resulting in a charge of \$90, which was recorded in Cost of goods sold on the accompanying Statement of Combined Operations. The other exit costs of \$222 represent \$72 in asset retirement obligations and \$85 in environmental remediation, both of which were triggered by the decisions to permanently close and demolish the aforementioned structures in the United States, Brazil, and Australia (includes the rehabilitation of a related coal mine in each of Australia and the United States), and \$65 in supplier and customer contract-related costs.

As of June 30, 2017, the separations associated with 2015 restructuring programs were essentially complete. In 2017, 2016, and 2015, cash payments of \$18, \$65, and \$26, respectively, were made against layoff reserves related to 2015 restructuring programs.

Alcoa Corporation does not include Restructuring and other charges in the results of its reportable segments. The impact of allocating such charges to segment results would have been as follows:

	2017	2016	2015
Bauxite	\$ 2	\$ (5)	\$ 8
Alumina	3	72	102
Aluminum	51	75	100
Segment total	56	142	210
Corporate	253	176	773
Total restructuring and other charges	\$309	\$318	\$983

Activity and reserve balances for restructuring charges were as follows:

	Layoff costs	Other costs	Total
Reserve balances at December 31, 2014	\$ 50	\$ 13	\$ 63
2015:			
Cash payments	(65)	(1)	(66)
Restructuring charges	199	222	421
Other*	(47)	(219)	(266)
Reserve balances at December 31, 2015	137	15	152
2016:			
Cash payments	(74)	(35)	(109)
Restructuring charges	32	168	200
Other*	(57)	(120)	(177)
Reserve balances at December 31, 2016	38	28	66
2017:			
Cash payments	(30)	(43)	(73)
Restructuring charges	23	67	90
Other*	(20)	(18)	(38)
Reserve balances at December 31, 2017	\$ 11	\$ 34	\$ 45

* Other includes reversals of previously recorded restructuring charges and the effects of foreign currency translation. In 2017, 2016, and 2015, Other for Layoff costs also included a reclassification of \$8, \$16, and \$35, respectively, in pension and/or other postretirement benefits costs, as these obligations were included in Alcoa Corporation's separate liability for pension and other postretirement benefits obligations (see Note N). Additionally in 2017, 2016, and 2015, Other for Other costs also included a reclassification of the following restructuring charges: \$10, \$97, and \$76, respectively, in asset retirement and \$8, \$26, and \$86, respectively, in environmental obligations, as these liabilities were included in Alcoa Corporation's separate reserves for asset retirement obligations (see Note Q) and environmental remediation (see Note R).

The remaining reserves are expected to be paid in cash during 2018, with the exception of \$4, which relates to the termination of an office lease contract and is expected to be paid by no later than the end of 2020.

E. Segment and Geographic Area Information

Segment Information

Alcoa Corporation is a producer of bauxite, alumina, and aluminum products (primary and flat-rolled). Segment performance under the Company's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is the Adjusted EBITDA (Earnings before interest, taxes, depreciation, and

amortization) (see below) of each segment. Segment assets include, among others, customer receivables (third-party and intersegment), inventories (excluding LIFO adjustments), properties, plants, and equipment, and equity investments. The accounting policies of the segments are the same as those described in the Summary of Significant Accounting Policies (see Note B). Transactions among segments are established based on negotiation among the parties. Differences between segment totals and Alcoa Corporation's consolidated totals for line items not reconciled are in Corporate.

Effective in the first quarter of 2017, management elected to change the profit and loss measure of Alcoa Corporation's reportable segments from After-tax operating income (ATOI) to Adjusted EBITDA for internal reporting and performance measurement purposes. This change was made to enhance the transparency and visibility of the underlying operating performance of each segment. Alcoa Corporation calculates segment Adjusted EBITDA as Total sales (third-party and intersegment) minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; and Research and development expenses. Previously, Alcoa Corporation calculated segment ATOI as segment Adjusted EBITDA minus (plus) the following items: Provision for depreciation, depletion, and amortization; Equity loss (income); Loss (gain) on certain asset sales; and Income taxes. Alcoa Corporation's Adjusted EBITDA may not be comparable to similarly titled measures of other companies.

Also effective in the first quarter of 2017, management initiated a realignment of the Company's internal business and organizational structure. This realignment consisted of combining Alcoa Corporation's aluminum smelting, casting, and rolling businesses, along with the majority of the energy business, into a new Aluminum business unit, as well as moving the financial results of previously closed operations, such as the Warrick smelter and Suriname refinery, into Corporate. The realignment was executed to align strategic, operational, and commercial activities, as well as to take advantage of synergies and reduce costs. The new Aluminum business unit is managed as a single operating segment. Prior to this change, each of these businesses were managed as individual operating segments and comprised the Aluminum, Cast Products, Energy, and Rolled Products segments. The existing Bauxite and Alumina segments and the new Aluminum segment represent Alcoa Corporation's operating and reportable segments. The chief operating decision maker function regularly reviews the financial information, including Sales and Adjusted EBITDA, of these three operating segments to assess performance and allocate resources.

Segment information for all prior periods presented was revised to reflect the new segment structure, as well as the new measure of profit and loss.

The following are detailed descriptions of Alcoa Corporation's reportable segments:

Bauxite. This segment represents the Company's global bauxite mining operations. A portion of this segment's production represents the offtake from certain equity method investments in Brazil, Guinea, and Saudi Arabia. The bauxite mined by this segment is sold primarily to internal customers within the Alumina segment; a portion of the bauxite is sold to external customers. Bauxite mined by this segment and used internally is transferred to the Alumina segment at negotiated terms that are intended to approximate market prices; sales to third-parties are conducted on a contract basis. Generally, the sales of this segment are transacted in U.S. dollars while costs and expenses of this segment are transacted in the local currency of the respective operations, which are the Australian dollar and the Brazilian real. Most of the operations that comprise the Bauxite segment are part of AWAC (see Principles of Consolidation in Note A).

Alumina. This segment represents the Company's worldwide refining system, which processes bauxite into alumina. The alumina produced by this segment is sold primarily to internal and external aluminum smelter customers; a portion of the alumina is sold to external customers who process it into industrial chemical products. Approximately two-thirds of Alumina's production is sold under supply contracts to third parties worldwide, while the remainder is used internally by the Aluminum segment. Alumina produced by this segment and used internally is transferred to the Aluminum segment at prevailing market prices. A portion of this segment's third-party sales are completed through the use of agents, alumina traders, and distributors. Generally, the sales of this segment are transacted in U.S. dollars while costs and expenses of this segment are transacted in the local currency of the respective operations, which are the

Australian dollar, the Brazilian real, the U.S. dollar, and the euro. Most of the operations that comprise the Alumina segment are part of AWAC (see Principles of Consolidation in Note A). This segment also includes AWAC's 25.1% share of the results of a mining and refining joint venture company in Saudi Arabia (see Note H).

Aluminum. This segment consists of (i) the Company's worldwide smelting and casthouse system, (ii) portfolio of energy assets in Brazil and the United States, and (iii) a rolling mill in the United States. This segment's combined smelting and casting operations produce primary aluminum products, virtually all of which is sold to external customers and traders; a small portion of this primary aluminum is consumed by the rolling mill. The smelting operations produce molten primary aluminum, which is then formed by the casting operations into either common alloy ingot (e.g., t-bar, sow, standard ingot) or into value-add ingot products, including foundry, billet, rod, and slab. A variety of external customers purchase the primary aluminum products for use in fabrication operations, which produce products primarily for the transportation, building and construction, packaging, wire, and other industrial markets. The energy assets supply power to external customers in Brazil and to this segment's rolling mill in the United States. The rolling mill produces aluminum sheet primarily sold directly to customers in the packaging market for the production of aluminum cans (beverage and food). Additionally, Alcoa Corporation has a tolling arrangement with Arconic whereby Arconic's rolling mill in Tennessee produces can sheet products for certain customers of the Company's rolling operations. Alcoa Corporation supplies all of the raw materials to the Tennessee facility and pays Arconic for the tolling service. Depending on certain factors, this arrangement concludes at the end of 2018. Seasonal increases in can sheet sales are generally experienced in the second and third quarters of the year. Results from the sale of aluminum powder and scrap are also included in this segment, as well as the impacts of embedded aluminum derivatives (see Note O) related to energy supply contracts. Generally, this segment's sales of aluminum are transacted in U.S. dollars while costs and expenses of this segment are transacted in the local currency of the respective operations, which are the U.S. dollar, the euro, the Norwegian krone, Icelandic krona, the Canadian dollar, the Brazilian real, and the Australian dollar. This segment also includes Alcoa Corporation's 25.1% share of the results of both a smelting and rolling mill joint venture company in Saudi Arabia (see Note H).

The operating results, capital expenditures, and assets of Alcoa Corporation's reportable segments were as follows:

	Bauxite	Alumina	Aluminum	Total
2017				
Sales:				
Third-party sales—unrelated party	\$ 333	\$3,133	\$7,163	\$10,629
Third-party sales—related party	-	-	864	864
Intersegment sales	875	1,723	21	2,619
Total sales	\$1,208	\$4,856	\$8,048	\$14,112
Adjusted EBITDA	\$ 427	\$1,289	\$ 964	\$ 2,680
Supplemental information:				
Depreciation, depletion, and amortization	\$ 82	\$ 207	\$ 419	\$ 708
Equity loss	-	(5)	(19)	(24)
2016				
Sales:				
Third-party sales—unrelated party	\$ 315	\$2,300	\$5,573	\$ 8,188
Third-party sales—related party	-	-	958	958
Intersegment sales	751	1,307	42	2,100
Total sales	\$1,066	\$3,607	\$6,573	\$11,246
Adjusted EBITDA	\$ 375	\$ 378	\$ 680	\$ 1,433
Supplemental information:				
Depreciation, depletion, and amortization	\$ 77	\$ 186	\$ 414	\$ 677
Equity loss	-	(40)	(24)	(64)
2015				
Sales:				
Third-party sales—unrelated party	\$ 71	\$3,341	\$6,479	\$ 9,891
Third-party sales—related party	-	-	1,078	1,078
Intersegment sales	1,076	1,727	175	2,978
Total sales	\$1,147	\$5,068	\$7,732	\$13,947
Adjusted EBITDA	\$ 454	\$ 958	\$ 767	\$ 2,179
Supplemental information:				
Depreciation, depletion, and amortization	\$ 93	\$ 192	\$ 424	\$ 709
Equity loss	-	(41)	(44)	(85)
2017				
Assets:				
Capital expenditures	\$ 53	\$ 144	\$ 178	\$ 375
Equity investments	191	262	930	1,383
Total assets	1,609	5,129	8,060	14,798
2016				
Assets:				
Capital expenditures	\$ 29	\$ 109	\$ 256	\$ 394
Equity investments	163	342	859	1,364
Total assets	1,541	4,791	7,658	13,990

The following tables reconcile certain segment information to consolidated totals:

	2017	2016	2015
Sales:			
Total segment sales	\$14,112	\$11,246	\$13,947
Elimination of intersegment sales	(2,619)	(2,100)	(2,978)
Other	159	172	230
Consolidated sales	\$11,652	\$ 9,318	\$11,199
Net income (loss) attributable to Alcoa Corporation:			
Total segment Adjusted EBITDA	\$ 2,680	\$ 1,433	\$ 2,179
Unallocated amounts:			
Impact of LIFO (I)	(91)	(10)	107
Metal price lag ⁽¹⁾	26	9	(30)
Corporate expense ⁽²⁾	(136)	(177)	(173)
Provision for depreciation, depletion, and amortization	(750)	(718)	(780)
Restructuring and other charges (D)	(309)	(318)	(983)
Interest expense (S)	(104)	(243)	(270)
Other income (expenses), net (S)	58	89	(42)
Other ⁽³⁾	(215)	(227)	(345)
Consolidated income (loss) before income taxes	1,159	(162)	(337)
Provision for income taxes (P)	(600)	(184)	(402)
Net income attributable to noncontrolling interest	(342)	(54)	(124)
Consolidated net income (loss) attributable to Alcoa Corporation	\$ 217	\$ (400)	\$ (863)

- (1) Metal price lag describes the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by Alcoa Corporation's rolled aluminum operations. In general, when the price of metal increases, metal price lag is favorable, and when the price of metal decreases, metal price lag is unfavorable.
- (2) Corporate expense is primarily composed of general administrative and other expenses of operating the corporate headquarters and other global administrative facilities.
- (3) Other includes, among other items, the Adjusted EBITDA of previously closed operations as applicable, pension and other postretirement benefit expenses associated with closed and sold operations, and intersegment profit elimination.

December 31,	2017	2016
Assets:		
Total segment assets	\$14,798	\$13,990
Elimination of intersegment receivables	(299)	(236)
Unallocated amounts:		
Cash and cash equivalents	1,358	853
LIFO reserve	(306)	(215)
Corporate fixed assets, net	520	595
Corporate goodwill	148	149
Deferred income taxes	814	741
Fair value of derivative contracts	34	497
Other	380	367
Consolidated assets	\$17,447	\$16,741

Sales by major product grouping were as follows:

	2017	2016	2015
Sales:			
Primary aluminum	\$ 6,168	\$5,204	\$ 6,214
Alumina	3,121	2,280	3,325
Flat-rolled aluminum	1,666	1,068	989
Energy	446	422	588
Bauxite	333	315	71
Other*	(82)	29	12
	<u>\$11,652</u>	<u>\$9,318</u>	<u>\$11,199</u>

* Other includes realized gains and losses related to embedded derivative instruments designated as cash flow hedges of forward sales of aluminum (see Note O).

Geographic Area Information

Geographic information for sales was as follows (based upon the country where the point of sale originated):

	2017	2016	2015
Sales:			
United States ⁽¹⁾	\$5,370	\$4,365	\$5,386
Spain ⁽²⁾	3,303	2,663	2,852
Australia	2,266	1,644	2,147
Brazil	569	432	562
Canada	93	141	132
Other	51	73	120
	<u>\$11,652</u>	<u>\$9,318</u>	<u>\$11,199</u>

(1) Sales of a portion of the alumina from refineries in Australia, Brazil, and Suriname (prior to closure in December 2016) and most of the aluminum from smelters in Canada occurred in the United States.

(2) Sales of the aluminum produced from smelters in Iceland and Norway, as well as the off-take related to an interest in the Saudi Arabia joint venture (see Note H), occurred in Spain.

Geographic information for long-lived assets was as follows (based upon the physical location of the assets):

December 31,	2017	2016
Long-lived assets:		
Australia	\$2,220	\$2,053
Brazil	2,111	2,228
United States	1,658	1,816
Iceland	1,276	1,341
Canada	1,116	1,161
Norway	427	438
Spain	316	273
Other	14	15
	<u>\$9,138</u>	<u>\$9,325</u>

F. Earnings Per Share

Basic earnings per share (EPS) amounts are computed by dividing earnings by the average number of common shares outstanding. Diluted EPS amounts assume the issuance of common stock for all potentially dilutive share equivalents outstanding.

The information used to compute basic and diluted EPS attributable to Alcoa Corporation common shareholders was as follows (shares in millions):

	2017	2016	2015
Net income (loss) attributable to Alcoa Corporation	\$217	\$(400)	\$(863)
Average shares outstanding—basic	184	183	182
Effect of dilutive securities:			
Stock options	1	-	-
Stock and performance awards	2	-	-
Average shares outstanding—diluted	187	183	182

In 2016, basic average shares outstanding and diluted average shares outstanding were the same because the effect of potential shares of common stock was anti-dilutive. Options to purchase 1 million shares of common stock outstanding as of December 31, 2016 at a weighted average exercise price of \$33.05 per share were not included in the computation of diluted EPS because the exercise prices of these options were greater than the average market price of Alcoa Corporation's common stock. Additionally, 1 million stock awards and stock options combined were not included in the computation of diluted EPS because Alcoa Corporation generated a net loss. Had Alcoa Corporation generated net income in 2016, 1 million potential shares of common stock related to stock awards and stock options combined would have been included in diluted average shares outstanding.

In 2015, the EPS included on the accompanying Statement of Consolidated Operations was calculated based on the 182,471,195 shares of Alcoa Corporation common stock distributed on the Separation Date in conjunction with the completion of the Separation Transaction and is considered pro forma in nature. Prior to November 1, 2016, Alcoa Corporation did not have any issued and outstanding publicly-traded common stock.

G. Accumulated Other Comprehensive Loss

The following table details the activity of the three components that comprise Accumulated other comprehensive loss for both Alcoa Corporation's shareholders and noncontrolling interest:

	Alcoa Corporation			Noncontrolling interest		
	2017	2016	2015	2017	2016	2015
Pension and other postretirement benefits (N)						
Balance at beginning of period	\$(2,330)	\$ (352)	\$ (424)	\$ (56)	\$ (56)	\$ (64)
Establishment of additional defined benefit plans	-	(2,704)	-	-	-	-
Separation-related adjustments (A)	-	928	-	-	-	-
Other comprehensive (loss) income:						
Unrecognized net actuarial loss and prior service cost/ benefit	(671)	(307)	73	9	2	5
Tax benefit (expense)	25	6	(18)	(2)	(6)	(1)
Total Other comprehensive (loss) income before reclassifications, net of tax	(646)	(301)	55	7	(4)	4
Amortization of net actuarial loss and prior service cost/benefit ⁽¹⁾	199	107	26	2	5	6
Tax expense ⁽²⁾	(9)	(8)	(9)	-	(1)	(2)
Total amount reclassified from Accumulated other comprehensive loss, net of tax ⁽⁷⁾	190	99	17	2	4	4
Total Other comprehensive (loss) income	(456)	(202)	72	9	-	8
Balance at end of period	\$(2,786)	\$(2,330)	\$ (352)	\$ (47)	\$ (56)	\$ (56)
Foreign currency translation						
Balance at beginning of period	\$(1,655)	\$(1,851)	\$ (668)	\$(677)	\$(779)	\$(351)
Separation-related adjustments (A)	-	(17)	-	-	-	-
Other comprehensive income (loss) ⁽³⁾	188	213	(1,183)	96	102	(428)
Balance at end of period	\$(1,467)	\$(1,655)	\$(1,851)	\$(581)	\$(677)	\$(779)
Cash flow hedges (O)						
Balance at beginning of period	\$ 210	\$ 603	\$ (224)	\$ 1	\$ (3)	\$ (2)
Separation-related adjustments (A)	-	(47)	-	-	-	-
Other comprehensive (loss) income:						
Net change from periodic revaluations	(1,489)	(558)	1,155	83	38	(1)
Tax benefit (expense)	251	233	(344)	(25)	(12)	-
Total Other comprehensive (loss) income before reclassifications, net of tax	(1,238)	(325)	811	58	26	(1)
Net amount reclassified to earnings:						
Aluminum contracts ⁽⁴⁾	130	7	21	-	-	-
Financial contract ⁽⁵⁾	(19)	(54)	-	(12)	(37)	-
Foreign exchange contracts ⁽⁴⁾	(2)	-	-	-	-	-
Interest rate contract ⁽⁶⁾	-	7	-	-	5	-
Sub-total	109	(40)	21	(12)	(32)	-
Tax (expense) benefit ⁽²⁾	(10)	19	(5)	4	10	-
Total amount reclassified from Accumulated other comprehensive loss, net of tax ⁽⁷⁾	99	(21)	16	(8)	(22)	-
Total Other comprehensive (loss) income	(1,139)	(346)	827	50	4	(1)
Balance at end of period	\$ (929)	\$ 210	\$ 603	\$ 51	\$ 1	\$ (3)

- (1) These amounts were included in the computation of net periodic benefit cost for pension and other postretirement benefits (see Note N).
- (2) These amounts were included in Provision for income taxes on the accompanying Statement of Consolidated Operations.
- (3) In all periods presented, there were no tax impacts related to rate changes and no amounts were reclassified to earnings.
- (4) These amounts were included in Sales on the accompanying Statement of Consolidated Operations.
- (5) The 2017 amounts were included in Cost of goods sold on the accompanying Statement of Consolidated Operations. The 2016 and 2015 amounts were included in Other (income) expenses, net on the accompanying Statement of Consolidated Operations.
- (6) These amounts were included in Other (income) expenses, net on the accompanying Statement of Consolidated Operations.
- (7) A positive amount indicates a corresponding charge to earnings and a negative amount indicates a corresponding benefit to earnings. These amounts were reflected on the accompanying Statement of Consolidated Operations in the line items indicated in footnotes 1 through 6.

H. Investments

December 31,	2017	2016
Equity investments	\$1,400	\$1,348
Other investments	10	10
	\$1,410	\$1,358

Equity Investments. The following table summarizes information of the equity investments as of December 31, 2017 and 2016 (AofA sold its interest in the Dampier to Bunbury Natural Gas Pipeline (DBNGP) Trust in April 2016 (see DBNGP Trust below)):

Investee	Country	Nature of investment ⁽⁴⁾	Ownership interest
Ma'aden Aluminum Company ⁽¹⁾	Saudi Arabia	Aluminum smelter	25.1%
Ma'aden Bauxite and Alumina Company ⁽¹⁾	Saudi Arabia	Bauxite mine and alumina refinery	25.1% ⁽⁵⁾
Ma'aden Rolling Company ⁽¹⁾	Saudi Arabia	Aluminum rolling mill	25.1%
Halco Mining, Inc. ⁽²⁾	Guinea	Bauxite mine	45% ⁽⁵⁾
Energetica Barra Grande S.A.	Brazil	Hydroelectric generation facility	42.18%
Pechiney Reynolds Quebec, Inc. ⁽³⁾	Canada	Aluminum smelter	50%
Consorcio Serra do Facão	Brazil	Hydroelectric generation facility	34.97%
Mineração Rio do Norte S.A.	Brazil	Bauxite mine	18.2% ⁽⁵⁾
Manicouagan Power Limited Partnership	Canada	Hydroelectric generation facility	40%

(1) See Saudi Arabia Joint Venture below for additional information.

(2) Halco Mining, Inc. owns 100% of Boké Investment Company, which owns 51% of Compagnie des Bauxites de Guinée.

(3) Pechiney Reynolds Quebec, Inc. owns a 50.1% interest in the Bécancour smelter in Quebec, Canada thereby entitling Alcoa Corporation to a 25.05% interest in the smelter. Through two wholly-owned Canadian subsidiaries, Alcoa Corporation also owns 49.9% of the Bécancour smelter.

(4) Each of the investees either owns the facility listed or has an ownership interest in an entity that owns the facility listed.

(5) A portion or all of each of these ownership interests are held by majority-owned subsidiaries that are part of AWAC.

In 2017, 2016, and 2015, Alcoa Corporation received \$71, \$74, and \$152, respectively, in dividends from these equity investments. Financial information for these equity investments is as follows (amounts represent 100% of the investee's financial information):

	Saudi Arabia Joint Venture ⁽¹⁾	Halco Mining, Inc.	Energetica Barra Grande S.A.	Pechiney Reynolds Quebec, Inc.	Consorcio Serra do Facão	Mineração Rio do Norte S.A.	Manicouagan Power L.P.	DBNGP Trust ⁽²⁾	Total
Profit and loss data—year ended December 31, 2017									
Sales	\$3,032	\$416	\$131	\$332	\$103	\$350	\$105	\$ -	\$ 4,469
Cost of goods sold	2,776	266	117	292	48	273	9	-	3,781
(Loss) Income before income taxes	(142)	50	13	35	45	35	96	-	132
Net (loss) income	(157)	47	5	23	46	30	88	-	82
Equity in net (loss) income of affiliated companies, before reconciling adjustments	(39)	21	2	11	16	6	35	-	52
Other	9	(1)	-	-	-	-	2	-	10
Alcoa Corporation's equity in net (loss) income of affiliated companies	(30)	20	2	11	16	6	37	-	62
Profit and loss data—year ended December 31, 2016									
Sales	\$1,970	\$437	\$ 60	\$309	\$ 90	\$451	\$104	\$ 86	\$ 3,507
Cost of goods sold	1,905	242	35	272	65	297	10	18	2,844
(Loss) Income before income taxes	(295)	53	16	36	8	152	94	21	85
Net (loss) income	(295)	50	15	16	5	129	87	14	21
Equity in net (loss) income of affiliated companies, before reconciling adjustments	(75)	23	6	8	2	23	35	3	25
Other	7	2	(1)	(4)	-	(1)	-	-	3
Alcoa Corporation's equity in net (loss) income of affiliated companies	(68)	25	5	4	2	22	35	3	28
Profit and loss data—year ended December 31, 2015									
Sales	\$2,025	\$487	\$130	\$486	\$ 84	\$498	\$106	\$303	\$ 4,119
Cost of goods sold	2,070	236	98	288	76	308	16	117	3,209
(Loss) Income before income taxes	(362)	86	27	113	6	118	91	46	125
Net (loss) income	(366)	80	7	104	(1)	98	90	31	43
Equity in net (loss) income of affiliated companies, before reconciling adjustments	(91)	36	3	52	-	18	36	6	60
Other	(2)	(2)	(1)	4	(2)	(3)	-	(1)	(7)
Alcoa Corporation's equity in net (loss) income of affiliated companies	(93)	34	2	56	(2)	15	36	5	53

	Saudi Arabia Joint Venture ⁽¹⁾	Halco Mining, Inc.	Energetica Barra Grande S.A.	Pechiney Reynolds Quebec, Inc.	Consorcio Serra do Facão	Mineração Rio do Norte S.A.	Manicouagan Power L.P.	DBNGP Trust ⁽²⁾	Total
Balance sheet data—as of									
December 31, 2017									
Current assets	\$1,415	\$ 40	\$ 44	\$140	\$ 79	\$121	\$ 23	\$ -	\$ 1,862
Noncurrent assets	9,373	174	285	106	261	744	72	-	11,015
Current liabilities	1,331	1	48	65	25	220	9	-	1,699
Noncurrent liabilities	6,191	12	6	12	117	413	-	-	6,751
Balance Sheet data—as of									
December 31, 2016									
Current assets	\$1,141	\$ 12	\$ 17	\$ 91	\$ 19	\$ 92	\$ 24	\$ -	\$ 1,396
Noncurrent assets	9,653	189	302	147	451	644	68	-	11,454
Current liabilities	1,452	4	31	62	37	174	7	-	1,767
Noncurrent liabilities	6,204	14	23	-	283	253	-	-	6,777

(1) The amounts included in this column represent the combined financial information related to Ma'aden Aluminum Company, Ma'aden Bauxite and Alumina Company, and Ma'aden Rolling Company.

(2) AofA sold its interest in the DBNGP Trust in April 2016.

Saudi Arabia Joint Venture—Alcoa Corporation and Saudi Arabian Mining Company (known as “Ma’aden”) have a 30-year (from December 2009) joint venture shareholders’ agreement (automatic extension for an additional 20 years, unless the parties agree otherwise or unless earlier terminated) setting forth the terms for the development, construction, ownership, and operation of an integrated aluminum complex in Saudi Arabia. Specifically, the project developed by the joint venture consists of: (i) a bauxite mine for the extraction of approximately 4,000 kmt of bauxite from the Al Ba’itha bauxite deposit near Quiba in the northern part of Saudi Arabia; (ii) an alumina refinery with an initial capacity of 1,800 kmt; (iii) a primary aluminum smelter with an initial capacity of 740 kmt; and (iv) an aluminum rolling mill with an initial capacity of 380 kmt. The refinery, smelter, and rolling mill were constructed in an industrial area at Ras Al Khair on the east coast of Saudi Arabia. The facilities use critical infrastructure, including power generation derived from reserves of natural gas, as well as port and rail facilities, developed by the government of Saudi Arabia. First production from the smelter, rolling mill, and mine and refinery occurred in December of 2012, 2013, and 2014, respectively.

In 2012, Alcoa Corporation and Ma’aden agreed to expand the capabilities of the rolling mill to include a capacity of 100 kmt dedicated to supplying the automotive, building and construction, and foil packaging markets with aluminum sheet. First production related to the expanded capacity occurred in 2014. This expansion did not result in additional equity investment (see below) due to significant savings from a change in the project execution strategy of the initial 380 kmt capacity of the rolling mill.

The joint venture is owned 74.9% by Ma’aden and 25.1% by Alcoa Corporation and consists of three separate companies as follows: one each for the mine and refinery, the smelter, and the rolling mill. The Alcoa Corporation affiliates that hold the Company’s interests in the smelting company and the rolling mill company are wholly-owned by Alcoa Corporation, and the Alcoa Corporation affiliate that holds the Company’s interests in the mining and refining company is majority-owned (part of AWAC) by Alcoa Corporation. Except in limited circumstances, Alcoa Corporation may not sell, transfer or otherwise dispose of or encumber or enter into any agreement in respect of the votes or other rights attached to its interests in the joint venture without Ma’aden’s prior written consent.

Ma’aden and Alcoa Corporation have put and call options, respectively, whereby Ma’aden can require Alcoa Corporation to purchase from Ma’aden, or Alcoa Corporation can require Ma’aden to sell to Alcoa Corporation, a 14.9% interest in the joint venture at the then fair market value. These options may only be exercised in a six-month window that opens five years after the last Commercial Production Date (as defined in the joint venture shareholders’ agreement) of the three joint venture companies and, if exercised, must be exercised for the full 14.9% interest. The Commercial Production Date was declared on September 1, 2014 for the smelting company and on October 1, 2016 for the mining and refining company. There has not been a similar declaration yet for the rolling mill company.

Ma'aden and Alcoa Corporation also may not sell, transfer, or otherwise dispose of, pledge, or encumber any interests in the joint venture until five years after the Commercial Production Date. Under the joint venture shareholders' agreement, upon the occurrence of an unremedied event of default by Alcoa Corporation, Ma'aden may purchase, or, upon the occurrence of an unremedied event of default by Ma'aden, Alcoa Corporation may sell, its interest for consideration that varies depending on the time of the default.

A number of Alcoa Corporation employees perform various types of services for the smelting, rolling mill, and mining and refining companies as part of the operation of the fully-integrated aluminum complex. At December 31, 2017 and 2016, Alcoa Corporation had an outstanding receivable of \$13 and \$11, respectively, from the smelting, rolling mill, and mining and refining companies for labor and other employee-related expenses.

Capital investment in the project is expected to total approximately \$10,800 (SAR 40.5 billion) and has been funded through a combination of equity contributions by the joint venture partners and project financing obtained by the joint venture companies, which has been partially guaranteed by both partners (see below). Both the equity contributions and the guarantees of the project financing are based on the joint venture's partners' ownership interests. Originally, it was estimated that Alcoa Corporation's total equity contribution in the joint venture related to the capital investment in the project would be approximately \$1,100, of which Alcoa Corporation has contributed \$982, including \$1 in 2016. Based on changes to both the project's capital investment and equity and debt structure from the initial plans, the estimated \$1,100 equity contribution may be reduced. Separate from the capital investment in the project, Alcoa Corporation contributed \$66 (Ma'aden contributed \$199) to the joint venture in 2017 for short-term funding purposes in accordance with the terms of the joint venture companies' financing arrangements. Both partners may be required to make such additional contributions in future periods. As of December 31, 2017 and 2016, the carrying value of Alcoa Corporation's investment in this joint venture was \$887 and \$853, respectively.

The rolling mill and mining and refining companies have project financing totaling \$3,334 (reflects principal repayments made through December 31, 2017), of which a combined \$837 represents Alcoa Corporation's and AWAC's respective 25.1% interest in the rolling mill company and the mining and refining company. Alcoa Corporation, itself and on behalf of AWAC, has issued guarantees (see below) to the lenders in the event of default on the debt service requirements by the rolling mill company through 2018 and 2021 and by the mining and refining company through 2019 and 2024 (Ma'aden issued similar guarantees related to its 74.9% interest). Alcoa Corporation's guarantees for the rolling mill and mining and refining companies cover total debt service requirements of \$132 in principal and up to a maximum of approximately \$25 in interest per year (based on projected interest rates). Previously, Alcoa Corporation issued similar guarantees related to the project financing of the smelting company. In December 2017, the smelting company refinanced and/or amended all of its existing outstanding debt. The guarantees that were previously required of the Company were effectively terminated. At December 31, 2017 and 2016, the combined fair value of the guarantees was \$3 and \$6, respectively, which was included in Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet. In the event Alcoa Corporation would be required to make payments under the guarantees related to the mining and refining company, 40% of such amount would be contributed to Alcoa Corporation by Alumina Limited, consistent with its ownership interest in AWAC.

As a result of the Separation Transaction, the various lenders to the joint venture companies required Arconic to maintain joint and several guarantees with Alcoa Corporation. In the event of default by any of the joint venture companies, the lenders would make a claim against both Alcoa Corporation and Arconic. Accordingly, Alcoa Corporation would perform under its guarantee; however, if the Company failed to perform, Arconic would be required to perform under its own guarantee. Arconic would then subsequently seek indemnification from Alcoa Corporation under the terms of the Separation and Distribution Agreement.

DBNGP Trust—In 2004, AofA acquired a 20% interest in a consortium, which subsequently purchased the DBNGP in Western Australia. The investment in the DBNGP was made to secure a competitively-priced long-term supply of natural gas to AofA's refineries in Western Australia. Since 2004, AofA made several contributions for its share of a pipeline capacity expansion and other operational purposes of the consortium, as well as equity call plans to improve the consortium's capitalization structure, including a plan initiated in December 2014. This plan required AofA to

contribute \$30 (A\$36) through mid-2016, of which \$20 (A\$27) was made through March 31, 2016, including \$3 (A\$5) and \$16 (A\$21) in 2016 and 2015, respectively.

In April 2016, AofA sold its 20% interest in the consortium, effectively terminating its remaining obligation to make contributions under the most recent equity call plan, to the only other member of the consortium, DUET Group. AofA received \$145 (A\$192) in cash, which was included in Sales of investments on the accompanying Statement of Consolidated Cash Flows, and recorded a gain of \$27 (A\$35) (\$11 (A\$15) after-tax and noncontrolling interest) in Other income, net on the accompanying Statement of Consolidated Operations. As part of the sale transaction, AofA will maintain its current access to approximately 30% of the DBNGP transmission capacity for gas supply to its three alumina refineries in Western Australia under an existing agreement to purchase gas transmission services from the DBNGP. At December 31, 2017 and 2016, AofA has an asset of \$300 (A\$385) and \$270 (A\$375), respectively, representing prepayments made under the agreement for future gas transmission services.

I. Inventories

December 31,	2017	2016
Finished goods	\$ 296	\$ 226
Work-in-process	258	220
Bauxite and alumina	585	429
Purchased raw materials	473	363
Operating supplies	147	137
LIFO reserve	(306)	(215)
	<u>\$1,453</u>	<u>\$1,160</u>

At December 31, 2017 and 2016, the total amount of inventories valued on a LIFO basis was \$516, or 29%, and \$393, or 29%, respectively, of total inventories before LIFO adjustments. The inventory values, prior to the application of LIFO, are generally determined under the average cost method, which approximates current cost.

J. Properties, Plants, and Equipment, Net

December 31,	2017	2016
Land and land rights, including mines	\$ 346	\$ 346
Structures (by type of operation):		
Bauxite mining	1,250	1,194
Alumina refining	2,664	2,500
Aluminum smelting and casting	3,575	3,544
Energy generation	552	610
Aluminum rolling	298	287
Other	417	405
	<u>8,756</u>	<u>8,540</u>
Machinery and equipment (by type of operation):		
Bauxite mining	508	465
Alumina refining	4,009	3,773
Aluminum smelting and casting	6,827	6,655
Energy generation	905	1,080
Aluminum rolling	1,020	884
Other	288	309
	<u>13,557</u>	<u>13,166</u>
	<u>22,659</u>	<u>22,052</u>
Less: accumulated depreciation, depletion, and amortization	<u>13,908</u>	<u>13,225</u>
	<u>8,751</u>	<u>8,827</u>
Construction work-in-progress	<u>387</u>	<u>498</u>
	<u>\$ 9,138</u>	<u>\$ 9,325</u>

As of December 31, 2017 and 2016, the net carrying value of temporarily idled refining assets was \$141 and \$158, respectively, representing 2,305 kmt of idle capacity in both periods. Also, as of December 31, 2017 and 2016, the net carrying value of temporarily idled smelting assets was \$248 and \$314, respectively, representing 856 kmt and 778 kmt, respectively, of idle capacity. In July 2017, Alcoa Corporation, recategorized 269 kmt of smelting capacity to idle capacity due to the decision to partially restart (161 kmt) a previously permanently closed smelter (carrying value is zero —see 2017 Actions in Note D), which is expected to be completed in the second quarter of 2018. Additionally, in December 2017, Alcoa Corporation permanently closed 191 kmt of smelting capacity, which was included in the 778 kmt of idle capacity as of December 31, 2016.

K. Goodwill and Other Intangible Assets

Goodwill, which is included in Other noncurrent assets on the accompanying Consolidated Balance Sheet, was as follows:

December 31,	2017	2016
Bauxite	\$ 2	\$ 2
Alumina	4	4
Aluminum ⁽¹⁾	-	-
Corporate ⁽²⁾	148	149
	<u>\$154</u>	<u>\$155</u>

(1) The carrying value of Aluminum's goodwill is zero, comprised of goodwill of \$989 and accumulated impairment losses of \$989 as of both December 31, 2017 and 2016. Additionally, the carrying value of Corporate's goodwill is net of accumulated impairment losses of \$742 as of both December 31, 2017 and 2016.

(2) As of December 31, 2017, the \$148 of goodwill reflected in Corporate is allocated to two of Alcoa Corporation's three reportable segments (\$49 to Bauxite and \$99 to Alumina) for purposes of impairment testing (see Note B). This goodwill is reflected in Corporate for segment reporting purposes because it is not included in management's assessment of performance by the two reportable segments.

Other intangible assets, which are included in Other noncurrent assets on the accompanying Consolidated Balance Sheet, were as follows:

December 31,	2017		2016	
	Gross carrying amount	Accumulated amortization	Gross carrying amount	Accumulated amortization
Computer software	\$241	\$(212)	\$252	\$(196)
Patents and licenses*	25	(6)	70	(6)
Other intangibles	21	(7)	21	(6)
Total other intangible assets	<u>\$287</u>	<u>\$(225)</u>	<u>\$343</u>	<u>\$(208)</u>

* As of December 31, 2016, Patents and licenses include amounts related to the capitalization of costs associated with the renewal of Alcoa Corporation's FERC (Federal Energy Regulatory Commission) license at its Yadkin Hydroelectric Project, which was divested in February 2017 (see Note C).

Computer software consists primarily of software costs associated with an enterprise business solution within Alcoa Corporation to drive common systems among all businesses.

Amortization expense related to the intangible assets in the tables above for the years ended December 31, 2017, 2016, and 2015 was \$12, \$7, and \$10, respectively, and is expected to be approximately \$10 annually from 2018 to 2022.

L. Debt

Long-Term Debt.

December 31,	2017	2016
6.75% Notes, due 2024	\$ 750	\$ 750
7.00% Notes, due 2026	500	500
BNDES Loans, due 2018-2029 (see below for weighted average rates)	137	192
Other	50	38
Unamortized discounts and deferred financing costs	(33)	(35)
	1,404	1,445
Less: amount due within one year	16	21
	\$1,388	\$1,424

The principal amount of long-term debt maturing in each of the next five years is \$16 in 2018, \$30 in 2019, and \$15 in each of 2020, 2021, and 2022.

144A Debt—In September 2016, Alcoa Nederland Holding B.V. (ANHBV), a wholly-owned subsidiary of Alcoa Corporation, completed a Rule 144A (U.S. Securities Act of 1933, as amended) debt offering for \$750 of 6.75% Senior Notes due 2024 (the “2024 Notes”) and \$500 of 7.00% Senior Notes due 2026 (the “2026 Notes” and, collectively with the 2024 Notes, the “Notes”). ANHBV received \$1,228 in net proceeds (see below) from the debt offering reflecting a discount to the initial purchasers of the Notes. The net proceeds were used to make a payment to ParentCo to fund the transfer of certain assets from ParentCo to Alcoa Corporation in connection with the Separation Transaction, and the remaining net proceeds were used for general corporate purposes. The discount to the initial purchasers, as well as costs to complete the financing, was deferred and is being amortized to interest expense over the respective terms of the Notes. Interest on the Notes is paid semi-annually in March and September, which commenced March 31, 2017.

ANHBV has the option to redeem the Notes on at least 30 days, but not more than 60 days, prior notice to the holders of the Notes under multiple scenarios, including, in whole or in part, at any time or from time to time after September 2019, in the case of the 2024 Notes, or after September 2021, in the case of the 2026 Notes, at a redemption price specified in the indenture (up to 105.063% of the principal amount for the 2024 Notes and up to 103.500% of the principal amount of the 2026 Notes, plus any accrued and unpaid interest in each case). Also, the Notes are subject to repurchase upon the occurrence of a change in control repurchase event (as defined in the indenture) at a repurchase price in cash equal to 101% of the aggregate principal amount of the Notes repurchased, plus any accrued and unpaid interest on the Notes repurchased.

The Notes are senior unsecured obligations of ANHBV and do not entitle the holders to any registration rights pursuant to a registration rights agreement. ANHBV does not intend to file a registration statement with respect to resales of or an exchange offer for the Notes. The Notes are guaranteed on a senior unsecured basis by Alcoa Corporation and its subsidiaries that are guarantors under the Revolving Credit Agreement described below (the “subsidiary guarantors” and, together with Alcoa Corporation, the “guarantors”). Each of the subsidiary guarantors will be released from their Notes guarantees upon the occurrence of certain events, including the release of such guarantor from its obligations as a guarantor under the Revolving Credit Agreement.

The Notes indenture contains various restrictive covenants similar to those described below for the Amended Revolving Credit Agreement, including a limitation on restricted payments, with, among other exceptions, capacity to pay annual ordinary dividends. Under the indenture, Alcoa Corporation may declare and make annual ordinary dividends in an aggregate amount not to exceed \$38 in each of the November 1, 2016 through December 31, 2017 time period (no such dividends were made) and annual 2018, \$50 in each of annual 2019 and 2020, and \$75 in the January 1, 2021 through September 30, 2026 (maturity date of the 2026 Notes) time period, except that 50% of any

unused amount of the base amount in any of the specified time periods may be used in the next succeeding period following the use of the base amount in said time period. Additionally, the restricted payments negative covenant includes a general exception to allow for potential future transactions incremental to those specifically provided for in the Notes indenture. This general exception provides for an aggregate amount of restricted payment not to exceed the greater of \$250 and 1.5% of Alcoa Corporation's consolidated total assets. Accordingly, Alcoa Corporation may make annual ordinary dividends in any fiscal year by an aggregate amount of up to \$250, assuming no other restricted payments have reduced, in part or whole, the available limit. The limits of the restricted payments negative covenant under the Amended Revolving Credit Agreement (see Credit Facility below) would govern the amount of ordinary dividend payments the Company could make in a given timeframe if the allowed amount is less than the limits of the restricted payments negative covenant under the Notes indenture.

In conjunction with this debt offering, the net proceeds of \$1,228, plus an additional \$81 of ParentCo cash on hand, were required to be placed in escrow contingent on completion of the Separation Transaction. The \$81 represented the necessary cash to fund the redemption of the Notes, pay all regularly scheduled interest on the Notes through a specified date as defined in the indenture, and a premium on the principal of the Notes if the Separation Transaction had not been completed by a certain time as defined in the indenture. As a result, the \$1,228 of escrowed cash was recorded as restricted cash. The issuance of the Notes and the increase in restricted cash both in the amount of \$1,228 were not reflected in the accompanying Statement of Consolidated Cash Flows as these represent noncash financing and investing activities, respectively. The subsequent release of the \$1,228 from escrow occurred on October 31, 2016 in preparation for the Separation Transaction. This decrease in restricted cash was reflected in the accompanying Statement of Consolidated Cash Flows as a cash inflow in the Net change in restricted cash line item.

BNDES Loans—Prior to July 5, 2016, Alcoa Alumínio (Alumínio), an indirect wholly-owned subsidiary of Alcoa Corporation, had a loan agreement with Brazil's National Bank for Economic and Social Development (BNDES) that provided for a financing commitment of \$397 (R\$687), which was divided into three subloans and was used to pay for certain expenditures of the Estreito hydroelectric power project. On July 5, 2016, this loan agreement was amended to change the borrower from Alumínio to a wholly-owned subsidiary of Alumínio. Interest on the three subloans is a Brazil real rate of interest equal to BNDES' long-term interest rate, 7.00% and 7.50% as of December 31, 2017 and 2016, respectively, plus a weighted-average margin of 2.74%. Principal and interest are payable monthly, which began in October 2011 and end in September 2029 for two of the subloans totaling R\$667 and began in July 2012 and end in June 2018 for the subloan of R\$20. This loan may be repaid early without penalty with the approval of BNDES. As of December 31, 2017 and 2016, outstanding borrowings were \$137 (R\$454) and \$150 (R\$490), respectively, and the weighted-average interest rate was 9.74% and 10.22%, respectively. During 2017 and 2016, Alumínio's subsidiary and/or Alumínio repaid \$15 (R\$49) and \$14 (R\$48), respectively, of outstanding borrowings.

Additionally, Alumínio had a loan agreement with BNDES that provided for a financing commitment of \$85 (R\$177), which also was used to pay for certain expenditures of the Estreito hydroelectric power project. Interest on the loan was a Brazil real rate of interest equal to BNDES' long-term interest rate plus a margin of 1.55%. Principal and interest were payable monthly, which began in January 2013 and were originally scheduled to end in September 2029. During 2017 and 2016, Alumínio repaid \$44 (R\$138) and \$3 (R\$11), respectively, of outstanding borrowings. The repayments in 2017 include an early repayment of \$41 (R\$131) made in August, representing the remaining outstanding loan balance. This early repayment was made without penalty under the approval of BNDES. With the full repayment of this loan, the commitment was effectively terminated. As of December 31, 2016, Alumínio's outstanding borrowings were \$42 (R\$137) and the interest rate was 9.05%.

Credit Facility. On September 16, 2016, Alcoa Corporation and ANHBV entered into a revolving credit agreement with a syndicate of lenders and issuers named therein, as amended, (the "Revolving Credit Agreement"). On November 14, 2017, these same parties and two additional lenders entered into an Amendment and Restatement Agreement to revise certain terms and provisions of the Revolving Credit Agreement (the Revolving Credit Agreement as revised by the Amendment and Restatement Agreement, the "Amended Revolving Credit Agreement"). Unless noted otherwise, the terms and provisions described below for the Amended Revolving Credit Agreement were applicable to the Revolving Credit Agreement prior to November 14, 2017.

The Amended Revolving Credit Agreement provides a \$1,500 senior secured revolving credit facility (the “Revolving Credit Facility”) to be used for working capital and/or other general corporate purposes of Alcoa Corporation and its subsidiaries. Subject to the terms and conditions of the Amended Revolving Credit Agreement, ANHBV may from time to time request the issuance of letters of credit up to \$750 under the Revolving Credit Facility, subject to a sublimit of \$400 for any letters of credit issued for the account of Alcoa Corporation or any of its domestic subsidiaries. Additionally, ANHBV may from time to time request that each of the lenders provide one or more additional tranches of term loans and/or increase the aggregate amount of revolving commitments, together in an aggregate principal amount of up to \$500 (previously \$0).

The Revolving Credit Facility is scheduled to mature on November 14, 2022 (previously November 1, 2021), unless extended or earlier terminated in accordance with the provisions of the Amended Revolving Credit Agreement. ANHBV may make extension requests during the term of the Revolving Credit Facility, subject to the lender consent requirements set forth in the Amended Revolving Credit Agreement. Under the provisions of the Amended Revolving Credit Agreement, ANHBV will pay a quarterly commitment fee ranging from 0.225% to 0.450% (based on Alcoa Corporation’s leverage ratio) on the unused portion of the Revolving Credit Facility.

A maximum of \$750 in outstanding borrowings under the Revolving Credit Facility may be denominated in euros. Loans will bear interest at a rate per annum equal to an applicable margin plus, at ANHBV’s option, either (a) an adjusted LIBOR rate or (b) a base rate determined by reference to the highest of (1) the prime rate of JPMorgan Chase Bank, N.A., (2) the greater of the federal funds effective rate and the overnight bank funding rate, plus 0.5%, and (3) the one month adjusted LIBOR rate plus 1% per annum. The applicable margin for all loans will vary based on Alcoa Corporation’s leverage ratio and will range from 1.75% to 2.50% for LIBOR loans and 0.75% to 1.50% for base rate loans. Outstanding borrowings may be prepaid without premium or penalty, subject to customary breakage costs.

All obligations of Alcoa Corporation or a domestic entity under the Revolving Credit Facility are secured by, subject to certain exceptions (including a limitation of pledges of equity interests in certain foreign subsidiaries to 65%, and certain thresholds with respect to real property), a first priority lien on substantially all assets of Alcoa Corporation and the material domestic wholly-owned subsidiaries of Alcoa Corporation and certain equity interests of specified non-U.S. subsidiaries. All other obligations under the Revolving Credit Facility are secured by, subject to certain exceptions (including certain thresholds with respect to real property), a first priority security interest in substantially all assets of Alcoa Corporation, ANHBV, the material domestic wholly-owned subsidiaries of Alcoa Corporation, and the material foreign wholly-owned subsidiaries of Alcoa Corporation located in Australia, Brazil, Canada, Luxembourg, the Netherlands, and Norway, including equity interests of certain subsidiaries that directly hold equity interests in AWAC entities. However, no AWAC entity is a guarantor of any obligation under the Revolving Credit Facility and no asset of any AWAC entity, or equity interests in any AWAC entity, will be pledged to secure the obligations under the Revolving Credit Facility.

The Amended Revolving Credit Agreement includes a number of customary affirmative covenants. Additionally, the Amended Revolving Credit Agreement contains a number of negative covenants (applicable to Alcoa Corporation and certain subsidiaries described as restricted), that, subject to certain exceptions, include limitations on (among other things): liens; fundamental changes; sales of assets; indebtedness (see below); entering into restrictive agreements; restricted payments (see below), including repurchases of common stock and shareholder dividends (see below); investments (see below), loans, advances, guarantees, and acquisitions; transactions with affiliates; amendment of certain material documents; and a covenant prohibiting reductions in the ownership of AWAC entities, and certain other specified restricted subsidiaries of Alcoa Corporation, below an agreed level. The Amended Revolving Credit Agreement also includes financial covenants requiring the maintenance of a specified interest expense coverage ratio of not less than 5.00 to 1.00, and a leverage ratio for any period of four consecutive fiscal quarters that is not greater than 2.25 to 1.00 (may be increased to a level not higher than 2.50 to 1.00). As of December 31, 2017 and 2016, Alcoa Corporation was in compliance with all such covenants.

The indebtedness, restricted payments, and investments negative covenants include general exceptions to allow for potential future transactions incremental to those specifically provided for in the Amended Revolving Credit

Agreement. The indebtedness negative covenant provides for an incremental amount not to exceed the greater of \$1,000 (previously \$500) and 6.0% (previously 3.0%) of Alcoa Corporation's consolidated total assets. Additionally, the restricted payments negative covenant provides for an aggregate amount not to exceed \$100 (previously \$0) and the investments negative covenant provides for an aggregate amount not to exceed \$400 (previously \$250), both of which contain two conditions in which these limits may increase. First, in any fiscal year, the thresholds for the restricted payments and investments negative covenants increase by \$250 (previously \$0) and \$200 (previously \$0), respectively, if the consolidated net leverage ratio is not greater than 1.20 to 1.00 and 1.30 to 1.00, respectively, as of the end of the prior fiscal year. Secondly, in regards to both the \$100 and \$250 for restricted payments and the \$200 for investments, 50% of any unused amount of these base amounts in any fiscal year may be used in the next succeeding fiscal year.

The following describes the specific restricted payment negative covenant for share repurchases and the application of the restricted payments general exception (described above) to both share repurchases and ordinary dividend payments.

Alcoa Corporation may repurchase shares of its common stock pursuant to stock option exercises and benefit plans in an aggregate amount not to exceed \$25 during any fiscal year, except that 50% of any unused amount of the base amount in any fiscal year may be used in the next succeeding fiscal year following the use of the base amount in said fiscal year. Additionally, as described above, the Amended Revolving Credit Agreement provides general exceptions to the restricted payments negative covenant that would allow Alcoa Corporation to exceed this specified threshold for share repurchases in any fiscal year by an aggregate amount of up to \$100 (see above for conditions that provide for this limit to increase), assuming no other restricted payments have reduced, in part or whole, the available limit.

Also, the Amended Revolving Credit Agreement rescinded the specific terms included in the Revolving Credit Agreement related to ordinary dividend payments. Previously, Alcoa Corporation was able to declare and make annual ordinary dividends in an aggregate amount not to exceed \$38 in each of the November 1, 2016 through December 31, 2017 time period (no such dividends were made) and annual 2018, \$50 in each of annual 2019 and 2020, and \$75 in the January 1, 2021 through November 1, 2021 time period, except that 50% of any unused amount of the base amount in any of the specified time periods may be used in the next succeeding period following the use of the base amount in said time period. Under the Amended Revolving Credit Agreement, any ordinary dividend payments made by Alcoa Corporation are only subject to the general exception for restricted payments described above. Accordingly, Alcoa Corporation may make annual ordinary dividends in any fiscal year by an aggregate amount of up to \$100 (see above for conditions that provide for this limit to increase), assuming no other restricted payments have reduced, in part or whole, the available limit. The limits of the restricted payments negative covenant under the Notes indenture (see 144A Debt above) would govern the amount of ordinary dividend payments the Company could make in a given timeframe if the allowed amount is less than the limits of the restricted payments negative covenant under the Amended Revolving Credit Agreement.

The Amended Revolving Credit Agreement contains customary events of default, including with respect to a failure to make payments under the Revolving Credit Facility, cross-default and cross-judgment default, and certain bankruptcy and insolvency events.

There were no amounts outstanding at December 31, 2017 and 2016 and no amounts were borrowed during 2017 and 2016 (September 16th through December 31st) under the Revolving Credit Facility.

M. Preferred and Common Stock

Preferred Stock. Alcoa Corporation is authorized to issue 100,000,000 shares of preferred stock at a par value of \$0.01 per share. At December 31, 2017 and 2016, Alcoa Corporation had no issued preferred stock.

Common Stock. Alcoa Corporation is authorized to issue 750,000,000 shares of common stock at a par value of \$0.01 per share. On November 1, 2016, in conjunction with the Separation Transaction, Alcoa Corporation distributed 182,471,195 shares of its common stock. Of this amount, 146,159,428 shares were distributed to ParentCo's shareholders and 36,311,767 shares were retained by ParentCo (Arconic sold all of these shares in 2017). As of

December 31, 2017 and 2016, Alcoa Corporation had 185,200,713 and 182,930,995, respectively, issued and outstanding shares of common stock. In 2017 and from November 1, 2016 through December 31, 2016, Alcoa Corporation issued 2,269,718 and 459,800, respectively, shares under the Company's employee stock-based compensation plan. Dividends on common stock are subject to authorization by Alcoa Corporation's Board of Directors. Alcoa Corporation did not declare any dividends in 2017 and from November 1, 2016 through December 31, 2016.

As of December 31, 2017, 27,270,482 shares of common stock were available for issuance under Alcoa Corporation's employee stock-based compensation plan. Alcoa Corporation issues new shares to satisfy the exercise of stock options and the conversion of stock awards.

Stock-based Compensation

For all periods prior to the Separation Date, Alcoa Corporation's employees participated in ParentCo's stock-based compensation plan. The stock-based compensation expense recorded by Alcoa Corporation in the referenced periods includes expense associated with employees historically attributable to Alcoa Corporation's operations and an allocation of expense (see Note A) related to ParentCo's corporate employees. For 2017 and the last two months of 2016, Alcoa Corporation employees participated in the Company's stock-based compensation plan.

Effective November 1, 2016, all outstanding stock options (vested and non-vested) and non-vested stock awards originally granted under ParentCo's stock-based compensation plan related to Alcoa Corporation employees were replaced with similar stock options and stock awards under Alcoa Corporation's stock-based compensation plan. In order to preserve the intrinsic value of the stock options and stock awards originally granted under ParentCo's stock-based compensation plan, the number of stock options and stock awards issued under Alcoa Corporation's stock-based compensation plan were increased by a ratio of 1.34 developed by dividing the October 31, 2016 closing market price of ParentCo's common stock (\$28.72) by the October 31, 2016 closing market price of Alcoa Corporation's "when issued" common stock (\$21.44). This resulted in a beginning balance of outstanding stock options and stock awards under Alcoa Corporation's stock-based compensation plan of 4,673,829 and 2,605,423, respectively, as of November 1, 2016.

The following description of Alcoa Corporation's stock-based compensation plan is not materially different from the description of ParentCo's stock-based compensation plan prior to the Separation Transaction.

Alcoa Corporation has a stock-based compensation plan under which stock options and stock awards generally will be granted in either January or February each year to eligible employees (the Company's Board of Directors also receive certain stock awards; however, these amounts are not material). Most plan participants can choose whether to receive their award in the form of stock options, stock awards, or a combination of both. This choice is made before the grant is issued and is irrevocable. Stock options are granted at the closing market price of Alcoa Corporation's common stock on the date of grant and vest over a three-year service period (1/3 each year) with a ten-year contractual term. Stock awards vest over a three-year service period from the date of grant and certain of these awards also include either a market (2017) or performance (2017, 2016, and 2015) condition.

The final number of market-based and performance-based stock awards earned is based on Alcoa Corporation's achievement of certain targets over a three-year measurement period. For market-based stock awards granted in 2017, the award will be earned at the end of the vesting period based on the Company's total shareholder return measured against the total shareholder return of the Standard & Poor's 500® Index from January 1, 2017 through December 31, 2019. For performance-based stock awards granted in 2017, the award will be earned at the end of the vesting period based on the Company's performance against a pre-established return-on-capital target measured from January 1, 2017 through December 31, 2019. For performance-based stock awards granted in 2016 and 2015, one-third of the award was to be earned each year during the vesting period based on the Company's performance against a pre-established return-on-capital target for that year measured from January 1st through December 31st (the second tranche of the 2016 performance awards and the third tranche of the 2015 performance awards were not earned in 2017). All market-based

and performance-based stock awards earned over the three-year service period vest on the third anniversary of the award grant date.

In 2017, 2016, and 2015, Alcoa Corporation recognized stock-based compensation expense of \$24, \$28, and \$35, respectively, of which between 80% and 90% related to stock awards in each period (there was no stock-based compensation expense capitalized in 2017, 2016, or 2015). Of the total pretax stock-based compensation expense recognized in 2016 and 2015, \$16 and \$21, respectively, relates to the allocation of expense for ParentCo's corporate employees. As part of both Alcoa Corporation's and ParentCo's stock-based compensation plan design in the respective periods, individuals who are retirement-eligible have a six-month requisite service period in the year of grant. As a result, a larger portion of expense was recognized in the first half of each year for these retirement-eligible employees. Of the total pretax stock-based compensation expense recognized in 2017, 2016, and 2015, \$4, \$7, and \$6, respectively, pertains to the acceleration of expense related to retirement-eligible employees.

Stock-based compensation expense is based on the grant date fair value of the applicable equity grant. For stock awards with no performance or market condition and for stock awards with a performance condition, the fair value was equivalent to the closing market price of either Alcoa Corporation's or ParentCo's common stock on the date of grant in the respective periods. For stock awards with a market condition, the fair value was estimated on the date of grant using a Monte Carlo simulation model, which generated a result of \$52.01 per award in 2017. The Monte Carlo simulation model uses certain assumptions to estimate the fair value of a market-based stock award, including volatility (36.98% for Alcoa Corporation and 11.44% for the Standard & Poor's 500[®] Index) and a risk-free interest rate (1.44%). For stock options, the fair value was estimated on the date of grant using a lattice-pricing model, which generated a result of \$12.45, \$2.12, and \$4.47 per option in 2017, 2016, and 2015, respectively (see below for updated fair value amounts for 2016 and 2015 grants). The lattice-pricing model uses several assumptions to estimate the fair value of a stock option, including an average risk-free interest rate, dividend yield, volatility, annual forfeiture rate, exercise behavior, and contractual life.

The following describes in detail the assumptions used by Alcoa Corporation to estimate the fair value of stock options granted in 2017 (the assumptions used to estimate the fair value of stock options granted by ParentCo in 2016 and 2015 were not materially different). As the Company was a standalone publicly-traded company only for a two-month period in 2016, the assumptions used to estimate the fair value of stock options granted in February 2017 were largely based on historical ParentCo information, where applicable (Alcoa Corporation did not grant any stock options from November 1, 2016 through December 31, 2016). The risk-free interest rate (2.48%) was based on a yield curve of interest rates at the time of the grant over the contractual life of the option. The dividend yield (0.0%) was based on the fact that the Company did not pay any dividends in the months of November and December 2016 and did not have any immediate plans to pay dividends in 2017. Volatility (40.68%) was based on historical and implied volatilities over the term of the option. Alcoa Corporation utilized historical option forfeiture data to estimate annual pre- and post-vesting forfeitures (6%). Exercise behavior (59%) was based on a weighted average exercise ratio (exercise patterns for grants issued over the number of years in the contractual option term) of an option's intrinsic value resulting from historical employee exercise behavior. Based upon the other assumptions used in the determination of the fair value, the life of an option (5.7 years) was an output of the lattice-pricing model.

For stock options outstanding as of October 31, 2016 that were originally granted under ParentCo's stock-based compensation plan to Alcoa Corporation employees, the previously-mentioned fair values were adjusted to reflect both the impact of ParentCo's 1-for-3 reverse stock split that occurred on October 5, 2016 and to maintain the intrinsic value of the stock options as a result of the Separation Transaction. Accordingly, the fair value of the stock options originally granted in 2016 and 2015 was adjusted to \$4.75 and \$10.01, respectively. Alcoa Corporation did not recognize any incremental stock-based compensation expense as a result of this adjustment.

The activity for stock options and stock awards during 2017 was as follows:

	Stock options		Stock awards	
	Number of options	Weighted average exercise price	Number of awards	Weighted average FMV per award
Outstanding, January 1, 2017	4,108,535	\$24.69	2,557,842	\$22.65
Granted	331,681	37.68	796,330	37.39
Exercised	(1,679,148)	25.80	-	-
Converted	-	-	(764,064)	24.98
Expired or forfeited	(73,961)	28.99	(145,756)	24.90
Performance share adjustment	-	-	(143,020)	21.03
Outstanding, December 31, 2017	2,687,107	25.48	2,301,332	26.93

As of December 31, 2017, the number of stock options outstanding had a weighted average remaining contractual life of 5.82 years and a total intrinsic value of \$76. Additionally, 1,704,299 of the stock options outstanding were fully vested and exercisable and had a weighted average remaining contractual life of 4.47 years, a weighted average exercise price of \$26.19, and a total intrinsic value of \$47 as of December 31, 2017. Cash received from stock option exercises was \$43 and \$10 in 2017 and 2016, respectively, and the total intrinsic value of stock options exercised during 2017 and 2016 was \$24 and \$4, respectively.

At December 31, 2017, there was \$24 (pretax) of unrecognized compensation expense related to non-vested stock option grants and non-vested stock award grants. This expense is expected to be recognized over a weighted average period of 1.75 years.

N. Pension and Other Postretirement Benefits

Alcoa Corporation maintains pension plans covering most U.S. employees and certain employees in foreign locations (see Note T). Pension benefits generally depend on length of service, job grade, and remuneration. Substantially all benefits are paid through pension trusts that are sufficiently funded to ensure that all plans can pay benefits to retirees as they become due. Most salaried and non-bargaining hourly U.S. employees hired after March 1, 2006 participate in a defined contribution plan instead of a defined benefit plan.

The Company also maintains health care and life insurance postretirement benefit plans covering eligible U.S. retired employees and certain retirees from foreign locations (see Note T). Generally, the medical plans are unfunded and pay a percentage of medical expenses, reduced by deductibles and other coverage. Life benefits are generally provided by insurance contracts. Alcoa Corporation retains the right, subject to existing agreements, to change or eliminate these benefits. All salaried and certain non-bargaining hourly U.S. employees hired after January 1, 2002 and certain bargaining hourly U.S. employees hired after July 1, 2010 are not eligible for postretirement health care benefits. All salaried and certain hourly U.S. employees that retire on or after April 1, 2008 are not eligible for postretirement life insurance benefits.

The above descriptions of retirement benefits for Alcoa Corporation participants also describe the retirement benefits provided by ParentCo to its employees and retirees prior to the Separation Date.

For all periods prior to August 1, 2016 (see below), eligible employees attributable to Alcoa Corporation operations participated in the U.S. defined benefit pension and other postretirement benefit plans sponsored by ParentCo (the "Shared Plans"), which included Arconic and ParentCo corporate participants. Alcoa Corporation accounted for its portion of the Shared Plans as multiemployer benefit plans. Accordingly, Alcoa Corporation did not record an asset or liability to recognize the funded status of the Shared Plans. The multiemployer contribution expense attributable to employees of Alcoa Corporation-related operations was based primarily on pensionable compensation of such employees for the pension plans and estimated interest costs for the other postretirement benefit plans. Additionally,

for all periods prior to August 1, 2016, Alcoa Corporation recorded an allocation of expenses for the Shared Plans attributable to ParentCo corporate participants, as well as to closed and sold operations (see Cost Allocations in Note A).

Also, certain of the ParentCo plans described above were specific to employees attributable to Alcoa Corporation operations (non-U.S.) in their entirety (the “Direct Plans”). Alcoa Corporation accounted for the Direct Plans as defined benefit pension and other postretirement benefit plans. Accordingly, the funded status of each of the Direct Plans was recorded in Alcoa Corporation’s Consolidated Balance Sheet. Actuarial gains and losses that had not yet been recognized in earnings were recorded in Accumulated other comprehensive loss until they were amortized as a component of net periodic benefit cost. The determination of benefit obligations and recognition of expenses related to Direct Plans are dependent on various assumptions. The major assumptions primarily relate to discount rates, long-term expected rates of return on plan assets, and future compensation increases. Management develops each assumption using relevant company experience in conjunction with market-related data for each of the plans.

In preparation for the Separation Transaction, effective August 1, 2016, certain of the Shared Plans were separated into standalone plans for both Alcoa Corporation (the “New Direct Plans”) and Arconic. Accordingly, the New Direct Plans for Alcoa Corporation were measured as of August 1, 2016. One of the primary assumptions used to measure the New Direct Plans was a weighted average discount rate of 3.48%. This measurement yielded a combined net unfunded status of \$2,348. Additionally, certain other Shared Plans were assumed by Alcoa Corporation (the “Additional New Direct Plans,” and collectively with the Direct Plans and New Direct Plans, the “Cumulative Direct Plans”) that did not require to be separated and/or to be remeasured. The Additional New Direct Plans had a combined net unfunded status of \$180. The aggregate combined net unfunded status of the New Direct Plans and the Additional New Direct Plans was recognized in Alcoa Corporation’s Consolidated Balance Sheet at that time, consisting of a current liability of \$136 and a noncurrent liability of \$2,392. Additionally, Alcoa Corporation recognized \$2,704 in Accumulated other comprehensive loss.

The following table summarizes the total expenses recognized by Alcoa Corporation related to all pension and other postretirement benefits:

Type of Plan	Type of Expense	Pension benefits			Other postretirement benefits		
		2017	2016	2015	2017	2016	2015
Cumulative Direct Plans	Net periodic benefit cost	\$119	\$ 83	\$106	\$50	\$21	\$(12)
Shared Plans	Multiemployer contribution expense	-	28	64	-	12	32
Shared Plans	Cost allocation	-	25	84	-	8	11
		\$119	\$136	\$254	\$50	\$41	\$ 31

The funded status of Alcoa Corporation’s Cumulative Direct Plans is measured as of December 31 each calendar year. All of the information that follows for pension and other postretirement benefit plans is only applicable to the Cumulative Direct Plans, as appropriate.

Obligations and Funded Status

December 31,	Pension benefits		Other postretirement benefits	
	2017	2016	2017	2016
Change in benefit obligation				
Benefit obligation at beginning of year	\$ 7,269	\$ 2,246	\$ 1,286	\$ 82
Benefit obligation assumed on August 1, 2016	-	5,316	-	1,277
Service cost	84	74	5	2
Interest cost	250	142	38	16
Amendments	2	1	-	-
Actuarial losses (gains)	388	(244)	(1)	(33)
Settlements	(64)	(80)	-	-
Benefits paid, net of participants' contributions	(437)	(218)	(116)	(61)
Medicare Part D subsidy receipts	-	-	5	3
Foreign currency translation impact	147	32	1	-
Benefit obligation at end of year*	\$ 7,639	\$ 7,269	\$ 1,218	\$ 1,286
Change in plan assets				
Fair value of plan assets at beginning of year	\$ 5,421	\$ 1,891	\$ -	\$ -
Fair value of plan assets assumed on August 1, 2016	-	4,065	-	-
Actual return on plan assets	187	(332)	-	-
Employer contributions	111	72	-	-
Participant contributions	15	18	-	-
Benefits paid	(432)	(224)	-	-
Administrative expenses	(41)	(11)	-	-
Settlements	(62)	(80)	-	-
Foreign currency translation impact	123	22	-	-
Fair value of plan assets at end of year*	\$ 5,322	\$ 5,421	\$ -	\$ -
Funded status*	\$ (2,317)	\$ (1,848)	\$ (1,218)	\$ (1,286)
Less: Amounts attributed to joint venture partners	(37)	(30)	-	-
Net funded status	\$ (2,280)	\$ (1,818)	\$ (1,218)	\$ (1,286)
Amounts recognized in the Consolidated Balance Sheet consist of:				
Noncurrent assets	\$ 72	\$ 43	\$ -	\$ -
Current liabilities	(11)	(10)	(118)	(120)
Noncurrent liabilities	(2,341)	(1,851)	(1,100)	(1,166)
Net amount recognized	\$ (2,280)	\$ (1,818)	\$ (1,218)	\$ (1,286)
Amounts recognized in Accumulated Other Comprehensive Loss consist of:				
Net actuarial loss	\$ 3,743	\$ 3,254	\$ 281	\$ 295
Prior service cost (benefit)	35	42	(30)	(36)
Total, before tax effect	3,778	3,296	251	259
Less: Amounts attributed to joint venture partners	45	36	-	-
Net amount recognized, before tax effect	\$ 3,733	\$ 3,260	\$ 251	\$ 259
Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Loss consist of:				
Net actuarial loss (benefit)	\$ 676	\$ 337	\$ (1)	\$ (33)
Amortization of accumulated net actuarial loss	(187)	(105)	(13)	(8)
Prior service cost (benefit)	2	2	-	(1)
Amortization of prior service (cost) benefit	(9)	(7)	6	5
Total, before tax effect	482	227	(8)	(37)
Less: Amounts attributed to joint venture partners	9	(3)	-	-
Net amount recognized, before tax effect	\$ 473	\$ 230	\$ (8)	\$ (37)

* At December 31, 2017, the benefit obligation, fair value of plan assets, and funded status for U.S. pension plans were \$5,093, \$3,195, and \$(1,898), respectively. At December 31, 2016, the benefit obligation, fair value of plan assets, and funded status for U.S. pension plans were \$4,977, \$3,504, and \$(1,473), respectively.

Pension Plan Benefit Obligations

	Pension benefits	
	2017	2016
The aggregate projected benefit obligation and accumulated benefit obligation for all defined benefit pension plans was as follows:		
Projected benefit obligation	\$7,639	\$7,269
Accumulated benefit obligation	7,426	7,075
The aggregate projected benefit obligation and fair value of plan assets for pension plans with projected benefit obligations in excess of plan assets was as follows:		
Projected benefit obligation	7,061	6,699
Fair value of plan assets	4,671	4,807
The aggregate accumulated benefit obligation and fair value of plan assets for pension plans with accumulated benefit obligations in excess of plan assets was as follows:		
Accumulated benefit obligation	6,885	6,531
Fair value of plan assets	4,671	4,807

Components of Net Periodic Benefit Cost

	Pension benefits⁽¹⁾			Other postretirement benefits⁽²⁾		
	2017	2016	2015	2017	2016	2015
Service cost	\$ 71	\$ 61	\$ 51	\$ 5	\$ 2	\$ -
Interest cost	244	138	89	38	16	4
Expected return on plan assets	(398)	(242)	(121)	-	-	-
Recognized net actuarial loss	185	102	42	13	8	(3)
Amortization of prior service cost (benefit)	9	7	6	(6)	(5)	(9)
Settlements ⁽³⁾	5	16	14	-	-	-
Curtailments ⁽⁴⁾	-	-	9	-	-	(4)
Special termination benefits ⁽⁵⁾	3	1	16	-	-	-
Net periodic benefit cost ⁽⁶⁾	\$ 119	\$ 83	\$ 106	\$50	\$21	\$(12)

⁽¹⁾ In 2017 and 2016, net periodic benefit cost for U.S pension plans was \$74 and \$21, respectively.

⁽²⁾ In 2017 and 2016, net periodic benefit cost for other postretirement benefits reflects a reduction of \$8 and \$6, respectively, related to the recognition of the federal subsidy awarded under Medicare Part D.

⁽³⁾ In 2017 and 2016, settlements were due to workforce reductions (see Note D). In 2015, settlements were due to workforce reductions (see Note D) and the payment of lump sum benefits.

⁽⁴⁾ In 2015, curtailments were due to elimination of benefits or workforce reductions (see Note D).

⁽⁵⁾ In 2017, 2016, and 2015, special termination benefits were due to workforce reductions (see Note D).

⁽⁶⁾ Amounts attributed to joint venture partners are not included.

Amounts Expected to be Recognized in Net Periodic Benefit Cost

	Pension benefits	Other postretirement benefits
	2018	2018
Net actuarial loss recognition	\$223	\$15
Prior service cost (benefit) recognition	9	(6)

Assumptions

Weighted average assumptions used to determine benefit obligations for pension and other postretirement benefit plans were as follows:

December 31,	2017	2016
Discount rate—pension plans	3.68%	4.12%
Discount rate—other postretirement benefit plans	3.54	3.93
Rate of compensation increase—pension plans	3.28	3.61

The discount rate is determined using a Company-specific yield curve model (above-median) developed with the assistance of an external actuary. The cash flows of the plans' projected benefit obligations are discounted using a single equivalent rate derived from yields on high quality corporate bonds, which represent a broad diversification of issuers in various sectors. The yield curve model parallels the plans' projected cash flows, which have a weighted average duration of 12 years, and the underlying cash flows of the bonds included in the model exceed the cash flows needed to satisfy the Company's plans' obligations multiple times. If a deep market of high quality corporate bonds does not exist in a country, then the yield on government bonds plus a corporate bond yield spread is used.

The rate of compensation increase is based upon anticipated compensation increases and estimated inflation. For 2018, the rate of compensation increase will be 3.28%.

Weighted average assumptions used to determine net periodic benefit cost for pension and other postretirement benefit plans were as follows:

	2017	2016	2015
Discount rate—pension plans*	3.61%	3.45%	4.09%
Discount rate—other postretirement benefit plans*	3.30	2.90	4.15
Expected long-term rate of return on plan assets—pension plans	7.47	7.31	6.91
Rate of compensation increase—pension plans	3.61	3.65	3.74

* In all periods presented, the respective discount rates were used to determine net periodic benefit cost for most plans for the full annual period. However, the discount rates for a limited number of plans were updated during 2017, 2016, and 2015 to reflect the remeasurement of these plans due to settlements and/or curtailments. The updated discount rates used were not significantly different from the discount rates presented.

The expected long-term rate of return on plan assets is generally applied to a five-year market-related value of plan assets (a four-year average or the fair value at the plan measurement date is used for certain non-U.S. plans). The process used by management to develop this assumption is one that relies on forward-looking investment returns by asset class. Management incorporates expected future investment returns on current and planned asset allocations using information from various external investment managers and consultants, as well as management's own judgment (see Plan Assets below). For 2017, 2016, and 2015, the expected long-term rate of return used by management was based on the prevailing and planned strategic asset allocations, as well as estimates of future returns by asset class. For 2018, management anticipates that 6.89% will be the weighted-average expected long-term rate of return.

Assumed health care cost trend rates for U.S. other postretirement benefit plans were as follows (non-U.S. plans are not material):

	2017	2016	2015
Health care cost trend rate assumed for next year	5.5%	5.5%	5.5%
Rate to which the cost trend rate gradually declines	4.5%	4.5%	4.5%
Year that the rate reaches the rate at which it is assumed to remain	2021	2020	2019

The assumed health care cost trend rate is used to measure the expected cost of gross eligible charges covered by Alcoa Corporation's other postretirement benefit plans. For 2018, a 5.5% trend rate will be used, reflecting management's best estimate of the change in future health care costs covered by the plans. The plans' actual annual health care cost trend experience (based on ParentCo's plans that previously included the Alcoa Corporation participants) over the past three years has ranged from (0.8)% to 9.0%. Management does not believe this three-year range is indicative of expected increases for future health care costs over the long-term.

Assumed health care cost trend rates have an effect on the amounts reported for a health care plan. A one-percentage point change in these assumed rates would have the following effects:

	1% increase	1% decrease
Effect on other postretirement benefit obligations	\$79	\$(70)
Effect on total of service and interest cost components	3	(2)

Plan Assets

Alcoa Corporation's pension plan investment policy and weighted average asset allocations at December 31, 2017 and 2016, by asset class, were as follows:

Asset class	Policy range	Plan assets at December 31,	
		2017	2016
Equities	20–55%	40%	37%
Fixed income	25–55%	35	36
Other investments	15–35%	25	27
Total		100%	100%

The principal objectives underlying the investment of the pension plans' assets are to ensure that Alcoa Corporation can properly fund benefit obligations as they become due under a broad range of potential economic and financial scenarios, maximize the long-term investment return with an acceptable level of risk based on such obligations, and broadly diversify investments across and within various asset classes to protect asset values against adverse movements.

Through 2017, specific objectives for long-term investment strategy included reducing the volatility of pension assets relative to pension liabilities and achieving risk factor diversification across the balance of the asset portfolio. A portion of the assets were matched to the interest rate profile of the benefit obligation through long duration fixed income investments and fixed income derivative instruments. Exposure to broad equity risk was decreased and diversified through investments in discretionary and systematic macro hedge funds, long/short equity hedge funds, and global and emerging market equities. Investments were further diversified by strategy, asset class, geography, and sector in an effort to enhance returns and mitigate downside risk. Several external investment managers were used to gain broad exposure to the financial markets and to mitigate manager-concentration risk. This investment strategy was defined prior to the Separation Date by ParentCo management and maintained by Alcoa Corporation management; however, this strategy resulted in investment returns less than those expected since the Separation Date.

Accordingly, in 2018, management plans to implement a less-complex, peer-like investment strategy and, as a result, restructure the asset portfolio. This new strategy will result in investing a higher percentage of the portfolio in assets that will match the interest rate and credit risk profiles of the benefit obligations, as well as investing in assets with returns expected to exceed the actual returns of the previous asset mix. To achieve this new strategy, the portfolio will no longer include investments in discretionary and systematic macro hedge funds and long/short equity hedge funds.

Instead, the portfolio will include a larger concentration of investments in long duration government debt, long-duration corporate credit, and real estate, as well as new investments in high yield and emerging sovereign debt and global-listed infrastructure. As a result, the expected asset class mix will be approximately 30% in equities, approximately 50% in fixed income, and approximately 20% in other investments. Additionally, the number of asset managers will be changed. The Company expects the new strategy to be fully implemented by the end of 2018.

Investment practices comply with the requirements of applicable laws and regulations in the respective jurisdictions, including the Employee Retirement Income Security Act of 1974 (ERISA) in the United States. The use of derivative instruments by external investment managers is permitted where appropriate and necessary for achieving overall investment policy objectives and for mitigating interest rate and other asset class risks.

The following section describes the valuation methodologies used by the trustees to measure the fair value of pension plan assets, including, if applicable, an indication of the level in the fair value hierarchy in which each type of asset is generally classified (see Note O for the definition of fair value and a description of the fair value hierarchy).

Equities. These securities consist of: (i) direct investments in the stock of publicly traded U.S. and non-U.S. companies and are valued based on the closing price reported in an active market on which the individual securities are traded (generally classified in Level 1); (ii) the plans' share of commingled funds that are invested in the stock of publicly traded companies and are valued at net asset value; and (iii) direct investments in long/short equity hedge funds and private equity (limited partnerships and venture capital partnerships) and are valued at net asset value.

Fixed income. These securities consist of: (i) U.S. government debt and are generally valued using quoted prices (included in Level 1); (ii) cash and cash equivalents invested in publicly-traded funds and are valued based on the closing price reported in an active market on which the individual securities are traded (generally classified in Level 1); (iii) publicly traded U.S. and non-U.S. fixed interest obligations (principally corporate bonds and debentures) and are valued through consultation and evaluation with brokers in the institutional market using quoted prices and other observable market data (included in Level 2); (iv) fixed income derivatives and are generally valued using industry standard models with market-based observable inputs (included in Level 2); and (v) cash and cash equivalents invested in institutional funds and are valued at net asset value.

Other investments. These investments include, among others: (i) exchange traded funds, such as real estate investment trusts and gold, and are valued based on the closing price reported in an active market on which the investments are traded (included in Level 1); (ii) the plans' share of commingled funds that are invested in real estate investment trusts and are valued at net asset value; (iii) direct investments of discretionary and systematic macro hedge funds and private real estate (includes limited partnerships) and are valued at net asset value; and (iv) absolute return hedge funds and are valued at net asset value.

The fair value methods described above may not be indicative of net realizable value or reflective of future fair values. Additionally, while Alcoa Corporation believes the valuation methods used by the plans' trustees are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following table presents the fair value of pension plan assets classified under either the appropriate level of the fair value hierarchy or net asset value:

December 31, 2017	Level 1	Level 2	Level 3	Net Asset Value	Total
Equities:					
Equity securities	\$ 906	\$ -	\$-	\$ 869	\$1,775
Long/short equity hedge funds	-	-	-	152	152
Private equity	-	-	-	226	226
	\$ 906	\$ -	\$-	\$1,247	\$2,153
Fixed income:					
Intermediate and long duration government/credit	\$ 95	\$378	\$-	\$ 264	\$ 737
Cash and cash equivalent funds	313	-	-	742	1,055
Other	-	56	-	-	56
	\$ 408	\$434	\$-	\$1,006	\$1,848
Other investments:					
Real estate	\$ 241	\$ -	\$-	\$ 365	\$ 606
Discretionary and systematic macro hedge funds	-	-	-	581	581
Other	-	-	-	132	132
	\$ 241	\$ -	\$-	\$1,078	\$1,319
Total⁽¹⁾	\$1,555	\$434	\$-	\$3,331	\$5,320
December 31, 2016	Level 1	Level 2	Level 3	Net Asset Value	Total
Equities:					
Equity securities	\$ 520	\$ -	\$-	\$ 772	\$1,292
Long/short equity hedge funds	-	-	-	449	449
Private equity	-	-	-	246	246
	\$ 520	\$ -	\$-	\$1,467	\$1,987
Fixed income:					
Intermediate and long duration government/credit	\$ 78	\$283	\$-	\$ 167	\$ 528
Cash and cash equivalent funds	897	-	-	468	1,365
Other	-	61	-	-	61
	\$ 975	\$344	\$-	\$ 635	\$1,954
Other investments:					
Real estate	\$ 88	\$ -	\$-	\$ 331	\$ 419
Discretionary and systematic macro hedge funds	-	-	-	866	866
Other	71	-	-	139	210
	\$ 159	\$ -	\$-	\$1,336	\$1,495
Total⁽²⁾	\$1,654	\$344	\$-	\$3,438	\$5,436

(1) As of December 31, 2017, the total fair value of pension plan assets excludes a net receivable of \$2, which represents securities not yet settled plus interest and dividends earned on various investments, less an amount due to Arconic pension plans from Alcoa Corporation pension plans related to the separation of certain plans between the two companies.

(2) As of December 31, 2016, the total fair value of pension plan assets excludes a net payable of \$15, which represents an amount due to Arconic pension plans from Alcoa Corporation pension plans related to the separation of certain plans between the two companies.

Funding and Cash Flows

It is Alcoa Corporation's policy to fund amounts for defined benefit pension plans sufficient to meet the minimum requirements set forth in applicable country benefits laws and tax laws, including the Pension Protection Act of 2006; the Worker, Retiree, and Employer Recovery Act of 2008; the Moving Ahead for Progress in the 21st Century Act of 2012; the Highway and Transportation Funding Act of 2015; and the Bipartisan Budget Act of 2016 for U.S. plans. From time to time, Alcoa Corporation contributes additional amounts as deemed appropriate. In 2017, 2016, and 2015, cash contributions to Alcoa Corporation's defined benefit pension plans were \$106, \$66, and \$69. The minimum required contribution to defined benefit pension plans in 2018 is estimated to be \$290, of which \$250 is for U.S. plans. Additionally, the Company expects to make discretionary contributions of approximately \$300 combined to the U.S. and Canadian defined benefit pension plans in 2018 (see Note T).

Benefit payments expected to be paid to pension and other postretirement benefit plan participants and expected Medicare Part D subsidy receipts are as follows:

Year ended December 31,	Pension benefits	Gross Other postretirement benefits	Medicare Part D subsidy receipts	Net Other postretirement benefits
2018	\$ 490	\$ 125	\$10	\$115
2019	485	125	10	115
2020	490	120	5	115
2021	490	120	5	115
2022	490	115	5	110
2023 through 2027	2,400	425	25	400
	\$4,845	\$1,030	\$60	\$970

Defined Contribution Plans

Alcoa Corporation sponsors savings and investment plans in several countries, including Australia and the United States. Prior to the Separation Date, employees attributable to Alcoa Corporation operations participated in ParentCo-sponsored plans. In the United States, employees may contribute a portion of their compensation to the plans, and Alcoa Corporation (ParentCo prior to Separation Date) matches a specified percentage of these contributions in equivalent form of the investments elected by the employee. Also, the Company makes contributions to a retirement savings account based on a percentage of eligible compensation for certain U.S. employees hired after March 1, 2006 that are not able to participate in Alcoa Corporation's defined benefit pension plans (see Note T). Alcoa Corporation's expenses related to all defined contribution plans were \$65 in 2017, \$57 in 2016, and \$59 in 2015.

O. Derivatives and Other Financial Instruments

Fair Value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy distinguishes between (i) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (ii) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

- Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted

prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

- Level 3—Inputs that are both significant to the fair value measurement and unobservable.

Derivatives. Alcoa Corporation is exposed to certain risks relating to its ongoing business operations, including financial, market, political, and economic risks. The following discussion provides information regarding Alcoa Corporation's exposure to the risks of changing commodity prices and foreign currency exchange rates.

Alcoa Corporation's commodity and derivative activities are subject to the management, direction, and control of the Strategic Risk Management Committee (SRMC), which consists of at least three members, including the chief executive officer and the chief financial officer. The remaining member(s) are other officers and/or employees of the Company as the chief executive officer may designate from time to time. Currently, the only other member of the SRMC is Alcoa Corporation's treasurer. The SRMC meets on a periodic basis to review derivative positions and strategy and reports to the Audit Committee of Alcoa Corporation's Board of Directors on the scope of its activities.

Alcoa Corporation's aluminum, energy, and foreign exchange contracts are held for purposes other than trading. They are used primarily to mitigate uncertainty and volatility, and to cover underlying exposures. Alcoa Corporation is not involved in trading activities for energy, weather derivatives, or other nonexchange commodity trading activities.

Several of Alcoa Corporation's aluminum, energy, and foreign exchange contracts are classified as Level 1 or Level 2 under the fair value hierarchy. The total fair value of these derivative contracts recorded as assets and liabilities was \$44 and \$117, respectively, at December 31, 2017 and \$5 and \$2, respectively, at December 31, 2016. Certain of these contracts are designated as either fair value or cash flow hedging instruments. Combined, in 2017, 2016, and 2015, Alcoa Corporation recognized a loss of \$22, a loss of less than \$1, and a gain of \$4, respectively, in Other (income) expenses, net on the accompanying Statement of Consolidated Operations related to these contracts. Additionally, for the contracts designated as cash flow hedges, Alcoa Corporation recognized an unrealized loss of \$92, an unrealized gain of \$2, and an unrealized loss of \$13 in Other comprehensive loss in 2017, 2016, and 2015, respectively.

In addition to the Level 1 and 2 derivative instruments described above, Alcoa Corporation has derivative instruments classified as Level 3 under the fair value hierarchy. These instruments are composed of (i) both embedded aluminum derivatives and an embedded credit derivative related to energy supply contracts and (ii) freestanding financial contracts related to energy purchases in the spot market, all of which are associated with nine smelters and three refineries. Certain of the embedded aluminum derivatives and financial contracts were designated as cash flow hedging instruments. All of these Level 3 derivative instruments are described below in detail and are enumerated as D1 through D11.

The following section describes the valuation methodologies used by Alcoa Corporation to measure its Level 3 derivative instruments at fair value. Derivative instruments classified as Level 3 in the fair value hierarchy represent those in which management has used at least one significant unobservable input in the valuation model. Alcoa Corporation uses a discounted cash flow model to fair value all Level 3 derivative instruments. Where appropriate, the description below includes the key inputs to those models and any significant assumptions. These valuation models are reviewed and tested at least on an annual basis.

Inputs in the valuation models for Level 3 derivative instruments are composed of the following: (i) quoted market prices (e.g., aluminum prices on the 10-year London Metal Exchange (LME) forward curve and energy prices), (ii) significant other observable inputs (e.g., information concerning time premiums and volatilities for certain option type embedded derivatives and regional premiums for aluminum contracts), and (iii) unobservable inputs (e.g., aluminum and energy prices beyond those quoted in the market). For periods beyond the term of quoted market prices for aluminum, Alcoa Corporation estimates the price of aluminum by extrapolating the 10-year LME forward curve. Additionally, for periods beyond the term of quoted market prices for energy, management has developed a forward curve based on independent consultant market research. Where appropriate, valuations are adjusted for various factors such as liquidity, bid/offer spreads, and credit considerations. Such adjustments are generally based on available market evidence (Level 2). In the absence of such evidence, management's best estimate is used (Level 3). If a significant input that is unobservable in one period becomes observable in a subsequent period, the related asset or

liability would be transferred to the appropriate classification (Level 1 or 2) in the period of such change (there were no such transfers in the periods presented).

D1 through D5—Alcoa Corporation has two power contracts (D1 and D2), each of which contain an embedded derivative that indexes the price of power to the LME price of aluminum. Additionally, Alcoa Corporation has three power contracts (D3 through D5), each of which contain an embedded derivative that indexes the price of power to the LME price of aluminum plus the Midwest premium. The embedded derivatives in these five power contracts are primarily valued using observable market prices; however, due to the length of the contracts, the valuation models also require management to estimate the long-term price of aluminum based upon an extrapolation of the 10-year LME forward curve (one of the contracts no longer requires the use of prices beyond this curve). Additionally, for three of the contracts, management also estimates the Midwest premium, generally, for the next twelve months based on recent transactions and then holds the premium estimated in that twelfth month constant for the remaining duration of the contract. Significant increases or decreases in the actual LME price beyond 10 years would result in a higher or lower fair value measurement. An increase in actual LME price and/or the Midwest premium over the inputs used in the valuation models will result in a higher cost of power and a corresponding decrease to the derivative asset or increase to the derivative liability. The embedded derivatives have been designated as cash flow hedges of forward sales of aluminum. Unrealized gains and losses were included in Other comprehensive loss on the accompanying Consolidated Balance Sheet while realized gains and losses were included in Sales on the accompanying Statement of Consolidated Operations.

D6—Alcoa Corporation had a power contract (expired in October 2016 —see D10 below) separate from above that contains an LME-linked embedded derivative. Prior to its expiration, the embedded derivative was valued using the probability and interrelationship of future LME prices, Australian dollar to U.S. dollar exchange rates, and the U.S. consumer price index. Significant increases or decreases in the LME price would result in a higher or lower fair value measurement. An increase in actual LME price over the inputs used in the valuation model will result in a higher cost of power and a corresponding decrease to the derivative asset. This embedded derivative did not qualify for hedge accounting treatment. Unrealized gains and losses from the embedded derivative were included in Other (income) expenses, net on the accompanying Statement of Consolidated Operations while realized gains and losses were included in Cost of goods sold on the accompanying Statement of Consolidated Operations as electricity purchases were made under the contract. At the time this derivative asset was recognized, an equivalent amount was recognized as a deferred credit in Other noncurrent liabilities and deferred credits on the Consolidated Balance Sheet. The amortization of this deferred credit was recognized in Other (income) expenses, net on the accompanying Statement of Consolidated Operations as power was received over the life of the contract.

D7—Additionally, Alcoa Corporation has a natural gas supply contract, which has an LME-linked ceiling. This embedded derivative is valued using probabilities of future LME aluminum prices and the price of Brent crude oil (priced on Platts), including the interrelationships between the two commodities subject to the ceiling. Any change in the interrelationship would result in a higher or lower fair value measurement. An LME ceiling was embedded into the contract price to protect against an increase in the price of oil without a corresponding increase in the price of LME. An increase in oil prices with no similar increase in the LME price would limit the increase of the price paid for natural gas. This embedded derivative did not qualify for hedge accounting treatment. Unrealized gains and losses from the embedded derivative were included in Other (income) expenses, net on the accompanying Statement of Consolidated Operations while realized gains and losses were included in Cost of goods sold on the accompanying Statement of Consolidated Operations as gas purchases were made under the contract.

D8—In mid-2016, Alcoa Corporation and the related counterparty elected to modify the pricing of an existing power contract for a smelter in the United States. This amendment contains an embedded derivative that indexes the price of power to the LME price of aluminum plus the Midwest premium. The embedded derivative is valued using the interrelationship of future metal prices (LME base plus Midwest premium) and the amount of megawatt hours of energy needed to produce the forecasted metric tons of aluminum at the smelter. Significant increases or decreases in the metal price would result in a higher or lower fair value measurement. An increase in actual metal price over the inputs used in the valuation model will result in a higher cost of power and a corresponding increase to the derivative liability. Management elected not to qualify the embedded derivative for hedge accounting treatment. Unrealized gains

and losses from the embedded derivative were included in Other (income) expenses, net on the accompanying Statement of Consolidated Operations while realized gains and losses were included in Cost of goods sold on the accompanying Statement of Consolidated Operations as electricity purchases were made under the contract. At the time this derivative liability was recognized, an equivalent amount was recognized as a deferred charge in Other noncurrent assets on the accompanying Consolidated Balance Sheet. The amortization of this deferred charge is recognized in Other (income) expenses, net on the accompanying Statement of Consolidated Operations as power is received over the life of the contract.

D9—Alcoa Corporation has a power contract, which contains an embedded derivative that indexes the difference in the respective credit spread of Alcoa Corporation and the counterparty to the 10-year U.S. treasury rate. This difference is then increased twice by a negotiated multiplier, which is currently based on the sum of Arconic's credit spread to both the 10-year and 20-year U.S. treasury rates. In accordance with the terms of the power contract, this calculation may be changed in January of each calendar year. Management uses market prices, historical relationships, and forecast services to determine fair value. Significant increases or decreases in any of these inputs would result in a lower or higher fair value measurement. A wider credit spread between Alcoa Corporation and the counterparty would result in a higher cost of power and a corresponding increase in the derivative liability. This embedded derivative did not qualify for hedge accounting treatment. Unrealized gains and losses were included in Other (income) expenses, net on the accompanying Statement of Consolidated Operations while realized gains and losses were included in Cost of goods sold on the accompanying Statement of Consolidated Operations as electricity purchases were made under the contract.

D10 and D11—Alcoa Corporation had a financial contract (D10) that hedged the anticipated power requirements at one of its smelters that began in November 2016. At that time, the energy supply contract related to this smelter had expired (see D6 above) and Alcoa Corporation began purchasing electricity directly from the spot market. Beyond the term where market information is available, management developed a forward curve, for valuation purposes, based on independent consultant market research. Significant increases or decreases in the power market may result in a higher or lower fair value measurement of the financial contract. Lower prices in the power market would cause a decrease in the derivative asset. The financial contract had been designated as a cash flow hedge of future purchases of electricity (this designation ceased in December 2016 —see below). Through November 2016, unrealized gains and losses on this contract were recorded in Other comprehensive loss on the accompanying Consolidated Balance Sheet, while realized gains and losses were recorded in Cost of goods sold as electricity purchases were made from the spot market. In August 2016, Alcoa Corporation gave the required notice to terminate this financial contract one year from the date of notification. As a result, Alcoa Corporation decreased both the related derivative asset recorded in Other noncurrent assets and the unrealized gain recorded in Accumulated other comprehensive loss by \$84, which related to the August 2017 through 2036 timeframe, resulting in no impact to Alcoa Corporation's earnings. In December 2016, the smelter experienced an unplanned outage, resulting in a portion of the financial contract no longer qualifying for hedge accounting, at which point management elected to discontinue hedge accounting for all of the remainder of the contract (through August 2017). As a result, Alcoa Corporation reclassified an unrealized gain of \$7 from Accumulated other comprehensive loss to Other income, net related to the portion of the contract that no longer qualified for hedge accounting. The remaining \$6 unrealized gain in Accumulated other comprehensive loss related to the portion management elected to discontinue hedge accounting was reclassified to Cost of goods sold as electricity purchases were made from the spot market through the termination date of the financial contract. Additionally, from December 2016 through August 2017, unrealized gains and losses on this contract were recorded in Other (income) expenses, net, and realized gains and losses were recorded in Other (income) expenses, net as electricity purchases were made from the spot market.

In January 2017, Alcoa Corporation and the counterparty entered into a new financial contract (D11) to hedge the anticipated power requirements at this smelter for the period from August 2017 through July 2021 and amended the existing financial contract to both reduce the hedged amount of anticipated power requirements and to move up the effective termination date to July 31, 2017. The new financial contract has been designated as a cash flow hedge of future purchases of electricity. Unrealized gains and losses on the new financial contract were recorded in Other comprehensive loss on the accompanying Consolidated Balance Sheet while realized gains and losses were recorded (began in August 2017) in Cost of goods sold as electricity purchases were made from the spot market.

The following table presents quantitative information related to the significant unobservable inputs described above for Level 3 derivative contracts:

	Fair value at December 31, 2017	Unobservable input	Range (\$ in full amounts)
Assets:			
Embedded aluminum derivative (D7)	\$ -	Interrelationship of future aluminum and oil prices	Aluminum: \$2,258 per metric ton in January 2018 to \$2,299 per metric ton in October 2018 Oil: \$67 per barrel in January 2018 to \$64 per barrel in October 2018
Financial contract (D11)	197	Interrelationship of forward energy price and the Consumer Price Index and price of electricity beyond forward curve	Electricity: \$83.69 per megawatt hour in 2018 to \$53.60 per megawatt hour in 2021
Liabilities:			
Embedded aluminum derivative (D1)	403	Interrelationship of LME price to the amount of megawatt hours of energy needed to produce the forecasted metric tons of aluminum	Aluminum: \$2,258 per metric ton in 2018 to \$2,651 per metric ton in 2027 Electricity: rate of 4 million megawatt hours per year
Embedded aluminum derivatives (D3 through D5)	685	Price of aluminum beyond forward curve	Aluminum: \$2,679 per metric ton in 2028 to \$2,759 per metric ton in 2029 (two contracts) and \$3,055 per metric ton in 2036 (one contract) Midwest premium: \$0.0950 per pound in 2018 to \$0.1150 per pound in 2029 (two contracts) and 2036 (one contract)
Embedded aluminum derivative (D8)	34	Interrelationship of LME price to the amount of megawatt hours of energy needed to produce the forecasted metric tons of aluminum	Aluminum: \$2,258 per metric ton in 2018 to \$2,317 per metric ton in 2019 Midwest premium: \$0.0950 per pound in 2018 to \$0.1150 per pound in 2019 Electricity: rate of 2 million megawatt hours per year
Embedded aluminum derivative (D2)	24	Interrelationship of LME price to overall energy price	Aluminum: \$2,110 per metric ton in 2018 to \$2,342 per metric ton in 2019
Embedded credit derivative (D9)	27	Estimated difference in credit spread of each of Alcoa Corporation and counterparty, and negotiated multiplier	3.38% (credit spreads: Alcoa Corporation—2.48% and counterparty—1.51%; multiplier: 3.49% (1.87% ²))

The fair values of Level 3 derivative instruments recorded as assets and liabilities in the accompanying Consolidated Balance Sheet were as follows:

	December 31, 2017	December 31, 2016
Asset Derivatives		
Derivatives designated as hedging instruments:		
Fair value of derivative contracts—current:		
Embedded aluminum derivatives	\$ -	\$ 29
Financial contract	96	-
Fair value of derivative contracts—noncurrent:		
Embedded aluminum derivatives	-	468
Financial contract	101	-
Total derivatives designated as hedging instruments	\$ 197	\$497
Derivatives not designated as hedging instruments:		
Fair value of derivative contracts—current:		
Financial contract	\$ -	\$ 17
Total derivatives not designated as hedging instruments	\$ -	\$ 17
Total Asset Derivatives	\$ 197	\$514
Liability Derivatives		
Derivatives designated as hedging instruments:		
Fair value of derivative contracts—current:		
Embedded aluminum derivatives	\$ 120	\$ 17
Fair value of derivative contracts—noncurrent:		
Embedded aluminum derivatives	992	187
Total derivatives designated as hedging instruments	\$1,112	\$204
Derivatives not designated as hedging instruments:		
Fair value of derivative contracts—current:		
Embedded aluminum derivative	\$ 28	\$ 10
Embedded credit derivative	4	5
Fair value of derivative contracts—noncurrent:		
Embedded aluminum derivative	6	18
Embedded credit derivative	23	30
Total derivatives not designated as hedging instruments	\$ 61	\$ 63
Total Liability Derivatives	\$1,173	\$267

The following table shows the net fair values of the Level 3 derivative instruments at December 31, 2017 and the effect on these amounts of a hypothetical change (increase or decrease of 10%) in the market prices or rates that existed as of December 31, 2017:

	Fair value asset/(liability)	Index change of +/-10%
Embedded aluminum derivatives	\$(1,146)	\$489
Embedded credit derivative	(27)	3
Financial contract	197	55

The following tables present a reconciliation of activity for Level 3 derivative contracts:

	Assets		Liabilities	
	Embedded aluminum derivatives	Financial contracts	Embedded aluminum derivatives	Embedded credit derivative
2017				
Opening balance—January 1, 2017	\$ 497	\$ 17	\$ 232	\$35
Total gains or losses (realized and unrealized) included in:				
Sales	3	-	(110)	-
Cost of goods sold	-	(31)	-	(5)
Other income, net	1	(7)	18	(3)
Other comprehensive loss	(499)	88	1,022	-
Purchases, sales, issuances, and settlements*	-	119	-	-
Transfers into and/or out of Level 3*	-	-	-	-
Other	(2)	11	(16)	-
Closing balance—December 31, 2017	\$ -	\$197	\$1,146	\$27
Change in unrealized gains or losses included in earnings for derivative contracts held at December 31, 2017:				
Sales	\$ -	\$ -	\$ -	\$ -
Cost of goods sold	-	-	-	-
Other income, net	1	(7)	18	(3)

* In January 2017, there was an issuance of a new financial contract (see D11 above). There were no purchases, sales or settlements of Level 3 derivative instruments. Additionally, there were no transfers of derivative instruments into or out of Level 3.

	Assets		Liabilities		
	Embedded aluminum derivatives	Financial contract	Embedded aluminum derivatives	Embedded credit derivative	Financial contract
2016					
Opening balance—January 1, 2016	\$1,135	\$ 2	\$169	\$35	\$ 4
Total gains or losses (realized and unrealized) included in:					
Sales	(5)	-	(12)	-	-
Cost of goods sold	(92)	-	-	(5)	-
Other income, net*	(13)	(80)	2	5	(2)
Other comprehensive loss	(568)	95	47	-	(1)
Purchases, sales, issuances, and settlements**	-	-	32	-	-
Transfers into and/or out of Level 3**	-	-	-	-	-
Other	40	-	(6)	-	(1)
Closing balance—December 31, 2016	\$ 497	\$ 17	\$232	\$35	\$ -
Change in unrealized gains or losses included in earnings for derivative contracts held at December 31, 2016:					
Sales	\$ -	\$ -	\$ -	\$ -	\$ -
Cost of goods sold	-	-	-	-	-
Other income, net*	(13)	(80)	2	5	(2)

* In August 2016, Alcoa Corporation elected to terminate the energy contract in accordance with the provisions of the agreement (see D10 above). As a result, Alcoa Corporation decreased the derivative asset and recorded a charge in Other income, net of \$84, which is reflected in the table above. Additionally, Alcoa Corporation also decreased the related unrealized gain included in Accumulated other comprehensive loss and recorded a benefit in

Other income, net of \$84. As such, the termination of the specified term of this derivative contract described above did not have an impact on Alcoa Corporation's earnings.

** In 2016, there was an issuance of a new embedded derivative contained in an amendment to an existing power contract (see D8 above). There were no purchases, sales or settlements of Level 3 derivative instruments. Additionally, there were no transfers of derivative instruments into or out of Level 3.

Derivatives Designated As Hedging Instruments—Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of unrealized gains or losses on the derivative is reported as a component of other comprehensive income. Realized gains or losses on the derivative are reclassified from other comprehensive income into earnings in the same period or periods during which the hedged transaction impacts earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized directly in earnings immediately.

Alcoa Corporation has five Level 3 embedded aluminum derivatives and one Level 3 financial contract (through November 2016 – see D10 above) that have been designated as cash flow hedges as described below. Additionally, in January 2017, Alcoa Corporation entered into a new financial contract, which was designated as a cash flow hedging instrument and was classified as Level 3 under the fair value hierarchy (see D11 above), that replaced the existing financial contract in August 2017.

Embedded aluminum derivatives (D1 through D5). Alcoa Corporation has entered into energy supply contracts that contain pricing provisions related to the LME aluminum price. The LME-linked pricing features are considered embedded derivatives. Five of these embedded derivatives have been designated as cash flow hedges of forward sales of aluminum. At December 31, 2017 and 2016, these embedded aluminum derivatives hedge forecasted aluminum sales of 2,859 kmt and 3,127 kmt, respectively.

In 2017, 2016, and 2015, Alcoa Corporation recognized a net unrealized loss of \$1,521, a net unrealized loss of \$615, and a net unrealized gain of \$1,155, respectively, in Other comprehensive loss related to these five derivative instruments. Additionally, Alcoa Corporation reclassified a realized loss of \$113, \$7, and \$21 from Accumulated other comprehensive loss to Sales in 2017, 2016, and 2015, respectively. Assuming market rates remain constant with the rates at December 31, 2017, a realized loss of \$120 is expected to be recognized in Sales over the next 12 months.

There was no ineffectiveness related to these five derivative instruments in 2017, 2016, and 2015.

Financial contracts (D10 and D11). Alcoa Corporation has a financial contract that hedges the anticipated power requirements at one of its smelters that became effective when the existing power contract expired in October 2016. In August 2016, Alcoa Corporation elected to terminate most of the remaining term of this financial contract (see D10 above). Additionally, in December 2016, management elected to discontinue hedge accounting for this contract (see D10 above). This financial contract hedged forecasted electricity purchases of 1,969,544 megawatt hours prior to December 2016. In 2017, Alcoa Corporation reclassified a realized gain of \$6 from Accumulated other comprehensive loss to Cost of goods sold. In 2016 and 2015, Alcoa Corporation recognized an unrealized gain of \$96 and an unrealized loss of \$2, respectively, in Other comprehensive loss. Additionally, Alcoa Corporation recognized a gain of \$3 and a loss of \$3 in Other (income) expenses, net related to hedge ineffectiveness in 2016 and 2015, respectively.

In addition, in January 2017, Alcoa Corporation entered into a new financial contract that hedges the anticipated power requirements at this smelter for the period from August 2017 through July 2021 (see D11 above). At December 31, 2017, this financial contract hedges forecasted electricity purchases of 8,805,456 megawatt hours. In 2017, Alcoa Corporation recognized an unrealized gain of \$88 in Other comprehensive loss. Additionally, Alcoa Corporation reclassified a realized gain of \$25 in 2017 from Accumulated other comprehensive loss to Cost of goods sold. Assuming market rates remain consistent with the rates at December 31, 2017, a realized gain of \$96 is expected to be recognized in Cost of goods sold over the next 12 months. Additionally, Alcoa Corporation recognized a loss of less than \$1 in Other income, net related to hedge ineffectiveness in 2017.

Derivatives Not Designated As Hedging Instruments

Alcoa Corporation has two (three prior to October 2016) Level 3 embedded aluminum derivatives (D6 through D8) and one Level 3 embedded credit derivative (D9) that do not qualify for hedge accounting treatment and one Level 3 financial contract that management elected to discontinue hedge accounting treatment (see D10 above). As such, gains and losses related to the changes in fair value of these instruments are recorded directly in earnings. In 2017, 2016, and 2015, Alcoa Corporation recognized a loss of \$22, \$17, and \$25, respectively, in Other (income) expenses, net, of which a loss of \$18, \$15, and \$8, respectively, related to the embedded aluminum derivatives, a gain of \$3, a loss of \$5, and a loss of \$17, respectively, related to the embedded credit derivative, and, a loss of \$7 and a gain of \$3 (no amount for 2015), respectively, related to the financial contract.

Material Limitations

The disclosures with respect to commodity prices and foreign currency exchange risk do not consider the underlying commitments or anticipated transactions. If the underlying items were included in the analysis, the gains or losses on the futures contracts may be offset. Actual results will be determined by several factors that are not under Alcoa Corporation's control and could vary significantly from those factors disclosed.

Alcoa Corporation is exposed to credit loss in the event of nonperformance by counterparties on the above instruments, as well as credit or performance risk with respect to its hedged customers' commitments. Although nonperformance is possible, Alcoa Corporation does not anticipate nonperformance by any of these parties. Contracts are with creditworthy counterparties and are further supported by cash, treasury bills, or irrevocable letters of credit issued by carefully chosen banks. In addition, various master netting arrangements are in place with counterparties to facilitate settlement of gains and losses on these contracts.

Other Financial Instruments. The carrying values and fair values of Alcoa Corporation's other financial instruments were as follows:

December 31,	2017		2016	
	Carrying value	Fair value	Carrying value	Fair value
Cash and cash equivalents	\$1,358	\$1,358	\$ 853	\$ 853
Restricted cash	7	7	6	6
Long-term debt due within one year	16	16	21	21
Long-term debt, less amount due within one year	1,388	1,555	1,424	1,573

The following methods were used to estimate the fair values of other financial instruments:

Cash and cash equivalents and Restricted cash. The carrying amounts approximate fair value because of the short maturity of the instruments. The fair value amounts for Cash and cash equivalents and Restricted cash were classified in Level 1.

Long-term debt due within one year and Long-term debt, less amount due within one year. The fair value was based on quoted market prices for public debt and on interest rates that are currently available to Alcoa Corporation for issuance of debt with similar terms and maturities for non-public debt. The fair value amounts for all Long-term debt were classified in Level 2 of the fair value hierarchy.

P. Income Taxes

Provision for income taxes. The components of income (loss) before income taxes were as follows:

	2017	2016	2015
Domestic	\$ (712)	\$(688)	\$(1,053)
Foreign	1,871	526	716
	\$1,159	\$(162)	\$ (337)

Provision for income taxes consisted of the following:

	2017	2016	2015
Current:			
Federal*	\$ 3	\$ 9	\$ 3
Foreign	421	221	313
State and local	-	-	-
	424	230	316
Deferred:			
Federal*	24	-	(85)
Foreign	152	(46)	171
State and local	-	-	-
	176	(46)	86
Total	\$600	\$184	\$402

* Includes U.S. income taxes related to foreign income

A reconciliation of the U.S. federal statutory rate to Alcoa Corporation's effective tax rate was as follows (the effective tax rate was a provision on income in 2017 and a provision on a loss in 2016 and 2015):

	2017	2016	2015
U.S. federal statutory rate	35.0%	35.0%	35.0%
Changes in valuation allowances	25.8	(1.9)	(62.6)
Taxes on foreign operations—rate differential	(10.8)	44.3	14.2
Impact of U.S. Tax Cuts and Jobs Act of 2017	1.9	-	-
Noncontrolling interest	1.4	(7.3)	(8.5)
Other taxes related to foreign operations	1.3	(19.5)	(20.9)
Tax holidays ⁽¹⁾	0.4	11.2	6.2
Losses and credits with no tax benefit ⁽²⁾	(0.2)	(163.2)	(82.0)
Statutory tax rate and law changes	0.1	(0.6)	(0.3)
Nondeductible costs related to the Separation Transaction	-	(9.6)	-
Impact of capitalization of intercompany debt	-	-	3.3
Other	(3.1)	(2.0)	(3.7)
Effective tax rate	51.8%	(113.6)%	(119.3)%

⁽¹⁾ As of December 31, 2017, the income of certain operations of several of the Company's subsidiaries in Brazil are taxed at a lower rate as a result of approved tax holidays. The difference between the respective holiday rates and the statutory rates resulted in a benefit of \$20, or \$0.11 per diluted share, in 2017. The majority of these tax holidays expire at the end of 2022 and one tax holiday expires at the end of 2026 (see below). In 2017, this line item also includes a charge of \$26 for the remeasurement of certain deferred tax assets at the holiday rate (see below).

- (2) In 2016 and 2015, hypothetical net operating losses and tax credits determined on a separate return basis for which it is more likely than not that a tax benefit will not be realized. The related deferred tax asset and offsetting valuation allowance have been adjusted to Parent Company net investment and, as such, are not reflected in subsequent deferred tax and valuation allowance tables.

In mid-2017, AWAB received approval for a tax holiday related to the operation of the Juruti (Brazil) bauxite mine. This tax holiday is effective as of January 1, 2017 (retroactively) and decreases AWAB's tax rate on income generated by the Juruti mine from 34% to 15.25%, which will result in future cash tax savings over a 10-year period. As a result of this income tax rate change, AWAB's existing deferred tax assets that are expected to reverse during the holiday period were remeasured at the lower tax rate. This remeasurement resulted in both a decrease to AWAB's deferred tax assets and a discrete income tax charge of \$26 (\$15 after noncontrolling interest).

Deferred income taxes. The components of deferred tax assets and liabilities based on the underlying attribute without regard to jurisdiction were as follows:

December 31,	2017		2016	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Tax loss carryforwards	\$ 1,185	\$ -	\$ 1,064	\$ -
Employee benefits	949	-	1,240	-
Derivatives and hedging activities	287	70	-	124
Loss provisions	246	-	313	-
Tax credit carryforwards	193	-	23	-
Depreciation	141	432	187	499
Deferred income/expense	11	109	28	136
Other	100	57	233	125
	3,112	668	3,088	884
Valuation allowance	(1,927)	-	(1,755)	-
	\$ 1,185	\$ 668	\$ 1,333	\$ 884

The following table details the expiration periods of the deferred tax assets presented above:

December 31, 2017	Expires within 10 years	Expires within 11-20 years	No expiration*	Other*	Total
Tax loss carryforwards	\$ 330	\$ 250	\$ 605	\$ -	\$ 1,185
Tax credit carryforwards	193	-	-	-	193
Other	-	-	297	1,437	1,734
Valuation allowance	(523)	(152)	(315)	(937)	(1,927)
	\$ -	\$ 98	\$ 587	\$ 500	\$ 1,185

* Deferred tax assets with no expiration may still have annual limitations on utilization. Other represents deferred tax assets whose expiration is dependent upon the reversal of the underlying temporary difference.

The total deferred tax asset (net of valuation allowance) is supported by projections of future taxable income exclusive of reversing temporary differences and taxable temporary differences that reverse within the carryforward period. The composition of Alcoa Corporation's net deferred tax asset by jurisdiction as of December 31, 2017 was as follows:

	Domestic	Foreign	Total
Deferred tax assets	\$ 1,164	\$1,948	\$ 3,112
Valuation allowance	(1,050)	(877)	(1,927)
Deferred tax liabilities	(108)	(560)	(668)
	\$ 6	\$ 511	\$ 517

The Company has several income tax filers in various foreign countries. The \$511 net deferred tax asset included under the "Foreign" column in the table above was comprised of the following (by income tax filer): a \$252 net deferred tax asset for Alumínio in Brazil; a \$153 net deferred tax asset for AWAB in Brazil; a \$112 deferred tax asset for Alúmina Española, S.A. ("Española" and collectively with Alumínio and AWAB, the "Foreign Filers") in Spain; and a combined \$6 net deferred tax liability for several other foreign income tax filers.

The future realization of the net deferred tax asset for each of the Foreign Filers was based on projections of the respective future taxable income (defined as the sum of pretax income, other comprehensive income, and permanent tax differences), exclusive of reversing temporary differences and carryforwards. The realization of the net deferred tax assets of the Foreign Filers is not dependent on any tax planning strategies. The Foreign Filers each generated taxable income in the three-year cumulative period ending December 31, 2017. Management has also forecasted taxable income for each of the Foreign Filers in 2018 and for the foreseeable future. This forecast is based on macroeconomic indicators and involves assumptions related to, among others: commodity prices; volume levels; and key inputs and raw materials, such as bauxite, caustic soda, alumina, calcined petroleum coke, liquid pitch, energy (fuel oil, natural gas, electricity), labor, and transportation costs. These are the same assumptions used by management to develop a financial and operating plan, which is used to run the Company and measure performance against actual results.

The majority of the Foreign Filers' net deferred tax assets relate to tax loss carryforwards. The Foreign Filers do not have a history of tax loss carryforwards expiring unused. Additionally, tax loss carryforwards have an infinite life under the respective income tax codes in Brazil and Spain. That said, utilization of an existing tax loss carryforward is limited to 30% and 25% of taxable income in a particular year in Brazil and Spain, respectively.

Accordingly, management concluded that the net deferred tax assets of the Foreign Filers will more likely than not be realized in future periods, resulting in no need for a partial or full valuation allowance as of December 31, 2017.

The following table details the changes in the valuation allowance:

December 31,	2017	2016	2015
Balance at beginning of year	\$(1,755)	\$ (712)	\$(486)
Establishment of new allowances ⁽¹⁾	(94)	-	(141)
Net change to existing allowances ⁽²⁾	(33)	(1,056)	(148)
U.S. state tax apportionment and tax rate changes	-	-	30
Foreign currency translation	(45)	13	33
Balance at end of year	\$(1,927)	\$(1,755)	\$(712)

(1) This line item reflects valuation allowances initially established as a result of a change in management's judgment regarding the realizability of deferred tax assets.

(2) This line item reflects movements in previously established valuation allowances, which increase or decrease as the related deferred tax assets increase or decrease. Such movements occur as a result of remeasurement due to a tax rate change and changes in the underlying attributes of the deferred tax assets, including expiration of the attribute and reversal of the temporary difference that gave rise to the deferred tax asset.

In 2017, Alcoa Corporation established a valuation allowance of \$94 related to the remaining deferred tax assets in Iceland (see below). This amount was comprised of a \$60 discrete income charge recognized in the Provision for income taxes on the accompanying Consolidated Statement of Operations and a \$34 charge to Accumulated other comprehensive loss on the accompanying Consolidated Balance Sheet. These deferred tax assets relate to tax loss carryforwards, which have an expiration period ranging from 2017 to 2026, and deferred losses associated with derivative and hedging activities. After weighing all available positive and negative evidence, management determined that it was no longer more likely than not that Alcoa Corporation will realize the tax benefit of these deferred tax assets. This conclusion was based on existing cumulative losses and a short expiration period. Such losses were generated as a result of intercompany interest expense under the Company's global treasury and cash management system and the realization of deferred losses associated with an LME-linked embedded derivative in a power contract (see Note O). Such interest expense is expected to continue and additional deferred losses associated with the embedded derivative will be realized in future years. As a result, management estimates that there will not be sufficient taxable income available to utilize the operating losses during the expiration period. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, a portion or all of the allowance may be reversed based on changes in facts and circumstances.

In 2015, Alcoa Corporation recognized a \$141 discrete income tax charge for valuation allowances on certain deferred tax assets in Suriname and Iceland. Of this amount, an \$85 valuation allowance was established on the full value of the deferred tax assets in Suriname. These deferred tax assets relate to tax loss carryforwards and employee benefits have an expiration period ranging from 2016 to 2022. The remaining \$56 charge relates to a valuation allowance established on a portion of the deferred tax assets in Iceland, which were related to tax loss carryforwards that have an expiration period ranging from 2017 to 2019. After weighing all available positive and negative evidence, management determined that it was no longer more likely than not that Alcoa Corporation will realize the tax benefit of these deferred tax assets. This conclusion was mainly driven by a decline in the outlook of the former Primary Metals business (refers to the smelting and casting operations included in what is currently the Aluminum segment), combined with prior year cumulative losses and a short expiration period. The need for this valuation allowance will be assessed on a continuous basis in future periods and, as a result, a portion or all of the allowance may be reversed based on changes in facts and circumstances.

Undistributed net earnings. The cumulative amount of Alcoa Corporation's foreign undistributed net earnings deemed to be permanently reinvested was approximately \$940 as of December 31, 2017. This amount relates to foreign undistributed net earnings generated prior to the Separation Date, as well as approximately \$150 of certain earnings generated during 2017. Alcoa Corporation has several commitments and obligations related to the Company's operations in various foreign jurisdictions; therefore, management has no plans to distribute such earnings in the foreseeable future. The Company continuously evaluates its local and global cash needs for future business operations and anticipated debt facilities, which may influence future repatriation decisions. As described below (see U.S. Tax Cuts and Jobs Act of 2017), beginning on January 1, 2018, dividends received from foreign subsidiaries will no longer be subject to U.S. federal income tax; however, there is a mandatory one-time deemed repatriation of existing foreign undistributed net earnings during 2017 subject to either an 8% or 15.5% tax rate as appropriate. Based on a preliminary analysis, management has estimated that the Company has sufficient U.S. tax losses and foreign tax credits to apply against such tax, resulting in no impact to Alcoa Corporation's Consolidated Financial Statements. Accordingly, with the exception of potential foreign currency exchange rate differences, the earnings described above will not be subject to residual U.S. income tax if repatriated in the future.

Unrecognized tax benefits. Alcoa Corporation and its subsidiaries file income tax returns in the U.S. federal jurisdiction and various foreign and U.S. state jurisdictions. With few exceptions, the Company is not subject to income tax examinations by tax authorities for years prior to 2013. For U.S. federal income tax purposes, most of the Company's U.S. operations were included in the income tax filings of ParentCo's U.S. consolidated tax group prior to the Separation Date. Since that time, the Company's U.S. consolidated tax group, comprised of the referenced U.S. operations, has filed a two-month U.S. federal income tax return, which has not been examined by the Internal Revenue Service. The U.S. federal income tax filings of ParentCo's U.S. consolidated tax group have been examined for all prior years through the Separation Date. Foreign jurisdiction tax authorities are in the process of examining

income tax returns of several of the Company's subsidiaries for various tax years between and including 2006 through 2015. For U.S. state income tax purposes, Alcoa Corporation and its subsidiaries remain subject to income tax examinations for the 2013 tax year and forward (as of December 31, 2017, there are no active examinations).

A reconciliation of the beginning and ending amount of unrecognized tax benefits (excluding interest and penalties) was as follows:

December 31,	2017	2016	2015
Balance at beginning of year	\$23	\$22	\$25
Additions for tax positions of the current year	1	3	2
Additions for tax positions of prior years	-	1	1
Reductions for tax positions of prior years	(5)	(2)	-
Settlements with tax authorities	(6)	(2)	(2)
Expiration of the statute of limitations	(3)	-	-
Foreign currency translation	-	1	(4)
Balance at end of year	\$10	\$23	\$22

For all periods presented, a portion of the balance at end of year pertains to state tax liabilities, which are presented before any offset for federal tax benefits. The effect of unrecognized tax benefits, if recorded, that would impact the annual effective tax rate for 2017, 2016, and 2015 would be 1%, 10%, and 4%, respectively, of pretax book income (loss). Alcoa Corporation does not anticipate that changes in its unrecognized tax benefits will have a material impact on the Statement of Consolidated Operations during 2018 (see Tax (Spain) in Note R for a matter for which no reserve has been recognized).

It is Alcoa Corporation's policy to recognize interest and penalties related to income taxes as a component of the Provision for income taxes on the accompanying Statement of Consolidated Operations. In 2017, 2016, and 2015, Alcoa Corporation recognized \$1, \$1, and \$7, respectively, in interest and penalties. Due to the expiration of the statute of limitations, settlements with tax authorities, and refunded overpayments, Alcoa Corporation also recognized interest income of \$6, \$2, and \$1 in 2017, 2016, and 2015, respectively. As of December 31, 2017 and 2016, the amount accrued for the payment of interest and penalties was \$2 and \$6, respectively.

U.S. Tax Cuts and Jobs Act of 2017. On December 22, 2017, U.S. tax legislation known as the U.S. Tax Cuts and Jobs Act of 2017 (the "TCJA") was enacted. For corporations, the TCJA amends existing U.S. Internal Revenue Code by reducing the corporate income tax rate and modifying several business deduction and international tax provisions. Specifically, the corporate income tax rate was reduced to 21% from 35%. Other significant changes, in general, include the following, among others: (i) a mandatory one-time deemed repatriation of accumulated foreign earnings (see Undistributed net earnings above) at either an 8% or 15.5% tax rate; (ii) dividends received from foreign subsidiaries can be deducted in full regardless of ownership interest (previously such dividends were fully taxable), however, a foreign withholding tax on any foreign earnings not asserted as indefinitely reinvested as of December 31, 2017 must be accrued; (iii) a 10.5% tax (effective in 2018) on a new category of income, referred to as global intangible low tax income, related to earnings taxed at a low rate of foreign entities without a significant fixed asset base; (iv) a 5% to 10% tax (effective in 2018) on base erosion payments (deductible cross-border payments to related parties) that exceed 3% of a company's deductible expenses; and (v) net operating losses have an unlimited carryforward period (previously 20 years) and no carryback period (previously 2 years), but deductions for such losses are limited to 80% of taxable income (previously 100% of taxable income) beginning with the 2018 tax year.

As a result of the close proximity of the enactment date of the TCJA in relation to the Company's calendar year-end, management elected January 17, 2018 as a cut-off date for purposes of recognizing any impacts from the TCJA in Alcoa Corporation's 2017 Consolidated Financial Statements. This date coincided with the Company's public release of its preliminary financial results for the fourth quarter and year ended December 31, 2017. Accordingly, the Company's preliminary analysis of the provisions of the TCJA resulted in a charge of \$22, which was reflected in the Provision for income taxes on the accompanying Statement of Consolidated Operations for 2017, as described below. The Company expects to finalize its analyses of the TCJA provisions in 2018.

The \$22 charge relates specifically to management's reasonable estimate of the corporate income tax rate change, which resulted in the remeasurement of the Company's deferred income tax accounts. On a gross basis, the Company reduced its deferred tax assets, valuation allowance, and deferred tax liabilities by \$506, \$433, and \$51, respectively.

Management also completed a preliminary analysis of the remaining provisions of the TCJA, including those specifically described above, in order to make a reasonable estimate as of the cut-off date, which resulted in no additional impact to the Company's 2017 Consolidated Financial Statements. Specifically, the reasonable estimate for the TCJA provisions described above was based on the following: for (i), (ii), and (iii), the Company's existing tax profile, which includes significant current U.S. tax losses that would be applied against such taxable income, as well as significant foreign tax credits that can be applied against these taxes; for (iv) management estimates that the Company will be under the 3% threshold; and for (v) the Company's deferred income tax assets related to U.S. net operating losses are fully reserved as of December 31, 2017.

The Company's preliminary analyses and provisional estimates of the financial statement impacts of the TCJA were completed in accordance with guidance issued by the SEC under Staff Accounting Bulletin No. 118, *Income Tax Accounting Implications of the Tax Cuts and Jobs Act*.

Q. Asset Retirement Obligations

Alcoa Corporation has recorded AROs related to legal obligations associated with the standard operation of bauxite mines, alumina refineries, and aluminum smelters. These AROs consist primarily of costs associated with mine reclamation, closure of bauxite residue areas, spent pot lining disposal, and landfill closure. Alcoa Corporation also recognizes AROs for any significant lease restoration obligation, if required by a lease agreement, and for the disposal of regulated waste materials related to the demolition of certain power facilities.

In addition to AROs, certain CAROs related to alumina refineries, aluminum smelters, rolling mills, and energy generation facilities have not been recorded in the Consolidated Financial Statements due to uncertainties surrounding the ultimate settlement date. Such uncertainties exist as a result of the perpetual nature of the structures, maintenance and upgrade programs, and other factors. At the date a reasonable estimate of the ultimate settlement date can be made (e.g., planned demolition), Alcoa Corporation would record an ARO for the removal, treatment, transportation, storage, and/or disposal of various regulated assets and hazardous materials such as asbestos, underground and aboveground storage tanks, PCBs, various process residuals, solid wastes, electronic equipment waste, and various other materials. If Alcoa Corporation was required to demolish all such structures immediately, the estimated CARO as of December 31, 2017 ranges from \$3 to \$28 per structure (24 structures) in today's dollars.

The following table details the carrying value of recorded AROs by major category (of which \$108 and \$104 was classified as a current liability as of December 31, 2017 and 2016, respectively):

December 31,	2017	2016
Mine reclamation	\$221	\$199
Closure of bauxite residue areas	238	219
Spent pot lining disposal	125	135
Demolition*	113	121
Landfill closure	27	30
Other	1	4
	\$725	\$708

* In 2017, 2016, and 2015, AROs were recorded as a result of management's decision to permanently close and demolish certain structures (see Note D).

The following table details the changes in the total carrying value of recorded AROs:

December 31,	2017	2016
Balance at beginning of year	\$708	\$635
Accretion expense	17	19
Payments	(69)	(47)
Liabilities incurred	43	117
Foreign currency translation and other	26	(16)
Balance at end of year	\$725	\$708

R. Contingencies and Commitments

Unless specifically described to the contrary, all matters within Note R are the full responsibility of Alcoa Corporation pursuant to the Separation and Distribution Agreement. Additionally, the Separation and Distribution Agreement provides for cross-indemnities between the Company and Arconic for claims subject to indemnification.

Contingencies

Litigation.

Glencore—On June 5, 2015, AWA and St. Croix Alumina, L.L.C. (“SCA”) filed a complaint in Delaware Chancery Court for a declaratory judgment and injunctive relief to resolve a dispute between ParentCo and Glencore Ltd. (“Glencore”) with respect to claimed obligations under a 1995 asset purchase agreement between ParentCo and Glencore. The dispute arose from Glencore’s demand that ParentCo indemnify it for liabilities it may have to pay to Lockheed Martin (“Lockheed”) related to the St. Croix alumina refinery. Lockheed had earlier filed suit against Glencore in federal court in New York seeking indemnity for liabilities it had incurred and would incur to the U.S. Virgin Islands to remediate certain properties at the refinery property and claimed that Glencore was required by an earlier, 1989 purchase agreement to indemnify it. Glencore had demanded that ParentCo indemnify and defend it in the Lockheed case and threatened to claim against ParentCo in the New York action despite exclusive jurisdiction for resolution of disputes under the 1995 purchase agreement being in Delaware. After Glencore conceded that it was not seeking to add ParentCo to the New York action, AWA and SCA dismissed their complaint in the Chancery Court case and on August 6, 2015 filed a complaint for declaratory judgment in Delaware Superior Court. AWA and SCA filed a motion for judgment on the pleadings on September 16, 2015. Glencore answered AWA’s and SCA’s complaint and asserted counterclaims on August 27, 2015, and on October 2, 2015 filed its own motion for judgment on the pleadings. Argument on the parties’ motions was held by the court on December 7, 2015, and by order dated February 8, 2016, the court granted ParentCo’s motion and denied Glencore’s motion, resulting in ParentCo not being liable to indemnify Glencore for the Lockheed action. The decision also leaves for pretrial discovery and possible summary judgment or trial Glencore’s claims for costs and fees it incurred in defending and settling an earlier Superfund action brought against Glencore by the Government of the Virgin Islands. On February 17, 2016, Glencore filed notice of its application for interlocutory appeal of the February 8, 2016 ruling. AWA and SCA filed an opposition to that application on February 29, 2016. On March 10, 2016, the court denied Glencore’s motion for interlocutory appeal and on the same day entered judgment on claims other than Glencore’s claims for costs and fees it incurred in defending and settling the earlier Superfund action brought against Glencore by the Government of the Virgin Islands. On March 29, 2016, Glencore filed a withdrawal of its notice of interlocutory appeal, and on April 6, 2016, Glencore filed an appeal of the court’s March 10, 2016 judgment to the Delaware Supreme Court, which set the appeal for argument for November 2, 2016. On November 4, 2016, the Delaware Supreme Court affirmed the judgment of the Delaware Superior Court granting ParentCo’s motion. Remaining in the case were Glencore’s claims for costs and fees it incurred related to the previously described Superfund action. On March 7, 2017, Alcoa Corporation and Glencore agreed in principle to settle these claims and on March 17, 2017 requested and were granted an adjournment of the court’s scheduled March 21, 2017 conference. On April 5, 2017, Alcoa and Glencore entered into a settlement agreement to resolve these remaining claims. Accordingly, on April 24, 2017, the court dismissed the case at the request of the parties. The amount of the settlement was not material. This matter is now closed.

Italy 148—Before 2002, ParentCo purchased power in Italy in the regulated energy market and received a drawback of a portion of the price of power under a special tariff in an amount calculated in accordance with a published resolution of the Italian Energy Authority, Energy Authority Resolution n. 204/1999 (“204/1999”). In 2001, the Energy Authority published another resolution, which clarified that the drawback would be calculated in the same manner, and in the same amount, in either the regulated or unregulated market. At the beginning of 2002, ParentCo left the regulated energy market to purchase energy in the unregulated market. Subsequently, in 2004, the Energy Authority introduced regulation no. 148/2004, which set forth a different method for calculating the special tariff that would result in a different drawback for the regulated and unregulated markets. ParentCo challenged the new regulation in the Administrative Court of Milan and received a favorable judgment in 2006. Following this ruling, ParentCo continued to receive the power price drawback in accordance with the original calculation method, through 2009, when the European Commission declared all such special tariffs to be impermissible “state aid.” In 2010, the Energy Authority appealed the 2006 ruling to the Consiglio di Stato (final court of appeal). On December 2, 2011, the Consiglio di Stato ruled in favor of the Energy Authority and against ParentCo, thus presenting the opportunity for the energy regulators to seek reimbursement from ParentCo of an amount equal to the difference between the actual drawback amounts received over the relevant time period, and the drawback as it would have been calculated in accordance with regulation 148/2004. On February 23, 2012, ParentCo filed its appeal of the decision of the Consiglio di Stato (this appeal was subsequently withdrawn in March 2013). On March 26, 2012, ParentCo received a letter from the agency (Cassa Conguaglio per il Settore Elettrico (CCSE)) responsible for making and collecting payments on behalf of the Energy Authority demanding payment in the amount of approximately \$110 (€85), including interest. By letter dated April 5, 2012, ParentCo informed CCSE that it disputes the payment demand of CCSE since (i) CCSE was not authorized by the Consiglio di Stato decisions to seek payment of any amount, (ii) the decision of the Consiglio di Stato has been appealed (see above), and (iii) in any event, no interest should be payable. On April 29, 2012, Law No. 44 of 2012 (“44/2012”) came into effect, changing the method to calculate the drawback. On February 21, 2013, ParentCo received a revised request letter from CCSE demanding ParentCo’s former subsidiary, Alcoa Trasformazioni S.r.l. (Trasformazioni is now a subsidiary of Alcoa Corporation), make a payment in the amount of \$97 (€76), including interest, which reflects a revised calculation methodology by CCSE and represents the high end of the range of reasonably possible loss associated with this matter of \$0 to \$97 (€76). ParentCo rejected that demand and formally challenged it through an appeal before the Administrative Court on April 5, 2013. The Administrative Court scheduled a hearing for December 19, 2013, which was subsequently postponed until April 17, 2014, and further postponed until June 19, 2014. On that date, the Administrative Court listened to ParentCo’s oral argument, and on September 2, 2014, rendered its decision. The Administrative Court declared the payment request of CCSE and the Energy Authority to ParentCo to be unsubstantiated based on the 148/2004 resolution with respect to the January 19, 2007 through November 19, 2009 timeframe. On December 18, 2014, the CCSE and the Energy Authority appealed the Administrative Court’s September 2, 2014 decision; a date for the hearing has been scheduled for May 2018. As a result of the conclusion of the European Commission Matter on January 26, 2016 (see below), ParentCo’s management modified its outlook with respect to a portion of the pending legal proceedings related to this matter. As such, a charge of \$37 (€34) was recorded in Restructuring and other charges for the year ended December 31, 2015 on Alcoa Corporation’s accompanying Statement of Consolidated Operations to establish a partial reserve for this matter.

In December 2017, through an agreement with Invitalia, which is an Italian government agency responsible for managing economic development, Alcoa Corporation settled this matter with CCSE and the Energy Authority for \$18 (€15) (paid in January 2018). Accordingly, the Company recorded a reduction of \$22 (€19) (the U.S. dollar amount reflects the effects of foreign currency movements since 2015) to its previously established reserve in Restructuring and other charges (see Note D) on the accompanying Statement of Consolidated Operations. In January 2018, subsequent to making the previously referenced payment, Alcoa Corporation and the respective state attorney in Italy filed a joint request with the Administrative Court to have this matter formally dismissed, for which the parties are awaiting notice. Additional terms of the agreement include the transfer of ownership of the Portovesme smelter (permanently closed in 2014) from the Company to Invitalia and the settlement of a groundwater remediation project (see Fusina and Portovesme, Italy in Environmental Matters below). Also, Alcoa will retain previously accrued asset retirement obligations related to ParentCo’s previous decision to demolish the Portovesme smelter; however, such liabilities may be reduced upon Invitalia achieving certain milestones related to the future of the smelter. The carrying

value of the assets related to the Portovesme site were previously written down to zero as a result of ParentCo's decision in 2014 to permanently close the smelter.

European Commission Matter. In July 2006, the European Commission (EC) announced that it had opened an investigation to establish whether an extension of the regulated electricity tariff granted by Italy to some energy-intensive industries complied with European Union (EU) state aid rules. The Italian power tariff extended the tariff that was in force until December 31, 2005 through November 19, 2009 (ParentCo had been incurring higher power costs at its smelters in Italy subsequent to the tariff end date through the end of 2012). The extension was originally through 2010, but the date was changed by legislation adopted by the Italian Parliament effective on August 15, 2009. Prior to expiration of the tariff in 2005, ParentCo had been operating in Italy for more than 10 years under a power supply structure approved by the EC in 1996. That measure provided a competitive power supply to the primary aluminum industry and was not considered state aid from the Italian Government. The EC's announcement expressed concerns about whether Italy's extension of the tariff beyond 2005 was compatible with EU legislation and potentially distorted competition in the European market of primary aluminum, where energy is an important part of the production costs.

On November 19, 2009, the EC announced a decision in this matter stating that the extension of the tariff by Italy constituted unlawful state aid, in part, and, therefore, the Italian Government is to recover a portion of the benefit ParentCo received since January 2006 (including interest). The amount of this recovery was to be based on a calculation prepared by the Italian Government (see below). In late 2009, after discussions with legal counsel and reviewing the bases on which the EC decided, including the different considerations cited in the EC decision regarding ParentCo's two smelters in Italy, ParentCo recorded a charge of \$250 (€173), which included \$20 (€14) to write off a receivable from the Italian Government for amounts due under the now expired tariff structure and \$230 (€159) to establish a reserve. On April 19, 2010, ParentCo filed an appeal of this decision with the General Court of the EU (see below). Prior to 2012, ParentCo was involved in other legal proceedings related to this matter that separately sought the annulment of the EC's July 2006 decision to open an investigation alleging that such decision did not follow the applicable procedural rules and requested injunctive relief to suspend the effectiveness of the EC's November 19, 2009 decision. However, the decisions by the General Court, and subsequent appeals to the European Court of Justice, resulted in the denial of these remedies.

In June 2012, ParentCo received formal notification from the Italian Government with a calculated recovery amount of \$375 (€303); this amount was reduced by \$65 (€53) for amounts owed by the Italian Government to ParentCo, resulting in a net payment request of \$310 (€250). In a notice published in the Official Journal of the European Union on September 22, 2012, the EC announced that it had filed an action against the Italian Government on July 18, 2012 to compel it to collect the recovery amount (on October 17, 2013, the European Court of Justice ordered Italy to so collect). On September 27, 2012, ParentCo received a request for payment in full of the \$310 (€250) by October 31, 2012. Following discussions with the Italian Government regarding the timing of such payment, ParentCo paid the requested amount in five quarterly installments of \$69 (€50) beginning in October 2012 through December 2013.

On October 16, 2014, ParentCo received notice from the General Court of the EU that its April 19, 2010 appeal of the EC's November 19, 2009 decision was denied. On December 27, 2014, ParentCo filed an appeal of the General Court's October 16, 2014 ruling to the European Court of Justice (ECJ). Following submission of the EC's response to the appeal, on June 10, 2015, ParentCo filed a request for an oral hearing before the ECJ; no decision on that request was received. On January 26, 2016, ParentCo was informed that the ECJ had dismissed ParentCo's December 27, 2014 appeal of the General Court's October 16, 2014 ruling. The dismissal of ParentCo's appeal represents the conclusion of the legal proceedings in this matter. Prior to this dismissal, ParentCo had a noncurrent asset of \$100 (€91) reflecting the excess of the total of the five payments made to the Italian Government over the reserve recorded in 2009. As a result, this noncurrent asset, along with the \$58 (€53) for amounts owed by the Italian Government to ParentCo mentioned above plus \$6 (€6) for interest previously paid, was written-off. A charge of \$164 (€150) was recorded in Restructuring and other charges for the year ended December 31, 2015 on Alcoa Corporation's accompanying Statement of Consolidated Operations (see Note D).

As a result of the EC's November 19, 2009 decision, ParentCo's management had contemplated ceasing operations at its Italian smelters due to uneconomical power costs. In February 2010, ParentCo's management agreed to continue to

operate its smelters in Italy for up to six months while a long-term solution to address increased power costs could be negotiated. Over a portion of this time, a long-term solution was not able to be reached related to the Fusina smelter, therefore, in May 2010, ParentCo and the Italian Government agreed to a temporary idling of the Fusina smelter. As of September 30, 2010, the Fusina smelter was fully curtailed (44,000 metric-tons-per-year). For the Portovesme smelter, ParentCo executed a new power agreement effective September 1, 2010 through December 31, 2012, replacing the short-term, market-based power contract that was in effect since early 2010. This new agreement along with interruptibility rights (i.e. compensation for power interruptions when grids are overloaded) granted to ParentCo for the Portovesme smelter provided additional time to negotiate a long-term solution (the EC had previously determined that the interruptibility rights were not considered state aid).

At the end of 2011, as part of a restructuring of ParentCo's global smelting system, ParentCo's management decided to curtail operations at the Portovesme smelter during 2012 due to the uncertain prospects for viable, long-term power, along with rising raw materials costs and falling global aluminum prices (mid-2011 to late 2011). As of December 31, 2012, the Portovesme smelter was fully curtailed (150,000 metric-tons-per-year).

In June 2013 and August 2014, ParentCo decided to permanently shut down and demolish the Fusina and Portovesme smelters, respectively, due to persistent uneconomical conditions.

Environmental Matters. Alcoa Corporation participates in environmental assessments and cleanups at several locations. These include owned or operating facilities and adjoining properties, previously owned or operating facilities and adjoining properties, and waste sites, including Superfund (Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)) sites.

A liability is recorded for environmental remediation when a cleanup program becomes probable and the costs can be reasonably estimated. As assessments and cleanups proceed, the liability is adjusted based on progress made in determining the extent of remedial actions and related costs. The liability can change substantially due to factors such as, among others, the nature and extent of contamination, changes in remedial requirements, and technological changes.

Alcoa Corporation's remediation reserve balance was \$294 and \$324 at December 31, 2017 and 2016 (of which \$36 and \$60 was classified as a current liability), respectively, and reflects the most probable costs to remediate identified environmental conditions for which costs can be reasonably estimated.

In 2017, the remediation reserve was increased by \$1 due to a charge of \$8 related to the planned demolition of the Rockdale smelter (see Note D), a combined reduction of \$6 related to the Baie Comeau and Mosjøen locations (see below), a reversal of \$4 related to the restart of the Warrick smelter (see Note D), and a net charge of \$3 associated with several other sites. In 2016, the remediation reserve was increased by \$39 due to a charge of \$26 related to the planned demolition of the Suriname refinery and permanent closure of the related bauxite mines (see Note D) and a net charge of \$13 associated with several other sites. In 2015, the remediation reserve was increased by \$107 due to a charge of \$52 related to the planned demolition of the remaining structures at the Massena East smelter location (see Note D), a charge of \$29 related to the planned demolition of the Poços de Caldas smelter and the Anglesea power station (see Note D), a charge of \$12 related to the Mosjøen location (see below), a charge of \$7 related to the Portovesme location (see below), and a net charge of \$7 associated with several other sites. Of the changes to the remediation reserve in 2017, 2016, and 2015, \$4, \$26, and \$86, respectively, was recorded in Restructuring and other charges, while the remainder was recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations.

Payments related to remediation expenses applied against the reserve were \$48, \$32, and \$24 in 2017, 2016, and 2015, respectively. These amounts include expenditures currently mandated, as well as those not required by any regulatory authority or third party. In 2017, the change in the reserve also reflects an increase of \$17, including \$11 due to the effects of foreign currency translation and \$5 for the reclassification of an amount previously included in Asset retirement obligations on Alcoa Corporation's Consolidated Balance Sheet as of December 31, 2016. In 2016, the

change in the reserve also reflects an increase for each of the following: \$60 of obligations transferred from ParentCo in connection with the Separation Transaction on November 1, 2016, including Sherwin and East St. Louis described below; \$17 for the reclassification of amounts included in other reserves within Other noncurrent liabilities and deferred credits on Alcoa Corporation's Consolidated Balance Sheet as of December 31, 2015; and \$5 due to the effects of foreign currency translation. In 2015, the change in the reserve also reflects a decrease of \$13 due to the effects of foreign currency translation.

The Separation and Distribution Agreement includes provisions for the assignment or allocation of environmental liabilities between Alcoa Corporation and Arconic, including certain remediation obligations associated with environmental matters. In general, the respective parties are responsible for the environmental matters associated with their operations, and with the properties and other assets assigned to each. Additionally, the Separation and Distribution Agreement lists environmental matters with a shared responsibility between the two companies with an allocation of responsibility and the lead party responsible for management of each matter. For matters assigned to Alcoa Corporation and Arconic under the Separation and Distribution Agreement, Alcoa Corporation and Arconic have agreed to indemnify Arconic and Alcoa Corporation in whole or in part for environmental liabilities arising from operations prior to the Separation Date.

The following description provides details regarding the current status of certain significant reserves related to current or former Alcoa Corporation sites. With the exception of the Fusina, Italy matter, Alcoa Corporation assumed full responsibility of the matters described below.

General—The Company is in the process of decommissioning various plants in several countries. As a result, redeveloping these sites for reuse or returning the land to a natural state requires the performance of certain remediation activities. In aggregate, the majority of these activities will be completed at various times in the future with the latest expected to be in 2026, after which ongoing monitoring and other activities will be required. At December 31, 2017 and 2016, the reserve balance associated with these activities was \$150 and \$141, respectively.

Sherwin, TX—In connection with ParentCo's sale of the Sherwin alumina refinery, which was required to be divested as part of ParentCo's acquisition of Reynolds Metals Company in 2000, ParentCo agreed to retain responsibility for the remediation of the then existing environmental conditions, as well as a pro rata share of the final closure of the active bauxite residue waste disposal areas (known as the Copano facility). All ParentCo obligations regarding the Sherwin refinery and Copano facility were transferred from ParentCo to Alcoa Corporation as part of the Separation Transaction on November 1, 2016. In February 2017, the current owner of the Sherwin alumina refinery and Copano facility received court approval for reorganization under Chapter 11 of the U.S. Bankruptcy Code (see Other below). Through the bankruptcy proceedings, the owner of Sherwin exercised its right under the U.S. Bankruptcy Code to reject the agreement from 2000 containing the previously mentioned retained responsibility, which had the effect of terminating all rights and responsibilities of the parties to the agreement. The Company continues to be involved in a legal dispute with the owner of Sherwin related to the allocation of responsibility for the environmental obligations at this site. At this time, it is unclear if the ultimate outcome of this matter will result in a change to Alcoa Corporation's reserve. At December 31, 2017 and 2016, the reserve balance associated with Sherwin was \$29 and \$30, respectively.

Baie Comeau, Quebec, Canada—In August 2012, ParentCo presented an analysis of remediation alternatives to the Quebec Ministry of Sustainable Development, Environment, Wildlife and Parks (MDDEP), in response to a previous request, related to known polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs) contained in sediments of the Anse du Moulin bay. As such, ParentCo increased the reserve for Baie Comeau by \$25 in 2012 to reflect the estimated cost of ParentCo's recommended alternative, consisting of both dredging and capping of the contaminated sediments. In July 2013, ParentCo submitted the Environmental Impact Assessment for the project to the MDDEP. The MDDEP notified ParentCo that the project as it was submitted was approved and a final ministerial decree was issued in July 2015. As a result, no further adjustment to the reserve was required in 2015. The decree provided final approval for the project and ParentCo began work on the final project design at that time; Alcoa Corporation began construction on the project in April 2017 and completed such work in December 2017. At the end of 2017, the Company decreased the reserve for Baie Comeau by \$4 to reflect the final cost estimate of the remaining project work. At December 31, 2017 and 2016, the reserve balance associated with this matter was \$5 and \$24, respectively.

Fusina and Portovesme, Italy—In 1996, ParentCo acquired the Fusina smelter and rolling operations and the Portovesme smelter, both of which were owned by ParentCo’s former subsidiary Alcoa Trasformazioni S.r.l. (“Trasformazioni”) (Trasformazioni is now a subsidiary of Alcoa Corporation and owns the Fusina smelter and Portovesme smelter sites, and Fusina Rolling S.r.l., a new ParentCo subsidiary, owns the Fusina rolling operations), from Alumix, an entity owned by the Italian Government. At the time of the acquisition, Alumix indemnified ParentCo for pre-existing environmental contamination at the sites. In 2004, the Italian Ministry of Environment and Protection of Land and Sea (MOE) issued orders to Trasformazioni and Alumix for the development of a clean-up plan related to soil contamination in excess of allowable limits under legislative decree and to institute emergency actions and pay natural resource damages. Trasformazioni appealed the orders and filed suit against Alumix, among others, seeking indemnification for these liabilities under the provisions of the acquisition agreement. In 2009, Ligestra S.r.l. (“Ligestra”), Alumix’s successor, and Trasformazioni agreed to a stay of the court proceedings while investigations were conducted and negotiations advanced towards a possible settlement.

In December 2009, Trasformazioni and Ligestra reached an initial agreement for settlement of the liabilities related to the Fusina operations while negotiations continued related to Portovesme (see below). The agreement outlined an allocation of payments to the MOE for emergency action and natural resource damages and the scope and costs for a proposed soil remediation project, which was formally presented to the MOE in mid-2010. The agreement was contingent upon final acceptance of the remediation project by the MOE. As a result of entering into this agreement, ParentCo increased the reserve by \$12 in 2009 for Fusina. Based on comments received from the MOE and local and regional environmental authorities, Trasformazioni submitted a revised remediation plan in the first half of 2012; however, such revisions did not require any change to the existing reserve. In October 2013, the MOE approved the project submitted by ParentCo, resulting in no adjustment to the reserve.

In January 2014, in anticipation of ParentCo reaching a final administrative agreement with the MOE, ParentCo and Ligestra entered into a final agreement related to Fusina for allocation of payments to the MOE for emergency action and natural resource damages and the costs for the approved soil remediation project. The agreement resulted in Ligestra assuming 50% to 80% of all payments and remediation costs. On February 27, 2014, ParentCo and the MOE reached a final administrative agreement for conduct of work. The agreement includes both a soil and groundwater remediation project estimated to cost \$33 (€24) and requires payments of \$25 (€18) to the MOE for emergency action and natural resource damages. Based on the final agreement with Ligestra, ParentCo’s share of all costs and payments was \$17 (€12), of which \$9 (€6) related to the damages will be paid annually over a 10-year period, which began in April 2014, and was previously fully reserved. On March 30, 2017, the MOE provided authorization to Trasformazioni to dispose of excavated waste into a third-party landfill; this work began on October 25, 2017. The responsibility for the execution of groundwater remediation project/emergency containment has been transferred to the MOE in accordance with the February 2014 settlement agreement and remediation is slated to begin in 2019. At December 31, 2017 and 2016, the reserve balance associated with these matters was \$8 and \$7, respectively.

Effective with the Separation Transaction, Arconic retained the portion of this obligation related to the Fusina rolling operations. Specifically, under the Separation and Distribution Agreement, Trasformazioni, and with it the Fusina properties, were assigned to Alcoa Corporation. Fusina Rolling S.r.l., entered into a lease agreement for the portion of property that included the rolling operation. Pursuant to the Separation and Distribution Agreement, the liabilities at Fusina described above were allocated between Alcoa Corporation (Trasformazioni) and Arconic (Fusina Rolling S.r.l.). Arconic will pay \$7 (€7) for the portion of remediation expenses associated with the section of property that includes the rolling operation as the project is completed.

Separately, in 2009, due to additional information derived from the site investigations conducted at Portovesme, ParentCo increased the reserve by \$3. In November 2011, Trasformazioni and Ligestra reached an agreement for settlement of the liabilities related to Portovesme, similar to the one for Fusina. A proposed soil remediation project for Portovesme was formally presented to the MOE in June 2012. Neither the agreement with Ligestra nor the proposal to the MOE resulted in a change to the reserve for Portovesme. In November 2013, the MOE rejected the proposed soil remediation project and requested a revised project be submitted. In May 2014, Trasformazioni and Ligestra submitted a revised soil remediation project that addressed certain stakeholders’ concerns. ParentCo increased the reserve by \$3 in 2014 to reflect the estimated higher costs associated with the revised soil remediation project, as well as current operating and maintenance costs of the Portovesme site.

In October 2014, the MOE required a further revised project be submitted to reflect the removal of a larger volume of contaminated soil than what had been proposed, as well as design changes for the cap related to the remaining contaminated soil left in place and the expansion of an emergency containment groundwater pump and treatment system that was previously installed. Trasformazioni and Ligestra submitted the further revised soil remediation project in February 2015. As a result, ParentCo increased the reserve by \$7 in March 2015 to reflect the increase in the estimated costs of the project. In October 2015, ParentCo received a final ministerial decree approving the February 2015 revised soil remediation project. Work on the soil remediation project commenced in mid-2016 and is expected to be completed in 2019. For the groundwater remediation project, which was part of a recent settlement of outstanding matters in Italy (see Italy 148 in Litigation above), the MOE has confirmed the percentage of project costs among the responsible parties, including Alcoa Corporation, although the total cost will not be determined until the final remedial design is completed in late 2018. The ultimate outcome of this matter may result in a change to the existing reserve for Portovesme.

Mosjøen, Norway—In September 2012, ParentCo presented an analysis of remediation alternatives to the Norwegian Environmental Agency (NEA) (formerly the Norwegian Climate and Pollution Agency, or “Klif”), in response to a previous request, related to known PAHs in the sediments located in the harbor and extending out into the fjord. As such, ParentCo increased the reserve for Mosjøen by \$20 in 2012 to reflect the estimated cost of the baseline alternative for dredging of the contaminated sediments. A proposed project reflecting this alternative was formally presented to the NEA in June 2014, and was resubmitted in late 2014 to reflect changes by the NEA. The revised proposal did not result in a change to the reserve for Mosjøen.

In April 2015, the NEA notified ParentCo that the revised project was approved and required submission of the final project design before issuing a final order. ParentCo completed and submitted the final project design, which identified a need to stabilize the related wharf structure to allow for the sediment dredging in the harbor. As a result, ParentCo increased the reserve for Mosjøen by \$11 in June 2015 to reflect the estimated cost of the wharf stabilization. Also in June 2015, the NEA issued a final order approving the project as well as the final project design. In September 2015, ParentCo increased the reserve by \$1 to reflect the potential need (based on prior experience with similar projects) to perform additional dredging if the results of sampling, which is required by the order, don’t achieve the required cleanup levels. Project construction commenced in early 2016 and is expected to be completed in 2018. In the second half of 2017, Alcoa Corporation reduced the reserve associated with this matter by \$2 based on a revised cost estimate of the remaining project work. At December 31, 2017 and 2016, the reserve balance associated with this matter was \$2 and \$8, respectively.

East St. Louis, IL—ParentCo had an ongoing remediation project related to an area used for the disposal of bauxite residue from former alumina refining operations. The project, which was selected by the EPA in a Record of Decision (ROD) issued in July 2012, is aimed at implementing a soil cover over the affected area. On November 1, 2013, the U.S. Department of Justice lodged a consent decree on behalf of the U.S. Environmental Protection Agency (EPA) for ParentCo to conduct the work outlined in the ROD. This consent decree was entered as final in February 2014 by the U.S. Department of Justice. As a result, ParentCo began construction in March 2014; the fieldwork on a majority of this project was completed by the end of June 2016. A completion report was approved by the EPA in September 2016 and this matter, for the completed portion of the project, transitioned into a long-term (approximately 30 years) inspection, maintenance, and monitoring program. Fieldwork for the remaining portion of the project is expected to be completed in 2019, at which time it would also transition into a long-term inspection, maintenance, and monitoring program. This obligation was transferred from ParentCo to Alcoa Corporation as part of the Separation Transaction on November 1, 2016. At both December 31, 2017 and 2016, the reserve balance associated with this matter was \$4.

Tax.

Spain—In September 2010, following a corporate income tax audit covering the 2003 through 2005 tax years, an assessment was received as a result of Spain’s tax authorities disallowing certain interest deductions claimed by a Spanish consolidated tax group owned by ParentCo. An appeal of this assessment in Spain’s Central Tax Administrative Court by ParentCo was denied in October 2013. In December 2013, ParentCo filed an appeal of the assessment in Spain’s National Court.

Additionally, following a corporate income tax audit of the same Spanish tax group for the 2006 through 2009 tax years, Spain's tax authorities issued an assessment in July 2013 similarly disallowing certain interest deductions. In August 2013, ParentCo filed an appeal of this second assessment in Spain's Central Tax Administrative Court, which was denied in January 2015. ParentCo filed an appeal of this second assessment in Spain's National Court in March 2015.

On January 16, 2017, Spain's National Court issued a decision in favor of the Company related to the assessment received in September 2010. On March 6, 2017, the Company was notified that Spain's tax authorities did not file an appeal, for which the deadline has passed. As a result, the assessment related to the 2003 through 2005 tax years is null and void. Spain's National Court has not yet rendered a decision related to the assessment received in July 2013 for the 2006 through 2009 tax years. The amount of this assessment on a standalone basis, including interest, was \$155 (€130) as of December 31, 2017.

The Company believes it has meritorious arguments to support its tax position and intends to vigorously litigate the remaining assessment through Spain's court system. However, in the event the Company is unsuccessful, a portion of the remaining assessment may be offset with existing tax loss carryforwards available to the Spanish consolidated tax group, which would be shared between the Company and Arconic as provided for in the Tax Matters Agreement related to the Separation Transaction. Additionally, it is possible that the Company may receive similar assessments for tax years subsequent to 2009 (see below). Despite the favorable decision received on the first assessment, at this time, the Company is unable to reasonably predict the ultimate outcome for this matter.

This Spanish consolidated tax group had been under audit (began in September 2015) for the 2010 through 2013 tax years. As Spain's tax authorities neared the end of the audit, they informed both Alcoa Corporation and Arconic of their intent to issue an assessment similarly disallowing certain interest deductions as the two assessments described above. On August 3, 2017, in lieu of receiving a formal assessment, all parties agreed to a settlement related to the 2010 through 2013 tax years. For Alcoa Corporation, this settlement is not material to the Company's Consolidated Financial Statements. Given the stage of the appeal of the assessment for the 2006 through 2009 tax years in Spain's National Court, the settlement of the 2010 through 2013 tax years will not impact the ultimate outcome of that proceeding.

Brazil (AWAB)—In March 2013, AWAB was notified by the Brazilian Federal Revenue Office (RFB) that approximately \$110 (R\$220) of value added tax credits previously claimed are being disallowed and a penalty of 50% assessed. Of this amount, AWAB received \$41 (R\$82) in cash in May 2012. The value added tax credits were claimed by AWAB for both fixed assets and export sales related to the Juruti bauxite mine and São Luís refinery expansion. The RFB has disallowed credits they allege belong to the consortium in which AWAB owns an interest and should not have been claimed by AWAB. Credits have also been disallowed as a result of challenges to apportionment methods used, questions about the use of the credits, and an alleged lack of documented proof. AWAB presented defense of its claim to the RFB on April 8, 2013. If AWAB is successful in this administrative process, the RFB would have no further recourse. If unsuccessful in this process, AWAB has the option to litigate at a judicial level. Separately from the AWAB's administrative appeal, in June 2015, new tax law was enacted repealing the provisions in the tax code that were the basis for the RFB assessing a 50% penalty in this matter. As such, the estimated range of reasonably possible loss is \$0 to \$31 (R\$103), whereby the maximum end of this range represents the portion of the disallowed credits applicable to the export sales and excludes the 50% penalty. Additionally, the estimated range of disallowed credits related to AWAB's fixed assets is \$0 to \$35 (R\$117), which would increase the net carrying value of AWAB's fixed assets if ultimately disallowed. It is management's opinion that the allegations have no basis; however, at this time, the Company is unable to reasonably predict the ultimate outcome for this matter.

Brazil (Alumínio)—Between 2000 and 2002, Alumínio sold approximately 2,000 metric tons of metal per month from its Poços de Caldas facility, located in the State of Minas Gerais (the "State"), Brazil, to Alfio, a customer also located in the State. Sales in the State were exempted from value-added tax (VAT) requirements. Alfio subsequently sold metal to customers outside of the State, but did not pay the required VAT on those transactions. In July 2002, Alumínio received an assessment from State auditors on the theory that Alumínio should be jointly and severally liable with

Alfio for the unpaid VAT. In June 2003, the administrative tribunal found Alumínio liable, and Alumínio filed a judicial case in the State in February 2004 contesting the finding. In May 2005, the Court of First Instance found Alumínio solely liable, and a panel of a State appeals court confirmed this finding in April 2006. Alumínio filed a special appeal to the Superior Tribunal of Justice (STJ) in Brasilia (the federal capital of Brazil) later in 2006. In 2011, the STJ (through one of its judges) reversed the judgment of the lower courts, finding that Alumínio should neither be solely nor jointly and severally liable with Alfio for the VAT, which ruling was then appealed by the State. In August 2012, the STJ agreed to have the case reheard before a five-judge panel. On February 21, 2017, the lead judge of the STJ issued a ruling confirming that Alumínio should be held liable in this matter. On March 16, 2017, Alumínio filed an appeal to have its case reheard before the five-judge panel as originally agreed to by the STJ in August 2012. Separately, in June 2017, the State opened a tax amnesty program. At the end of August 2017, Alumínio elected to submit this matter for consideration into the amnesty program, which the State approved. As a result, under the terms of the amnesty program, this matter was settled for \$8 (R\$25). In 2017, a charge for the settlement amount was recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations. Prior to submitting this matter for consideration into the amnesty program, the assessment, including penalties and interest, totaled \$46 (R\$145). This matter is now closed.

Other. On January 11, 2016, Sherwin Alumina Company, LLC (“Sherwin”), the current owner of a refinery previously owned by ParentCo (see below), and one of its affiliate entities, filed bankruptcy petitions in Corpus Christi, Texas for reorganization under Chapter 11 of the U.S. Bankruptcy Code. Sherwin informed the bankruptcy court that it intends to cease operations because it is not able to continue its bauxite supply agreement. On November 23, 2016, the bankruptcy court approved Sherwin’s plans for cessation of its operations. On February 16, 2017, Sherwin filed a bankruptcy Chapter 11 Plan (the “Plan”) and on February 17, 2017 the court approved that Plan.

In 2000, ParentCo acquired Reynolds Metals Company (“Reynolds,” a subsidiary of Alcoa Corporation), which included an alumina refinery in Gregory, Texas. As a condition of the Reynolds acquisition, ParentCo was required to divest this alumina refinery. In accordance with the terms of the divestiture in 2000, ParentCo agreed to retain responsibility for certain environmental obligations (see Environmental Matters above) and assigned to the buyer an Energy Services Agreement (“ESA”) with Gregory Power Partners (“Gregory Power”) for purchase of steam and electricity by the refinery.

As a result of Sherwin’s initial bankruptcy filing, separate legal actions were initiated against Reynolds by Gregory Power and Sherwin as follows.

Gregory Power—On January 26, 2016, Gregory Power delivered notice to Reynolds that Sherwin’s bankruptcy filing constitutes a breach of the ESA; on January 29, 2016, Reynolds responded that the filing does not constitute a breach. On September 16, 2016, Gregory Power filed a complaint in the bankruptcy case against Reynolds alleging breach of the ESA. In response to this complaint, on November 10, 2016, Reynolds filed both a motion to dismiss, including a jury demand, and a motion to withdraw the reference to the bankruptcy court based on the jury demand. On July 18, 2017, the district court ordered that any trial would be held to a jury in district court, but that the bankruptcy court would retain jurisdiction on all pre-trial matters. At this time, Alcoa Corporation is unable to reasonably predict the ultimate outcome of this matter.

Sherwin—On October 4, 2016, the state of Texas filed suit against Sherwin in the bankruptcy proceeding seeking to hold Sherwin responsible for remediation of alleged environmental conditions at the facility. On October 11, 2016, Sherwin filed a similar suit against Reynolds in the case. As provided in the Plan, Sherwin, including certain affiliated companies, and Reynolds are negotiating an allocation among them as to the ownership of and responsibility for certain areas of the refinery and related bauxite residue waste disposal areas. Upon agreed stipulations filed by the parties, the bankruptcy court has extended the deadline to negotiate and file a settlement several times and is currently scheduled for March 12, 2018. At this time, Alcoa Corporation is unable to reasonably predict the ultimate outcome of this matter.

General. In addition to the matters discussed above, various other lawsuits, claims, and proceedings have been or may be instituted or asserted against Alcoa Corporation, including those pertaining to environmental, product liability,

safety and health, contract dispute, and tax matters, and other actions and claims arising out of the normal course of business. While the amounts claimed in these other matters may be substantial, the ultimate liability cannot now be determined because of the considerable uncertainties that exist. Therefore, it is possible that the Company's liquidity or results of operations in a particular period could be materially affected by one or more of these other matters. However, based on facts currently available, management believes that the disposition of these other matters that are pending or asserted will not have a material adverse effect, individually or in the aggregate, on the financial position of the Company.

Commitments

Purchase Obligations. Alcoa Corporation is party to unconditional purchase obligations for energy that expire between 2028 and 2037. Commitments related to these contracts total \$176 in 2018, \$180 in 2019, \$186 in 2020, \$192 in 2021, \$199 in 2022, and \$2,824 thereafter. Expenditures under these contracts totaled \$199 in 2017, \$181 in 2016, and \$125 in 2015. Additionally, Alcoa Corporation has entered into other purchase commitments for energy, raw materials, and other goods and services, which total \$2,296 in 2018, \$1,946 in 2019, \$1,498 in 2020, \$1,343 in 2021, \$1,302 in 2022, and \$11,433 thereafter.

On April 8, 2015, AofA secured a new 12-year gas supply agreement to power its three alumina refineries in Western Australia beginning in July 2020. This agreement was conditional on the completion of a third-party acquisition of the related energy assets from the then-current owner, which occurred in June 2015. The terms of the gas supply agreement required AofA to make a prepayment of \$500 in two installments. The first installment of \$300 was made at the time of the completion of the third-party acquisition in June 2015 and the second installment of \$200 was made in April 2016. Both of these amounts were included in (Increase) in noncurrent assets on the accompanying Statement of Consolidated Cash Flows in the respective periods. At December 31, 2017 and 2016, Alcoa Corporation has an asset of \$510 (A\$654) and \$471 (A\$654), respectively, which was included in Other noncurrent assets (see Note S) on the accompanying Consolidated Balance Sheet.

Operating Leases. Certain land and buildings, alumina refinery process control technology, plant equipment, vehicles, and computer equipment are under operating lease agreements. Total expense for all leases was \$101 in 2017, \$90 in 2016, and \$98 in 2015. Under long-term operating leases, minimum annual rentals are \$94 in 2018, \$73 in 2019, \$58 in 2020, \$47 in 2021, \$15 in 2022, and \$21 thereafter.

Guarantees of Third Parties. At December 31, 2017, Alcoa Corporation has maximum potential future payments for guarantees issued on behalf of a third party of \$177. These guarantees expire at various times between 2018 and 2024 and relate to project financing for the aluminum complex in Saudi Arabia (see Note H).

Bank Guarantees and Letters of Credit. Alcoa Corporation has outstanding bank guarantees and letters of credit related to, among others, energy contracts, environmental obligations, legal and tax matters, outstanding debt, leasing obligations, workers compensation, and customs duties. The total amount committed under these instruments, which automatically renew or expire at various dates between 2018 and 2022, was \$543 (includes \$112 issued under a one-year agreement — see below) at December 31, 2017. Additionally, Arconic has outstanding bank guarantees and letters of credit related to Alcoa Corporation in the amount of \$29 at December 31, 2017. In the event Arconic would be required to perform under any of these instruments, Arconic would be indemnified by Alcoa Corporation in accordance with the Separation and Distribution Agreement. Likewise, Alcoa Corporation has outstanding bank guarantees and letters of credit related to Arconic in the amount of \$18 at December 31, 2017. In the event Alcoa Corporation would be required to perform under any of these instruments, Alcoa Corporation would be indemnified by Arconic in accordance with the Separation and Distribution Agreement.

In August 2017, Alcoa Corporation entered into a one-year standby letter of credit agreement with three financial institutions. The agreement provides for a \$150 facility, which will be used by Alcoa Corporation for matters in the ordinary course of business. Alcoa Corporation's obligations under this facility will be secured in the same manner as obligations under the Company's Amended Revolving Credit Agreement (see Note L). Additionally, this facility

contains similar representations and warranties and affirmative, negative, and financial covenants as the Company's Amended Revolving Credit Agreement (see Note L). As of December 31, 2017, letters of credit aggregating \$112 were issued under this facility. These letters of credit were previously issued in 2017 on a standalone basis.

Surety Bonds. Alcoa Corporation has outstanding surety bonds primarily related to tax matters, contract performance, workers compensation, environmental-related matters, and customs duties. The total amount committed under these bonds, which automatically renew or expire at various dates, mostly in 2018, was \$122 at December 31, 2017. Additionally, Arconic has outstanding surety bonds related to Alcoa Corporation in the amount of \$14 at December 31, 2017. In the event Arconic would be required to perform under any of these instruments, Arconic would be indemnified by Alcoa Corporation in accordance with the Separation and Distribution Agreement.

S. Other Financial Information

Interest Cost Components

	2017	2016	2015
Amount charged to expense	\$104	\$243	\$270
Amount capitalized	17	23	30
	\$121	\$266	\$300

Other (Income) Expenses, Net

	2017	2016	2015
Equity loss	\$ 28	\$ 70	\$ 89
Foreign currency losses (gains), net	8	8	(39)
Net gain from asset sales	(116)	(164)	(32)
Net loss on mark-to-market derivative instruments (O)	24	9	26
Other, net	(2)	(12)	(2)
	\$ (58)	\$ (89)	\$ 42

In 2017, Net gain from asset sales included a \$122 gain related to the sale of Yadkin (see Note C). In 2016, Net gain from asset sales included a \$118 gain related to the sale of wharf property near the Intalco (Washington) smelter and a \$27 gain related to the sale of an equity interest in a natural gas pipeline in Australia (see Note H). In 2015, Net gain from asset sales included a \$29 gain related to the sale of land around the Lake Charles, Louisiana anode facility.

Other Noncurrent Assets

December 31,	2017	2016
Gas supply prepayment (R)	\$ 510	\$ 471
Value-added tax credits ⁽¹⁾	340	287
Prepaid gas transmission contract (H)	300	270
Goodwill (K)	154	155
Deferred mining costs, net ⁽²⁾	139	127
Prepaid pension benefit (N)	72	43
Intangibles, net (K)	62	135
Other	142	180
	\$1,719	\$1,668

⁽¹⁾ The Value-added tax credits relate to two of the Company's subsidiaries in Brazil, AWAB and Alumínio.

⁽²⁾ As of December 31, 2016, this amount reflects an asset impairment of \$72 (see Note D).

Other Noncurrent Liabilities and Deferred Credits

<u>December 31,</u>	<u>2017</u>	<u>2016</u>
Accrued compensation and retirement costs	\$127	\$122
Deferred alumina sales revenue	68	76
Liability related to the resolution of a legal matter*	-	74
Other	84	98
	<u>\$279</u>	<u>\$370</u>

* In early 2014, ParentCo and one of Alcoa's Corporation's current subsidiaries, AWA, resolved violations of certain provisions of the Foreign Corrupt Practices Act of 1977 with the U.S. Department of Justice and U.S. Securities and Exchange Commission. Under the resolution, ParentCo and AWA agreed to pay a combined \$384 over a four-year timeframe. Prior to the Separation Transaction, ParentCo and AWA paid \$236 of the total amount. As part of the Separation and Distribution Agreement, Alcoa Corporation assumed ParentCo's portion of the \$148 remaining obligation. The \$148 was paid in equal installments of \$74 in January 2017 and January 2018.

Cash Flow Information

Cash paid for interest and income taxes was as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Interest, net of amount capitalized	\$100	\$226	\$270
Income taxes, net of amount refunded	363	265	265

Noncash Financing and Investing Activities. In September 2016, ANHBV issued \$1,250 in new senior notes (see Note L) in preparation for the Separation Transaction. The net proceeds of \$1,228 from the debt issuance were required to be placed in escrow contingent on completion of the Separation Transaction. As a result, the \$1,228 of escrowed cash was recorded as restricted cash. The issuance of the new senior notes and the increase in restricted cash both in the amount of \$1,228 were not reflected in the accompanying Statement of Consolidated Cash Flows as these represent noncash financing and investing activities, respectively. The subsequent release of the \$1,228 from escrow occurred on October 31, 2016. This decrease in restricted cash was reflected in the accompanying Statement of Consolidated Cash Flows as a cash inflow in the Net change in restricted cash line item.

T. Subsequent Events

Management evaluated all activity of Alcoa Corporation and concluded that no subsequent events have occurred that would require recognition in the Consolidated Financial Statements or disclosure in the Notes to the Consolidated Financial Statements, except as described below.

On January 17, 2018, the Company communicated retirement benefit changes to certain U.S. and Canadian employees. Effective January 1, 2021, all salaried U.S. and Canadian employees that are participants in the Company's defined benefit pension plans will cease accruing retirement benefits for future service. This change will affect approximately 800 employees, who will be transitioned to country-specific defined contribution plans, in which the Company will contribute 3% of these participants' eligible earnings on an annual basis. Such contributions will be incremental to any employer savings match the employees may receive under existing defined contribution plans. Participants already collecting benefits under the defined benefit pension plans, as well as those currently covered by collective bargaining agreements, are not affected by these changes. Also, effective January 1, 2021, Alcoa Corporation will no longer contribute to pre-Medicare retiree medical coverage for U.S. salaried employees and retirees. As a result of these changes, Alcoa Corporation expects to record both a curtailment gain of approximately \$20 (pretax) in 2018 and a reduction to the Company's net pension and other postretirement benefits liability of approximately \$35.

Separately, Alcoa expects to make discretionary contributions of approximately \$300 combined to the U.S. and Canadian defined benefit pension plans in 2018. The Company intends these contributions to be used to purchase annuity contracts for approximately 9,000 retirees. Such instruments will allow the Company to transfer risk and lower its costs related to these defined benefit pension plans. At such time(s) annuity contracts are purchased, Alcoa Corporation will record a settlement charge as part of the net periodic benefit cost of these defined benefit pension plans.

Supplemental Financial Information (unaudited)

**Quarterly Data
(in millions, except per-share amounts)**

	First	Second	Third	Fourth⁽²⁾	Year
2017					
Sales	\$2,655	\$2,859	\$2,964	\$3,174	\$11,652
Net income (loss)	\$ 308	\$ 138	\$ 169	\$ (56)	\$ 559
Net income (loss) attributable to Alcoa Corporation	\$ 225	\$ 75	\$ 113	\$ (196)	\$ 217
Earnings per share attributable to Alcoa Corporation common shareholders ⁽¹⁾ :					
Basic	\$ 1.23	\$ 0.41	\$ 0.61	\$ (1.06)	\$ 1.18
Diluted	\$ 1.21	\$ 0.40	\$ 0.60	\$ (1.06)	\$ 1.16
2016					
Sales	\$2,129	\$2,323	\$2,329	\$2,537	\$ 9,318
Net (loss) income	\$ (215)	\$ (12)	\$ 10	\$ (129)	\$ (346)
Net loss attributable to Alcoa Corporation	\$ (210)	\$ (55)	\$ (10)	\$ (125)	\$ (400)
Earnings per share attributable to Alcoa Corporation common shareholders ⁽¹⁾ :					
Basic	\$ (1.16)	\$ (0.29)	\$ (0.06)	\$ (0.68)	\$ (2.19)
Diluted	\$ (1.16)	\$ (0.29)	\$ (0.06)	\$ (0.68)	\$ (2.19)

⁽¹⁾ Per share amounts are calculated independently for each period presented; therefore, the sum of the quarterly per share amounts may not equal the per share amounts for the year.

⁽²⁾ In the fourth quarter of 2017, Alcoa Corporation recorded restructuring and other charges of \$297 (pretax), which were primarily related to both the termination of a power contract associated with and the permanent closure of the Rockdale (Texas) smelter (see Note D), and discrete income tax charges of \$98 for a valuation allowance on certain non-U.S. deferred tax assets, the remeasurement of certain non-U.S. deferred tax assets due to a tax rate change, and the remeasurement of U.S. deferred tax assets and liabilities at the new corporate income tax rate of 21% under the 2017 Tax Cuts and Jobs Act signed into law on December 22, 2017 (see Note P). In the fourth quarter of 2016, Alcoa Corporation recorded restructuring and other charges of \$209 (pretax), which were primarily related to the closure of the Suriname refinery and related bauxite mines and the impairment of an interest in a gas exploration field in Australia (see Note D).

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

(a) Evaluation of Disclosure Controls and Procedures

Alcoa Corporation's Chief Executive Officer and Chief Financial Officer have evaluated the Company's disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the U.S. Securities Exchange Act of 1934, as amended, as of the end of the period covered by this report, and they have concluded that these controls and procedures are effective as of December 31, 2017.

(b) Management's Annual Report on Internal Control over Financial Reporting

Management's Report on Internal Control over Financial Reporting is included in Part II, Item 8 of this Form 10-K.

(c) Attestation Report of the Registered Public Accounting Firm

The effectiveness of Alcoa Corporation's internal control over financial reporting as of December 31, 2017 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included in Part II, Item 8 of this Form 10-K.

(d) Changes in Internal Control over Financial Reporting

There have been no changes in internal control over financial reporting during the fourth quarter of 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by Item 401 of Regulation S-K regarding executive officers is set forth in Part I, Item 1 of this report under “Executive Officers of the Registrant.” The information required by Item 401 of Regulation S-K regarding directors is contained under the caption “Item 1 Election of Directors” of Alcoa Corporation’s Definitive Proxy Statement for the 2018 Annual Meeting of Stockholders (“Proxy Statement”), which will be filed with the Securities and Exchange Commission within 120 days of the end of Alcoa Corporation’s fiscal year ended December 31, 2017 and is incorporated herein by reference.

The information required by Item 405 of Regulation S-K is contained under the caption “Section 16(a) Beneficial Ownership Reporting Compliance” of the Proxy Statement and is incorporated herein by reference.

The Company’s Code of Ethics for the CEO, CFO and Other Financial Professionals, and Business Conduct Policies are publicly available on the Company’s Internet website at <http://www.alcoa.com> under the section “Investors—Corporate Governance—Governance Documents.” The remaining information required by Item 406 of Regulation S-K is contained under the captions “Corporate Governance” and “Corporate Governance—Business Conduct Policies and Code of Ethics” of the Proxy Statement and is incorporated herein by reference.

The information required by Items 407(c)(3), (d)(4) and (d)(5) of Regulation S-K is included under the captions “Item 1 Election of Directors—Nominating Board Candidates—Procedures and Director Qualifications” and “Corporate Governance—Board Meetings and Attendance” and “—Committees of the Board—Audit Committee”, respectively, of the Proxy Statement and is incorporated herein by reference.

Item 11. Executive Compensation.

The information required by Item 402 of Regulation S-K is contained under the captions “Non-Employee Director Compensation Program,” “Executive Compensation” (excluding the information under the caption “—Compensation Committee Report”), and “Corporate Governance—The Board’s Role in Risk Oversight” of the Proxy Statement. Such information is incorporated herein by reference.

The information required by Items 407(e)(4) and (e)(5) of Regulation S-K is contained under the captions “Corporate Governance—Compensation Committee Interlocks and Insider Participation” and “Executive Compensation—Compensation Committee Report”, respectively, of the Proxy Statement. Such information (other than the Compensation Committee Report, which shall not be deemed to be “filed”) is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by Item 201(d) of Regulation S-K relating to securities authorized for issuance under equity compensation plans is contained under the caption “Equity Compensation Plan Information” of the Proxy Statement and is incorporated herein by reference.

The information required by Item 403 of Regulation S-K is contained under the captions “Beneficial Ownership—Stock Ownership of Certain Beneficial Owners” and “—Stock Ownership of Directors and Executive Officers” of the Proxy Statement and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Certain Relationships and Related Party Transactions

Agreements with Arconic

On November 1, 2016, the Separation Transaction was completed and became effective at 12:01 a.m. Eastern Standard Time, at which time Alcoa Corporation became an independent, publicly traded company. To effect the Separation Transaction, ParentCo undertook a series of transactions to separate the net assets and certain legal entities of ParentCo, resulting in a cash payment of approximately \$1.1 billion to ParentCo by Alcoa Corporation using the net proceeds of a debt offering. Also at 12:01 a.m. Eastern Standard Time on November 1, 2016, the Distribution occurred. Immediately following the Distribution, Alcoa Corporation stockholders owned directly 80.1% of the outstanding shares of common stock of Alcoa Corporation, and Arconic retained 19.9% of the outstanding shares of common stock of Alcoa Corporation. 146,159,428 shares of Alcoa Corporation common stock were distributed to ParentCo stockholders, and Arconic retained 36,311,767 shares of Alcoa Corporation common stock representing its 19.9% retained interest. (In 2017, ParentCo divested itself of its entire interest in Alcoa Corporation and we believe that as of December 31, 2017 it does not hold any shares of Alcoa Corporation common stock.) ParentCo stockholders received cash in lieu of any fractional shares of Alcoa Corporation common stock that they would have received after application of the distribution ratio. Upon completion of the Separation Transaction and the Distribution, each ParentCo stockholder as of the record date continued to own shares of ParentCo (which, as a result of ParentCo's name change to Arconic, are Arconic shares) and owned a proportionate share of the outstanding common stock of Alcoa Corporation that was distributed. ParentCo stockholders were not required to make any payment, surrender or exchange their ParentCo common stock or take any other action to receive their shares of Alcoa Corporation common stock in the Distribution. "Regular-way" trading of Alcoa Corporation's common stock began with the opening of the New York Stock Exchange ("NYSE") on November 1, 2016 under the ticker symbol "AA." Alcoa Corporation's common stock has a par value of \$0.01 per share.

Since the Separation Transaction and the Distribution, Alcoa Corporation and Arconic operate separately, each as an independent public company. In connection with the Separation Transaction, Alcoa Corporation entered into a separation and distribution agreement with ParentCo, and also entered into various other agreements to effect the Separation Transaction and provide a framework for its relationship with Arconic after the separation, including a transition services agreement, a tax matters agreement, an employee matters agreement, a stockholder and registration rights agreement with respect to ParentCo's retained interest in Alcoa Corporation, intellectual property license agreements, a metal supply agreement, real estate and office leases, a spare parts loan agreement and an agreement relating to the North American packaging business. These agreements, together with the documents and agreements by which the internal reorganization was effected, provide for the allocation between Alcoa Corporation and Arconic of ParentCo's assets, employees, liabilities and obligations (including investments, property and employee benefits, and tax-related assets and liabilities) attributable to periods prior to, at and after Alcoa Corporation's separation from ParentCo and govern certain relationships between Alcoa Corporation and Arconic after the separation.

The summaries of each of these agreements set forth below are qualified in their entireties by reference to the full text of the applicable agreements.

Separation and Distribution Agreement

Transfer of Assets and Assumption of Liabilities

The separation and distribution agreement identifies the assets transferred, the liabilities assumed and the contracts transferred to each of Alcoa Corporation and Arconic as part of the Separation Transaction of ParentCo into two companies, and provides for when and how these transfers and assumptions occurred. In particular, the separation and distribution agreement provides that, among other things, subject to the terms and conditions contained therein:

- certain assets related to ParentCo's Alcoa Corporation Business, which we refer to as the "Alcoa Corporation Assets," were transferred to Alcoa Corporation or one of its subsidiaries, including:
 - equity interests in certain ParentCo subsidiaries that hold assets relating to the Alcoa Corporation Business;
 - the Alcoa brand, certain other trade names and trademarks, and certain other intellectual property (including, patents, know-how and trade secrets), software, information and technology used in the Alcoa Corporation Business or related to the Alcoa Corporation Assets, the Alcoa Corporation Liabilities or Alcoa Corporation's business;
 - facilities related to the Alcoa Corporation Business;
 - contracts (or portions thereof) that relate to the Alcoa Corporation Business;
 - rights and assets expressly allocated to Alcoa Corporation pursuant to the terms of the separation and distribution agreement or certain other agreements entered into in connection with the separation;
 - permits that primarily relate to the Alcoa Corporation Business;
- certain liabilities related to the Alcoa Corporation Business or the Alcoa Corporation Assets, which we refer to as the "Alcoa Corporation Liabilities," were retained by or transferred to Alcoa Corporation, including certain liabilities associated with previously consummated divestitures of assets primarily related to the Alcoa Corporation Business. Subject to limited exceptions, liabilities that relate primarily to the Alcoa Corporation Business, including liabilities of various legal entities that are now subsidiaries of Alcoa Corporation following the separation, are now Alcoa Corporation Liabilities;
- all of the assets and liabilities (including whether accrued, contingent or otherwise) other than the Alcoa Corporation Assets and Alcoa Corporation Liabilities (such assets and liabilities, other than the Alcoa Corporation Assets and the Alcoa Corporation Liabilities, we refer to as the "Arconic Assets" and "Arconic Liabilities," respectively) were retained by or transferred to Arconic; and
- Alcoa Corporation will pay to Arconic the net after-tax proceeds it receives in respect of the sales of certain assets, as occurred with a portion of the proceeds of the Yadkin hydroelectric project.

Except as expressly set forth in the separation and distribution agreement or any ancillary agreement, neither Alcoa Corporation nor ParentCo made any representation or warranty as to the assets, business or liabilities transferred or assumed as part of the separation, as to any approvals or notifications required in connection with the transfers, as to the value of or the freedom from any security interests of any of the assets transferred, as to the absence or presence of any defenses or right of setoff or freedom from counterclaim with respect to any claim or other asset of either Alcoa Corporation or ParentCo, or as to the legal sufficiency of any document or instrument delivered to convey title to any asset or thing of value transferred in connection with the separation. All assets were transferred on an "as is," "where is" basis, and the respective transferees bore and will continue to bear the economic and legal risks that any conveyance will prove to be insufficient to vest in the transferee good and marketable title, free and clear of all security interests, that any necessary consents or governmental approvals are not obtained, or that any requirements of law, agreements, security interests or judgments are not complied with.

The separation and distribution agreement provides that in the event that the transfer of certain assets and liabilities to Alcoa Corporation or Arconic, as applicable, did not occur prior to the separation, then until such assets or liabilities

are able to be transferred, Alcoa Corporation or Arconic, as applicable, will hold such assets on behalf and for the benefit of the other party and will pay, perform and discharge such liabilities, for which the other party will reimburse Alcoa Corporation or Arconic, as applicable, for all commercially reasonable payments made in connection with the performance and discharge of such liabilities.

Non-Compete

Arconic and Alcoa Corporation agreed for four years following the Distribution to not compete with respect to certain rolled metal products: Arconic agreed not to produce certain products for the North American packaging business at its Tennessee operations (except for the benefit of Alcoa Corporation) and similarly, Alcoa Corporation agreed not to produce certain rolled metal products for automotive applications at Warrick.

Claims

In general, each party to the separation and distribution agreement assumed liability for all pending, threatened and unasserted legal matters related to its own business or assumed or retained liabilities and will indemnify the other party for any liability to the extent arising out of or resulting from such assumed or retained legal matters.

Releases

The separation and distribution agreement provides that Alcoa Corporation and its affiliates release and discharge Arconic and its affiliates from all liabilities assumed by Alcoa Corporation as part of the separation, from all acts and events occurring or failing to occur, and all conditions existing, on or before the distribution date relating to Alcoa Corporation's business, and from all liabilities existing or arising in connection with the implementation of the separation, except as expressly set forth in the separation and distribution agreement. Arconic and its affiliates release and discharge Alcoa Corporation and its affiliates from all liabilities retained by Arconic and its affiliates as part of the separation, from all acts and events occurring or failing to occur, and all conditions existing, on or before the distribution date relating to Arconic's business, and from all liabilities existing or arising in connection with the implementation of the separation, except as expressly set forth in the separation and distribution agreement.

These releases do not extend to obligations or liabilities under any agreements between the parties that remain in effect following the separation, which agreements include the separation and distribution agreement and the other agreements described under "Certain Relationships and Related Party Transactions."

Indemnification

In the separation and distribution agreement, Alcoa Corporation agreed to indemnify, defend and hold harmless Arconic, each of Arconic's affiliates and each of Arconic and its affiliates' respective directors, officers and employees, from and against all liabilities relating to, arising out of or resulting from:

- the Alcoa Corporation Liabilities;
- Alcoa Corporation's failure or the failure of any other person to pay, perform or otherwise promptly discharge any of the Alcoa Corporation Liabilities, in accordance with their respective terms, whether prior to, at or after the Distribution;
- except to the extent relating to a Arconic Liability, any guarantee, indemnification or contribution obligation for the benefit of Alcoa Corporation by Arconic that survives the Distribution;
- any breach by Alcoa Corporation of the separation and distribution agreement or any of the ancillary agreements; and
- any untrue statement or alleged untrue statement or omission or alleged omission of material fact in the Form 10 or in the information statement of Alcoa Corporation (as amended or supplemented), except for any such statements or omissions made explicitly in Arconic's name.

Arconic agreed to indemnify, defend and hold harmless Alcoa Corporation, each of Alcoa Corporation's affiliates and each of Alcoa Corporation and Alcoa Corporation's affiliates' respective directors, officers and employees from and against all liabilities relating to, arising out of or resulting from:

- the Arconic Liabilities;
- the failure of Arconic or any other person to pay, perform or otherwise promptly discharge any of the Arconic Liabilities, in accordance with their respective terms whether prior to, at or after the Distribution;
- except to the extent relating to an Alcoa Corporation Liability, any guarantee, indemnification or contribution obligation for the benefit of Arconic by Alcoa Corporation that survives the Distribution;
- any breach by Arconic of the separation and distribution agreement or any of the ancillary agreements; and
- any untrue statement or alleged untrue statement or omission or alleged omission of a material fact made explicitly in Arconic's name in the Form 10 or in the information statement of Alcoa Corporation (as amended or supplemented).

The separation and distribution agreement also establishes procedures with respect to claims subject to indemnification and related matters.

Insurance

The separation and distribution agreement provides for the allocation between the parties of rights and obligations under existing insurance policies with respect to occurrences prior to the Distribution and set forth procedures for the administration of insured claims and related matters.

Further Assurances

In addition to the actions specifically provided for in the separation and distribution agreement, except as otherwise set forth therein or in any ancillary agreement, both Alcoa Corporation and Arconic agreed in the separation and distribution agreement to use reasonable best efforts, prior to, on and after the distribution date, to take, or cause to be taken, all actions, and to do, or cause to be done, all things necessary, proper or advisable under applicable laws, regulations and agreements to consummate and make effective the transactions contemplated by the separation and distribution agreement and the ancillary agreements.

Dispute Resolution

The separation and distribution agreement contains provisions that govern, except as otherwise provided in any ancillary agreement, the resolution of disputes, controversies or claims that may arise between Alcoa Corporation and Arconic related to the Separation Transaction and that are unable to be resolved through good faith discussions between Alcoa Corporation and Arconic. These provisions contemplate that efforts will be made to resolve disputes, controversies and claims by escalation of the matter to executives of Alcoa Corporation and Arconic, and that, if such efforts are not successful, either Alcoa Corporation or Arconic may submit the dispute, controversy or claim to nonbinding mediation or, if such nonbinding mediation is not successful, binding alternative dispute resolution, subject to the provisions of the separation and distribution agreement.

Expenses

Except as expressly set forth in the separation and distribution agreement or in any ancillary agreement, Arconic is responsible for all costs and expenses incurred in connection with the Separation Transaction incurred prior to the distribution date, including costs and expenses relating to legal and tax counsel, financial advisors and accounting advisory work related to the separation. Except as expressly set forth in the separation and distribution agreement or in any ancillary agreement, or as otherwise agreed in writing by Arconic and Alcoa Corporation, all costs and expenses incurred in connection with the Separation Transaction after the Distribution will be paid by the party incurring such cost and expense.

Other Matters

Other matters governed by the separation and distribution agreement include Arconic's right to continue to use the "Alcoa" name and related trademark for limited purposes for a limited period following the Distribution, access to financial and other information, confidentiality, access to and provision of records and treatment of outstanding guarantees and similar credit support.

Termination

The separation and distribution agreement provides that it may not be terminated after the distribution date except by an agreement in writing signed by both Arconic and Alcoa Corporation.

Transition Services Agreement

Alcoa Corporation and Arconic entered into a transition services agreement in connection with the Separation Transaction pursuant to which Alcoa Corporation and Arconic and their respective affiliates provide each other, on an interim, transitional basis, various services, including, but not limited to, employee benefits administration, specialized technical and training services and access to certain industrial equipment, information technology services, regulatory services, continued industrial site remediation and closure services on discrete projects, project management services for certain equipment installation and decommissioning projects, general administrative services and other support services. The agreed-upon charges for such services are generally intended to allow the servicing party to charge a price comprised of out-of-pocket costs and expenses and a predetermined profit in the form of a mark-up of such out-of-pocket expenses. The party receiving each transition service will be provided with reasonable information that supports the charges for such transition service by the party providing the service.

The services generally commenced on the distribution date and will terminate no later than two years following the distribution date. The receiving party may terminate any services by giving prior written notice to the provider of such services and paying any applicable wind-down charges.

Subject to certain exceptions, the liabilities of each party providing services under the transition services agreement are generally limited to the aggregate charges actually paid to such party by the other party pursuant to the transition services agreement.

Tax Matters Agreement

In connection with the separation, Alcoa Corporation and Arconic entered into a tax matters agreement that governs the parties' respective rights, responsibilities and obligations with respect to taxes (including taxes arising in the ordinary course of business and taxes, if any, incurred as a result of any failure of the Distribution and certain related transactions to qualify as tax-free for U.S. federal income tax purposes), tax attributes, the preparation and filing of tax returns, the control of audits and other tax proceedings, and assistance and cooperation in respect of tax matters.

In addition, the tax matters agreement imposes certain restrictions on us and our subsidiaries (including restrictions on share issuances, business combinations, sales of assets and similar transactions) that are designed to preserve the tax-free status of the Distribution and certain related transactions. The tax sharing agreement provides special rules that allocate tax liabilities in the event the Distribution, together with certain related transactions, is not tax-free. In general, under the tax matters agreement, each party is responsible for any taxes imposed on Arconic or Alcoa Corporation that arise from the failure of the Distribution, together with certain related transactions, to qualify as a transaction that is generally tax-free, for U.S. federal income tax purposes, under Sections 355 and 368(a)(1)(D) and certain other relevant provisions of the Code, to the extent that the failure to so qualify is attributable to actions, events or transactions relating to such party's respective stock, assets or business, or a breach of the relevant representations or covenants made by that party in the tax matters agreement.

Employee Matters Agreement

Alcoa Corporation and Arconic entered into an employee matters agreement, as amended, in connection with the separation to allocate liabilities and responsibilities relating to employment matters, employee compensation and benefits plans and programs, and other related matters. The employee matters agreement governs certain compensation and employee benefit obligations with respect to the current and former employees and non-employee directors of each company.

The employee matters agreement provides that, unless otherwise specified, Arconic is responsible for liabilities associated with current and former employees of Arconic and its subsidiaries and certain other former employees classified as former employees of Arconic for purposes of post-separation compensation and benefits matters, and Alcoa Corporation is responsible for liabilities associated with current and former employees of Alcoa Corporation and its subsidiaries and certain other former employees classified as former employees of Alcoa Corporation for purposes of post-separation compensation and benefits matters.

The employee matters agreement also governs the treatment of equity-based awards granted by ParentCo prior to the separation, as discussed in the “Executive Compensation” section of the Proxy Statement.

Stockholder and Registration Rights Agreement

In connection with the separation, Alcoa Corporation entered into a stockholder and registration rights agreement with Arconic pursuant to which we agreed that, following the 60-day period commencing immediately after the effective time of the Distribution, upon the request of Arconic, we will use commercially reasonable efforts to effect the registration under applicable federal and state securities laws of any shares of our common stock retained by Arconic. Pursuant to the terms of the agreement, upon notice from Arconic, in February 2017, we effected the registration of the shares of common stock held by Arconic. On May 4, 2017, Arconic sold all remaining shares of our common stock that it had held.

Intellectual Property License Agreements

In connection with the separation, Alcoa Corporation and Arconic entered into an Alcoa Corporation to Arconic Inc. Patent, Know-How, and Trade Secret License Agreement, an Arconic Inc. to Alcoa Corporation Patent, Know-How, and Trade Secret License Agreement, and an Alcoa Corporation to Arconic Inc. Trademark License Agreement, which we refer to, collectively, as the “intellectual property license agreements.”

Under the intellectual property license agreements, two Arconic businesses, Alcoa Wheels and Spectrochemical Standards, have ongoing rights to use the “Alcoa” name following the separation. Alcoa Wheels received a 25 year, evergreen renewable, royalty-free license to use the “Alcoa” name for commercial transportation wheels and hubs. The Spectrochemical Standards business received a royalty-free license to use the “Alcoa” name for five years on existing inventory, with the possibility of one five-year extension. Under the intellectual property license agreements, subject to limited exceptions, Alcoa Corporation is not permitted to use or license others to use the “Alcoa” name for a period of 20 years on Arconic-type products, such as aerospace and automotive parts.

The intellectual property license agreements also governs patents that were developed jointly and will continued to be used by both Arconic and Alcoa Corporation, as well as shared know-how. The intellectual property license agreements provides for a license of these patents and know-how from Arconic or Alcoa Corporation, as applicable, to the other on a perpetual, royalty-free, non-exclusive basis, subject to certain exceptions. Namely, Alcoa Corporation will exclusively license to Arconic (i) Advanced Ceramics for non-smelting uses (subject to Alcoa Corporation retaining some non-smelting rights) and (ii) the EVERCAST foundry alloy for commercial truck wheel applications, subject to a threshold sales target being met by December 31, 2020.

Either party may terminate the license with respect to any trademark under the intellectual property license agreements upon an uncured material breach of Arconic with respect to such trademark that remains uncured after at least 60 days.

Metal Supply Agreement

In connection with the separation, Alcoa Corporation and Arconic entered into a master agreement for the supply of primary aluminum (“metal supply agreement”) pursuant to which Alcoa Corporation will supply Arconic with aluminum for use in its businesses. The metal supply agreement consists of a master agreement setting forth the general terms and conditions of the overall supply arrangement, with an initial term of three years, as well as individual sub-agreements that set forth terms and conditions with respect to the supply of a particular metal item. The master agreement is based on the form of agreement currently used by the Alcoa Corporation Business with its third party customers for metal supply arrangements. Each of the sub-agreements were negotiated individually and contain the main economic terms of the particular supply arrangement, including quantity and pricing. The term of each sub-agreement is typically one year, but if longer than one year, quantity and pricing will be redetermined and renegotiated on an annual basis in accordance with industry practices. Notwithstanding the metal supply agreement, Arconic has the right to purchase metal from other suppliers.

Real Estate Arrangements

Alcoa Corporation and Arconic entered into a lease agreement pursuant to which Arconic leased to Alcoa Corporation the land on which Arconic’s smelter, cast house and associated facilities located in Massena, New York are located for a term of 20 years with three automatic 10-year extensions, except that if Alcoa Corporation determines to close the smelter, the lease will terminate three years after such closure. If Alcoa Corporation ceases active production by the smelter, the facility will be considered closed five years after such cessation continues uninterrupted, and Alcoa Corporation will then be required to dismantle the smelter, remediate the land and otherwise restore it to industrial standard within three years before the lease is deemed terminated. The rent under the Massena lease agreement is set at a market rate and fixed for 10 years, after which it will increase annually based on the Consumer Price Index. In connection with the Massena lease agreement, Alcoa Corporation will provide certain power transmission services and process water to Arconic’s fabricating facility at the Massena, New York location.

In addition, subsidiaries of Alcoa Corporation and Arconic entered into a lease agreement pursuant to which a subsidiary of Alcoa Corporation, which will own the land and smelter assets at Arconic’s Fusina, Italy location, leased the land underlying Arconic’s rolling mill facilities to a subsidiary of Arconic for a term of 20 years with three automatic 10-year extensions. The rent under the Fusina lease agreement is set at a market rate and fixed for 10 years, after which it will increase annually based on the Consumer Price Index.

Alcoa Corporation and Arconic entered into a lease agreement pursuant to which Arconic leased to Alcoa Corporation a portion of one research and development building in which Arconic’s research and development facilities also are located, on Arconic’s research and development campus in New Kensington, Pennsylvania (“ATC Lease Agreement”). The ATC Lease Agreement is for a term of 3 years with no automatic extensions and the rent is set at a market rate and fixed for the term. In connection with the ATC Lease Agreement, Arconic also provides certain building utilities to Alcoa Corporation’s research and development facilities via metered rates.

Spare Parts Loan Agreement

In connection with the separation, Alcoa Corporation and Arconic entered into a spare parts loan agreement pursuant to which each of Alcoa Corporation and Arconic and their respective affiliates will provide the other party with a loan of a spare equipment in its inventory while the other party has an order in process with its supplier. Upon fulfillment of the equipment order (or, if earlier, the need for the equipment by the loaning party or one year from the loan), the loaned spare equipment is returned to the loaning party. Transportation costs are borne by the borrowing party. Terms and conditions of the agreement are in line with similar agreements to which ParentCo was a party with third parties.

North American Packaging Business Agreement

ParentCo's operations in Tennessee, which remained with Arconic following the separation, currently produce wide can body sheet for the North American packaging market. Alcoa plans to shift the production of the wide can body sheet for packaging applications from Tennessee to Alcoa Corporation's Ma'aden rolling mill. Before the Ma'aden rolling mill can begin production of the wide can body sheet, product from the facilities must be qualified by existing customers as an acceptable source of supply. While it is anticipated that these approvals will be obtained, the qualification process takes approximately 18 months per customer and will roll out over a period of months, subject to when the customer commences the qualification process. To permit Alcoa Corporation to continue supplying its customers without interruption during the qualification process, Alcoa Corporation and Arconic entered into a toll processing and services agreement ("North American packaging business agreement") pursuant to which Arconic will continue producing the wide can body sheet at Tennessee and provide it to Alcoa Corporation.

Procedures for Approval of Related Party Transactions

Alcoa Corporation adopted a written Related Person Transaction Approval Policy regarding the review, approval and ratification of transactions between the Company and related persons. The policy applies to any transaction in which the Company or a Company subsidiary is a participant, the amount involved exceeds \$120,000 and a related person has a direct or indirect material interest. A related person means any director or executive officer of the Company, any nominee for director, any stockholder known to the Company to be the beneficial owner of more than 5% of any class of the Company's voting securities, and any immediate family member of any such person.

Under this policy, reviews will be conducted by management to determine which transactions or relationships should be referred to the Governance and Nominating Committee for consideration. The Governance and Nominating Committee will then review the material facts and circumstances regarding a transaction and determine whether to approve, ratify, revise or reject a related person transaction, or to refer it to the full Board of Directors or another committee of the Board of Directors for consideration. The Company's Related Person Transaction Approval Policy operates in conjunction with other aspects of the Company's compliance program, including its Business Conduct Policies, which require that all directors, officers and employees have a duty to be free from the influence of any conflict of interest when they represent the Company in negotiations or make recommendations with respect to dealings with third parties, or otherwise carry out their duties with respect to the Company.

The Board of Directors is expected to consider the following types of potential related person transactions and pre-approve them under the Company's Related Person Transaction Approval Policy as not presenting material conflicts of interest:

- employment of executive officers (except employment of an executive officer that is an immediate family member of another executive officer, director, or nominee for director) as long as the Compensation and Benefits Committee has approved the executive officers' compensation;
- director compensation that the Board of Directors has approved;
- any transaction with another entity in which the aggregate amount involved does not exceed the greater of \$1 million or 2% of the other entity's total annual revenues, if a related person's interest arises only from:
 - such person's position as an employee or executive officer of the other entity; or

- such person’s position as a director of the other entity; or
- the ownership by such person, together with his or her immediate family members, of less than a 10% equity interest in the aggregate in the other entity (other than a partnership); or
- both such position as a director and ownership as described in the foregoing two bullets; or
- such person’s position as a limited partner in a partnership in which the person, together with his or her immediate family members, have an interest of less than 10%;
- charitable contributions in which a related person’s only relationship is as an employee (other than an executive officer), or a director or trustee, if the aggregate amount involved does not exceed the greater of \$250,000 or 2% of the charitable organization’s total annual receipts;
- transactions, such as the receipt of dividends, in which all stockholders receive proportional benefits;
- transactions involving competitive bids;
- transactions involving the rendering of services as a common or contract carrier, or public utility, at rates or charges fixed in conformity with law or governmental authority; and
- transactions with a related person involving services as a bank depository of funds, transfer agent, registrar, trustee under a trust indenture, or similar services.

Director Independence

The information required by Item 407(a) of Regulation S-K regarding director independence is contained under the captions “Item 1 Election of Directors” and “Corporate Governance” of the Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information required by Item 9(e) of Schedule 14A is contained under the captions “Item 2 Ratification of the Appointment of the Independent Registered Public Accounting Firm—Audit Committee Pre-Approval Policy” and “—Audit and Non-Audit Fees” of the Proxy Statement and is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The consolidated financial statements and exhibits listed below are filed as part of this report.

(1) The Company's consolidated financial statements, the notes thereto and the report of the Independent Registered Public Accounting Firm are on pages 96 through 172 of this report.

(2) Financial statement schedules have been omitted because they are not applicable, not required, or the required information is included in the consolidated financial statements or notes thereto.

(3) Exhibits.

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
2.1	Separation and Distribution Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa Corporation (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))*
2.2	Transition Services Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa Corporation (incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))*
2.3	Tax Matters Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa Corporation (incorporated by reference to Exhibit 2.3 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
2.4	Employee Matters Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa Corporation (incorporated by reference to Exhibit 2.4 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
2.5	Amendment No. 1 to Employee Matters Agreement, dated as of December 13, 2016, by and between Arconic Inc. and Alcoa Corporation (incorporated by reference to Exhibit 2.5 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))
2.6	Alcoa Corporation to Arconic Inc. Patent, Know-How, and Trade Secret License Agreement, dated as of October 31, 2016, by and between Alcoa USA Corp. and Arconic Inc. (incorporated by reference to Exhibit 2.5 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
2.7	Arconic Inc. to Alcoa Corporation Patent, Know-How, and Trade Secret License Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa USA Corp. (incorporated by reference to Exhibit 2.6 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
2.8	Amended and Restated Alcoa Corporation to Arconic Inc. Trademark License Agreement, dated as of June 25, 2017, by and between Alcoa USA Corp. and Arconic Inc. (incorporated by reference to Exhibit 2 to the Company's Quarterly Report on Form 10-Q filed August 3, 2017 (File No. 1-37816))
2.9	Toll Processing and Services Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa Warrick LLC (incorporated by reference to Exhibit 2.8 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))*
2.10	Master Agreement for the Supply of Primary Aluminum, dated as of October 31, 2016, by and between Alcoa Corporation and its affiliates and Arconic Inc. (incorporated by reference to Exhibit 2.9 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))

Exhibit No.	Description of Exhibit
2.11	Massena Land Lease Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa USA Corp. (incorporated by reference to Exhibit 2.10 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))*
2.12	English Translation of Fusina Lease and Operations Agreement by and between Alcoa Servizi S.r.l. and Fusina Rolling S.r.l., dated as of August 4, 2016 (incorporated by reference to Exhibit 2.11 to Amendment No. 1 to the Company's Registration Statement on Form 10 filed August 12, 2016 (File No. 1-37816))*
3.1	Amended and Restated Certificate of Incorporation of Alcoa Corporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed November 3, 2016 (File No. 1-37816))
3.2	Amended and Restated Bylaws of Alcoa Corporation, as adopted on December 6, 2017 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed December 8, 2017 (File No. 1-37816))
4.1	Indenture, dated September 27, 2016, among Alcoa Nederland Holding B.V., Alcoa Upstream Corporation and The Bank of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 10.19 to Amendment No. 4 to the Company's Registration Statement on Form 10 filed September 29, 2016 (File No. 1-37816))
4.2	Supplemental Indenture, dated as of November 1, 2016, among the entities listed in Annex A thereto, subsidiaries of Alcoa Corporation, Alcoa Corporation, Alcoa Nederland Holding B.V. and The Bank Of New York Mellon Trust Company, N.A. (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
10.1	Amendment and Restatement Agreement, dated as of November 14, 2017, which includes, as Exhibit A thereto, the Revolving Credit Agreement, dated as of September 16, 2016, and amended as of October 26, 2016, and as amended and restated as of November 14, 2017, among Alcoa Upstream Corporation, Alcoa Nederland Holding B.V., the lenders and issuers from time to time party thereto, and JPMorgan Chase Bank, N.A., as administrative agent for the lenders and issuers (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 16, 2017 (File No. 1-37816))
10.2	Amended and Restated Charter of the Strategic Council for the AWAC Joint Venture (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
10.3	Third Amended and Restated Limited Liability Company Agreement of Alcoa World Alumina LLC, dated as of November 1, 2016, by and among Alcoa USA Corp., ASC Alumina, Alumina International Holdings Pty Ltd, Alumina (USA) Inc., Reynolds Metals Company, LLC and Reynolds Metals Exploration, Inc. (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
10.4	Side Letter of November 1, 2016, between Alcoa Corporation and Alumina Limited clarifying transfer restrictions (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
10.5	Enterprise Funding Agreement (Restated), dated November 1, 2016, between Alcoa Corporation, Alumina Limited, Alcoa Australian Holdings Pty Ltd, Alcoa of Australia Limited and Enterprise Funding Partnership (as defined therein) (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed November 4, 2016 (File No. 1-37816))
10.6	Alcoa Corporation 2016 Stock Incentive Plan (as Amended and Restated as of May 10, 2017), (incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K filed May 15, 2017 (File No. 1-37816))*

Exhibit No.	Description of Exhibit
10.7	Alcoa USA Corp. Deferred Compensation Plan (incorporated by reference to Exhibit 10.2 to Amendment No. 1 to the Company's Registration Statement on Form 10 filed August 12, 2016 (File No. 1-37816))**
10.8	Alcoa USA Corp. Nonqualified Supplemental Retirement Plan C (incorporated by reference to Exhibit 10.3 to Amendment No. 1 to the Company's Registration Statement on Form 10 filed August 12, 2016 (File No. 1-37816))**
10.9	Amendment 1 to Alcoa USA Corp. Nonqualified Supplemental Retirement Plan C, effective January 1, 2021 (filed herewith)**
10.10	Form of Amended and Restated Indemnification Agreement by and between Alcoa Corporation and individual directors or officers, effective August 1, 2017 (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q filed August 3, 2017 (File No. 1-37816))**
10.11	Aluminum Project Framework Shareholders' Agreement, dated December 20, 2009, between Alcoa Inc. and Saudi Arabian Mining Company (Ma'aden) (incorporated by reference to Exhibit 10(i) to Alcoa Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009, filed February 18, 2010 (File No. 1-03610))
10.12	First Supplemental Agreement, dated March 30, 2010, to the Aluminium Project Framework Shareholders Agreement, dated December 20, 2009, between Saudi Arabian Mining Company (Ma'aden) and Alcoa Inc. (incorporated by reference to Exhibit 10(c) to Alcoa Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed April 22, 2010 (File No. 1-03610))
10.13	Kwinana State Agreement of 1961 (incorporated by reference to Exhibit 10.7 to Amendment No. 2 to the Company's Registration Statement on Form 10 filed September 1, 2016 (File No. 1-37816))
10.14	Pinjarra State Agreement of 1969 (incorporated by reference to Exhibit 10.8 to Amendment No. 2 to the Company's Registration Statement on Form 10 filed September 1, 2016 (File No. 1-37816))
10.15	Wagerup State Agreement of 1978 (incorporated by reference to Exhibit 10.9 to Amendment No. 2 to the Company's Registration Statement on Form 10 filed September 1, 2016 (File No. 1-37816))
10.16	Alumina Refinery Agreement of 1987 (incorporated by reference to Exhibit 10.10 to Amendment No. 2 to the Company's Registration Statement on Form 10 filed September 1, 2016 (File No. 1-37816))
10.17	Amended and Restated Limited Liability Company Agreement of Alcoa Alumina & Chemicals, L.L.C. dated as of December 31, 1994 (incorporated by reference to Exhibit 99.4 to Alcoa Inc.'s Current Report on Form 8-K filed November 28, 2001 (File No. 1-03610))
10.18	Shareholders' Agreement between Alcoa of Australia Limited, Alcoa Australian Pty Ltd and Alumina Limited, originally dated as of May 10, 1996 (incorporated by reference to Exhibit 10.13 to Amendment No. 2 to the Company's Registration Statement on Form 10 filed September 1, 2016 (File No. 1-37816))

Exhibit No.	Description of Exhibit
10.19	Amendments to Enterprise Funding Agreement, effective January 25, 2008, between Alcoa Inc., certain of its affiliates and Alumina Limited (incorporated by reference to Exhibit 10(f)(1) to Alcoa Inc.'s Annual Report on Form 10-K for the year ended December 31, 2007, filed February 15, 2008 (File No. 1-03610))
10.20	Plea Agreement dated January 8, 2014, between the United States of America and Alcoa World Alumina LLC (incorporated by reference to Exhibit 10(l) to Alcoa Inc.'s Annual Report on Form 10-K for the year ended December 31, 2013, filed February 13, 2014 (File No. 1-03610))
10.21	Alcoa Corporation Amended and Restated Change in Control Severance Plan, dated as of July 31, 2017 (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed August 3, 2017 (File No. 1-37816))**
10.22	Alcoa Corporation Annual Cash Incentive Compensation Plan (as Amended and Restated as of May 10, 2017) (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed May 15, 2017 (File No. 1-37816))**
10.23	Form of Alcoa Corporation 2016 Deferred Fee Plan for Directors (incorporated by reference to Exhibit 10.24 to Amendment No. 4 to the Company's Registration Statement on Form 10 filed September 29, 2016 (File No. 1-37816))**
10.24	Form of Alcoa Corporation Corporate Officer Severance Agreement, effective December 1, 2016 (incorporated by reference to Exhibit 10.27 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**
10.25	Form of Alcoa Corporation Chief Executive Officer and Chief Financial Officer Severance Agreement, effective December 1, 2016 (incorporated by reference to Exhibit 10.28 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**
10.26	Terms and Conditions for Employee Restricted Share Units (incorporated by reference to Exhibit 10.29 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**
10.27	Terms and Conditions for Employee Stock Option Awards (incorporated by reference to Exhibit 10.30 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**
10.28	Terms and Conditions for Employee Special Retention Awards (incorporated by reference to Exhibit 10.31 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**
10.29	Terms and Conditions for Employee Restricted Share Units, dated January 24, 2018 (filed herewith)**
10.30	Terms and Conditions for Employee Stock Option Awards, dated January 24, 2018 (filed herewith)**
10.31	Terms and Conditions for Employee Special Retention Awards (Restricted Share Units), dated January 24, 2018 (filed herewith)**
10.32	Alcoa Corporation Non-Employee Director Compensation Policy, effective November 1, 2016 (incorporated by reference to Exhibit 10.32 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**
10.33	Appendix C to the Alcoa Corporation Deferred Fee Plan for Directors, effective December 1, 2016 (incorporated by reference to Exhibit 10.33 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**
10.34	Terms and Conditions for Deferred Fee Restricted Share Units Director Awards, effective December 1, 2016 (incorporated by reference to Exhibit 10.34 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**

Exhibit No.	Description of Exhibit
10.35	Terms and Conditions for Restricted Share Units Annual Director Awards, effective December 1, 2016 (incorporated by reference to Exhibit 10.35 to the Company's Registration Statement on Form S-1 filed January 18, 2017 (File No. 333-215606))**
10.36	Terms and Conditions for Restricted Share Units Annual Director Awards, effective May 9, 2017 (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report Form 10-Q filed on August 3, 2017 (File No. 1-37816))**
21.1	List of Subsidiaries (filed herewith)
23.1	Consent of PricewaterhouseCoopers LLP (filed herewith)
31.1	Certification of Chief Executive Officer required by Securities and Exchange Commission Rule 13a-14(a) or 15d-14(a) (filed herewith)
31.2	Certification of Principal Financial Officer required by Securities and Exchange Commission Rule 13a-14(a) or 15d-14(a) (filed herewith)
32.1	Certification pursuant to 18 U.S.C. Section 1350 (filed herewith)
95.1	Mine Safety Disclosure (filed herewith)
99.1	Amended and Restated Grantor Trust Agreement by and between Alcoa Corporation and Wells Fargo Bank, National Association, effective October 24, 2017 (filed herewith)
101.INS	XBRL Instance Document (filed herewith)
101.SCH	XBRL Taxonomy Extension Schema Document (filed herewith)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document (filed herewith)
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document (filed herewith)
101.LAB	XBRL Taxonomy Extension Label Linkbase Document (filed herewith)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document (filed herewith)

* Schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Company hereby undertakes to furnish copies of any of the omitted schedules and exhibits upon request by the Commission.

** Denotes management contracts or compensatory plans or arrangements required to be filed as Exhibits to this Form 10-K.

Amendments and modifications to other Exhibits previously filed have been omitted when, in the opinion of the registrant, such Exhibits as amended or modified are no longer material or, in certain instances, are no longer required to be filed as Exhibits.

No other instruments defining the rights of holders of long-term debt of the registrant or its subsidiaries have been filed as Exhibits because no such instruments met the threshold materiality requirements under Regulation S-K. The registrant agrees, however, to furnish a copy of any such instruments to the Commission upon request.

Item 16. Form 10-K Summary.

Not applicable.

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.

ALCOA CORPORATION

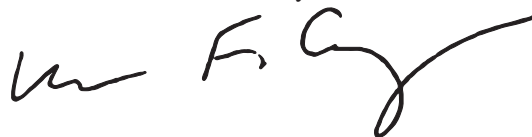
By: 

Molly S. Beerman
Vice President and Controller

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated and as of February 23, 2018.



Roy C. Harvey
President, Chief Executive Officer and Director
(Principal Executive Officer and Director)



William F. Oplinger
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)



Molly S. Beerman
Vice President and Controller
(Principal Accounting Officer)

/s/ Michael G. Morris

Michael G. Morris
Director, Chairman of the Board of Directors

/s/ Mary Anne Citrino

Mary Anne Citrino
Director

/s/ Timothy P. Flynn

Timothy P. Flynn
Director

/s/ Kathryn S. Fuller

Kathryn S. Fuller
Director

/s/ James A. Hughes

James A. Hughes
Director

/s/ James E. Nevels

James E. Nevels
Director

/s/ James W. Owens

James W. Owens
Director

/s/ Carol L. Roberts

Carol L. Roberts
Director

/s/ Suzanne Sitherwood

Suzanne Sitherwood
Director

/s/ Steven W. Williams

Steven W. Williams
Director

/s/ Ernesto Zedillo

Ernesto Zedillo
Director

SUBSIDIARIES OF THE REGISTRANT

<u>Name</u>	<u>State or Country of Organization</u>
Alcoa - Aluminerie De Deschambault L.P.	Canada
Alcoa Alumínio S.A.	Brazil
Alcoa Canada Co.	Canada
Alcoa Fjarðaál sf	Iceland
Alcoa Holland B.V.	Netherlands
Alcoa Nederland Holding B.V.	Netherlands
Alcoa Norway ANS	Norway
Alcoa of Australia Limited ¹	Australia
Alcoa Power Generating Inc. ²	Tennessee
Alcoa Saudi Rolling Inversiones S.L.	Spain
Alcoa Saudi Smelting Inversiones S.L.	Spain
Alcoa Treasury S.a.r.l.	Luxembourg
Alcoa USA Corp.	Delaware
Alcoa USA Holding Company	Delaware
Alcoa Warrick LLC	Delaware
Alcoa Wolinbec Company	Canada
Alcoa World Alumina LLC ^{1,3}	Delaware
Alcoa World Alumina Brasil Ltda. ¹	Brazil
Alcoa World Alumina Saudi Limited ¹	Hong Kong
Alcoa-Lauralco Management Company	Canada
Alumina Española, S.A. ¹	Spain
Alumínio Espanol, S.L.U.	Spain
Estreito Energia S.A.	Brazil
Luxcoa S.a.r.l.	Luxembourg
Reynolds Bécancour, Inc.	Delaware
Reynolds Metals Company, LLC	Delaware
Suriname Aluminum Company, L.L.C. ¹	Delaware

The names of particular subsidiaries have been omitted because, considered in the aggregate as a single subsidiary, they would not constitute, as of the end of the year covered by this report, a “significant subsidiary” as defined in Regulation S-X under the Securities Exchange Act of 1934, as amended.

1 Owned directly or indirectly 60% by Alcoa Corporation and 40% by Alumina Limited.

2 Registered to do business in Tennessee under the name APG Trading and the name Tapoco and in Washington under the name of Colockum.

3 Registered to do business in Pennsylvania and Texas under the name of Alcoa World Chemicals.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (Nos. 333-214420, 333-214423 and 33-218038) of Alcoa Corporation of our report dated February 23, 2018 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 23, 2018

CERTIFICATIONS

I, Roy C. Harvey, certify that:

1. I have reviewed this annual report on Form 10-K of Alcoa Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2018



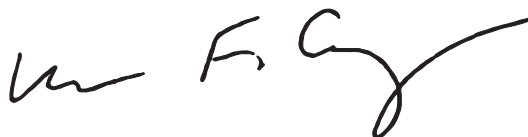
Name: Roy C. Harvey
Title: President and Chief Executive
Officer

CERTIFICATIONS

I, William F. Oplinger, certify that:

1. I have reviewed this annual report on Form 10-K of Alcoa Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2018



Name: William F. Oplinger
Title: Executive Vice President and
Chief Financial Officer

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Alcoa Corporation (the "Company") on Form 10-K for the period ended December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned, in the capacities and on the dates indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

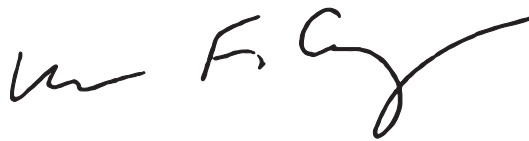
1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 23, 2018



Roy C. Harvey
President and Chief Executive Officer

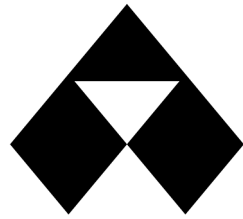
Date: February 23, 2018



William F. Oplinger
Executive Vice President and
Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of this report.



Alcoa

Alcoa Corporation and subsidiaries
Calculation of Financial Measures (unaudited)
(in millions)

Reconciliation of Adjusted Income (Loss)

	Year ended December 31,	
	2017	2016 ⁽⁴⁾
Net income (loss) attributable to Alcoa Corporation	\$ 217	\$ (400)
Special items:		
Restructuring and other charges	309	318
Discrete tax items ⁽¹⁾	93	–
Other special items ⁽²⁾	(9)	(65)
Tax impact ⁽³⁾	(24)	(25)
Noncontrolling interest impact ⁽³⁾	(23)	(55)
Subtotal	346	173
Net income (loss) attributable to Alcoa Corporation – as adjusted	\$ 563	\$ (227)

Net income (loss) attributable to Alcoa Corporation – as adjusted is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management reviews the operating results of Alcoa Corporation excluding the impacts of restructuring and other charges, discrete tax items, and other special items (collectively, “special items”). There can be no assurances that additional special items will not occur in future periods. To compensate for this limitation, management believes that it is appropriate to consider both Net income (loss) attributable to Alcoa Corporation determined under GAAP as well as Net income (loss) attributable to Alcoa Corporation – as adjusted.

- (1) Discrete tax items include the following:
- for the year ended December 31, 2017, a charge for a valuation allowance related to certain non-U.S. deferred income tax assets (\$60), a charge for the remeasurement of certain non-U.S. deferred income tax assets due to a tax rate change (\$26), a charge for the remeasurement of U.S. deferred income tax assets and liabilities at the new corporate income tax rate of 21% (from 35%) under the 2017 Tax Cuts and Jobs Act signed into law on December 22, 2017 (\$22), and a net benefit for several other items (\$15); and
 - for the year ended December 31, 2016, a benefit for the remeasurement of certain deferred income tax assets of a subsidiary in Brazil due to a tax rate change (\$11) and a net charge for several other items (\$11).
- (2) Other special items include the following:
- for the year ended December 31, 2017, a gain on the sale of the Yadkin Hydroelectric Project in the United States (\$122), costs related to the partial restart of the Warrick (Indiana) smelter (\$46), a net unfavorable change in certain mark-to-market energy derivative contracts (\$25), an unfavorable impact due to the near-term power market exposure as a result of renegotiating a hedging contract related to forecasted future spot market power purchases for the Portland (Australia) smelter (\$21), settlement of legacy tax matters in Brazil (\$11), a write-down of inventory related to the permanent closure of the Rockdale (Texas) smelter (\$6), and preparation and contingency costs for a potential work stoppage (lockout commenced on January 11, 2018) at a non-U.S. smelter (\$4); and
 - for the year ended December 31, 2016, a gain on the sale of wharf property near the Intalco (Washington) smelter (\$118), costs associated with the separation of Alcoa Corporation from its former parent company (\$73), a gain on the sale of an equity investment in a natural gas pipeline in Australia (\$27), a benefit for an arbitration recovery related to a 2010 fire at the Iceland smelter (\$14), interest expense incurred in October 2016 related to debt that was issued in September 2016 in preparation for the separation of Alcoa Corporation from its former parent company (completed on November 1, 2016) (\$8), a write-down of inventory related to the permanent closure of a smelter in the United States and adjustments at two previously curtailed facilities (\$7), and a net unfavorable change in certain mark-to-market energy derivative contracts (\$6).
- (3) The tax impact on special items is based on the applicable statutory rates in the jurisdictions where the special items occurred. The noncontrolling interest impact on special items represents Alcoa Corporation’s partner’s share of certain special items.
- (4) Prior to November 1, 2016, Alcoa Corporation’s financial statements were prepared on a carve-out basis, as the underlying operations of the Company were previously consolidated as part of Alcoa Corporation’s former parent company’s financial statements. Accordingly, the results of operations of Alcoa Corporation for the first ten months included in the year ended December 31, 2016 were prepared on such basis. The carve-out financial statements of Alcoa Corporation are not necessarily indicative of Alcoa Corporation’s consolidated results of operations had it been a standalone company during the referenced period. See the Combined Financial Statements included in Exhibit 99.1 to Alcoa Corporation’s Form 10 Registration Statement and the Consolidated Financial Statements included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 filed with the United States Securities and Exchange Commission on October 11, 2016 and February 26, 2018, respectively, for additional information.

Reconciliation of Adjusted EBITDA

	Year ended December 31,	
	2017	2016 ⁽²⁾
Net income (loss) attributable to Alcoa Corporation	\$ 217	\$ (400)
Add:		
Net income attributable to noncontrolling interest	342	54
Provision for income taxes	600	184
Other income, net	(58)	(89)
Interest expense	104	243
Restructuring and other charges	309	318
Provision for depreciation, depletion, and amortization	750	718
Adjusted EBITDA	\$2,264	\$1,028
Special items ⁽¹⁾	88	80
Adjusted EBITDA, excluding special items	\$2,352	\$1,108

Alcoa Corporation's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) is net margin plus an add-back for depreciation, depletion, and amortization. Net margin is equivalent to Sales minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; Research and development expenses; and Provision for depreciation, depletion, and amortization. Adjusted EBITDA is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because Adjusted EBITDA provides additional information with respect to Alcoa Corporation's operating performance and the Company's ability to meet its financial obligations. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies.

- (1) Special items include the following (see Reconciliation of Adjusted Income (Loss) above for additional information):
- for the year ended December 31, 2017, costs related to the partial restart of the Warrick (Indiana) smelter (\$46), an unfavorable impact due to the near-term power market exposure as a result of renegotiating a hedging contract related to forecasted future spot market power purchases for the Portland (Australia) smelter (\$21), settlement of legacy tax matters in Brazil (\$11), a write-down of inventory related to the permanent closure of the Rockdale (Texas) smelter (\$6), and preparation and contingency costs for a potential work stoppage (lockout commenced on January 11, 2018) at a non-U.S. smelter (\$4); and
 - for the year ended December 31, 2016, costs associated with the separation of Alcoa Corporation from its former parent company (\$73) and a write-down of inventory related to the permanent closure of a smelter in the United States and adjustments at two previously curtailed facilities (\$7).
- (2) Prior to November 1, 2016, Alcoa Corporation's financial statements were prepared on a carve-out basis, as the underlying operations of the Company were previously consolidated as part of Alcoa Corporation's former parent company's financial statements. Accordingly, the results of operations of Alcoa Corporation for the first ten months included in the year ended December 31, 2016 were prepared on such basis. The carve-out financial statements of Alcoa Corporation are not necessarily indicative of Alcoa Corporation's consolidated results of operations had it been a standalone company during the referenced period. See the Combined Financial Statements included in Exhibit 99.1 to Alcoa Corporation's Form 10 Registration Statement and the Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 filed with the United States Securities and Exchange Commission on October 11, 2016 and February 26, 2018, respectively, for additional information.

Reconciliation of Free Cash Flow

	Year ended December 31,	
	2017	2016 ⁽¹⁾
Cash from operations	\$1,224	\$(311)
Capital expenditures	(405)	(404)
Free cash flow	\$ 819	\$(715)

Free Cash Flow is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management reviews cash flows generated from operations after taking into consideration capital expenditures, which are both necessary to maintain and expand Alcoa Corporation's asset base and expected to generate future cash flows from operations. It is important to note that Free Cash Flow does not represent the residual cash flow available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements, are not deducted from the measure.

- (1) Prior to November 1, 2016, Alcoa Corporation's financial statements were prepared on a carve-out basis, as the underlying operations of the Company were previously consolidated as part of Alcoa Corporation's former parent company's financial statements. Accordingly, the cash flows of Alcoa Corporation for the first ten months included in the year ended December 31, 2016 were prepared on such basis. The carve-out financial statements of Alcoa Corporation are not necessarily indicative of Alcoa Corporation's consolidated cash flows had it been a standalone company during the referenced period. See the Combined Financial Statements included in Exhibit 99.1 to Alcoa Corporation's Form 10 Registration Statement and the Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the period ended December 31, 2017 filed with the United States Securities and Exchange Commission on October 11, 2016 and February 26, 2018, respectively, for additional information.

ALCOA CORPORATION DIRECTORS AND OFFICERS AS OF MARCH 1, 2018

Directors

**Michael G. Morris
(Chairman)**
*Retired Chairman, President
and Chief Executive Officer,
American Electric Power
Company, Inc.*

Mary Anne Citrino
*Senior Advisor,
The Blackstone Group L.P.*

Timothy P. Flynn
*Retired Chairman,
KPMG International*

Kathryn S. Fuller
*Vice Chair,
Smithsonian
National Museum of
Natural History*

Roy C. Harvey
*President and
Chief Executive Officer,
Alcoa Corporation*

James A. Hughes
*Chief Executive Officer
and Managing Director,
Prisma Energy Capital*

James E. Nevels
*Founder and Chairman,
The Swarthmore Group*

James W. Owens
*Retired Chairman and
Chief Executive Officer,
Caterpillar Inc.*

Carol L. Roberts
*Retired Senior Vice
President and Chief
Financial Officer,
International Paper
Company*

Suzanne Sitherwood
*President and Chief
Executive Officer,
Spire Inc.*

Steven W. Williams
*President and Chief
Executive Officer,
Suncor Energy Inc.*

Ernesto Zedillo
*Director,
Yale Center for the
Study of Globalization*

Officers

Renato De C.A. Bacchi
*Vice President and
Treasurer*

Ronald E. Barin
*Vice President
Chief Investment Officer,
Pension Plan Investments*

Molly S. Beerman
*Vice President and
Controller*

Leigh Ann C. Fisher
*Executive Vice President
and Chief Administrative
Officer*

Catherine L. Garfinkel
*Vice President
Chief Ethics and
Compliance Officer*

John Kenna
*Vice President
Tax*

Roy C. Harvey
*President and
Chief Executive Officer*

Jeffrey D. Heeter
*Executive Vice President,
General Counsel and
Secretary*

William F. Oplinger
*Executive Vice President
and Chief Financial Officer*

Tómas Már Sigurdsson
*Executive Vice President
and Chief Operating
Officer*



Stockholder Information

ANNUAL MEETING

The annual meeting of stockholders will be held at 10:00 a.m. Eastern Daylight Time on Wednesday, May 9, 2018, at The Westin Convention Center–Pittsburgh, 1000 Penn Avenue, Pittsburgh, Pennsylvania 15222.

COMPANY NEWS

Visit www.alcoa.com for Securities and Exchange Commission filings, quarterly earnings reports and other company news.

Copies of the annual report and Forms 10-K and 10-Q may be requested at no cost at <http://investors.alcoa.com> or by writing to Corporate Communications, Alcoa Corporation, 201 Isabella Street, Suite 500, Pittsburgh, PA 15212-5858.

INVESTOR INFORMATION

Securities analysts and investors may write to Investor Relations, Alcoa Corporation, 201 Isabella Street, Suite 500, Pittsburgh, PA 15212-5858; call 1.412.992.5450; or e-mail AlcoaIR@alcoa.com.

OTHER PUBLICATIONS

For more information about the Alcoa Foundation and Alcoa community investments, visit www.alcoa.com and choose “Community” under “Who We Are,” or www.alcoa.com/foundation.

For Alcoa’s Sustainability Report, visit www.alcoa.com/sustainability; write to Sustainability, Alcoa Corporation, 201 Isabella Street, Suite 500, Pittsburgh, PA 15212-5858; or e-mail sustainability@alcoa.com.

STOCKHOLDER SERVICES

Stockholders with questions on account balances, address changes, or other account matters may contact Alcoa’s stock transfer agent and registrar, Computershare.

By Telephone

1.800.522.6645 (in the United States and Canada)
1.201.680.6578 (all other calls)
1.800.231.5469 (Telecommunications Device for the Deaf: TDD)

By Internet

www.computershare.com

Shareholder Correspondence

Computershare Investor Services
P.O. Box 505000
Louisville, KY 40233-5000

Overnight Correspondence

Computershare Investor Services
462 South 4th Street
Suite 1600
Louisville, KY 40202

For stockholder questions on other matters related to Alcoa, write to Corporate Secretary, Alcoa Corporation, 201 Isabella Street, Suite 500, Pittsburgh, PA 15212-5858; call 1.412.315.2900; or email Corporate_Secretary@alcoa.com.

STOCK LISTING

Common Stock

New York Stock Exchange | Ticker symbol: AA



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Tel 1.412.315.2900
www.alcoa.com

**Alcoa Corporation is
incorporated in Delaware**

CONNECT WITH US

