Arconic Inc.
Form 10-K
February 26, 2018
Table of Contents

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 1-3610
ARCONIC INC.
(Exact name of registrant as specified in its charter)
Delaware 25-0317820
(State of incorporation) (I.R.S. Employer Identification No.)
390 Park Avenue, New York, New York 10022-4608
(Address of principal executive offices) (Zip code)
Registrant's telephone numbers:
Investor Relations-------------— (212) 836-2758
Office of the Secretary--------—(212) 836-2732
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value $1.00 per share	New York Stock Exchange
$3.75 Cumulative Preferred Stock, par value $100.00 per share	NYSE American

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, or a smaller reporting 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 [] (Do not check if a smaller reporting company)
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 .

The aggregate market value of the outstanding common stock, other than shares held by persons who may be deemed affiliates of the registrant, as of the last business day of the registrant's most recently completed second fiscal quarter was approximately $10 billion. As of February 16, 2018, there were 482,772,252 shares of common stock, par value $1.00 per share, of the registrant outstanding.

Table of Contents

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 Shareholders to be filed pursuant to Regulation 14A (Proxy Statement).

Table of Contents

TABLE OF CONTENTS

		Page(s)
Part I		
Item 1.	Business	1
Item 1A.	Risk Factors	15
Item 1B.	Unresolved Staff Comments	27
Item 2.	Properties	27
Item 3.	Legal Proceedings	28
Item 4.	Mine Safety Disclosures	30
Part II		
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	31
Item 6.	Selected Financial Data	33
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	34
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	57
Item 8.	Financial Statements and Supplementary Data	57
Item 9.	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure	113
Item 9A.	Controls and Procedures	113
Item 9B.	Other Information	113
Part III		
Item 10.	Directors, Executive Officers and Corporate Governance	114
Item 11.	Executive Compensation	114
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	114
Item 13.	Certain Relationships and Related Transactions, and Director Independence	114
Item 14.	Principal Accounting Fees and Services	114
Part IV		
Item 15.	Exhibits, Financial Statement Schedules	115
Item 16.	Form 10-K Summary	124
	Signatures	125

Note on Incorporation by Reference

In this Form 10-K, selected items of information and data are incorporated by reference to portions of the Proxy Statement. Unless otherwise provided herein, any reference in this report to disclosures in the Proxy Statement shall constitute incorporation by reference of only that specific disclosure into this Form 10-K.

Table of Contents

PART I

Item 1. Business.

General

Arconic Inc. is a Delaware corporation with its principal office in New York, New York and the successor to Arconic Pennsylvania (as defined below) which was formed in 1888 and formerly known as Alcoa Inc. In this report, unless the context otherwise requires, “Arconic” or the “Company” means Arconic Inc., a Delaware corporation, and all subsidiaries consolidated for the purposes of its financial statements.

The Company’s Internet address is http://www.arconic.com. Arconic 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 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.

Forward-Looking Statements

This report contains (and oral communications made by Arconic may contain) 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,” “goal,” “guidance,” “intends,” “may,” “outlook,” “plans,” “projects,” “should,” “targets,” “will,” “would,” or other words of similar meaning. All statements that reflect Arconic’s expectations, assumptions or projections about the future, other than statements of historical fact, are forward-looking statements, including, without limitation, forecasts relating to the growth of the aerospace, automotive, commercial transportation and other end markets; statements and guidance regarding future financial results or operating performance; statements about Arconic’s strategies, outlook, business and financial prospects; and statements regarding potential share gains. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, and changes in circumstances that are difficult to predict. Although Arconic 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 Arconic’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 Note K and the Derivatives Section of Note U to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data). Market projections are subject to the risks discussed in this report and other risks in the market. Arconic disclaims any intention or obligation to update publicly any forward-looking statements, whether in response to new information, future events or otherwise, except as required by applicable law.

Overview

Arconic is a global leader in lightweight metals engineering and manufacturing. Arconic’s innovative, multi-material products, which include aluminum, titanium, and nickel, are used worldwide in aerospace, automotive, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications.

Arconic is a global company operating in 18 countries. Based upon the country where the point of sale occurred, the United States and Europe generated 63% and 26%, respectively, of Arconic’s sales in 2017. In addition, Arconic has operating activities in Brazil, Canada, China, Japan, and Russia, among others. 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.

Arconic's operations consist of three worldwide reportable segments: Engineered Products and Solutions, Global Rolled Products and Transportation and Construction Solutions.

Table of Contents

Background

Arconic Inc. Reincorporation

On December 31, 2017 (the “Effective Date”), Arconic Inc., a Pennsylvania corporation (“Arconic Pennsylvania” or, prior to the Reincorporation (as defined below), the “Company”), effected the change of the Company’s jurisdiction of incorporation from Pennsylvania to Delaware (the “Reincorporation”) by merging (the “Reincorporation Merger”) with a direct wholly owned Delaware subsidiary, Arconic (in this section, “Arconic Delaware” or, following the Reincorporation, the “Company”), pursuant to an Agreement and Plan of Merger (the “Reincorporation Merger Agreement”), dated as of October 12, 2017, by and between Arconic Pennsylvania and Arconic Delaware. Arconic Pennsylvania shareholders approved the Reincorporation Merger to effect the Reincorporation at a Special Meeting of Shareholders held on November 30, 2017. As a result of the Reincorporation, (i) Arconic Pennsylvania has ceased to exist, (ii) Arconic Delaware automatically inherited the reporting obligations of Arconic Pennsylvania under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and (iii) Arconic Delaware is deemed to be the successor issuer to Arconic Pennsylvania.

The common stock, par value $1.00 per share, of Arconic Pennsylvania (the “Arconic Pennsylvania Common Stock”) was listed for trading on the New York Stock Exchange and traded under the symbol “ARNC.” As of the Effective Date, this symbol, without interruption, represents shares of common stock, par value $1.00 per share, of Arconic Delaware (the “Arconic Delaware Common Stock”). There was no change in the Exchange Act File Number assigned by the SEC as a result of the Reincorporation.

As of the Effective Date, the rights of the Company’s stockholders began to be governed by the General Corporation Law of the State of Delaware, the Certificate of Incorporation of Arconic Delaware (the “Delaware Certificate”) and the Bylaws of Arconic Delaware (the “Delaware Bylaws”).

Other than the change in corporate domicile, the Reincorporation did not result in any change in the business, physical location, management, financial condition or number of authorized shares of the Company, nor did it result in any change in location of its current employees, including management. On the Effective Date, (i) the directors and officers of Arconic Pennsylvania prior to the Reincorporation continued as the directors and officers of Arconic Delaware after the Reincorporation, (ii) each outstanding share of Arconic Pennsylvania Common Stock was automatically converted into one share of Arconic Delaware Common Stock, (iii) each outstanding share of Serial Preferred Stock, par value $100 per share, of Arconic Pennsylvania (the “Arconic Pennsylvania Preferred Stock”) was automatically converted into one share of Serial Preferred Stock, par value $100 per share, of Arconic Delaware (the “Arconic Delaware Preferred Stock”) and (iv) all of Arconic Pennsylvania’s employee benefit and compensation plans immediately prior to the Reincorporation were continued by Arconic Delaware, and each outstanding equity award and notional share unit relating to shares of Arconic Pennsylvania Common Stock was converted into an equity award or notional share unit, as applicable, relating to an equivalent number of shares of Arconic Delaware Common Stock on the same terms and subject to the same conditions. Beginning at the effective time of the Reincorporation, each certificate representing Arconic Pennsylvania Common Stock or Arconic Pennsylvania Preferred Stock was deemed for all corporate purposes to evidence ownership of Arconic Delaware Common Stock or Arconic Delaware Preferred Stock, as applicable. The Company’s stockholders may, but are not required to, exchange their stock certificates as a result of the Reincorporation.

The foregoing descriptions of the Arconic Delaware Common Stock, the Arconic Delaware Preferred Stock, the Delaware Certificate and the Delaware Bylaws are qualified in their entirety by the full text of the Delaware Certificate and the Delaware Bylaws, which are filed as Exhibits 3(a) and 3(b), respectively, to this report.

Alcoa Corporation Separation Transaction

On November 1, 2016, Alcoa Inc. completed the separation of its business into two independent, publicly traded companies (the “Separation”) – Alcoa Corporation and Arconic Inc. (the new name for Alcoa Inc.). Following the Separation, Alcoa Corporation holds the Alumina and Primary Metals segments, the rolling mill at the Warrick, Indiana operations and the 25.1% stake in the Ma’aden Rolling Company in Saudi Arabia previously held by the Company. The Company retained the Global Rolled Products (other than the rolling mill at the Warrick, Indiana operations and the 25.1% ownership stake in the Ma’aden Rolling Company), Engineered Products and Solutions and Transportation and Construction Solutions segments.

The Separation was effected by a pro rata distribution of 80.1% of the outstanding shares of Alcoa Corporation common stock to the Company's shareholders (the "Distribution"). The Company's shareholders of record as of the close of business on October 20, 2016 (the "Record Date") received one share of Alcoa Corporation common stock for every three shares of the Company's common stock held as of the Record Date. The Company did not issue fractional shares of Alcoa Corporation common stock in the Distribution. Instead, each shareholder otherwise entitled to receive a fractional share of Alcoa Corporation common stock received cash in lieu of fractional shares.

Table of Contents

The Company distributed 146,159,428 shares of common stock of Alcoa Corporation in the Distribution and retained 36,311,767 shares, or approximately 19.9%, of the common stock of Alcoa Corporation immediately following the Distribution. As a result of the Distribution, Alcoa Corporation became an independent public company trading under the symbol "AA" on the New York Stock Exchange, and the Company trades under the symbol "ARNC" on the New York Stock Exchange.

During 2017, the Company disposed of its retained interest in Alcoa Corporation. In February 2017, the Company sold 23,353,000 shares of Alcoa Corporation stock at $38.03 per share, which resulted in cash proceeds of $888 million and a gain of $351 million. In April and May 2017, the Company acquired a portion of its outstanding notes held by two investment banks (the "Investment Banks") in exchange for cash and the Company's remaining 12,958,767 shares (valued at $35.91 per share) in Alcoa Corporation stock (the "Debt-for-Equity Exchange") and recorded a gain of $167 million. The gains of $351 million and $167 million associated with the disposition of the Alcoa Corporation shares were recorded in Other Income, Net in the accompanying Statement of Consolidated Operations in Part II, Item 8 (Financial Statements and Supplementary Data).

On October 31, 2016, in connection with the Separation and the Distribution, Arconic entered into several agreements with Alcoa Corporation or its subsidiaries that govern the relationship of the parties following the Distribution, including the following: Separation and Distribution Agreement, Transition Services Agreement, Tax Matters Agreement, Employee Matters Agreement, certain Patent, Know-How, Trade Secret License and Trademark License Agreements, Toll Processing and Services Agreement, Master Agreement for the Supply of Primary Aluminum, Massena Lease and Operations Agreement, Fusina Lease and Operations Agreement, and Stockholder and Registration Rights Agreement.

Description of the Business

Information describing Arconic's businesses can be found on the indicated pages of this report:

Item	Page(s)
Discussion of Recent Business Developments:	
Management's Discussion and Analysis of Financial Condition and Results of Operations:	
Overview—Results of Operations (Earnings Summary)	34
Notes to Consolidated Financial Statements:	
Note C. Separation Transaction and Discontinued Operations	74
Note D. Restructuring and Other Charges	76
Note E. Goodwill and Other Intangible Assets	78
Note F. Acquisitions and Divestitures	79
Note K. Contingencies and Commitments	84
Note Q. Income Taxes	96
Segment Information:	
Business Descriptions, Principal Products, Principal Markets, Methods of Distribution, Seasonality and Dependence Upon Customers:	
Engineered Products and Solutions	40
Global Rolled Products	41
Transportation and Construction Solutions	42
Financial Information about Segments and Financial Information about Geographic Areas:	
Note N. Segment and Geographic Area Information	88

Table of Contents

Major Product Revenues
Products that contributed 10% or more to consolidated revenues for the years ended December 31, 2017, 2016 and 2015, were:

	For the Years Ended December 31,		
	2017	2016	2015
Flat-rolled aluminum	39 %	39 %	42 %
Fastening systems and rings	16 %	17 %	18 %
Investment castings	15 %	15 %	15 %
Other extruded and forged products	12 %	12 %	11 %

See Note N to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data) for operating results of the Company's reportable segments. Arconic has no customers that account for more than 10% of its consolidated revenues. However, certain of the Company's businesses are dependent upon a few significant customers. The loss of any such significant customer could have a material adverse effect on such businesses.

Engineered Products and Solutions

Arconic's Engineered Products and Solutions segment ("EP&S") develops and manufactures high performance products mainly for the aerospace (commercial and defense), commercial transportation, and power generation end markets. Such products include fastening systems (titanium, steel, and nickel superalloys); seamless rolled rings (mostly nickel superalloys); investment castings (nickel superalloys, titanium, and aluminum), including airfoils and structural components; forged airframe and jet engine components (nickel superalloys, titanium, aluminum), including bulkheads, disks and shafts; extruded airframe components (aluminum); and various other forged and extruded metallic components for the oil and gas, industrial products, automotive, and land and sea defense end markets. Throughout 2017, EP&S was comprised of four business units: Arconic Power and Propulsion; Arconic Fastening Systems and Rings; Arconic Forgings and Extrusions; and Arconic Titanium and Engineered Products.

Arconic Power and Propulsion (APP). APP produced investment cast airfoils for aero engine and industrial gas turbines and structural aero engine and airframe components. APP also provided additive manufacturing technologies, superalloy and titanium ingots, machining, performance coatings, and hot isostatic pressing for high performance parts.

Arconic Fastening Systems and Rings (AFSR). AFSR produced aerospace fastening systems and seamless rolled rings, as well as commercial transportation fasteners. The business's high-tech, multi-material fastening systems are found nose to tail on aircraft and aero engines. The business's products are also critical components of industrial gas turbines, automobiles, commercial transportation vehicles, and construction and industrial equipment.

Arconic Forgings and Extrusions (AFE). AFE produced defense airframe forgings and extrusions, such as forged bulkheads, wing and landing gear components, closed-die aero engine forgings, such as disks, and lightweight drive shafts for commercial transportation industries.

Arconic Titanium and Engineered Products (ATEP). ATEP produced titanium aero ingots and mill products, and provided multi-material airframe subassemblies and solutions related to advanced technologies and materials, such as 3D printing and titanium aluminides.

In January 2018, EP&S announced a change in the organizational structure of the segment, from four business units to three business units, with a focus on aligning its internal structure to core markets and customers and reducing costs. The three new business units are Arconic Engines; Arconic Fastening Systems; and Arconic Engineered Structures.

Arconic Engines (AE). AE will produce investment cast airfoils, seamless rolled rings and closed-die (including isothermal) forged turbine disks for aero engine and industrial gas turbines, as well as other structural aero engine components. AE also will provide additive manufacturing technologies, superalloy ingots, open-die forging, machining, performance coatings, and hot isostatic pressing for high performance parts.

Arconic Fastening Systems (AFS). AFS will produce aerospace fastening systems, as well as commercial transportation fasteners. The business's high-tech, multi-material fastening systems are found nose to tail on aircraft and aero engines. The

Table of Contents

business’s products are also critical components of industrial gas turbines, automobiles, commercial transportation vehicles, and construction and industrial equipment.

Arconic Engineered Structures (AES). AES will produce titanium and aluminum ingots and mill products for aerospace and defense applications and is vertically integrated to produce structural investment castings, forgings and extrusions, for airframe, wing, aero-engine, and landing gear components, as well as lightweight drive shafts for the commercial transportation industries. AES will also provide multi-material airframe subassemblies and solutions related to advanced technologies and materials, such as 3D printing and titanium aluminides.

For additional discussion of the EP&S's business, see “Results of Operations—Segment Information” in Part II, Item 7. (Management’s Discussion and Analysis of Financial Condition and Results of Operations) and Note N to the Consolidated Financial Statements—Segment and Geographic Area Information in Part II, Item 8. (Financial Statements and Supplementary Data).

In November 2017, Arconic announced a multi-year cooperative research agreement with Airbus to advance metal 3D printing for aircraft manufacturing. Together, the companies will develop customized processes and parameters to produce and qualify large, structural 3D printed components, such as pylon spars and rib structures, up to approximately 1 meter (3 feet) in length. The arrangement combines Arconic’s expertise in metal additive manufacturing and metallurgy with Airbus’s design and qualification capabilities. In September 2017, the Company announced that Airbus and Arconic achieved a 3D printing first - the installation of a 3D printed titanium bracket on a series production Airbus commercial aircraft, the A350 XWB. Arconic is 3D printing these parts using laser power bed technologies at its additive manufacturing facility in Austin, Texas.

This 3D printed titanium bracket is part of an ongoing arrangement between the Company and Airbus. In 2016, Arconic announced three agreements with Airbus to produce titanium and nickel 3D printed parts for commercial aircraft, including the A320 platform and A350 XWB. These agreements draw on Arconic’s cutting-edge 3D printing technology capabilities, including laser powder bed and electron beam processes.

Table of Contents

Engineered Products and Solutions Principal Facilities[1]

Country	Facility	Products
Australia	Oakleigh	Fasteners
Canada	Georgetown, Ontario[2]	Aerospace Castings
	Laval, Québec	Aerospace Castings and Machining
China	Suzhou[2]	Fasteners and Rings
France	Dives-sur-Mer	Aerospace and Industrial Gas Turbine Castings
	Evron	Aerospace and Specialty Castings
	Gennevilliers	Aerospace and Industrial Gas Turbine Castings
	Montbrison	Fasteners
	St. Cosme-en-Vairais[2]	Fasteners
	Toulouse	Fasteners
	Us-par-Vigny	Fasteners
Germany	Bestwig	Aerospace Castings
	Erwitte	Aerospace Castings
	Hannover[2]	Extrusions
	Hildesheim-Bavenstedt[2]	Fasteners
	Kelkheim[2]	Fasteners
Hungary	Eger	Forgings
	Nemesvámos	Fasteners
	Székesfehérvár	Aerospace and Industrial Gas Turbine Castings and Forgings
Japan	Nomi	Aerospace and Industrial Gas Turbine Castings
Mexico	Ciudad Acuña[2]	Aerospace Castings/Fasteners and Rings
Morocco	Casablanca[2]	Fasteners
South Korea	Kyoungnam	Extrusions
United Kingdom	Darley Dale	Forgings
	Ecclesfield	Ingot Castings
	Exeter[2]	Aerospace and Industrial Gas Turbine Castings and Alloy
	Glossop	Ingot Castings
	Ickles	Ingot Castings
	Leicester[2]	Fasteners
	Low Moor	Extrusions
	Meadowhall	Forgings
	Provincial Park	Forgings
	Redditch[2]	Fasteners
	River Don	Forgings
	Telford	Fasteners
	Welwyn Garden City	Aerospace Formed Parts

Table of Contents

Country	Facility	Products
United States	Chandler, AZ	Extrusions
	Tucson, AZ[2]	Fasteners
	Carson, CA[2]	Fasteners
	City of Industry, CA[2]	Fasteners
	Fontana, CA	Rings
	Fullerton, CA[2]	Fasteners
	Newbury Park, CA	Fasteners
	Rancho Cucamonga, CA	Rings
	Sylmar, CA	Fasteners
	Torrance, CA	Fasteners
	Branford, CT	Aerospace Coatings
	Winsted, CT	Aerospace Machining
	Savannah, GA	Forgings
	Lafayette, IN	Extrusions
	La Porte, IN	Aerospace and Industrial Gas Turbine Castings
	Burlington, MA[2]	Powdered Metal Parts
	Baltimore, MD[2]	Extrusions
	Whitehall, MI	Aerospace and Industrial Gas Turbine Castings and Coatings, Titanium Alloy and Specialty Products
	Sullivan, MO	Titanium Mill Products
	Washington, MO	Aerospace Formed Parts
	Big Lake, MN	Aerospace Machining
	New Brighton, MN	Aerospace Machining
	Dover, NJ	Aerospace and Industrial Gas Turbine Castings and Alloy
	Verdi, NV	Rings
	Kingston, NY[2]	Fasteners
	Massena, NY	Extrusions
	Rochester, NY	Rings
	Canton, OH[2]	Ferro-Titanium Alloys and Titanium Mill Products
	Cleveland, OH	Investment Casting Equipment, Aerospace Components, Castings, Forgings and Oil & Gas Drilling Products
	Niles, OH	Titanium Mill Products
	Morristown, TN[2]	Aerospace and Industrial Gas Turbine Ceramic Products
	Austin, TX[2]	Additively Manufactured Parts
	Houston, TX[2]	Extrusions
	Spring, TX	Deep Water Drilling Machining
	Waco, TX[2]	Fasteners
	Wichita Falls, TX	Aerospace and Industrial Gas Turbine Castings
	Hampton, VA[2]	Aerospace and Industrial Gas Turbine Castings
	Martinsville, VA	Titanium Mill Products

[1] Principal facilities are listed, and do not include 13 locations that serve as sales and administrative offices, distribution centers or warehouses.

[2] Leased property or partially leased property.

Table of Contents

Global Rolled Products
Arconic's Global Rolled Products segment ("GRP") produces a range of aluminum sheet and plate products for the following markets:
Aerospace and Automotive - GRP provides a wide range of products, including many highly-differentiated sheet and plate products, for the worldwide aerospace and regional automotive markets.
Brazing, Commercial Transportation and Industrial - GRP provides specialty aluminum sheet and plate products for automotive, commercial transportation and industrial applications including proprietary heat exchanger products like multilayer brazing sheet.
Packaging - GRP serves the packaging market in Russia, Asia and Latin America through regional facilities.
In July 2017, GRP announced a new organization, streamlining and consolidating its businesses into a single group organization structure.
For additional discussion of the Global Rolled Products segment's business, see "Results of Operations—Segment Information" in Part II, Item 7. (Management's Discussion and Analysis of Financial Condition and Results of Operations) and Note N to the Consolidated Financial Statements—Segment and Geographic Area Information in Part II, Item 8. (Financial Statements and Supplementary Data).
In November 2017, the Company announced plans to install a new horizontal heat treat furnace at its Davenport, Iowa facility. This new furnace will enable Arconic to heat treat longer and thicker plate than ever before, including material for its new state of the art "very thick plate stretcher."
This stretcher, the world's largest, improves the performance of thick aluminum and aluminum-lithium plate in aerospace and industrial applications, and enables the Company to produce the largest high-strength monolithic wing ribs in the industry. In April 2017, the Company announced the completion of the installation of the stretcher.
Also in April 2017, the Company announced the divestiture of its Fusina, Italy rolling mill to Slim Aluminum. The transaction was part of GRP's drive to improve portfolio mix.
Global Rolled Products Principal Facilities

Country	Location	Products
Brazil	Itapissuma	Specialty Foil
China	Kunshan	Sheet and Plate
	Qinhuangdao[1]	Sheet and Plate
Hungary	Székesfehérvár	Sheet and Plate/Slabs and Billets
Russia	Samara	Sheet and Plate/Extrusions and Forgings
United Kingdom	Birmingham	Plate
United States	Davenport, IA	Sheet and Plate
	Danville, IL[2]	Sheet and Plate
	Hutchinson, KS[2]	Sheet and Plate
	Lancaster, PA	Sheet and Plate
	Alcoa, TN	Sheet
	Texarkana, TX[3]	Slabs
	San Antonio, TX[4]	Micromill™

[1] Leased property or partially leased property.
[2] Properties are satellite locations of the Davenport, Iowa facility.

Table of Contents

3 The Texarkana rolling mill facility had been idle since September 2009 due to a continued weak outlook in common alloy markets. In January 2016, the Company restarted its Texarkana cast house to meet demand for aluminum slab for the automotive industry. The aluminum slab that is cast at Texarkana is turned into aluminum sheets at Arconic's expanded automotive facility in Davenport, Iowa and its rolling mill in Lancaster, Pennsylvania.

4 Micromill™ production facility produces sheet for automotive and industrial applications using Arconic innovative production process.

Transportation and Construction Solutions

Arconic's Transportation and Construction Solutions segment ("TCS") produces products that are used mostly in the commercial transportation and nonresidential building and construction end markets. Such products include integrated aluminum structural systems, architectural extrusions, forged aluminum commercial vehicle wheels, and aluminum products for the industrial products end market.

The Transportation and Construction Solutions segment is comprised of three business units: Arconic Wheel and Transportation Products; Building and Construction Systems; and Latin America Extrusions.

Arconic Wheel and Transportation Products (AWTP). AWTP provides forged aluminum wheels and related products for heavy-duty trucks and the commercial transportation markets.

Building and Construction Systems (BCS). BCS provides building and construction architectural framing products and aluminum curtain wall and front entry systems.

Latin America Extrusions (LAE). LAE serves both the building and construction and the industrial markets in Latin America, with products including aluminum architectural systems for doors, windows and curtain walls, and a wide range of extruded solutions for the automotive, defense and other industrial industries. In December 2017, Arconic announced an agreement to divest its LAE business. Customary regulatory and antitrust reviews are complete, and the ownership of LAE will be transferred to a subsidiary of Hydro Extruded Solutions AS. The deal is expected to close in the first half of 2018.

For additional discussion of the Transportation and Construction Solutions segment's business, see "Results of Operations—Segment Information" in Part II, Item 7. (Management's Discussion and Analysis of Financial Condition and Results of Operations) and Note N to the Consolidated Financial Statements—Segment and Geographic Area Information in Part II, Item 8. (Financial Statements and Supplementary Data).

Transportation and Construction Solutions Principal Facilities[1]

Country	Facility	Products
Brazil	Itapissuma[2]	Forgings
	Tubarão[3]	Extrusions
	Utinga[3]	Extrusions
Canada	Lethbridge, Alberta	Architectural Products
China	Suzhou[2]	Forgings
France	Merxheim[2]	Architectural Products
Hungary	Székesfehérvár	Forgings
Japan	Jôetsu City[2]	Forgings
Mexico	Monterrey	Forgings
United Kingdom	Runcorn	Architectural Products
United States	Springdale, AR	Architectural Products
	Visalia, CA	Architectural Products
	Eastman, GA	Architectural Products
	Barberton, OH	Forgings
	Cleveland, OH	Forgings
	Bloomsburg, PA	Architectural Products
	Cranberry, PA	Architectural Products

Table of Contents

[1] Principal facilities are listed, and do not include 9 locations that serve as sales and administrative offices, distribution centers or warehouses. In addition to the facilities listed above, TCS has 21 service centers. These centers perform light manufacturing, such as assembly and fabrication of certain products.

[2] Leased property or partially leased property.

[3] Location is part of the planned divestiture of LAE, the sale of which is expected to be completed in the first half of 2018.

Sources and Availability of Raw Materials

The major raw materials purchased in 2017 for each of the Company's reportable segments are listed below.

Engineered Products and Solutions	Global Rolled Products
Alloying materials	Alloying materials
Electricity	Aluminum scrap
Natural gas	Coatings
Nickel alloys	Electricity
Primary aluminum (ingot, billet, P1020, high purity)	Lube oil
Resin	Natural gas
Stainless steel	Packaging materials
Steel	Primary aluminum (ingot, slab, billet, P1020, high purity)
Titanium alloys	Steam
Titanium sponge	

Transportation and Construction Solutions
Aluminum coil
Aluminum scrap
Electricity
Natural gas
Paint/Coating
Polyethylene
Primary aluminum
Resin

Generally, other 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.

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 patents, 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. The patents owned by Arconic generally concern particular products or manufacturing equipment or techniques. Arconic'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 the end of 2017, the Company's worldwide patent portfolio consists of approximately 1,669 granted patents and 807 pending patent applications.

The Company also has a significant number of trade secrets, mostly regarding manufacturing processes and material compositions that give many of its businesses important advantages in their markets. The Company continues to strive to improve those processes and generate new material compositions that provide additional benefits.

With respect to domestic and international registered trademarks, the Company has many that have significant recognition within the markets that are served. Examples include the name "Arconic" and the Arconic symbol for aluminum, nickel, and titanium products, Howmet® metal castings, Huck® fasteners, Kawneer® building panels and Dura-Bright® wheels with easy-

Table of Contents

clean surface treatments. A significant trademark filing campaign for the name “Arconic” was completed in 2016, in support of the corporate launch of Arconic Inc. As of the end of 2017, the Company’s worldwide trademark portfolio consists of approximately 1,793 registered trademarks and 625 pending trademark applications. The Company’s rights under its trademarks are important to the Company as a whole and, to varying degrees, important to each business segment.

Competitive Conditions

Engineered Products and Solutions (EP&S)

EP&S’s business units - AFS (Arconic Fastening Systems), AE (Arconic Engines) and AES (Arconic Engineered Structures) -are subject to substantial and intense competition in the markets they serve. Although Arconic believes its advanced technology, manufacturing processes and experience provide advantages to Arconic’s customers, such as high quality and superior mechanical properties that meet the Company’s customers’ most stringent requirements, many of the products Arconic makes can be produced by competitors using similar types of manufacturing processes as well as alternative forms of manufacturing. Despite intense competition, Arconic continues as a market leader in most of its principal markets. Several factors, including Arconic’s legacy of technical innovation, state-of-the-art capabilities, engaged employees and long-standing customer relationships, enable the Company to maintain its competitive position.

Principal competitors in the EP&S segment include Berkshire Hathaway Inc., through its acquisition of Precision Castparts Corporation and subsidiaries, for titanium and titanium-based alloys, precision forgings, seamless rolled rings, investment castings and aerospace fasteners; VSMPO (Russia) for titanium and titanium-based alloys and precision forgings; the High-Performance Materials & Components segment of Allegheny Technologies, Inc. (ATI) for titanium and titanium-based alloys, precision forgings, and investment castings; Lisi Aerospace (France) for aerospace fasteners; and Aubert & Duval (part of Eramet Group in France) for precision forgings.

Other competitors include:

- Kaiser Aluminum - for extruded products
- Universal Alloy Corp., part of Montana Tech Components - for extruded products
- Doncasters Group Ltd. (UK) - for investment castings
- Consolidated Precision Products Corp., part of Warburg Pincus - for investment castings
- Weber Metals, part of Otto Fuchs - for precision forgings
- Forgital - for seamless rings

Several of Arconic’s largest customers have captive superalloy furnaces for producing airfoil investment castings for their own use. Many other companies around the world also produce superalloy investment castings, and some of these companies currently compete with Arconic in the aerospace and other markets, while others are capable of competing with the Company should they choose to do so.

International competition in the investment casting, fastener, ring and forging markets may also increase in the future as a result of strategic alliances among engine original equipment manufacturers (OEMs), aero-structure prime contractors, and overseas companies, especially in developing markets, particularly where “offset” or “local content” requirements create purchase obligations with respect to products manufactured in or directed to a particular country.

Global Rolled Products (GRP)

GRP is one of the leaders in many of the aluminum flat rolled products markets in which it participates, including aerospace, automotive, brazing sheet, commercial transportation, industrial markets and packaging. However, much like other Arconic businesses, GRP is subject to substantial and intense competition in all of its markets.

While GRP participates in markets where Arconic believes the Company has a significant competitive advantage due to customer intimacy, advanced manufacturing capability, unique technology and/or differentiated products, in certain cases, the Company’s competitors are capable of making products similar to Arconic’s. The Company continuously works to maintain and enhance its competitive advantage through innovation: new alloys such as Arconic’s new aerospace alloys, new products such as the Company’s 5-layer brazing products and break-through processes such as Arconic Micromill® technology.

Some of GRP’s markets are worldwide and some are more regionally focused. Participation in these segments by GRP’s competitors varies. For example, Novelis is the largest flat rolled products producer competing in automotive, but it does not participate in the aerospace market. On the other hand, Constellium participates in all major market segments including aerospace, brazing, industrial, commercial transportation and packaging. Granges participates only in the brazing sheet market. Other GRP competitors include Aleris, AMAG, Kaiser, Kobe, Nanshan, and UACJ.

Table of Contents

Additionally, there are a number of new competitors emerging, particularly in China and other developing economies. For example, in the brazing business, the number of viable competitors has doubled over a five-year period. Arconic expects that this competitive pressure will continue and increase in the future as customers seek to globalize their supply bases in order to reduce costs. The Company continually monitors and plans for these new emerging players.

Summary of Major Competitors for GRP:

- Constellium (The Netherlands)
- Novelis
- Kaiser Aluminum
- UACJ (Japan)
- Aleris
- Hydro (Norway)
- Nanshan (China)
- Granges (Sweden)
- Kobe (Japan)

Transportation and Construction Solutions (TCS)

In the forged aluminum wheels business, AWTP competes in commercial transportation, under the product brand name Alcoa® Wheels, for the major regions that it serves (Americas, Europe, Japan, China, and Australia). AWTP competes against steel wheels, as well as aluminum. Its larger competitors are Accuride Corporation, Nippon Steel & Sumitomo Metal Corporation, Zhejiang Dicastal Hongxin Technology Co. Ltd, Wheels India Limited and Speedline (member of the Ronal Group). In recent years, AWTP has seen an increase in the number of aluminum wheel suppliers (both forged and cast aluminum wheels) from China, Taiwan, India and South Korea attempting to penetrate the commercial transportation market.

BCS is a manufacturer of aluminum architectural systems and products in North America and with a growing presence in Europe and the Middle East. In North America, BCS primarily competes in the nonresidential building segment. In Europe and the Middle East, it competes in both the residential and the nonresidential building segments. BCS competes with regional and local players in the architectural systems and more global companies in the products markets. BCS's competitive advantage is the cornerstone to its strong brand, innovative products, customer intimacy and technical services. Over the past decade, the regional competitors, primarily in North America, have narrowed the product portfolio and technical services advantages. However, BCS has maintained its competitive advantage through innovative products like highly energy-efficient high-thermal products and differentiated services. BCS sales are derived mainly from the retail, office, education and healthcare building segments.

BCS is organized into two business segments: architectural systems and architectural products. The primary product categories in architectural systems are storefront, framing and entrances (SEF), curtain walls, and windows. In the SEF and curtain wall businesses, BCS competes with competitors like Apogee, YKK, Oldcastle, Schüco, Hydro/SAPA and Reynaers in their aluminum framing systems business. The architectural products business is more global and is primarily served by subsidiaries of larger companies like Alpolic (Mitsubishi Corporation), Alucobond (Schweiter Technologies) and Novelis (Aditya Birla Group). The primary product categories are aluminum composite material and coil coated sheet. The competitive landscape in the architectural systems market has been relatively stable since the mid-2000s, with the major competitors in North America and Europe still operating in their markets, despite some industry consolidation in North America during the late 2000s.

As noted above, in December 2017, Arconic announced the divestiture of its LAE business which is expected to close in the first half of 2018. LAE has participated in two distinct segments: building and construction and industrial. In the building and construction market, LAE develops and markets aluminum architectural systems for both commercial and residential buildings. In the industrial business market, LAE manufactures and sells soft alloy extruded profiles and solutions, mainly for the automotive, consumer goods, machinery and equipment segments. Overall, LAE has held a strong presence in Brazil, where competition is very fragmented, composed mainly of small local extruders and a few multinationals such as CBA (Votorantim Group) and SAPA.

Table of Contents

Summary of Major Competitors:

AWTP:

- Accuride Corporation
- Nippon Steel & Sumitomo Metal Corporation (Japan)
- Zhejiang Dicastal Hongxin Technology Co. Ltd (China)
- Wheels India Limited (India)
- Speedline (member of the Ronal Group in Switzerland)

BCS:

- Apogee, Oldcastle and YKK
- Alpolic, Alucobond and Alucoil
- Schüco (Germany), Hydro/SAPA (Norway), Reynaers (Belgium) and Corialis (Belgium)
- Alucobond, Alucoil, Euramax and Novelis

LAE:

- Belmetal (Brazil)
- CBA (Brazil)
- SAPA (Norway)
- Aluk (Brazil)

Research and Development

Arconic, at its light metals research center, engages in research and development (R&D) programs that include process and product development, and basic and applied research. R&D expenditures were $111 million, $132 million and $169 million in 2017, 2016 and 2015, respectively.

Throughout 2017, the Company continued working on new developments in all business segments and leveraging new technologies. The Company has continued investing in additive manufacturing, with a focus on producing metal powder materials tailored for a range of additive process technologies, and furthering its development of advanced 3D printing design and manufacturing techniques-such as Arconic's Ampliforge™ process-to improve production speeds, reduce costs, and achieve material properties not possible through other additive flowpaths. The Company's new powder production facility was completed at the Arconic Technology Center in 2016. This facility will continue its focus on material development in aluminum, nickel and titanium alloys.

The Company is also producing and qualifying additively manufactured aerospace components via laser powder bed printing technology. It also is developing more formable titanium plate based wrought products for customers.

The Arconic Micromill® technology located in San Antonio continues to transition to commercial production, as the Company has invested in further developing Micromill™ technology, including installation of a pilot line at the Arconic Technology Center.

The Company continues to develop differentiated pretreatment technology, continuing to improve on its patented A951 technology, joining methods/fasteners (like RSR™) and highly formable and high strength automotive sheet products for automotive original equipment manufacturer applications in both cosmetic hang on parts and structural body-in-white applications.

The Company continued its differentiation in the commercial transportation market with Dura-Bright® EVO, UltraOne™ and European UltraOne™ wheel products.

The Company also continues to develop and deploy proprietary processing technologies in the manufacture of aerospace components, as well as a continued commitment and commercialization of a portfolio of proprietary aerospace fasteners. One such example is Ergo-Tech® blind fasteners which enable automated assembly operations.

Table of Contents

Environmental Matters

Information relating to environmental matters is included in Note K to the Consolidated Financial Statements under the caption "Environmental Matters" on page 84. Approved capital expenditures for new or expanded facilities for environmental control are $19 million for 2018 and estimated expenditures for such purposes are $2 million for 2019.

Employees

Total worldwide employment at the end of 2017 was approximately 41,500 employees in 25 countries. About 20,900 of these employees are represented by labor unions. The Company believes that relations with its employees and any applicable union representatives generally are good.

In the United States, approximately 7,600 employees are represented by various labor unions. The largest collective bargaining agreement is the master collective bargaining agreement between Arconic and the United Steelworkers (USW). The USW master agreement covers approximately 3,300 employees at four U.S. locations; the current labor agreement expires on May 15, 2019. There are 17 other collective bargaining agreements in the United States with varying expiration dates.

On a regional basis, collective bargaining agreements with varying expiration dates cover approximately 9,300 employees in Europe and Russia, 10,000 employees in North America, 600 employees in South America, and 1,000 employees in Asia.

Executive Officers of the Registrant

The names, ages, positions and areas of responsibility of the executive officers of the Company as of February 23, 2018 are listed below.

Charles P. "Chip" Blankenship, 51, Chief Executive Officer. Mr. Blankenship was elected Chief Executive Officer of Arconic and a member of the Arconic Board of Directors effective January 15, 2018. Mr. Blankenship was Senior Vice President of Haier Group, and President and Chief Executive Officer of its GE Appliances business from June 2016 to June 2017. GE Appliances was a division of General Electric Company until June 2016, when it was acquired by Qingdao Haier Co., Ltd., and Mr. Blankenship served as its President and Chief Executive Officer from December 2011 until June 2016. Prior to GE Appliances, Mr. Blankenship served as Vice President and General Manager of the Commercial Engines Operation for GE Aviation from July 2008 until December 2011. From April 2006 to July 2008, Mr. Blankenship was the General Manager of Aero Energy, a division of GE Energy.

Ken Giacobbe, 52, Executive Vice President and Chief Financial Officer. Mr. Giacobbe was elected Executive Vice President and Chief Financial Officer of Arconic effective November 1, 2016. Mr. Giacobbe joined Arconic in 2004 as Vice President of Finance for Global Extruded Products, part of Alcoa Forgings and Extrusions. He then served as Vice President of Finance for the Company's Building and Construction Systems business from 2008 until 2011. In 2011, he assumed the role of Group Controller for the Engineered Products and Solutions segment. From January 2013 until October 2016, Mr. Giacobbe served as Chief Financial Officer of the Engineered Products and Solutions segment. Before joining Arconic, Mr. Giacobbe held senior finance roles at Avaya and Lucent Technologies.

Mark J. Krakowiak, 57, Executive Vice President, Strategy and Development. Mr. Krakowiak was elected to his current position effective January 29, 2018. Prior to joining Arconic, Mr. Krakowiak had a 33-year career at General Electric Company, where he held a range of financial and strategy roles, including positions in financial planning, business development and M&A, treasury and commercial. Most recently, Mr. Krakowiak was Chief Financial Officer of GE Appliances, a Haier Company, from June 2016 to January 2017. Previously, Mr. Krakowiak served as Vice President and Chief Financial Officer of General Electric's Appliances and Lighting business from September 2011 to June 2016. From July 2009 to September 2011, Mr. Krakowiak was Chief Risk Officer of GE's global enterprise risk function, and from January 2003 to July 2009, he was Vice President of GE's Industrial Treasury and Insurance Operations.

Timothy D. Myers, 52, Executive Vice President and Group President, Global Rolled Products and Transportation and Construction Solutions. Mr. Myers was appointed Executive Vice President and Group President, Global Rolled Products and Transportation and Construction Solutions in October 2017. Prior to being appointed to his current role, he was Executive Vice President and Group President, Transportation and Construction Solutions from May 2016 to October 2017. Prior to that assignment, he was President of Alcoa Wheel and Transportation Products, from June 2009 to May 2016. Mr. Myers was Vice President and General Manager, Commercial Vehicle Wheels for the Alcoa

Wheel Products business from January 2006 to June 2009. Mr. Myers joined Arconic in 1991 as an automotive applications engineer in the Commercial Rolled Products Division, and held a series of engineering, marketing, sales and management positions with the Company since that time.

Table of Contents

Paul Myron, 51, Vice President and Controller. Mr. Myron was elected Vice President and Controller of Arconic effective November 1, 2016. Mr. Myron joined Arconic as a systems analyst in Pittsburgh and in 1992 relocated to the Company's Davenport, Iowa facility as a product accountant. He served in numerous financial management positions from 1995 until 2000 when he was named Commercial Manager and Controller for the Atlantic division of the Alcoa World Alumina and Chemicals business. In 2002, Mr. Myron was appointed Vice President of Finance, Alcoa Primary Metals and later became Vice President of Finance, Alcoa World Alumina and Chemicals. In 2005 Mr. Myron was named Director of Financial Planning and Analysis, accountable for Arconic's financial planning, analysis, and reporting worldwide. In February 2012, he became Director of Finance Initiatives for the Engineered Products and Solutions segment, overseeing specific financial initiatives and projects within the group. From July 2012 until his most recent appointment, Mr. Myron served as Vice President, Finance and Business Excellence for the Arconic Power and Propulsion business.

Vas Nair, 52, Executive Vice President, Human Resources. Ms. Nair was appointed Executive Vice President, Human Resources in November 2015. Prior to being appointed to her current role, Ms. Nair was Arconic's Chief Talent and Diversity Officer, with global responsibility for diversity and inclusion from February 2015 to October 2015. Prior to joining Arconic, Ms. Nair was VP of Global Learning and Talent Development at Estee Lauder from November 2010 to January 2015. Ms. Nair was Vice President and Chief Learning Officer at Schering-Plough from November 2003 to October 2009.

Katherine H. Ramundo, 50, Executive Vice President, Chief Legal Officer and Secretary. Ms. Ramundo was elected to her current position effective November 1, 2016. Prior to joining Arconic, from January 2013 through August 2015, she was Executive Vice President, General Counsel and Secretary of ANN INC., the parent company of ANN TAYLOR and LOFT brands, based in New York. Prior to ANN INC., she served as Vice President, Deputy General Counsel and Assistant Secretary at Colgate-Palmolive, where she held various legal roles from November 1997 to January 2013. She began her career as a litigator in New York, practicing at major law firms, including Cravath, Swaine & Moore and Sidley & Austin.

Eric V. Roegner, 48, Executive Vice President and Group President, Engineered Products and Solutions, and President, Arconic Defense. Mr. Roegner was elected Executive Vice President and Group President, Engineered Products and Solutions effective October 2017, and President, Arconic Defense effective June 2012. Previously, Mr. Roegner served as Executive Vice President and Group President, Global Rolled Products from May 2017 until October 2017; Chief Operating Officer of Arconic Investment Castings, Titanium and Engineered Products from July 2015 until May 2017; and Chief Operating Officer of Alcoa Investment Castings, Forgings and Extrusions from January 2013 until July 2015. Mr. Roegner joined the Company in 2006 as Chief Operating Officer of Arconic's Global Engineered Products business.

The Company's executive officers are elected or appointed to serve until the next annual meeting of the Board of Directors (held in conjunction with the annual meeting of shareholders) except in the case of earlier death, retirement, resignation or removal.

Item 1A. Risk Factors.

Arconic'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 Arconic'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 Arconic or that Arconic currently deems immaterial also may materially adversely affect the Company in future periods.

The markets for Arconic's products are highly cyclical and are influenced by a number of factors, including global economic conditions.

Arconic is subject to cyclical fluctuations in global economic conditions and lightweight metals end-use markets. Arconic sells many products to industries that are cyclical, such as the aerospace, automotive, and commercial transportation and construction industries, and the demand for its products is sensitive to, and quickly impacted by, demand for the finished goods manufactured by its customers in these industries, which may change as a result of changes in regional or worldwide economies, currency exchange rates, energy prices or other factors beyond its

control.
In particular, Arconic derives a significant portion of its revenue from products sold to the aerospace industry, which can be highly cyclical and reflective of changes in the general economy. The commercial aerospace industry is historically driven by the demand from commercial airlines for new aircraft. The U.S. and international commercial aviation industries may face challenges arising from competitive pressures and fuel costs. Demand for commercial aircraft is influenced by airline industry profitability, trends in airline passenger traffic, the state of U.S., regional and world economies, the ability of aircraft purchasers to obtain required financing and numerous other factors including the effects of terrorism, health and safety concerns, environmental constraints imposed upon aircraft operators, the retirement of older aircraft, and

technological improvements to new engines. The military aerospace cycle is highly dependent on U.S. and foreign government funding; however, it is also driven by the effects of terrorism, a changing global political environment, U.S. foreign policy, the retirement of older aircraft, and technological improvements to new engines.
Further, the demand for Arconic's automotive and ground transportation products is driven by the number of vehicles produced by automotive manufacturers and Arconic content per vehicle. The automotive industry is sensitive to general economic conditions, including credit markets and interest rates, and consumer spending and preferences regarding vehicle ownership and usage, vehicle size, configuration and features. Automotive sales and production can also be affected by other factors including the age of the vehicle fleet and related scrappage rates, labor relations issues, fuel prices, regulatory requirements, government initiatives, trade agreements and levels of competition.
While Arconic believes that the long-term prospects for its products are positive, the Company is unable to predict the future course of industry variables, the strength of the U.S., regional or global economies, or the effects of government intervention. Negative economic conditions, such as a major economic downturn, a prolonged recovery period, or disruptions in the financial markets, could have a material adverse effect on Arconic's business, financial condition or results of operations.
Arconic faces significant competition, which may have an adverse effect on profitability.
As discussed in Part I, Item 1. (Business-Competitive Conditions) of this report, the markets for Arconic's products are highly competitive. Arconic's competitors include a variety of both U.S. and non-U.S. companies in all major markets. New product offerings or new technologies in the marketplace may compete with or replace Arconic products. The willingness of customers to accept substitutes for the products sold by Arconic, the ability of large customers to exert leverage in the marketplace to affect the pricing for Arconic's products, and technological advancements or other developments by or affecting Arconic's competitors or customers could adversely affect Arconic's business, financial condition or results of operations.
Arconic may be unable to develop innovative new products or implement technology initiatives successfully.
Arconic's competitive position and future performance depends, in part, on the Company's ability to:

- identify and evolve with emerging technological and broader industry trends in Arconic's target end-markets;
- identify and successfully execute on a strategy to remain an essential and sustainable element of its customer's supply chain;
- fund, develop, manufacture and bring innovative new products and services to market quickly and cost-effectively;
- monitor disruptive technologies and understand customers' and competitors' abilities to deploy those disruptive technologies; and
- achieve sufficient return on investment for new products based on capital expenditures and research and development spending.

Arconic is working on new developments for a number of strategic projects in all business segments, including additive manufacturing, alloy development, engineered finishes and product design, high speed continuous casting and rolling technology, and other advanced manufacturing technologies. For more information on Arconic's research and development programs, see "Research and Development" in Part I, Item 1. (Business) of this report.
While Arconic intends to continue committing substantial financial resources and effort to the development of innovative new products and services, it may not be able to successfully differentiate its products or services from those of its competitors or match the level of research and development spending of its competitors, including those developing technology to displace Arconic's current products. In addition, Arconic may not be able to adapt to evolving markets and technologies or achieve and maintain technological advantages. There can be no assurance that any of Arconic's new products or services, development programs or technologies will be commercially feasible or beneficial to Arconic.
Arconic could be adversely affected by changes in the business or financial condition or the loss of a significant customer or customers.
A significant downturn or deterioration in the business or financial condition or loss of a key customer or customers supplied by Arconic could affect Arconic's financial results in a particular period. Arconic's customers may experience delays in the launch of new products, labor strikes, diminished liquidity or credit unavailability, weak demand for their products, or other

16

Table of Contents

difficulties in their businesses. Arconic's customers may also change their business strategies or modify their business relationships with Arconic, including to reduce the amount of Arconic's products they purchase or to switch to alternative suppliers. If Arconic is unsuccessful in replacing business lost from such customers, profitability may be adversely affected.

Arconic could encounter manufacturing difficulties or other issues that impact product performance, quality or safety, which could affect Arconic's reputation, business and financial statements.

The manufacture of many of Arconic's products is a highly exacting and complex process. Problems may arise during manufacturing for a variety of reasons, including equipment malfunction, failure to follow specific protocols, specifications and procedures, including those related to quality or safety, problems with raw materials, supply chain interruptions, natural disasters, labor unrest and environmental factors. Such problems could have an adverse impact on the Company's ability to fulfill orders or on product quality or performance. Product manufacturing or performance issues could result in recalls, customer penalties, contract cancellation and product liability exposure, including if any of our products are defective or are used in a manner that results in injuries or other damages. Because of approval and license requirements applicable to manufacturers and/or their suppliers, alternatives to mitigate manufacturing disruptions may not be readily available to the Company or its customers. Accordingly, manufacturing problems, product defects or other risks associated with our products, including their use or application, could result in significant costs to and liability for Arconic that could have a material adverse effect on its business, financial condition or results of operations, including the payment of potentially substantial monetary damages, fines or penalties, as well as negative publicity and damage to the Company's reputation, which could adversely impact product demand and customer relationships.

Arconic's business depends, in part, on its ability to meet increased program demand successfully and to mitigate the impact of program cancellations, reductions and delays.

Arconic is currently under contract to supply components for a number of new and existing commercial, general aviation and military aircraft programs and is the sole supplier of aluminum sheet for a number of aluminum-intensive automotive vehicle programs. Many of these programs are scheduled for production increases over the next several years. If Arconic fails to meet production levels or encounters difficulty or unexpected costs in meeting such levels, it could have a material adverse effect on the Company's business, financial condition or results of operations. Similarly, program cancellations, reductions or delays could also have a material adverse effect on Arconic's business.

Arconic could be adversely affected by reductions in defense spending.

Arconic's products are used in a variety of military applications, including military aircraft and armored vehicles. Although many of the programs in which Arconic participates extend several years, they are subject to annual funding through congressional appropriations. Changes in military strategy and priorities, or reductions in defense spending, may affect current and future funding of these programs and could reduce the demand for Arconic's products, which could adversely affect Arconic's business, financial condition or results of operations.

Arconic's global operations expose the Company to risks that could adversely affect Arconic's business, financial condition, results of operations or cash flows.

Arconic has operations or activities in numerous countries and regions outside the United States, including Europe, Brazil, Canada, China, Japan, and Russia. As a result, the Company's global operations are affected by economic, political and other conditions in the foreign countries in which Arconic does business as well as U.S. laws regulating international trade, including:

- 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, sanctions 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, and renegotiation or nullification of existing agreements;
- war or terrorist activities;
- major public health issues such as an outbreak of a pandemic or epidemic (such as Sudden Acute Respiratory Syndrome, Avian Influenza, H7N9 virus, or the Ebola virus), which could cause disruptions in Arconic's operations or workforce;

- difficulties enforcing intellectual property and contractual rights in certain jurisdictions;

Table of Contents

- changes in trade and tax laws that may result in our customers being subjected to increased taxes, duties and tariffs and reduce their willingness to use our services in countries in which we are currently manufacturing their products;
- rising labor costs;
- labor unrest, including strikes;
- compliance with antitrust and competition regulations;
- compliance with foreign labor laws, which generally provide for increased notice, severance and consultation requirements compared to U.S. laws;
- aggressive, selective or lax enforcement of laws and regulations by national governmental authorities;
- compliance with the Foreign Corrupt Practices Act (“FCPA”) and other anti-bribery and corruption laws;
- compliance with U.S. laws concerning trade, including the International Traffic in Arms Regulations (“ITAR”), the Export Administration Regulations (“EAR”), and the sanctions, regulations and embargoes administered by the U.S. Department of Treasury’s Office of Foreign Asset Controls (“OFAC”);
- imposition of currency controls;
- adverse tax audit rulings; and
- unexpected events, including fires or explosions at facilities, and natural disasters.

Although the effect of any of the foregoing factors is difficult to predict, any one or more of them could adversely affect Arconic’s business, financial condition, or results of operations. While Arconic believes it has adopted appropriate risk management, compliance programs and insurance arrangements to address and reduce the risks associated with these factors, such measures may provide inadequate protection against costs or liabilities that may arise from such events.

Arconic may face challenges to its intellectual property rights which could adversely affect the Company’s reputation, business and competitive position.

Arconic owns important intellectual property, including patents, trademarks, copyrights and trade secrets. The Company’s intellectual property plays an important role in maintaining Arconic’s competitive position in a number of the markets that the Company serves. Arconic’s competitors may develop technologies that are similar or superior to Arconic’s proprietary technologies or design around the patents Arconic owns or licenses. The pursuit of remedies for any misappropriation of such intellectual property is expensive and the ultimate remedies may be deemed insufficient. Further, as the Company expands its operations in jurisdictions where the enforcement of intellectual property rights is less robust, the risk of misappropriation of Arconic intellectual property increases, despite efforts the Company undertakes to protect them. Developments or assertions by or against Arconic relating to intellectual property rights, and any inability to protect or enforce these rights sufficiently, could adversely affect Arconic’s business and competitive position.

Arconic may be unable to realize the expected benefits from acquisitions, divestitures, joint ventures and strategic alliances.

Arconic has made, and may continue to plan and execute, acquisitions and divestitures and take other actions to grow its business or streamline its portfolio. Although management believes that its strategic actions are beneficial to Arconic, there is no assurance that anticipated benefits will be realized. Acquisitions present significant challenges and risks, including the effective integration of the business into the Company, unanticipated costs and liabilities, and the ability to realize anticipated benefits, such as growth in market share, revenue or margins, at the levels or in the timeframe expected. The Company may be unable to manage acquisitions successfully. Additionally, adverse factors may prevent Arconic from realizing the benefits of its growth projects, including unfavorable global economic conditions, currency fluctuations, or unexpected delays in target timelines.

With respect to portfolio optimization actions such as divestitures, curtailments and closures, Arconic may face barriers to exit from unprofitable businesses or operations, including high exit costs or objections from various stakeholders. In addition, Arconic may retain unforeseen liabilities for divested entities if a buyer fails to honor all commitments. Arconic’s business operations are capital intensive, and curtailment or closure of operations or facilities may include significant charges, including employee separation costs, asset impairment charges and other measures.

Table of Contents

In addition, Arconic has participated in, and may continue to participate in, joint ventures, strategic alliances and other similar arrangements from time to time. Although the Company has, in connection with past and existing joint ventures, sought to protect its interests, joint ventures and strategic alliances inherently involve special risks. Whether or not Arconic holds majority interests or maintains operational control in such arrangements, its partners may:

- have economic or business interests or goals that are inconsistent with or opposed to those of the Company;
- exercise veto rights to block actions that Arconic believes to be in its or the joint venture's or strategic alliance's best interests;
- take action contrary to Arconic's policies or objectives with respect to 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 acquisitions, growth investments, divestitures, closures, joint ventures, strategic alliances or similar arrangements will be undertaken or completed in their entirety as planned or that they will be beneficial to Arconic, whether due to the above-described risks, unfavorable global economic conditions, increases in construction costs, currency fluctuations, political risks, or other factors.

Arconic may be unable to realize future targets or goals established for its business segments, at the levels or by the dates targeted.

From time to time, Arconic may announce future targets or goals for its business, which are based on the Company's then current expectations, estimates, forecasts and projections about the operating environment, economies and markets in which Arconic operates. Future targets and goals reflect the Company's beliefs and assumptions and its perception of historical trends, then current conditions and expected future developments, as well as other factors management believes are appropriate in the circumstances. As such, targets and goals are inherently subject to significant business, economic, competitive and other uncertainties and contingencies regarding future events, including the risks discussed in this report. The actual outcome may be materially different. There can be no assurance that any targets or goals established by the Company will be accomplished at the levels or by the dates targeted, if at all. Failure to achieve the targets or goals by the Company may have a material adverse effect on its business, financial condition, results of operations or the market price of its securities.

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

Arconic faces 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 security breaches may include, but are not limited to, attempts to access information, computer viruses, denial of service and other electronic security breaches.

The Company believes that it faces a heightened threat of cyber attacks due to the industries it serves, the locations of its operations and its technological innovations. The Company has experienced cybersecurity attacks in the past, including breaches of its information technology systems in which information was taken, and may experience them in the future, potentially with more frequency or sophistication. Based on information known to date, past attacks have not had a material impact on Arconic's financial condition or results of operations. However, due to the evolving nature of cybersecurity threats, the scope and impact of any future incident cannot be predicted. While the Company continually works to safeguard its 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 its systems or networks, compromise confidential or otherwise protected information, destroy or corrupt data, or otherwise disrupt its operations. The occurrence of such events could negatively impact Arconic's reputation and its 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 its 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 the Company's investment in research and development.

A decline in Arconic's financial performance or outlook could negatively impact the Company's access to the global capital markets, reduce the Company's liquidity and increase its borrowing costs.

Arconic has significant capital requirements and depends, in part, upon the issuance of debt to fund its operations and contractual commitments and pursue strategic acquisitions. A decline in the Company's financial performance or outlook

Table of Contents

due to internal or external factors could affect the Company’s access to, and the availability or cost of, financing on acceptable terms and conditions. There can be no assurance that Arconic will have access to the global capital market on terms the Company finds acceptable. Limitations on Arconic’s ability to access the global capital markets, a reduction in the Company’s liquidity or an increase in borrowing costs could materially and adversely affect Arconic’s ability to maintain or grow its business, which in turn may adversely affect its financial condition and results of operations.

A downgrade of Arconic’s credit ratings could limit Arconic’s ability to obtain future financing, increase its borrowing costs, increase the pricing of its credit facilities, adversely affect the market price of its securities, trigger letter of credit or other collateral postings, or otherwise impair its business, financial condition, and results of operations.

Arconic’s credit ratings are important to the Company’s cost of capital. The major rating agencies routinely evaluate Arconic’s credit profile and assign debt ratings to the Company. This evaluation is based on a number of factors, which include financial strength, business and financial risk, as well as transparency with rating agencies and timeliness of financial reporting. On May 1, 2017, Standard and Poor’s Ratings Services affirmed Arconic’s long-term debt at BBB-, an investment grade rating, with a stable outlook, and its short-term debt at A-3. On November 1, 2016, Moody’s Investor Service (Moody’s) downgraded Arconic’s long-term debt rating from Ba1, a non-investment grade, to Ba2 and its short-term debt rating from Speculative Grade Liquidity-1 to Speculative Grade Liquidity-2. Additionally, Moody’s changed the outlook from negative to stable (ratings and outlook were affirmed on November 2, 2017). On April 21, 2016, Fitch affirmed Arconic’s long-term debt rating at BB+, a non-investment grade, and short-term debt at B. Additionally, Fitch changed the current outlook from positive to evolving. On July 7, 2016, Fitch changed the current outlook from evolving to stable (ratings and outlook were affirmed on July 3, 2017).

There can be no assurance that one or more of these or other rating agencies will not take negative actions with respect to Arconic’s ratings. Increased debt levels, macroeconomic conditions, a deterioration in the Company’s debt protection metrics, a contraction in the Company’s liquidity, or other factors could potentially trigger such actions. A rating agency may lower, suspend or withdraw entirely a rating or place it on negative outlook or watch if, in that rating agency’s judgment, circumstances so warrant.

A downgrade of Arconic’s credit ratings by one or more rating agencies could adversely impact the market price of Arconic’s securities; adversely affect existing financing (for example, a downgrade by Standard and Poor’s or a further downgrade by Moody’s would subject Arconic to higher costs under Arconic’s Five-Year Revolving Credit Agreement and certain of its other revolving credit facilities); limit access to the capital (including commercial paper) or credit markets or otherwise adversely affect the availability of other new financing on favorable terms, if at all; result in more restrictive covenants in agreements governing the terms of any future indebtedness that the Company incurs; increase the cost of borrowing or fees on undrawn credit facilities; result in vendors or counterparties seeking collateral or letters of credit from Arconic; or otherwise impair Arconic’s business, financial condition and results of operations.

Arconic’s business and growth prospects may be negatively impacted by limits in its capital expenditures.

Arconic requires substantial capital to invest in growth opportunities and to maintain and prolong the life and capacity of its existing facilities. Insufficient cash generation or capital project overruns may negatively impact Arconic’s ability to fund as planned its sustaining and return-seeking capital projects. Over the long term, Arconic’s ability to take advantage of improved market conditions or growth opportunities in its businesses may be constrained by earlier capital expenditure restrictions, which could adversely affect the long-term value of its business and the Company’s position in relation to its competitors.

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

Arconic’s results of operations may be negatively affected by the amount of expense Arconic records for its pension and other postretirement benefit plans, reductions in the fair value of plan assets and other factors. Arconic calculates income or expense for its 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 Arconic 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, Arconic is required to make an annual measurement of plan assets and liabilities, which may result in a significant charge to shareholders' equity. For a discussion regarding how Arconic's financial statements can be affected by pension and other postretirement benefits accounting policies, see "Critical Accounting Policies and Estimates-Pension and Other Postretirement Benefits" in Part II, Item 7. (Management's Discussion

20

Table of Contents

and Analysis of Financial Condition and Results of Operations) and Note T to the Consolidated Financial Statements-Pension and Other Postretirement Benefits in Part II, Item 8. (Financial Statements and Supplementary Data). 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 Arconic 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. The Moving Ahead for Progress in the 21st Century Act ("MAP-21"), enacted in 2012, provided temporary relief for employers like Arconic who sponsor defined benefit pension plans related to funding contributions under the Employee Retirement Income Security Act of 1974 by allowing the use of a 25-year average discount rate within an upper and lower range for purposes of determining minimum funding obligations. In 2014, the Highway and Transportation Funding Act (HATFA) was signed into law. HATFA extended the relief provided by MAP-21 and modified the interest rates that had been set by MAP-21. In 2015, the Bipartisan Budget Act of 2015 (BBA 2015) was signed into law. BBA 2015 extends the relief period provided by HAFTA. Arconic believes that the relief provided by BBA 2015 will moderately reduce the cash flow sensitivity of the Company's U.S. pension plans' funded status to potential declines in discount rates over the next several years. However, 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 the Company's cash flows. Adverse capital market conditions could result in reductions in the fair value of plan assets and increase the Company's liabilities related to such plans, which could adversely affect Arconic's liquidity and results of operations.

Unanticipated changes in Arconic's tax provisions or exposure to additional tax liabilities could affect Arconic's future profitability.

Arconic is subject to income taxes in both the United States and various non-U.S. jurisdictions. Its 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. Arconic's 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 its deferred tax assets. The Company's 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 its tax exposures.

Corporate tax law changes continue to be analyzed in the United States and in many other jurisdictions. In particular, on December 22, 2017, the Tax Cuts and Jobs Act (the "2017 Act") was signed into law, significantly reforming the United States Internal Revenue Code of 1986, as amended. The Company continues to review the components of the 2017 Act and evaluate its consequences. As such, the ultimate impact of the 2017 Act may differ from reported amounts, possibly materially, due to, among other things, changes in interpretations and assumptions the Company has made; guidance that may be issued; and actions the Company may take as a result of the 2017 Act. The changes to the U.S. corporate tax system resulting from the 2017 Act could have a substantial impact, positive or negative, on Arconic's future effective tax rate, cash tax expenditures, and deferred tax assets and liabilities.

Arconic's business could be adversely affected by increases in the cost of aluminum.

Arconic derives a significant portion of its revenue from aluminum-based products. The price of primary aluminum has historically been subject to significant cyclical price fluctuations and the timing of changes in the market price of aluminum is largely unpredictable. Although the Company's pricing of products is generally intended to pass the risk of metal price fluctuations on to the Company's customers, Arconic may be unable to pass on the entire cost of increases to its customers and there can be a potential time lag on certain products between increases in costs for aluminum and the point when the Company can implement a corresponding increase in price to its customers. As a result, Arconic may be exposed to such price fluctuations during the time lag. If this occurs, it could have a material

adverse effect on Arconic's business, financial condition or results of operations.
Arconic is exposed to fluctuations in foreign currency exchange rates and interest rates, as well as inflation, and other economic factors in the countries in which it operates.
Economic factors, including inflation and fluctuations in foreign currency exchange rates and interest rates, competitive factors in the countries in which Arconic operates, and continued volatility or deterioration in the global economic and

financial environment could affect Arconic's revenues, expenses and results of operations. Changes in the valuation of the U.S. dollar against other currencies, including the Euro, British pound, Chinese yuan (renminbi) and Russian ruble, may affect Arconic's profitability as some important inputs are purchased in other currencies, while the Company's products are generally sold in U.S. dollars.

Arconic may not realize expected benefits from its productivity and cost-reduction initiatives.

Arconic has undertaken, and may continue to undertake, productivity and cost-reduction initiatives to improve performance and conserve cash, including deployment of company-wide business process models, such as Arconic's 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 Arconic or that estimated cost savings from such activities will be realized. If Arconic fails to achieve net cost savings at anticipated levels, its business, financial condition or results of operations could be adversely affected.

Arconic's customers may reduce their demand for aluminum products in favor of alternative materials.

Certain applications of Arconic's aluminum-based products compete with products made from other materials, such as steel, titanium and composites. The willingness of customers to pursue materials other than aluminum depends upon the desire to achieve specific attributes. For example, the commercial aerospace industry has used and continues to evaluate the further use of alternative materials to aluminum, such as titanium and composites, in order to reduce the weight and increase the fuel efficiency of aircraft. Additionally, the automotive industry, while motivated to reduce vehicle weight through the use of aluminum, may revert to steel or other materials for certain applications. Further, the decision to use aluminum may be impacted by aluminum prices. The willingness of customers to accept other materials in lieu of aluminum could adversely affect the demand for certain of Arconic's products, and thus adversely affect Arconic's business, financial condition or results of operations.

Arconic's profitability could be adversely affected by volatility in the availability or cost of raw materials.

Arconic's results of operations may be affected by changes in the availability or cost of raw materials (e.g., aluminum, nickel, titanium dioxide), as well as freight costs associated with transportation of raw materials. The availability and costs of certain raw materials necessary for the production of Arconic's products may be influenced by private or government entities, changes in world politics or regulatory requirements, labor relations between the producers and their work forces, unstable governments in exporting nations, export quotas, sanctions, new or increased import duties, countervailing or anti-dumping duties, market forces of supply and demand, and inflation. In addition, from time to time, commodity prices may fall rapidly. When this happens, suppliers may withdraw capacity from the market until prices improve, which may cause periodic supply interruptions. Arconic may be unable to offset fully the effects of raw material shortages or higher costs through price increases, productivity improvements or cost reduction programs. Shortages or price fluctuations in raw materials could have a material adverse effect on Arconic's operating results.

Union disputes and other employee relations issues could adversely affect Arconic's business, financial condition or results of operations.

A significant portion of Arconic's employees are represented by labor unions in a number of countries under various collective bargaining agreements with varying durations and expiration dates. For more information, see "Employees" in Part I, Item 1. (Business) of this report. While Arconic was previously successful in renegotiating its collective bargaining agreements with various unions, Arconic may not be able to satisfactorily renegotiate collective bargaining agreements in the United States and other countries when they expire. In addition, existing collective bargaining agreements may not prevent a strike or work stoppage at Arconic's facilities in the future. Arconic may also be subject to general country strikes or work stoppages unrelated to its business or collective bargaining agreements. Any such work stoppages (or potential work stoppages) could have a material adverse effect on Arconic's business, financial condition or results of operations.

A failure to attract, retain or provide adequate succession plans for key personnel could adversely affect Arconic's operations and competitiveness.

Arconic's existing operations and development projects require highly skilled executives and staff with relevant industry and technical experience. The inability of the Company to attract and retain such people may adversely impact Arconic's ability to meet project demands adequately and fill roles in existing operations. Skills shortages in

engineering, manufacturing, technology, construction and maintenance contractors and other labor market inadequacies may also impact activities. These shortages may adversely impact the cost and schedule of development projects and the cost and efficiency of existing operations.

Table of Contents

In addition, the continuity of key personnel and the preservation of institutional knowledge are vital to the success of the Company's growth and business strategy. The loss of key members of management and other personnel could significantly harm Arconic's business, and any unplanned turnover, or failure to develop adequate succession plans for key positions, could deplete the Company's institutional knowledge base, delay or impede the execution of the Company's business plans and erode Arconic's competitiveness.

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

Arconic's 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 Arconic. The Company may experience a change in effective tax rates or 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. The Company is also subject to a variety of legal and regulatory compliance risks associated with its business and products. These risks include, among other things, potential claims relating to product liability, health and safety, environmental matters, intellectual property rights, government contracts and taxes, as well as compliance with U.S. and foreign laws and regulations governing export, anti-bribery, antitrust and competition, sales and trading practices, and the manufacture and sale of products. Arconic could be subject to fines, penalties, damages (in certain cases, treble damages), or suspension or debarment from government contracts.

For example, in the event that an Arconic product fails to perform as expected, regardless of fault, or is used in an unexpected manner, and such failure or use results in, or is alleged to result in, bodily injury and/or property damage or other losses, Arconic may be subject to product liability lawsuits and other claims or may be required or requested by its customers to participate in a recall or other corrective action involving such product. In addition, if an Arconic product is perceived to be defective or unsafe, sales of the Company's products could be diminished, and the Company could be subject to further liability claims. Even if Arconic successfully defends against these types of claims, the Company could still be required to spend a substantial amount of money in connection with legal proceedings or investigations with respect to such claims; the Company's management could be required to devote significant time, attention and operational resources responding to and defending against these claims; and Arconic's reputation could suffer, any of which could have a material adverse effect on its financial condition and results of operations.

While Arconic believes it has adopted appropriate risk management and compliance programs to address and reduce these risks, including insurance arrangements with respect to these risks, such measures may provide inadequate protection against liabilities that may arise. The global and diverse nature of Arconic's 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 unsusceptible to 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 the Company's financial condition, results of operations or cash flows in a particular period. For additional information regarding the legal proceedings involving the Company, see the discussion in Part I, Item 3. (Legal Proceedings) of this report and in Note L to the Consolidated Financial Statements in Part II, Item 8. (Financial Statements and Supplementary Data).

Arconic is subject to a broad range of health, safety and environmental laws and regulations in the jurisdictions in which it operates and may be exposed to substantial costs and liabilities associated with such laws and regulations.

Arconic's operations worldwide are subject to numerous complex and increasingly stringent health, safety and environmental 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 Arconic may be liable may arise in the future at its present sites, where no problem is currently known, at previously owned sites, sites previously operated by the Company, sites owned by its

predecessors or sites that it may acquire in the future. Compliance with health, safety and environmental laws and regulations may prove to be more challenging and costly than the Company anticipates. For example, new data and information, including information about the ways in which the Company's products are used, may lead the Company, regulatory authorities, government agencies or other entities or organizations to publish guidelines or recommendations, or impose restrictions, related to the manufacturing or use of the Company's products. This could lead to

reduced sales or market acceptance of the Company’s products. Arconic’s 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 as well as other health and safety risks relating to its operations and products. 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 the Company’s financial condition, results of operations and cash flows.

Arconic is subject to privacy and data security/protection laws in the jurisdictions in which it operates and may be exposed to substantial costs and liabilities associated with such laws and regulations.

The regulatory environment surrounding information security and privacy is increasingly demanding, with frequent imposition of new and changing requirements. For example, the European Union's General Data Protection Regulation (“GDPR’), which will become effective in May 2018, imposes significant new requirements on how companies process and transfer personal data, as well as significant fines for non-compliance. Compliance with changes in privacy and information security laws and standards may result in significant expense due to increased investment in technology and the development of new operational processes, which could have a material adverse effect on Arconic’s financial condition and results of operations. In addition, the payment of potentially significant fines or penalties in the event of a breach of the GDRP or other privacy and information security laws, as well as the negative publicity associated with such a breach, could damage the Company’s reputation and adversely impact product demand and customer relationships.

Arconic may be subject to securities litigation, which could cause the Company to incur substantial costs and divert management’s attention and resources.

Arconic currently is, and may in the future become, subject to claims and litigation alleging violations of the securities laws. Arconic is generally obliged, to the extent permitted by law, to indemnify its current and former directors and officers who are named as defendants in these types of lawsuits. Regardless of the outcome, securities litigation may require substantial attention from management and could result in significant legal expenses, settlement costs or damage awards that could have a material impact on the Company’s financial position, results of operations and cash flows.

Failure to comply with domestic or international employment and related laws could result in penalties or costs that could have a material adverse effect on Arconic’s business results.

Arconic is subject to a variety of domestic and foreign employment laws, such as the Fair Labor Standards Act (which governs such matters as minimum wages, overtime and other working conditions), state and local wage laws, the Employee Retirement Income Security Act (“ERISA”), and regulations related to safety, discrimination, organizing, whistle-blowing, classification of employees, privacy and severance payments, citizenship requirements, and healthcare insurance mandates. Allegations that Arconic has violated such laws or regulations could damage the Company’s reputation and lead to fines from or settlements with federal, state or foreign regulatory authorities or damages payable to employees, which could have a material adverse impact on Arconic’s operations and financial condition.

Arconic may be affected by global climate change or by legal, regulatory, or market responses to such change.

Increased concern over climate change has led to new and proposed legislative and regulatory initiatives, such as cap-and-trade systems and additional limits on emissions of greenhouse gases. New laws enacted could directly and indirectly affect Arconic’s customers and suppliers (through an increase in the cost of production or their ability to produce satisfactory products) or business (through an impact on Arconic’s inventory availability, cost of sales, operations or demand for Arconic products), which could result in an adverse effect on our financial condition, results of operations and cash flows. Compliance with any new or more stringent laws or regulations, or stricter interpretations of existing laws, could require additional expenditures by the Company or its customers or suppliers. Also, Arconic relies on natural gas, electricity, fuel oil and transport fuel to operate its facilities. Any increased costs of these energy sources because of new laws could be passed along to the Company and its customers and suppliers, which could also have a negative impact on Arconic’s profitability.

Anti-takeover provisions could prevent or delay a change in control of Arconic, including a takeover attempt by a third party and limit the power of Arconic’s shareholders.

Arconic's Certificate of Incorporation and 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 Arconic's Board of Directors rather than to attempt a hostile takeover. For example, Arconic is subject to Section 203 of the Delaware General Corporation Law, which imposes certain restrictions on mergers and other business combinations between the Company and any holder of 15% or more of the Company's outstanding common stock, which could make it more difficult for another party to acquire Arconic. Additionally, the Company's Certificate of Incorporation authorizes Arconic's Board of Directors to issue preferred stock or adopt other

anti-takeover measures without shareholder approval. These provisions may apply even if an offer may be considered beneficial by some shareholders and could delay or prevent an acquisition that Arconic's Board of Directors determines is not in the best interests of Arconic's shareholders. These provisions may also limit the price that investors might be willing to pay in the future for shares of Arconic common stock, or prevent or discourage attempts to remove and replace incumbent directors.

Dividends on Arconic common stock could be reduced or eliminated in the event of material future deterioration in business conditions or in other circumstances.

The existence, timing, declaration, amount and payment of future dividends to Arconic's shareholders falls within the discretion of Arconic's Board of Directors. The Arconic Board of Director's decisions regarding the payment of dividends will depend on many factors, such as Arconic's financial condition, earnings, capital requirements, debt service obligations, covenants associated with certain of the Company's debt service obligations, industry practice, legal requirements, regulatory constraints and other factors that Arconic's Board of Directors deems relevant. Arconic's Board of Directors may determine to reduce or eliminate Arconic's common stock dividend in the event of material future deteriorations in business conditions or in other circumstances.

Changes in the United Kingdom's economic and other relationships with the European Union could adversely affect Arconic.

In June 2016, a majority of voters in the United Kingdom elected to withdraw from the European Union in a national referendum (also referred to as "Brexit"). The ultimate effects of Brexit on Arconic are difficult to predict, but because the Company currently operates and conducts business in the United Kingdom and in Europe, the results of the referendum and any eventual withdrawal could cause disruptions and create uncertainty to Arconic's businesses, including affecting the business of and/or our relationships with Arconic's customers and suppliers, as well as altering the relationship among tariffs and currencies, including the value of the British pound and the Euro relative to the U.S. dollar. Such disruptions and uncertainties could adversely affect Arconic's financial condition, operating results and cash flows. In addition, Brexit could result in legal uncertainty and potentially divergent national laws and regulations as new legal relationships between the United Kingdom and the European Union are established. The ultimate effects of Brexit on Arconic will also depend on the terms of any agreements the United Kingdom and the European Union make to retain access to each other's respective markets either during a transitional period or more permanently.

Arconic may not achieve some or all of the expected benefits of the Separation, and failure to realize such benefits in a timely manner may materially adversely affect Arconic's business.

Arconic may be unable to achieve the full strategic and financial benefits expected to result from the Separation, or such benefits may be delayed or not occur at all. The Separation is expected to provide the following benefits, among others: (i) enabling the management of each company to pursue more effectively its own distinct operating priorities and strategies, to focus on strengthening its core business and its unique needs, and to pursue distinct and targeted opportunities for long-term growth and profitability; (ii) permitting each company to allocate its financial resources to meet the unique needs of its own business, allowing each company to intensify its focus on its distinct strategic priorities and to pursue more effectively its own distinct capital structures and capital allocation strategies; (iii) allowing each company to articulate more effectively a clear investment thesis to attract a long-term investor base suited to its business and providing investors with two distinct and targeted investment opportunities; (iv) creating an independent equity currency tracking each company's underlying business, affording Arconic and Alcoa Corporation direct access to the capital markets and facilitating each company's ability to consummate future acquisitions or other restructuring transactions utilizing its common stock; (v) allowing each company more consistent application of incentive structures and targets, due to the common nature of the underlying businesses; and (vi) separating and simplifying the structures required to manage two distinct and differing underlying businesses.

Arconic may not achieve these and other anticipated benefits for a variety of reasons, including, among others: (i) Arconic may be more susceptible to market fluctuations and other adverse events than if Alcoa Corporation were still a part of the Company because Arconic's business is less diversified than it was prior to the completion of the Separation; and (ii) as a smaller, independent company, Arconic may be unable to obtain certain goods, services and technologies at prices or on terms as favorable as those it obtained prior to completion of the Separation. If Arconic fails to achieve some or all of the benefits expected to result from the Separation, or if such benefits are delayed, it

could have a material adverse effect on Arconic’s competitive position, business, financial condition, results of operations and cash flows.

Table of Contents

Alcoa Corporation may fail to perform under various transaction agreements that were executed as part of the Separation.

In connection with the Separation, Arconic and Alcoa Corporation entered into a Separation and Distribution Agreement and also entered into various other agreements, including a Tax Matters Agreement, an Employee Matters Agreement, 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. The Separation and Distribution Agreement, the Tax Matters Agreement and the Employee Matters Agreement, together with the documents and agreements by which the internal reorganization of the Company prior to the Separation was effected, determined the allocation of assets and liabilities between the companies following the Separation for those respective areas and included any necessary indemnifications related to liabilities and obligations. Arconic will rely on Alcoa Corporation to satisfy its performance and payment obligations under these agreements. If Alcoa Corporation is unable or unwilling to satisfy its obligations under these agreements, including its indemnification obligations, we could incur operational difficulties and/or losses.

In connection with the Separation, Alcoa Corporation has agreed to indemnify Arconic for certain liabilities and Arconic has agreed to indemnify Alcoa Corporation for certain liabilities. If Arconic is required to pay under these indemnities to Alcoa Corporation, Arconic's financial results could be negatively impacted. The Alcoa Corporation indemnity may be insufficient to hold Arconic harmless from the full amount of liabilities for which Alcoa Corporation will be allocated responsibility, and Alcoa Corporation may be unable to satisfy its indemnification obligations in the future.

Pursuant to the Separation and Distribution Agreement and certain other agreements with Alcoa Corporation, Alcoa Corporation has agreed to indemnify Arconic for certain liabilities, and Arconic has agreed to indemnify Alcoa Corporation for certain liabilities, in each case for uncapped amounts. Indemnities that Arconic may be required to provide Alcoa Corporation are not subject to any cap, may be significant and could negatively impact Arconic's business. Third parties could also seek to hold Arconic responsible for any of the liabilities that Alcoa Corporation has agreed to retain. Any amounts Arconic is required to pay pursuant to these indemnification obligations and other liabilities could require Arconic to divert cash that would otherwise have been used in furtherance of the Company's operating business. Further, the indemnity from Alcoa Corporation may be insufficient to protect Arconic against the full amount of such liabilities, and Alcoa Corporation may be unable to satisfy its indemnification obligations fully. Moreover, even if Arconic ultimately succeeds in recovering from Alcoa Corporation any amounts for which Arconic is held liable, Arconic may be temporarily required to bear such losses. Each of these risks could negatively affect Arconic's business, results of operations and financial condition.

The Separation could result in substantial tax liability.

It was a condition to the Distribution that (i) the private letter ruling from the Internal Revenue Service (the "IRS") regarding certain U.S. federal income tax matters relating to the Separation and the Distribution received by Arconic remain valid and be satisfactory to Arconic's Board of Directors and (ii) Arconic receive an opinion of its outside counsel, satisfactory to the Board of Directors, 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, under Sections 355 and 368(a)(1)(D) of the Internal Revenue Code of 1986, as amended (the "Code"). Both of these conditions were satisfied prior to the Distribution. However, the IRS private letter ruling and the opinion of counsel were based upon and relied on, among other things, various facts and assumptions, as well as certain representations, statements and undertakings of Arconic and Alcoa Corporation, including those relating to the past and future conduct of Arconic and Alcoa Corporation. If any of these representations, statements or undertakings is, or becomes, inaccurate or incomplete, or if Arconic or Alcoa Corporation breaches any of its representations or covenants contained in any of the Separation- related agreements and documents or in any documents relating to the IRS private letter ruling and/or the opinion of counsel, the IRS private letter ruling and/or the opinion of counsel may be invalid and the conclusions reached therein could be jeopardized.

Notwithstanding Arconic's receipt of the IRS private letter ruling and the opinion of counsel, the IRS could determine that the Distribution and/or certain related transactions should be treated as taxable transactions for U.S. federal income tax purposes if it determines that any of the representations, assumptions or undertakings upon which the IRS

private letter ruling or the opinion of counsel was based are false or have been violated. In addition, the IRS private letter ruling does not address all of the issues that are relevant to determining whether the Distribution, together with certain related transactions, qualifies as a transaction that is generally tax-free for U.S. federal income tax purposes, and the opinion of counsel represents the judgment of such counsel and is not binding on the IRS or any court and the IRS or a court may disagree with the conclusions in the opinion of counsel. Accordingly, notwithstanding receipt by Arconic of the IRS private letter ruling and the opinion of counsel, there can be no assurance that the IRS will not assert that the Distribution and/or certain related transactions do not qualify for tax-free treatment for U.S. federal income tax purposes or that a court would not sustain such a challenge. In the

event the IRS were to prevail with such challenge, Arconic, Alcoa Corporation and Arconic shareholders could be subject to significant U.S. federal income tax liability.

If the Distribution, together with certain related transactions, fails 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) of the Code, in general, for U.S. federal income tax purposes, Arconic would recognize taxable gain as if it had sold the Alcoa Corporation common stock in a taxable sale for its fair market value and Arconic shareholders who received Alcoa Corporation shares in the distribution would be subject to tax as if they had received a taxable distribution equal to the fair market value of such shares.

Under current U.S. federal income tax law, even if the Distribution, together with certain related transactions, otherwise qualifies for tax-free treatment under Sections 355 and 368(a)(1)(D) of the Code, the Distribution may nevertheless be rendered taxable to Arconic and its shareholders as a result of certain post-Distribution transactions, including certain acquisitions of shares or assets of Arconic or Alcoa Corporation. The possibility of rendering the Distribution taxable as a result of such transactions may limit Arconic's ability to pursue certain equity issuances, strategic transactions or other transactions that would otherwise maximize the value of Arconic's business. Under the Tax Matters Agreement that Arconic entered into with Alcoa Corporation, Alcoa Corporation may be required to indemnify Arconic against any additional taxes and related amounts resulting from (i) an acquisition of all or a portion of the equity securities or assets of Alcoa Corporation, whether by merger or otherwise (and regardless of whether Alcoa Corporation participated in or otherwise facilitated the acquisition), (ii) issuing equity securities beyond certain thresholds, (iii) repurchasing shares of Alcoa Corporation stock other than in certain open-market transactions, (iv) ceasing actively to conduct certain of its businesses, (v) other actions or failures to act by Alcoa Corporation or (vi) any of Alcoa Corporation's representations, covenants or undertakings contained in any of the Separation-related agreements and documents or in any documents relating to the IRS private letter ruling and/or the opinion of counsel being incorrect or violated. However, the indemnity from Alcoa Corporation may be insufficient to protect Arconic against the full amount of such additional taxes or related liabilities, and Alcoa Corporation may be unable to satisfy its indemnification obligations fully. Moreover, even if Arconic ultimately succeeds in recovering from Alcoa Corporation any amounts for which Arconic is held liable, Arconic may be temporarily required to bear such losses.

In addition, Arconic and Arconic's subsidiaries may incur certain tax costs in connection with the Separation, including tax costs resulting from separations in non-U.S. jurisdictions, which may be material. Each of these risks could negatively affect Arconic's business, results of operations and financial condition.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Arconic's principal office is located at 390 Park Avenue, New York, New York 10022-4608. Arconic's corporate center is located at 201 Isabella Street, Pittsburgh, Pennsylvania 15212-5858. The Arconic Technology Center for research and development is located at 100 Technical Drive, New Kensington, Pennsylvania 15069-0001.

Arconic 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.

Arconic believes that its facilities are suitable and adequate for its operations. Although no title examination of properties owned by Arconic has been made for the purpose of this report, the Company knows of no material defects in title to any such properties. See Notes A and H to the financial statements for information on properties, plants and equipment.

Arconic has active plants and holdings under the following segments and in the following geographic areas:

ENGINEERED PRODUCTS AND SOLUTIONS

See the table and related text in the Engineered Products and Solutions Facilities section on page 6 of this report.

GLOBAL ROLLED PRODUCTS

See the table and related text in the Global Rolled Products Facilities section on page 8 of this report.

TRANSPORTATION AND CONSTRUCTION SOLUTIONS

See the table and related text in the Transportation and Construction Solutions section on page 9 of this report.

27

Table of Contents

Item 3. Legal Proceedings.

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

Environmental Matters

Arconic 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, the remediation of the Grasse River in Massena, NY, is discussed in the Environmental Matters section of Note K to the Consolidated Financial Statements under the caption "Environmental Matters" on page 84.

As previously reported, on June 21, 2017, the UK Environment Agency (the "Agency") confirmed that it will prosecute Firth Rixson Metals Limited in Chesterfield (UK) Magistrates Court in relation to an environmental incident that took place on April 22, 2015 at the Company's Glossop UK site. It is alleged that an acid scrubber unit at the site caused a leak into the local river resulting in environmental damage, including the death of approximately 200 fish. Arconic was not successful in persuading the Agency to drop the prosecution in lieu of an enforcement undertaking (a civil remedy) despite the fact that cyanide, a compound not used on the site, had been identified in the samples of water taken at the time. A hearing before the Court was held on September 13, 2017 at which Firth Rixson pled guilty to the underlying offense of allowing a release to occur to the nearby stream. A follow-up hearing was held on December 6, 2017 at which the Court accepted Firth Rixson's guilty plea. The Court categorized the Company's level of culpability as negligent and the level of harm to the environment as level 2 (on a scale of 1 to 4 with 1 being the most serious). The Court fined Firth Rixson £80,000 (converted to approximately $108,355) plus costs of approximately £19,000 (converted to $25,734). The Company paid the fine and costs and accordingly, this matter is now closed and no further reports will be made.

Reynobond PE

As previously reported, on June 13, 2017, the Grenfell Tower in London, UK caught fire resulting in fatalities, injuries and damage. A French subsidiary of Arconic, Arconic Architectural Products SAS (AAP SAS), supplied a product, Reynobond PE, to its customer, a cladding system fabricator, which used the product as one component of the overall cladding system on Grenfell Tower. The fabricator supplied its portion of the cladding system to the façade installer, who then completed and installed the system under the direction of the general contractor. Neither Arconic nor AAP SAS was involved in the design or installation of the system used at the Grenfell Tower, nor did it have a role in any other aspect of the building's refurbishment or original design. Regulatory investigations into the overall Grenfell Tower matter are being conducted, including a criminal investigation by the London Metro Police, a Public Inquiry by the British government and a consumer protection inquiry by a French public authority. AAP SAS has sought and received core participant status in the Public Inquiry. The Company will no longer sell the PE product for architectural use on buildings.

Sullivan v. Arconic Inc. et al. A purported class action complaint was filed on July 18, 2017 in the United States District Court for the Southern District of New York against Arconic Inc., as well as two former Arconic executives and several current and former Arconic directors, and banks that acted as underwriters for Arconic's September 18, 2014 preferred stock offering. The complaint alleges that statements in the registration statement for Arconic's September 18, 2014 preferred stock offering were false and misleading in light of the subsequent Grenfell Tower fire. The complaint also alleges that Arconic's failure to disclose at the time of the offering that it was obtaining significant profits through sales that exposed it to substantial liability violated the federal securities laws. The plaintiffs seek, among other things, unspecified compensatory and rescissory damages and an award of attorney and expert fees and expenses. On August 25, 2017, this case was dismissed by the plaintiff without prejudice and re-filed on September 15, 2017 in the United States District Court for the Western District of Pennsylvania. On February 7, 2018, on motion from certain putative class members, the court consolidated Sullivan and Howard v. Arconic Inc. et al., another case pending in the Western District of Pennsylvania (described below), and appointed lead plaintiffs in the consolidated case.

Howard v. Arconic Inc. et al. A purported class action complaint was filed on August 11, 2017 in the United States District Court for Western District of Pennsylvania against Arconic Inc., and Klaus Kleinfeld. The complaint alleges that Arconic and Mr. Kleinfeld made various false and misleading statements, and omitted to disclose material information, about the Company's business and financial prospects and, specifically, the risks of the Reynobond PE product. The complaint alleges that the statements in Arconic's Form 10-K for the fiscal years ended December 31, 2012, 2013, 2014, 2015 and 2016, its 2012, 2013, 2014, 2015 and 2016 Annual Reports, and its 2016 Annual Highlights Report about management's recognition of its responsibility to conduct the Company's affairs according to the highest standards of personal and corporate conduct and within the laws of the host countries in which it operates, and its failure to disclose that Arconic knowingly supplied highly flammable Reynobond PE cladding panels for use in construction that significantly increased the risk of property damage, injury and death, were false and misleading in violation of the federal securities laws and artificially inflated the prices of Arconic's

28

securities. The plaintiffs seek, among other things, unspecified compensatory damages and an award of attorney and expert fees and expenses. On February 7, 2018, on motion from certain putative class members, the court consolidated Howard and Sullivan v. Arconic Inc. et al., another case pending in the Western District of Pennsylvania (described above), and appointed lead plaintiffs in the consolidated case.

While the Company believes that these cases are without merit and intends to challenge them vigorously, there can be no assurances regarding the ultimate resolution of these matters. Given the preliminary nature of these matters and the uncertainty of litigation, the Company cannot reasonably estimate at this time the likelihood of an unfavorable outcome or the possible loss or range of losses in the event of an unfavorable outcome. The Board of Directors has also received letters, purportedly sent on behalf of shareholders, reciting allegations similar to those made in the federal court lawsuits and demanding that the Board authorize the Company to initiate litigation against members of management, the Board and others. The Board of Directors has appointed a Special Litigation Committee of the Board to review these shareholder demand letters and consider the appropriate course of action. In addition, lawsuits are pending in state court in New York and federal court in Pennsylvania, initiated, respectively, by another purported shareholder and by the Company, concerning the shareholder's claimed right, which the Company contests, to inspect the Company's books and records related to the Grenfell Tower fire and Reynobond PE.

Other Matters

As previously reported, Arconic Inc. and its subsidiaries and former subsidiaries are defendants in lawsuits filed on behalf of persons alleging injury as a result of occupational or other exposure to asbestos. Arconic, its subsidiaries and former subsidiaries have numerous insurance policies over many years that provide coverage for asbestos related claims. Arconic has significant insurance coverage and believes that Arconic's 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 the Company.

Tax

Pursuant to the Tax Matters Agreement, dated as of October 31, 2016, entered into between the Company and Alcoa Corporation in connection with the Separation, the Company shares responsibility with Alcoa Corporation for, and Alcoa Corporation has agreed to partially indemnify the Company with respect to, the following matter.

As previously reported, 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 the Company. An appeal of this assessment in Spain's Central Tax Administrative Court by the Company was denied in October 2013. In December 2013, the Company filed an appeal of the assessment in Spain's National Court.

On January 16, 2017, Spain's National Court issued a decision in favor of the Company related to the assessment received in September 2010. The Spanish Tax Administration did not file an appeal within the applicable period. Based on this decision and recent confirming correspondence from the Spanish Tax Administration, the matter is now closed. The Company will not be responsible for any assessment related to the 2003 through 2005 tax years.

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, the Company filed an appeal of this second assessment in Spain's Central Tax Administrative Court, which was denied in January 2015. The Company filed an appeal of this second assessment in Spain's National Court in March 2015. Spain's National Court has not yet rendered a decision related to the assessment received in July 2013. The assessment for the 2006 through 2009 tax years is $155 million (€130 million), including interest.

The Company believes it has meritorious arguments to support its tax position and intends to vigorously litigate the assessments through Spain's court system. However, in the event the Company is unsuccessful, a portion of the assessments may be offset with existing net operating losses available to the Spanish consolidated tax group, which would be shared between the Company and Alcoa Corporation as provided for in the Tax Matters Agreement. Additionally, while the tax years 2010 through 2013 are closed to audit, it is possible that the Company may receive similar assessments for tax years subsequent to 2013. At this time, the Company is unable to reasonably predict an ultimate outcome for this matter.

Matters Previously Reported – Alcoa Corporation

We have included the matters discussed below in which the Company remains party to proceedings relating to Alcoa Corporation in accordance with SEC regulations. The Separation and Distribution Agreement, dated October 31, 2016, entered into between the Company and Alcoa Corporation in connection with the Separation, provides for cross-indemnities between

Table of Contents

the Company and Alcoa Corporation for claims subject to indemnification. The Company does not expect any of such matters to result in a net claim against it.

St. Croix Proceedings

Abednego and Abraham cases. As previously reported, on January 14, 2010, Arconic was served with a multi-plaintiff action complaint involving several thousand individual persons claiming to be residents of St. Croix who are alleged to have suffered 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 Arconic 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.

Also as previously reported, on March 1, 2012, Arconic 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.

Arconic 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 Arconic 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. On July 7, 2017, the Court issued an order and associated memoranda on plaintiff's multiple motions for extension of time to file the individual Complaints. Following the court's July 7, 2017 order, a total of 429 complaints were filed and accepted by the court by the deadline of July 30, 2017 (and consolidated into the Red Dust Claims docket (Master Case No.: SX-15-CV-620)). These complaints include claims of about 1,260 individual plaintiffs. As a result of the devastation caused by two hurricanes, court operations were suspended until very recently. On December 11, 2017, the court issued a new scheduling order and further set a scheduling conference for January 18, 2018. At that conference, the court set the next status conference for late July 2018.

Other Contingencies

In addition to the matters discussed above, various other lawsuits, claims, and proceedings have been or may be instituted or asserted against Arconic, including those pertaining to environmental, product liability, safety and health, employment and tax matters. While the amounts claimed in these other matters may be substantial, the ultimate liability cannot currently 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 results of operations, financial position, or cash flows of the Company.

Item 4. Mine Safety Disclosures.

Not applicable.

Table of Contents

PART II

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

The Company's common stock is listed on the New York Stock Exchange. Prior to the Separation of Alcoa Corporation from the Company, the Company's common stock traded under the symbol "AA." In connection with the separation, on November 1, 2016, the Company changed its stock symbol and its common stock began trading under the symbol "ARNC."

On October 5, 2016, the Company's common shareholders approved a 1-for-3 reverse stock split of the Company's outstanding and authorized shares of common stock (the "Reverse Stock Split"). As a result of the Reverse Stock Split, every three shares of issued and outstanding common stock were combined into one issued and outstanding share of common stock, without any change in the par value per share. The Reverse Stock Split reduced the number of shares of common stock outstanding from approximately 1.3 billion shares to approximately 0.4 billion shares, and proportionately decreased the number of authorized shares of common stock from 1.8 billion to 0.6 billion shares. The Company's common stock began trading on a Reverse Stock Split-adjusted basis on October 6, 2016.

On November 1, 2016, the Company completed the Separation of its business into two independent, publicly traded companies: the Company and Alcoa Corporation. The Separation was effected by means of a pro rata distribution by the Company of 80.1% of the outstanding shares of Alcoa Corporation common stock to the Company's shareholders. The Company's shareholders of record as of the close of business on October 20, 2016 (the "Record Date") received one share of Alcoa Corporation common stock for every three shares of the Company's common stock held as of the Record Date. The Company retained 19.9% of the outstanding common stock of Alcoa Corporation immediately following the Separation. See disposition of retained shares in Note C to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

The following table sets forth, for the periods indicated, the high and low sales prices and quarterly dividend amounts per share of the Company's common stock as reported on the New York Stock Exchange, adjusted to take into account the Reverse Stock Split effected on October 6, 2016. The prices listed below for those dates prior to November 1, 2016 reflect stock trading prices of Alcoa Inc. prior to the Separation of Alcoa Corporation from the Company on November 1, 2016, and therefore are not comparable to the Company's post-Separation prices.

	2017			2016		
Quarter	High	Low	Dividend	High	Low	Dividend
First	$30.69	$18.64	$ 0.06	$30.66	$18.42	$ 0.09
Second	28.65	21.76	0.06	34.50	26.34	0.09
Third	26.84	22.67	0.06	32.91	27.09	0.09
Fourth (Separation occurred on November 1, 2016)	27.85	22.74	0.06	32.10	16.75	0.09
Year	$30.69	$18.64	$ 0.24	$34.50	$16.75	$ 0.36

The number of holders of record of common stock was approximately 12,271 as of February 16, 2018.

Table of Contents

Stock Performance Graph

The following graph compares the most recent five-year performance of the Company’s common stock with (1) the Standard & Poor’s 500® Index and (2) the Standard & Poor’s 500® Materials Index, a group of 25 companies categorized by Standard & Poor’s as active in the “materials” market sector. The graph assumes, in each case, an initial investment of $100 on December 31, 2012, and the reinvestment of dividends. Historical prices prior to the separation of Alcoa Corporation from the Company on November 1, 2016, have been adjusted to reflect the value of the Separation transaction. The graph, table and related information shall not be deemed to be “filed” with the SEC, nor shall such information be incorporated by reference into future filings under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that the Company specifically incorporates it by reference into such filing.

Copyright© 2018 Standard & Poor's, a division of S&P Global. All rights reserved.

As of December 31,	2012	2013	2014	2015	2016	2017
Arconic Inc.	$100	$124.15	$186.02	$117.48	$99.40	$147.47
S&P 500® Index	100	132.39	150.51	152.59	170.84	208.14
S&P 500® Materials Index	100	125.60	134.28	123.03	143.56	177.79

Table of Contents

Item 6. Selected Financial Data.

The separation of Alcoa Inc. into two standalone, publicly-traded companies, Arconic Inc. (the new name for Alcoa Inc.) and Alcoa Corporation, became effective on November 1, 2016 (the "Separation Transaction"). The financial results of Alcoa Corporation for all periods prior to the Separation Transaction have been retrospectively reflected in the Statement of Consolidated Operations as discontinued operations and, as such, have been excluded from continuing operations and segment results for 2016 and all prior periods presented prior to the Separation Transaction. The cash flows related to Alcoa Corporation have not been segregated and are included in the Statement of Consolidated Cash Flows for 2016 and all prior periods presented.

(dollars in millions, except per-share amounts)

For the year ended December 31,	2017	2016	2015	2014	2013
Sales	$12,960	$12,394	$12,413	$12,542	$11,997
Amounts attributable to Arconic:					
Loss from continuing operations[1]	$(74)	$(1,062)	$(157)	$(61)	$(63)
Income (loss) from discontinued operations[2]	—	121	(165)	329	(2,222)
Net (loss) income	$(74)	$(941)	$(322)	$268	$(2,285)
(Loss) earnings per share attributable to Arconic common shareholders:[3]					
Basic:					
Loss from continuing operations	$(0.28)	$(2.58)	$(0.54)	$(0.21)	$(0.18)
Income (loss) from discontinued operations	—	0.27	(0.39)	0.85	(6.23)
Net (loss) income	$(0.28)	$(2.31)	$(0.93)	$0.64	$(6.41)
Diluted:					
Loss from continuing operations	$(0.28)	$(2.58)	$(0.54)	$(0.21)	$(0.18)
Income (loss) from discontinued operations	—	0.27	(0.39)	0.84	(6.23)
Net (loss) income	$(0.28)	$(2.31)	$(0.93)	$0.63	$(6.41)
Cash dividends declared per common share[3]	$0.24	$0.36	$0.36	$0.36	$0.36
Total assets	18,718	20,038	36,477	37,298	35,623
Total debt	6,844	8,084	8,827	8,445	7,826
Cash provided from operations[4]	701	870	1,582	1,674	1,578
Capital expenditures:					
Capital expenditures—continuing operations	596	827	789	775	626
Capital expenditures—discontinued operations	—	298	391	444	567
Total capital expenditures	$596	$1,125	$1,180	$1,219	$1,193

(1) Calculated from the accompanying Statement of Consolidated Operations as Loss from continuing operations after income taxes less Net income from continuing operations attributable to noncontrolling interests.

(2) Calculated from the accompanying Statement of Consolidated Operations as Income (loss) from discontinued operations after income taxes less Net income from discontinued operations attributable to noncontrolling interests.

(3) Per share data for all periods presented has been retroactively restated to reflect the 1-for-3 reverse stock split which became effective on October 6, 2016 (see Note O to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K).

(4) Cash provided from operations has not been restated for discontinued operations presentation for 2016 and all prior periods presented (see Basis of Presentation section of Note A to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K).

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 and Notes in Part II Item 8 of this Form 10-K.

Table of Contents

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

(dollars in millions, except per-share amounts and aluminum prices; shipments in thousands of metric tons [kmt])

Overview

Our Business

Arconic ("Arconic" or the "Company") is a global leader in lightweight metals engineering and manufacturing. Arconic's innovative, multi-material products, which include aluminum, titanium, and nickel, are used worldwide in aerospace, automotive, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications.

Arconic is a global company operating in 18 countries. Based upon the country where the point of sale occurred, the United States and Europe generated 63% and 26%, respectively, of Arconic's sales in 2017. In addition, Arconic has operating activities in Brazil, Canada, China, Japan, and Russia, among others. 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.

Management Review of 2017 and Outlook for the Future

In 2017, Arconic's revenues increased 5% over 2016 as a result of higher volumes across all segments including strong volume growth in our aerospace, automotive, and commercial transportation markets, and higher aluminum pricing primarily impacting the Global Rolled Products segment, partially offset by the planned ramp down and Toll Processing and Services Agreement (the "Toll Processing Agreement") relating to the Company's North America packaging business in Tennessee, and unfavorable product pricing and mix. In the segments, Adjusted EBITDA increased over 2016 as a result of the aforementioned higher volumes and continued focus on net cost savings that more than offset negative factors including product pricing pressures, ramp up costs associated with new aerospace engine parts, aerospace customer inventory destocking and reduced build rates, and higher aluminum prices.

Loss from continuing operations after income taxes was $74 in 2017 compared to $1,062 in 2016. There were several significant items that impacted the fourth quarter of 2017. The Company recorded a charge of $719 ($719 pre-tax) associated with the impairment of goodwill in the forgings and extrusions business and a charge of $41 ($41 pre-tax) for the impairment of assets in the Latin America extrusions business in conjunction with an agreement to sell the business. Also in the fourth quarter of 2017, the Company recorded income of $97 ($106 pre-tax) associated with the reversal of liabilities for a contingent earn-out and a separation-related guarantee. The Company was also impacted by the Tax Cuts and Jobs Act enacted on December 22, 2017 ("the 2017 Act"), and recorded a provisional charge of $272 associated with the revaluation of U.S. net deferred tax assets due to a decrease in the U.S. corporate tax rate from 35% to 21%, as well as a one-time transition tax on the non-previously taxed earnings and profits of certain U.S.-owned foreign corporations as of December 31, 2017. The impact of the 2017 Act provisions will be updated over the course of 2018, in accordance with guidance issued by the Securities and Exchange Commission which has provided a one-year measurement period to finalize the accounting impacts of the new legislation, and as additional guidance is issued and the new law is further analyzed.

Additionally during 2017, the Company disposed of its retained interest in Alcoa Corporation common stock and recorded gains of $405 ($518 pre-tax), and the Company redeemed debt of $1,250, recording charges of $49 ($76 pre-tax) primarily for the premium paid for the early redemption of the debt. See discussion that follows under Results of Operations below for further information on 2017 results.

Management continued its focus on liquidity and cash flows as well as improving its operating performance through cost reductions, streamlined organizational structures, margin enhancement, and profitable revenue generation. Management has also intensified its focus on capital efficiency. This focus and the related results enabled Arconic to end 2017 with a solid financial position.

Table of Contents

The following financial information reflects certain key measures of Arconic's 2017 results:

- Sales of $12,960 and Net loss of $74, or 0.28 per diluted share;
- Consolidated adjusted EBITDA of $1,761, an increase of 17% from 2016[1];
- Cash from operations of $701;
- Capital expenditures of $596;
- Cash on hand at the end of the year of $2,150; and
- Total debt of $6,844, a decrease in total debt of $1,240 from 2016.

(1) For the reconciliation of Net loss attributable to Arconic to Consolidated adjusted EBITDA and related information, see page 45.

In 2018, management projects that sales will be up 3% to 6% based on volume and share gains, as well as higher aluminum prices. In aerospace, it is anticipated that the favorable impact of share gains on new platforms and engines will be somewhat offset by lower pricing and the mix of wide-body and narrow-body aircraft produced. Management also expects strong growth in automotive sheet and commercial transportation markets, particularly due to North American and European heavy-duty truck production increases, while the industrial gas turbine market will continue declining throughout 2018.

Looking ahead over the next year, management will continue to focus on improving operating performance through cost reductions, margin enhancement, and profitable revenue generation. As part of this effort, the Company made the decision to freeze its U.S. defined benefit pension plans for all U.S.-based salaried and non-bargained hourly employees effective April 1, 2018, and the Company intends to relocate its global headquarters by the end of 2018 out of New York City to a more cost-effective location. Management has initiated a review of the Company's strategy and portfolio. Additionally, each of the segments are projected to achieve net cost savings in 2018. As a result, adjusted earnings per share is anticipated to increase and free cash flow is also expected to improve in 2018 through increased focus on driving operational improvements and working capital efficiency.

To further enhance the Company's financial position and return capital to shareholders, Arconic's Board of Directors authorized a share repurchase program of up to $500 of its outstanding common stock and a $500 early debt reduction. Under the share repurchase program, the Company may repurchase shares from time to time, in amounts, at prices, and at such times as the Company deems appropriate. Repurchases will be subject to market conditions, legal requirements and other considerations. The Company is not obligated to repurchase any specific number of shares or to do so at any particular time, and the share repurchase program may be suspended, modified or terminated at any time without prior notice. For the early debt reduction, Arconic intends to redeem in March 2018 all of its outstanding 5.72% Notes due in 2019.

Beginning in the first quarter of 2018, the Company's primary measure of segment performance will change from Adjusted EBITDA to Operating income, which more closely aligns segment performance with Operating income as presented in the Statement of Consolidated Operations. As part of this change, LIFO and metal price lag will be included in the Operating income of the segments.

In conjunction with the implementation of the new accounting guidance on changes to the classification of certain cash receipts and cash payments within the statement of cash flows (effective January 1, 2018 and to be applied retrospectively), specifically as it relates to the requirement to reclassify cash received from net sales of beneficial interest in sold receivables from Cash from operations to Cash provided from investing activities, the Company has changed the calculation of its measure of free cash flow to Cash from operations plus cash received from net sales of beneficial interest in sold receivables, less Capital expenditures. This change to our measure of free cash flow is being implemented to ensure consistent presentation of this measure across all historical periods, once the required accounting guidance reclassification is reflected in our financial results beginning in the first quarter of 2018. The adoption of this accounting change does not reflect a change in our underlying business or activities.

2016 Separation Transaction. On November 1, 2016, the Company completed the separation of its business into two standalone, publicly-traded companies, Arconic Inc. and Alcoa Corporation. Following the Separation Transaction, Arconic comprises the Global Rolled Products (other than the rolling mill in Warrick, Indiana, and the 25.1% equity ownership stake in the Ma'aden Rolling Company), the Engineered Products and Solutions, and the Transportation and Construction Solutions segments. Alcoa Corporation comprises the Alumina and Primary Metals segments, the rolling

mill in Warrick, Indiana, and the 25.1% equity ownership stake in the Ma’aden Rolling Company in Saudi Arabia.

The Separation Transaction was effected by the distribution of 80.1% of the outstanding shares of Alcoa Corporation common stock to the Company's shareholders (the "Distribution"). The Company's shareholders of record as of the close of business on October 20, 2016 (the "Record Date") received one share of Alcoa Corporation common stock for every three shares of the Company's common stock held as of the Record Date. The Company distributed 146,159,428 shares of common stock of Alcoa Corporation in the Distribution and retained 36,311,767 shares, or approximately 19.9% (see disposition of retained shares under Results of Operations below), of the common stock of Alcoa Corporation immediately following the Distribution. As a result of the Distribution, Alcoa Corporation is now an independent public company trading under the symbol "AA" on the New York Stock Exchange, and the Company trades under the symbol "ARNC" on the New York Stock Exchange.

On October 31, 2016, Arconic entered into several agreements with Alcoa Corporation that govern the relationship of the parties following the completion of the Separation Transaction. These agreements include the following: Separation and Distribution Agreement, Transition Services Agreement, Tax Matters Agreement, Employee Matters Agreement, Alcoa Corporation to Arconic Inc. Patent, Know-How, and Trade Secret License Agreement, Arconic Inc. to Alcoa Corporation Patent, Know-How, and Trade Secret License Agreement, Alcoa Corporation to Arconic Inc. Trademark License Agreement, Toll Processing and Services Agreement, Master Agreement for the Supply of Primary Aluminum, Massena Lease and Operations Agreement, Fusina Lease and Operations Agreement, and Stockholder and Registration Rights Agreement.

Results of Operations

Earnings Summary

Sales—Sales for 2017 were $12,960 compared with sales of $12,394 in 2016, an increase of $566, or 5%. The increase was the result of strong volume growth in all segments and higher aluminum pricing, partially offset by the planned ramp down and Toll Processing Agreement relating to the Company's North America packaging business in Tennessee in the Global Rolled Products segment, as well as unfavorable product pricing in both the Engineered Products and Solutions and Global Rolled Products segments. Pursuant to the Toll Processing Agreement that Arconic entered into with Alcoa Corporation on October 31, 2016 in connection with the Separation Transaction, Arconic provides can body stock to Alcoa Corporation using aluminum supplied by Alcoa Corporation, resulting in the absence of metal sales in 2017 compared to 2016.

Sales for 2016 were $12,394 compared with sales of $12,413 in 2015, a decline of $19, or less than 1%. The relatively flat performance was the result of a full-year effect of two 2015 acquisitions in the Engineered Products and Solutions segment and automotive volume increases in the Global Rolled Products segment, which were more than offset by the ramp-down of the Tennessee packaging business and the impact of aluminum prices in the Global Rolled Products segment and unfavorable product price and mix across all segments.

Cost of Goods Sold (COGS)—COGS as a percentage of Sales was 79.9% in 2017 compared with 79.2% in 2016. The increase was primarily attributable to cost increases, including net higher aluminum prices of $84 and ramp-up costs related to new commercial aerospace engines, and a lower margin product mix, partially offset by net cost savings.

COGS as a percentage of Sales was 79.2% in 2016 compared with 81.4% in 2015. The primary drivers in the improvement in COGS as a percentage of sales were productivity gains across all segments and higher volume in the Engineered Products and Solutions segment due to the benefit of a full-year effect of two 2015 acquisitions. This benefit was somewhat offset by overall cost increases across all segments and unfavorable product pricing and mix impacts primarily in the Engineered Products and Solutions and Global Rolled Products segments.

Selling, General Administrative, and Other Expenses (SG&A) — SG&A expenses were $731, or 5.6% of Sales, in 2017 compared with $942, or 7.6% of Sales, in 2016. The decrease in SG&A was the result of expenses related to the Separation Transaction of $193 in 2016 compared to $18 in 2017, as well as ongoing overhead cost reduction efforts (see Restructuring and Other Charges below), partially offset by proxy, advisory and governance-related costs of $58, external legal and other advisory costs related to Grenfell Tower of $14 and costs associated with the Company's Delaware reincorporation of $3 in 2017.

,

SG&A expenses were $942, or 7.6% of Sales, in 2016 compared with $765, or 6.2% of Sales, in 2015. The increase in SG&A was primarily due to costs related to the Separation Transaction of $193 in 2016, an increase of $169 from

2015 separation costs.
Research and Development Expenses (R&D)—R&D expenses were $111 in 2017 compared with $132 in 2016 and $169 in 2015. The decrease in 2017 as compared to 2016 was driven by lower spending. The decrease in 2016 as compared to 2015 was driven by the decrease in spending for the Micromill™ in San Antonio, TX which was completed in 2015 and began production of automotive sheet, on a limited basis, for the Global Rolled Products segment.

Table of Contents

Provision for Depreciation and Amortization (D&A)—The provision for D&A was $551 in 2017 compared with $535 in 2016. The increase of $16, or 3%, was primarily due to capital projects placed into service. The provision for D&A was $535 in 2016 compared with $508 in 2015. The increase of $27 related to a full year of D&A related to two acquisitions which occurred during 2015 (see Engineered Products and Solutions under Segment Information below).
Impairment of Goodwill—In 2017, the Company recognized an impairment of goodwill of $719, related to the annual impairment review of the Arconic Forgings and Extrusions business. In 2015, the Company recognized an impairment of goodwill of $25 related to the annual impairment review of the soft alloy extrusion business in Brazil. See Goodwill under Critical Accounting Policies and Estimates 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
Asset impairments	$58	$80	$—
Layoff costs	64	70	97
Net loss on divestitures of businesses	57	3	136
Other	(3)	27	(11)
Reversals of previously recorded layoff costs	(11)	(25)	(8)
Restructuring and other charges	$165	$155	$214

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, Arconic recorded Restructuring and other charges of $165 ($143 after-tax), which were comprised of the following components: $69 ($47 after-tax) for layoff costs related to cost reduction initiatives including the separation of approximately 880 employees (400 in the Engineered Products and Solutions segment, 245 in the Global Rolled Products segment, 135 in the Transportation and Construction Solutions segment and 100 in Corporate), a charge of $60 ($60 after-tax) related to the sale of the Fusina, Italy rolling mill; a charge of $41 ($41 after-tax) for the impairment of assets associated with the agreement to sell the Latin America Extrusions business (see Note F to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K); a net benefit of $6 ($4 after-tax), for the reversal of forfeited executive stock compensation of $13, partially offset by a charge of $7 for the related severance; a net charge of $12 ($7 after-tax) for other miscellaneous items; and a favorable benefit of $11 ($8 after-tax) for the reversal of a number of small layoff reserves related to prior periods.
As of December 31, 2017, approximately 300 of the 880 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 $28 were made against layoff reserves related to 2017 restructuring programs.
2016 Actions. In 2016, Arconic recorded Restructuring and other charges of $155 ($114 after-tax), which were comprised of the following components: $57 ($46 after-tax) for costs related to the exit of certain legacy Firth Rixson operations in the U.K.; $37 ($24 after-tax) for exit costs related to the decision to permanently shut down a can sheet facility; $20 ($14 after-tax) for costs related to the closures of five facilities, primarily in the Transportation and Construction Solutions segment and Engineered Products and Solutions segment, including the separation of approximately 280 employees; $53 ($33 after-tax) for other layoff costs, including the separation of approximately 1,315 employees (1,045 in the Engineered Products and Solutions segment, 210 in Corporate, 30 in the Global Rolled Products segment and 30 in the Transportation and Construction Solutions segment); $11 ($8 after-tax) for other miscellaneous items, including $3 ($2 after-tax) for the sale of Remmele Medical; $2 ($1 after-tax) for a pension settlement; and $25 ($12 after-tax) for the reversal of a number of small layoff reserves related to prior periods.
In 2016, management made the decision to exit certain legacy Firth Rixson facilities in the U.K. Costs related to these actions included asset impairments and accelerated depreciation of $51; other exit costs of $4; and $2 for the separation of 60 employees.

Also in 2016, management approved the shutdown and demolition of the can sheet facility in Tennessee upon completion of the Toll Processing Agreement with Alcoa Corporation (see Global Rolled Products under Segment Information below). Costs related to this action included $21 in asset impairments; $9 in other exit costs; and $7 for the separation of 145 employees. The other exit costs of $9 represent $4 in asset retirement obligations and $3 in environmental remediation, both of which were triggered by the decision to permanently shut down and demolish the can sheet facility in Tennessee, and $2 in other exit costs.

Table of Contents

As of December 31, 2017, approximately 1,280 of the 1,700 (previously 1,750) employees were separated. The total number of employees associated with 2016 restructuring programs was updated to reflect employees, who were initially identified for separation, accepting other positions within Arconic and natural attrition. The remaining separations for 2016 restructuring programs are expected to be completed by the end of 2018. In 2017 and 2016, cash payments of $26 and $16 were made against layoff reserves related to 2016 restructuring programs.

2015 Actions. In 2015, Arconic recorded Restructuring and other charges of $214 ($192 after-tax), which were comprised of the following components: a $136 ($134 after-tax) net loss related to the March 2015 divestiture of a rolling mill in Russia and post-closing adjustments associated with the December 2014 divestitures of three rolling mills located in Spain and France; $97 ($70 after-tax) for layoff costs, including the separation of approximately 1,505 employees (590 in the Engineered Products and Solutions segment, 425 in the Transportation and Construction Solutions segment, 400 in Corporate, and 90 in the Global Rolled Products segment); an $18 ($13 after-tax) gain on the sale of land related to one of the rolling mills in Australia that was permanently closed in December 2014; a net charge of $7 ($4 after-tax) for other miscellaneous items; and $8 ($3 after-tax) for the reversal of a number of small layoff reserves related to prior periods.

As of December 31, 2017, the separations associated with the 2015 restructuring programs were essentially complete. In 2017, 2016 and 2015, cash payments of $5, $55 and $18, respectively, were made against layoff reserves related to 2015 restructuring programs.

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

	2017	2016	2015
Engineered Products and Solutions	$30	$78	$46
Global Rolled Products	72	40	121
Transportation and Construction Solutions	52	14	8
Segment total	154	132	175
Corporate	11	23	39
Total restructuring and other charges	$165	$155	$214

Interest Expense—Interest expense was $496 in 2017 compared with $499 in 2016. The decrease of $3, or 1%, was primarily due to lower interest expense resulting from lower outstanding debt, mostly offset by $73 primarily in higher premiums paid in 2017 related to the early redemption of $1,250 in debt. In the second quarter of 2017, Arconic redeemed all of the Company's 6.50% Bonds due 2018 and 6.75% Notes due 2018, and a portion of the Company's 5.72% Notes due 2019 in advance of the respective maturity dates.

Interest expense was $499 in 2016 compared with $473 in 2015. The increase of $26, or 5%, was primarily due to debt issuance costs of $9 that were expensed in connection with the Separation Transaction and costs associated with the early redemption of $750 of 5.55% Notes due February 2017, completed on December 30, 2016, which included a $3 purchase premium, and a full-year of interest related to RTI International Metals, Inc. (RTI) debt of $6.

Other Income, Net—Other income, net was $640 in 2017 compared with $94 in 2016. The increase of $546 was primarily due to the gain on the sale of a portion of Arconic's investment in Alcoa Corporation common stock of $351 (in February 2017, the Company sold 23,353,000 shares of Alcoa Corporation stock at $38.03 per share, which resulted in cash proceeds of $888 and a gain of $351) and the gain of $167 on the Debt-for-Equity Exchange (in April and May 2017, the Company acquired a portion of its outstanding notes held by two investment banks (the "Investment Banks") in exchange for cash and the Company's remaining 12,958,767 shares (valued at $35.91 per share) in Alcoa Corporation stock and recorded a gain of $167), income of $25 associated with a higher reversal of a contingent earn-out liability related to the Firth Rixson acquisition (see Note F to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K for additional information), and income of $25 due to the reversal of a liability associated with a separation-related guarantee. The Company was required to provide a guarantee for an Alcoa Corporation electricity contract in the event of an Alcoa Corporation payment default. In the fourth quarter of 2017, Alcoa Corporation announced that it had terminated the electricity contract at its Rockdale Operations and, as a result, Arconic reversed its associated guarantee liability.

Other income, net was $94 in 2016 compared with $28 in 2015. The increase of $66 was mainly the result of a favorable adjustment to the contingent earn-out liability and a post-closing adjustment, both of which related to the acquisition of Firth Rixson of $76, and favorable foreign currency movements of $55. These items were partially offset by the absence of gains on the sales of land in the United States and an equity investment in a China rolling mill of $38 in 2015.

Table of Contents

Income Taxes—Arconic's effective tax rate was 115.7% in 2017 compared with the U.S. federal statutory rate of 35%. The effective tax rate primarily differs from the U.S. federal statutory rate as a result of a $719 impairment of goodwill, a $41 impairment of assets in the Latin America extrusions business, and a $60 charge related to the sale of a rolling mill in Italy that are nondeductible for income tax purposes, a $272 tax charge as a provisional impact of the 2017 Act, and a $23 tax charge for an increase in an uncertain tax position in Germany, partially offset by a $73 tax benefit related to the sale and Debt-for-Equity Exchange of the Alcoa Corporation stock, a $69 tax benefit for the release of U.S. state valuation allowances net of the federal tax benefit, a $27 favorable tax impact associated with a non-taxable earn-out liability adjustment in connection with the Firth Rixson acquisition, and by foreign income taxed in lower rate jurisdictions.

Arconic's effective tax rate was 356.5% in 2016 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs from the U.S. federal statutory rate primarily due to a $1,267 discrete income tax charge for valuation allowances related to the Separation Transaction (see Income Taxes under Critical Accounting Policies and Estimates below), a $95 tax charge associated with the redemption of company-owned life insurance policies whose tax basis was less than the redemption amount resulting in a taxable gain, a $51 net charge for the remeasurement of certain deferred tax assets and liabilities due to tax rate and tax law changes, and a $34 unfavorable tax impact related to certain separation costs which are nondeductible for income tax purposes, somewhat offset by a $39 discrete income tax benefit for the release of valuation allowances in Canada and Russia, a $38 tax benefit related to currency impacts of a distribution of previously taxed income, and a $26 favorable tax impact associated with non-taxable settlement proceeds and earn-out liability adjustments in connection with the Firth Rixson acquisition.

Arconic's effective tax rate was 185.2% in 2015 compared with the U.S. federal statutory rate of 35%. The effective tax rate differs from the U.S. federal statutory rate principally due to a $190 discrete income tax charge for valuation allowances on certain deferred tax assets in the U.S. and Iceland (see Income Taxes under Critical Accounting Policies and Estimates below), a $25 impairment of goodwill that is nondeductible for income tax purposes, a loss on the sale of a rolling mill in Russia for which no tax benefit was recognized, and a $34 net discrete income tax charge as described below.

In 2015, Alcoa World Alumina and Chemicals (AWAC), the former joint venture owned 60% by Arconic and 40% by Alumina Limited, recognized an $85 discrete income tax charge for a valuation allowance on certain deferred tax assets in Suriname (see Income Taxes under Critical Accounting Policies and Estimates below), which were related mostly to employee benefits and tax loss carryforwards. Arconic also had a $51 deferred tax liability related to its 60%-share of these deferred tax assets that was written off as a result of the valuation allowance recognized by AWAC.

Management anticipates that the effective tax rate in 2018 will be between 27% and 29%. However, business portfolio actions, changes in the current economic environment, tax legislation or rate changes, currency fluctuations, ability to realize deferred tax assets, movements in stock price impacting tax benefits or deficiencies on stock-based payment awards, and the results of operations in certain taxing jurisdictions may cause this estimated rate to fluctuate. It is also expected that continuing analysis of the 2017 Act, as well as additional guidance as it is issued, will have an impact on the estimated rate.

Loss from continuing operations after income taxes and noncontrolling interests—Loss from continuing operations after income taxes and noncontrolling interests was $74 for 2017, or $0.28 per diluted share, compared to $1,062 for 2016, or $2.58 per share. The increase in results of $988 was primarily attributable to charges for tax valuation allowances and costs related to the Separation Transaction in 2016; a gain of $238 ($351 pre-tax) on the sale of a portion of Arconic's investment in Alcoa Corporation common stock and a gain of $167 ($167 pre-tax) on the Debt-for-Equity Exchange in 2017; income of $25 ($25 pre-tax) associated with a higher reversal of a contingent earn-out liability related to the Firth Rixson acquisition and income of $16 ($25 pre-tax) due to the reversal of a liability associated with a separation-related guarantee; net cost savings; and higher sales volumes across all segments; partially offset by a charge for goodwill impairment of $719 ($719 pre-tax); a charge related to the 2017 Act of $272; $47 ($73 pre-tax) of higher premiums paid for the early redemption of debt in 2017; higher LIFO inventory expense associated with higher aluminum prices; charges for asset impairments of the Fusina, Italy rolling mill of $60 ($60 pre-tax) and Latin America extrusions business of $41 ($41 pre-tax) based on the sale of these businesses; unfavorable product pricing,

primarily in aerospace; and lower-margin product mix.
Loss from continuing operations after income taxes and noncontrolling interests was $1,062 for 2016, or $2.58 per diluted share, compared to $157 for 2015, or $0.54 per share. The decrease in results of $905 was primarily due to charges for tax valuation allowances and costs related to the Separation Transaction, primarily offset by a full-year effect of 2015 acquisitions (see Engineered Products and Solutions under Segment Information below) and net cost savings across all segments.

Segment Information

Arconic's operations consist of three worldwide reportable segments: Engineered Products and Solutions, Global Rolled Products and Transportation and Construction Solutions (see below). In the first quarter of 2017, the Company changed its primary measure of segment performance from After-tax operating income (ATOI) to Adjusted earnings before interest, tax,

depreciation, and amortization (“Adjusted EBITDA”). Segment performance under Arconic’s management reporting system is evaluated based on a number of factors; however, the primary measure of performance in 2017 was Adjusted EBITDA. Arconic’s definition of Adjusted EBITDA is net margin plus an add-back for depreciation 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 and amortization. Prior period information has been recast to conform to current year presentation. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies. Certain items are excluded from segment Adjusted EBITDA such as: Impairment of goodwill; Restructuring and other charges; the impact of LIFO inventory accounting; metal price lag (the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by the respective segment - generally, when the price of metal increases, metal price lag is favorable, and when the price of metal decreases, metal price lag is unfavorable); corporate expense (general administrative and selling expenses of operating the corporate headquarters and other global administrative facilities and corporate research and development expenses); and other items, including intersegment profit eliminations.

Beginning in the first quarter of 2018, the Company's primary measure of segment performance will change from Adjusted EBITDA to Operating income, which more closely aligns segment performance with Operating income as presented in the Statement of Consolidated Operations. As part of this change, LIFO and metal price lag will be included in the Operating income of the segments.

Adjusted EBITDA for all reportable segments totaled $2,144 in 2017, $2,063 in 2016, and $1,894 in 2015. The following information provides sales and Adjusted EBITDA for each reportable segment, as well as certain shipment and realized price data for Global Rolled Products, for each of the three years in the period ended December 31, 2017. See Note N to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K for additional information.

Engineered Products and Solutions

	2017	2016	2015
Third-party sales	$5,935	$5,728	$5,342
Adjusted EBITDA	$1,224	$1,195	$1,111

The Engineered Products and Solutions segment produces products that are used primarily in the aerospace (commercial and defense), industrial, commercial transportation, and power generation end markets. Such products include fastening systems (titanium, steel, and nickel superalloys) and seamless rolled rings (mostly nickel superalloys); investment castings (nickel superalloys, titanium, and aluminum), including airfoils and forged jet engine components (e.g., jet engine disks), and extruded, machined and formed aircraft parts (titanium and aluminum), all of which are sold directly to customers and through distributors. More than 75% of the third-party sales in this segment are from the aerospace end market. A small part of this segment also produces various forged, extruded, and machined metal products (titanium, aluminum and steel) for the oil and gas, automotive, and land and sea defense end markets. Seasonal decreases in sales are generally experienced in the third quarter of the year due to the European summer slowdown across all end markets. Generally, the sales and costs and expenses of this segment are transacted in the local currency of the respective operations, which are mostly the U.S. dollar, British pound and the euro.

In April 2016, Arconic completed the sale of the Remmele Medical business that was part of the RTI acquisition (see below) and manufactured precision-machined metal products for customers in the minimally invasive surgical device and implantable device markets. Remmele Medical generated third-party sales of $23 from January 1, 2016 through the divestiture date, and, at the time of the divestiture, had approximately 330 employees.

In July 2015, Arconic completed the acquisition of RTI, a global supplier of titanium and specialty metal products and services for the commercial aerospace, defense, energy, and medical device end markets. The purpose of the acquisition was to expand Arconic’s range of titanium offerings and add advanced technologies and materials, primarily related to the aerospace end market. In 2014, RTI generated net sales of $794 and had approximately 2,600 employees. The operating results and assets and liabilities of RTI have been included within the Engineered Products and Solutions segment since the date of acquisition.

In March 2015, Arconic completed the acquisition of TITAL, a privately held aerospace castings company with approximately 650 employees (at the time of the acquisition) based in Germany. TITAL produces aluminum and titanium investment casting products for the aerospace and defense end markets. In 2014, TITAL generated sales of approximately $100. The purpose of the acquisition was to capture increasing demand for advanced jet engine components made of titanium, establish titanium-casting capabilities in Europe, and expand existing aluminum casting capacity. The operating results and assets and liabilities of TITAL have been included within the Engineered Products and Solutions segment since the date of acquisition.

Table of Contents

Third-party sales for the Engineered Products and Solutions segment increased $207, or 4%, in 2017 compared with 2016, primarily attributable to volume growth in both aerospace engines and airframes, partially offset by lower product pricing, primarily in the aerospace end market, and the absence of sales of $23 related to the Remmele Medical business, which was sold in April 2016.
Third-party sales for this segment increased $386, or 7%, in 2016 compared with 2015, primarily attributable to higher third-party sales of the two acquired businesses of $457, primarily related to the aerospace end market, and increased demand from the industrial gas turbine end market, partially offset by lower volumes in the oil and gas end market and commercial transportation end market as well as pricing pressures in aerospace.
Adjusted EBITDA for the Engineered Products and Solutions segment increased $29, or 2%, in 2017 compared with 2016, primarily on higher volumes and net cost savings, partially offset by product pricing pressures, ramp up costs associated with increasing production volumes of new aerospace engine parts, and a lower margin product mix.
Adjusted EBITDA for this segment increased $84, or 8%, in 2016 compared with 2015, primarily on net cost savings across all businesses as well as the volume increase from both the RTI acquisition and organic revenue growth, partially offset by a lower margin product mix and pricing pressures in the aerospace end market.
In 2018, demand in the commercial aerospace end market is expected to remain strong, driven by the ramp-up of new aerospace engine platforms. Demand in the defense end market is expected to grow due to the continuing ramp-up of certain aerospace programs. Additionally, net cost savings are anticipated while declines in the industrial gas turbine market and pricing pressure across all markets is likely to continue.
Global Rolled Products[(1)]

	2017	2016	2015
Third-party sales	$4,992	$4,864	$5,253
Intersegment sales	148	118	125
Total sales	$5,140	$4,982	$5,378
Adjusted EBITDA	$599	$577	$512
Third-party aluminum shipments (kmt)	1,197	1,339	1,375
Average realized price per metric ton of aluminum [(2)]	$4,171	$3,633	$3,820

(1) Excludes the Warrick, IN rolling operations and the equity interest in the rolling mill at the joint venture in Saudi Arabia, both of which were previously part of the Global Rolled Products segment but became part of Alcoa Corporation effective November 1, 2016.

(2) Generally, average realized price per metric ton of aluminum includes two elements: a) the price of metal (the underlying base metal component based on quoted prices from the LME, plus a regional premium which represents the incremental price over the base LME component that is associated with physical delivery of metal to a particular region), and b) the conversion price, which represents the incremental price over the metal price component that is associated with converting primary aluminum into sheet and plate. In this circumstance, the metal price component is a pass-through to this segment's customers with limited exception (e.g., fixed-priced contracts, certain regional premiums).

The Global Rolled Products segment produces aluminum sheet and plate for a variety of end markets. Sheet and plate is sold directly to customers and through distributors related to the aerospace, automotive, commercial transportation, packaging, building and construction, and industrial products (mainly used in the production of machinery and equipment and consumer durables) end markets. A small portion of this segment also produces aseptic foil for the packaging end market. While the customer base for flat-rolled products is large, a significant amount of sales of sheet and plate is to a relatively small number of customers. Generally, the sales and costs and expenses of this segment are transacted in the local currency of the respective operations, which are mostly the U.S. dollar, Chinese yuan, the euro, the Russian ruble, the Brazilian real, and the British pound.
In March 2017, Arconic completed the sale of its Fusina, Italy rolling mill. While owned by Arconic, the operating results and assets and liabilities of the Fusina, Italy rolling mill were included in the Global Rolled Products segment. The rolling mill generated third-party sales of approximately $54 and $165 for 2017 and 2016, respectively. At the time of the divestiture, the rolling mill had approximately 312 employees. See Restructuring and Other Charges under Results of Operations above.

On November 1, 2016, Arconic entered into a Toll Processing Agreement with Alcoa Corporation for the tolling of metal for the Warrick, IN rolling mill which became a part of Alcoa Corporation upon the completion of the Separation Transaction. As

part of this arrangement, Arconic provides a toll processing service to Alcoa Corporation to produce can sheet products at its facility in Tennessee through the expected end date of the contract, December 31, 2018. Alcoa Corporation supplies all required raw materials to Arconic and Arconic processes the raw materials into finished can sheet coils ready for shipment to the end customer. Tolling revenue for 2017 and the two months ended December 31, 2016 was $190 and $37, respectively.

In March 2015, Arconic completed the sale of a rolling mill located in Belaya Kalitva, Russia. While owned by Arconic, the operating results and assets and liabilities of the rolling mill were included in the Global Rolled Products segment. The rolling mill generated sales of approximately $20 and $130 in 2015 and 2014 and, at the time of divestiture, had approximately 1,870 employees. See Restructuring and Other Charges under Results of Operations above.

Third-party sales for the Global Rolled Products segment increased $128, or 3%, in 2017 compared with 2016, primarily attributable to volume growth in the automotive end market and higher aluminum pricing, partially offset by the impact of $362 associated with the ramp-down and Toll Processing Agreement with Alcoa Corporation at the Company's North America packaging business in Tennessee, the absence of sales of $111 from the rolling mill in Fusina, Italy, aerospace customer inventory destocking and reduced build rates, and pricing pressures in the global packaging market.

Third-party sales for this segment decreased $389, or 7%, in 2016 compared with 2015, primarily due to the ramp-down of Tennessee packaging of $251; lower aluminum prices; and lower demand in the industrial products, packaging, commercial aerospace, commercial transportation, and North American heavy duty truck markets. These decreases were partially offset by higher volume in the automotive market.

Adjusted EBITDA for the Global Rolled Products segment increased $22, or 4%, in 2017 compared with 2016, primarily driven by net cost savings and increased automotive volumes, partially offset by lower aerospace volume from customer destocking and reduced build rates, continued pricing pressure on global packaging products and higher aluminum prices. The higher aluminum prices negatively impacted the Global Rolled Products Adjusted EBITDA margin by $18, or 140 basis points, in 2017 compared with 2016.

Adjusted EBITDA for this segment increased $65, or 13%, in 2016 compared with 2015, primarily driven by strong productivity improvements, which significantly exceeded cost increases, partially offset by lower pricing, primarily due to overall pricing pressure in the global can sheet market, unfavorable product mix and lower volumes as detailed above.

In 2018, demand in the automotive end market is expected to continue to grow due to the growing demand for innovative products and aluminum-intensive vehicles. Demand from the commercial airframe end market is expected to be flat in 2018 as the ramp-up of new programs is offset by lower build rates for aluminum intensive wide-body programs. The ramp-down of the North American packaging operations is expected to continue in 2018. Net productivity improvements are anticipated to continue.

Transportation and Construction Solutions

	2017	2016	2015
Third-party sales	$1,985	$1,802	$1,882
Adjusted EBITDA	$321	$291	$271

The Transportation and Construction Solutions segment produces products that are used mostly in the commercial transportation and nonresidential building and construction end markets. Such products include integrated aluminum structural systems, architectural extrusions, and forged aluminum commercial vehicle wheels, which are sold both directly to customers and through distributors. A small part of this segment also produces aluminum products for the industrial products end market. Generally, the sales and costs and expenses of this segment are transacted in the local currency of the respective operations, which are primarily the U.S. dollar, the euro, and the Brazilian real.

In December 2017, Arconic reached an agreement to sell its Latin America extrusions business that operates primarily in Brazil (see Restructuring and Other Charges under Results of Operations above). The sale is expected to close in the first half of 2018 following customary regulatory and anti-trust reviews. The operating results and assets and liabilities of the extrusions business are included in the Transportation and Construction Solutions segment.

Third-party sales for the Transportation and Construction Solutions segment increased $183, or 10%, in 2017 compared with 2016, primarily driven by increased volumes in the commercial transportation and building and construction end markets, higher aluminum pricing, and favorable foreign currency movements, partially offset by lower product pricing.

Table of Contents

Third-party sales for this segment decreased $80, or 4%, in 2016 compared with 2015, primarily driven by lower demand from the North American commercial transportation end market, which was partially offset by rising demand from the building and construction end market.

Adjusted EBITDA for the Transportation and Construction Solutions segment increased $30, or 10%, in 2017 compared with 2016, principally driven by net cost savings and higher volumes, partially offset by lower product pricing in the heavy-duty truck market, unfavorable product mix, and higher aluminum prices. The higher aluminum prices negatively impacted the Transportation and Construction Solutions Adjusted EBITDA margin by $19, or 120 basis points, in 2017 compared with 2016.

Adjusted EBITDA for this segment increased $20, or 7%, in 2016 compared with 2015, principally driven by net cost savings across all businesses and growth in the building and construction segment, partially offset by lower demand in the North American heavy duty truck and Brazilian markets.

In 2018, we expect continued growth in the North American and European commercial transportation and building and construction markets and continued demand for innovative products. Additionally, net cost savings are anticipated.

Reconciliation of Combined segment adjusted EBITDA to Net loss attributable to Arconic

Items required to reconcile Combined segment adjusted EBITDA to Net loss attributable to Arconic include: the Provision for depreciation and amortization; Impairment of goodwill; Restructuring and other charges; the impact of LIFO inventory accounting; metal price lag (the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by the respective segment — generally, when the price of metal increases, metal price lag is favorable, and when the price of metal decreases, metal price lag is unfavorable); corporate expense (general administrative and selling expenses of operating the corporate headquarters and other global administrative facilities and corporate research and development expenses); other items, including intersegment profit eliminations; Other income, net; Interest expense; Income tax expense; and the results of discontinued operations.

The following table reconciles Combined segment adjusted EBITDA to Net loss attributable to Arconic:

	2017	2016	2015
Combined segment adjusted EBITDA	$2,144	$2,063	$1,894
Unallocated amounts:			
Depreciation and amortization	(551)	(535)	(508)
Impairment of goodwill	(719)	—	(25)
Restructuring and other charges	(165)	(155)	(214)
Impact of LIFO	(110)	(18)	101
Metal price lag	72	27	(175)
Corporate expense	(274)	(454)	(371)
Other	(71)	(109)	(74)
Operating income	$326	$819	$628
Interest expense	(496)	(499)	(473)
Other income, net	640	94	28
Income from continuing operations before income taxes	$470	$414	$183
Provision for income taxes	(544)	(1,476)	(339)
Discontinued operations	—	121	(165)
Net income attributable to noncontrolling interest	—	—	(1)
Net loss attributable to Arconic	$(74)	$(941)	$(322)

The significant changes in the reconciling items between Combined segment adjusted EBITDA and Net loss attributable to Arconic for 2017 compared with 2016 consisted of:

- an impairment of goodwill related to the annual impairment review of the Arconic Forgings and Extrusions business in 2017;

Table of Contents

- a change in the Impact of LIFO, mostly due to a greater increase in the price of aluminum, driven by higher base metal prices (LME) and regional premiums (increase in price at December 31, 2017 indexed to December 31, 2016 compared to the increase in price at December 31, 2016 indexed to December 31, 2015);
- a favorable change in Metal price lag due to higher prices for aluminum;
- a decrease in Corporate expense primarily attributable to costs incurred in 2016 related to the Separation Transaction, partially offset by proxy, advisory and governance-related costs and legal and other advisory costs related to Grenfell Tower incurred in 2017;
- an increase in Other income, net, largely the result of the $351 gain on the sale of a portion of Arconic's investment in Alcoa Corporation common stock and a $167 gain on the Debt-for-Equity Exchange, income of $25 associated with a higher reversal of a contingent earn-out liability related to the Firth Rixson acquisition, and income of $25 due to the reversal of a liability associated with a separation-related guarantee;
- a decrease in Interest expense due to lower outstanding debt, mostly offset by premiums paid for the early redemption of $1,250 of the Company's long-term debt; and
- a decrease in Provision for income taxes attributable to a charge for tax valuation allowances related to the Separation Transaction of $1,267 in 2016, partially offset by a charge of $272 resulting from the 2017 Act that principally relates to the revaluation of U.S. deferred tax assets and liabilities from 35% to 21%.

The significant changes in the reconciling items between Combined segment adjusted EBITDA and Net loss attributable to Arconic for 2016 compared with 2015 consisted of:

- an increase in Depreciation and amortization related to a full year of D&A related to two acquisitions which occurred during 2015 (see Engineered Products and Solutions under Segment Information above)
- a decrease in Restructuring and other charges, due to fewer portfolio actions;
- a change in the impact of LIFO, mostly due to higher aluminum prices, driven by higher base metal prices (LME) (increase in price at December 31, 2016 indexed to December 31, 2015 compared to a decrease in price at December 31, 2015 indexed to December 31, 2014);
- a favorable change in Metal price lag, the result of higher prices for aluminum;
- an increase in Corporate expense, largely attributable to an increase in costs related to the Separation Transaction of $193, partially offset by decreases in corporate research and development expenses and other various expenses;
- an increase in Other income, net, as a result of income of $76 associated with the reversal of a contingent earn-out liability and a post-closing adjustment, both of which related to the November 2014 acquisition of Firth Rixson;
- an increase in Interest expense, due to debt issuance costs expensed associated with the Separation Transaction, a full year of interest related to the RTI debt and costs associated with the early redemption of $750 of 5.55% Notes due February 2017, completed on December 30, 2016, which included a purchase premium; and
- an increase in Provision for income taxes attributable to a charge for tax valuation allowances related to the Separation Transaction of $1,267.

Reconciliation of Net loss attributable to Arconic to Consolidated adjusted EBITDA

Items required to reconcile Net loss attributable to Arconic to Consolidated adjusted EBITDA include: Depreciation and amortization; Impairment of goodwill; Restructuring and other charges; Other income, net; Interest expense; Income tax expense; and Discontinued operations.

Table of Contents

The following table reconciles Net loss attributable to Arconic to Consolidated adjusted EBITDA:

	2017	2016	2015
Net loss attributable to Arconic	$(74)	$(941)	$(322)
Depreciation and amortization	551	535	508
Impairment of goodwill	719	—	25
Restructuring and other charges	165	155	214
Other income, net	(640)	(94)	(28)
Interest expense	496	499	473
Income taxes	544	1,476	339
Discontinued operations	—	(121)	165
Consolidated Adjusted EBITDA [1]	$1,761	$1,509	$1,374

[1] Consolidated adjusted EBITDA is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because Consolidated adjusted EBITDA provides additional information with respect to Arconic’s operating performance. Additionally, presenting Consolidated adjusted EBITDA pursuant to our debt agreements is appropriate to provide additional information to investors to demonstrate Arconic’s ability to comply with its financial debt covenants. The Consolidated adjusted EBITDA presented may not be comparable to similarly titled measures of other companies.

Environmental Matters

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

Liquidity and Capital Resources

Arconic maintains a disciplined approach to cash management and strengthening of its balance sheet. Management continued to focus on actions to improve Arconic’s cost structure and liquidity, providing the Company with the ability to operate effectively. Such actions included procurement efficiencies and overhead rationalization to reduce costs, working capital initiatives, and maintaining a sustainable level of capital expenditures.

Cash provided from operations and financing activities is expected to be adequate to cover Arconic’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 Arconic were $2,150, of which $402 was held by Arconic's non-U.S. subsidiaries. The cash held by non-U.S. subsidiaries is generally used for operational activities of Arconic’s international businesses. As such, management does not have a current expectation of repatriating cash held in foreign jurisdictions.

The Statement of Consolidated Cash Flows has not been restated for discontinued operations, therefore the discussion below concerning Cash from Operations, Financing Activities, and Investing Activities for the years ended December 31, 2016 and 2015 includes the results of both Arconic and Alcoa Corporation up through the completion of the Separation Transaction on November 1, 2016.

Cash from Operations

Cash provided from operations in 2017 was $701 compared with $870 in 2016. The decrease of $169, or 19%, was primarily due to lower operating results (net loss plus net add-back for noncash transactions in earnings) of $345 and higher pension contributions of $20, partially offset by a favorable change in noncurrent assets of $111 due to the prepayment of $200 made in April 2016 related to a gas supply agreement for the Australia alumina refineries (Alcoa Corporation), a favorable change in noncurrent liabilities of $55, and lower cash used for working capital of $30. The components of the change in working capital included favorable changes of $114 in receivables; $87 in prepaid expenses and other current assets; and $278 in accrued expenses; mostly offset by unfavorable changes in working capital, including $163 in inventories; $170 in accounts payable, trade; and $116 in taxes, including income taxes.

Cash provided from operations in 2016 was $870 compared with $1,582 in 2015. The decrease of $712, or 45%, was primarily due to lower operating results (net loss plus net add-back for noncash transactions in earnings) of $985 and unfavorable changes in working capital of $104 and noncurrent liabilities of $21, partially offset by a favorable change associated with noncurrent assets of $218 and a decrease in pension contributions of $180. The components of

the unfavorable change in working capital included $450 in receivables and $122 in prepaid expenses and other current assets; partially offset by

---

favorable changes in working capital including $322 in accounts payable, trade, principally the result of the impact of purchasing metal from Alcoa Corporation and the timing of payments; $68 in taxes, including income taxes; $43 in accrued expenses; and $35 in inventories.

Financing Activities

Cash used for financing activities was $963 in 2017 compared with $754 in 2016 and $441 in 2015.

The use of cash of $963 in 2017 was principally the result of $1,634 in repayments on borrowings under certain revolving credit facilities (see below) and repayments on debt, primarily related to the early redemption of the Company's 6.50% Bonds due 2018, 6.75% Notes due 2018, and a portion of the 5.72% Notes due 2019 (see Note I to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K for additional information); and $162 in dividends to shareholders. These items were partially offset by $816 in additions to debt, primarily from borrowings under certain revolving credit facilities, and $50 of proceeds from the exercise of stock options.

The use of cash of $754 in 2016 was principally the result of $2,734 in payments on debt, mostly related to the repayment of borrowings under certain revolving credit facilitates (see below) and the repayment in December 2016 of $750 of outstanding principal of 5.55% Notes due February 2017; $228 in dividends to shareholders; and $175 in net cash paid to noncontrolling interests. These items were mostly offset by $1,962 in additions to debt, virtually all of which was the result of borrowing under certain revolving credit facilities, and $421 in net cash transferred from Alcoa Corporation at the completion of the Separation Transaction.

The use of cash in 2015 of $441 was principally the result of $2,030 in payments on debt, mostly related to the repayment of borrowings under certain revolving credit facilities (see below) and the repayment of convertible notes assumed in conjunction with the acquisition of RTI (see below); $223 in dividends paid to shareholders; and $104 in net cash paid to noncontrolling interests. These items were mostly offset by $1,901 in additions to debt, virtually all of which was the result of borrowings under certain revolving credit facilities (see below).

In July 2015, through the acquisition of RTI (see Engineered Products and Solutions under Segment Information above), Arconic assumed the obligation to repay two tranches of convertible debt; one tranche was due and settled in cash on December 1, 2015 (principal amount of $115) and the other tranche is due on October 15, 2019 (principal amount of $403), unless earlier converted or purchased by Arconic at the holder's option under specific conditions. Upon conversion of the 2019 convertible notes, holders will receive, at Arconic's election, cash, shares of common stock (approximately 14,294,000 shares using the December 31, 2017 conversion rate of 35.5119 shares per $1,000 (not in millions) bond or per-share conversion price of $28.1596), or a combination of cash and shares. On the maturity date, each holder of outstanding notes will be entitled to receive $1,000 (not in millions) in cash for each $1,000 (not in millions) bond, together with accrued and unpaid interest.

On July 25, 2014, Arconic entered into a Five-Year Revolving Credit Agreement (the "Credit Agreement") with a syndicate of lenders and issuers named therein which provides for a senior unsecured revolving credit facility (the "Credit Facility"). The proceeds are to be used to provide working capital or for other general corporate purposes of Arconic. By an Extension Request and Amendment Letter dated as of June 5, 2015, the maturity date of the Credit Facility was extended to July 25, 2020. In September 2016, Arconic entered into an amendment to the Credit Agreement to permit the Separation Transaction and to amend certain terms of the Credit Facility including the replacement of the existing financial covenant with a leverage ratio and reduction of total commitments available from $4,000 to $3,000. The amendment became effective on the separation date of November 1, 2016. The previous financial covenant, based upon Consolidated Net Worth (as defined in the Credit Agreement) was replaced. Arconic is required to maintain a ratio of Indebtedness (as defined in the Credit Agreement), to Consolidated EBITDA (as defined in the Credit Agreement) of 4.50 to 1.00 for the period of the four fiscal quarters most recently ended, declining to 3.50 to 1.00 on December 31, 2019 and thereafter.

The Credit Agreement includes additional covenants, including, among others, (a) limitations on Arconic's ability to incur liens securing indebtedness for borrowed money, (b) limitations on Arconic's ability to consummate a merger, consolidation or sale of all or substantially all of its assets, and (c) limitations on Arconic's ability to change the nature of its business. As of December 31, 2017, Arconic was in compliance with all such covenants.

The Credit Agreement matures on July 25, 2020, unless extended or earlier terminated in accordance with the provisions of the Credit Agreement. Arconic may make one additional one-year extension request during the

remaining term of the Credit Agreement, subject to the lender consent requirements set forth in the Credit Agreement. Under the provisions of the Credit Agreement, Arconic will pay a fee of 0.30% (based on Arconic's long-term debt ratings as of December 31, 2017) of the total commitment per annum to maintain the Credit Facility.

Table of Contents

The Credit Facility is unsecured and amounts payable under it will rank pari passu with all other unsecured, unsubordinated indebtedness of Arconic. Borrowings under the Credit Facility may be denominated in U.S. dollars or euros. Loans will bear interest at a base rate or a rate equal to LIBOR, plus, in each case, an applicable margin based on the credit ratings of Arconic's outstanding senior unsecured long-term debt. The applicable margin on base rate loans and LIBOR loans will be 0.70% and 1.70% per annum, respectively, based on Arconic's long-term debt ratings as of December 31, 2017. Loans may be prepaid without premium or penalty, subject to customary breakage costs.
The obligation of Arconic to pay amounts outstanding under the Credit Facility may be accelerated upon the occurrence of an "Event of Default" as defined in the Credit Agreement. Such Events of Default include, among others, (a) Arconic's failure to pay the principal of, or interest on, borrowings under the Credit Facility, (b) any representation or warranty of Arconic in the Credit Agreement proving to be materially false or misleading, (c) Arconic's breach of any of its covenants contained in the Credit Agreement, and (d) the bankruptcy or insolvency of Arconic.
There were no amounts outstanding at December 31, 2017 and 2016 and no amounts were borrowed during 2017, 2016 or 2015 under the Credit Facility. In addition to the Credit Facility, Arconic has a number of other credit facilities that provide a combined borrowing capacity of $715 as of December 31, 2017, of which $640 is due to expire in 2018 and $75 is due to expire in 2019. The purpose of any borrowings under these credit arrangements is to provide for working capital requirements and for other general corporate purposes. The covenants contained in all these arrangements are the same as the Credit Agreement (see above).
In 2017, 2016 and 2015, Arconic borrowed and repaid $810, $1,950, and $1,890, respectively, under the respective credit arrangements. The weighted-average interest rate and weighted-average days outstanding of the respective borrowings during 2017, 2016, and 2015 were 2.6%, 1.9%, and 1.6%, respectively, and 46 days, 49 days, and 69 days, respectively.
In September 2014, Arconic completed two public securities offerings under its shelf registration statement for (i) $1,250 of 25 million depositary shares, each representing a 1/10th interest in a share of Arconic's 5.375% Class B Mandatory Convertible Preferred Stock, Series 1, par value $1 per share, liquidation preference $500 per share, and (ii) $1,250 of 5.125% Notes due 2024. The net proceeds of the offerings were used to finance the cash portion of the acquisition of Firth Rixson. On October 2, 2017, all outstanding 24,975,978 depositary shares were converted at a rate of 1.56996 into 39,211,286 common shares; 24,022 depositary shares were previously tendered for early conversion into 31,420 shares of Arconic common stock. No gain or loss was recognized associated with this noncash equity transaction.
Arconic'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 Arconic's debt by the major credit rating agencies.
On May 1, 2017, Standard and Poor's Ratings Services affirmed Arconic's long-term debt at BBB-, an investment grade rating, with a stable outlook, and its short-term debt at A-3. On November 1, 2016, Moody's Investor Service (Moody's) downgraded Arconic's long-term debt rating from Ba1, a non-investment grade, to Ba2 and its short-term debt rating from Speculative Grade Liquidity-1 to Speculative Grade Liquidity-2. Additionally, Moody's changed the outlook from negative to stable (ratings and outlook were affirmed on November 2, 2017). On April 21, 2016, Fitch affirmed Arconic's long-term debt rating at BB+, a non-investment grade, and short-term debt at B. Additionally, Fitch changed the current outlook from positive to evolving. On July 7, 2016, Fitch changed the current outlook from evolving to stable (ratings and outlook were affirmed on July 3, 2017).
Investing Activities
Cash provided from investing activities was $540 in 2017 compared with cash used for investing activities of $165 in 2016 and $1,060 in 2015.
The source of cash in 2017 included proceeds of $888 from the sale of a portion of Arconic's investment in Alcoa Corporation common stock and the receipt of proceeds from the sale of the Yadkin Hydroelectric Project of $243, somewhat offset by cash used for capital expenditures of $596, including the aerospace expansion (very thick plate stretcher and horizontal heat treat furnace) at the Davenport, IA plant and a titanium aluminide furnace at the Niles, Ohio facility, and the injection of $10 into the Fusina rolling business prior to its sale.
The use of cash in 2016 was mainly due to $1,125 in capital expenditures ($298 Alcoa Corporation), 29% of which related to growth projects, including the aerospace expansion (very thick plate stretcher) at the Davenport, IA plant

and a titanium aluminide furnace at the Niles, Ohio facility. This use of cash was primarily offset by $692 in proceeds from the sale of assets and businesses, including $457 from the redemption of company-owned life insurance policies, $120 in proceeds related to the sale of the Intalco smelter wharf property (Alcoa Corporation), and $102 in proceeds ($99 net of transaction costs) from the sale of the Remmele Medical business, which was part of Arconic's acquisition of RTI in July 2015; and $280 in sales of

investments, composed primarily of $145 for an equity interest in a natural gas pipeline in Australia (Alcoa Corporation) and $130 for securities held by Arconic's captive insurance company.

The use of cash in 2015 was mainly due to $1,180 in capital expenditures ($391 Alcoa Corporation) (includes costs related to environmental control in new and expanded facilities of $141), 38% of which related to growth projects, including the aerospace expansion at the La Porte, IN plant, the automotive expansion at the Alcoa, TN plant, the aerospace expansion (very thick plate stretcher) at the Davenport, IA plant, the aerospace expansion (isothermal press) at the Savannah, GA plant (Firth Rixson), and the specialty foil expansion at the Itapissuma plant in Brazil; $205 (net of cash acquired) for the acquisition of TITAL (see Engineered Products and Solutions under Segment Information above); and $134 in additions to investments, including the purchase of $70 in securities held by Arconic's captive insurance company and equity contributions of $29 related to the aluminum complex joint venture in Saudi Arabia (Alcoa Corporation). These items were somewhat offset by $302 in cash acquired from RTI (see Engineered Products and Solutions under Segment Information above); $112 in proceeds from the sale of assets and businesses, composed of three land sales in Australia and the United States combined and post-closing adjustments related to an ownership stake in a smelter (Alcoa Corporation), four rolling mills, and an ownership stake in a bauxite mine/alumina refinery (Alcoa Corporation) divested from December 2014 through March 2015; and $40 in sales of investments, related to the sale of $21 in securities held by Arconic's captive insurance company and $19 in proceeds from the sale of the remaining portion of an equity investment in a China rolling mill.

Noncash Financing and Investing Activities.

On October 2, 2017, all outstanding 24,975,978 depositary shares (each depositary share representing a 1/10th interest in a share of the mandatory convertible preferred stock) were converted at a rate of 1.56996 into 39,211,286 common shares; 24,022 depositary shares were previously tendered for early conversion into 31,420 shares of Arconic common stock. No gain or loss was recognized associated with this equity transaction. (See Note O to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K for additional information.)

In the second quarter of 2017, the Company completed a Debt-for-Equity Exchange with the Investment Banks of a portion of Arconic's retained interest in Alcoa Corporation common stock for a portion of the Company's outstanding notes held by the Investment Banks for $465 including accrued and unpaid interest.

On October 5, 2016, Arconic completed a 1-for-3 reverse stock split of its outstanding and authorized shares of common stock, pursuant to the authorization provided at a special meeting of Arconic common shareholders (the "Reverse Stock Split"). The Reverse Stock Split reduced the number of shares of common stock outstanding from approximately 1.3 billion shares to approximately 0.4 billion shares. The par value of the common stock remained at $1.00 per share. Accordingly, Common stock and Additional capital in the Company's Consolidated Balance Sheet at December 31, 2016 reflect a decrease and increase of $877, respectively.

In August 2016, Arconic retired its outstanding treasury stock consisting of approximately 76 million shares. As a result, Common stock and Additional capital were decreased by $76 and $2,563, respectively, to reflect the retirement of the treasury shares.

In July 2015, Arconic purchased all outstanding shares of RTI common stock in a stock-for-stock transaction valued at $870. As a result, Arconic issued 29 million shares (87 million shares—pre-Reverse Stock Split) of its common stock to consummate this transaction.

Table of Contents

Contractual Obligations and Off-Balance Sheet Arrangements

Contractual Obligations. Arconic is required to make future payments under various contracts, including long-term purchase obligations, financing arrangements, and lease agreements. Arconic 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 Arconic'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	$71	$40	$ 26	$ 5	$ —
Raw material purchase obligations	1,013	801	210	2	—
Other purchase obligations	51	20	14	12	5
Operating leases	442	108	150	84	100
Interest related to total debt	2,675	371	693	429	1,182
Estimated minimum required pension funding	1,600	350	675	575	—
Other postretirement benefit payments	785	90	180	180	335
Layoff and other restructuring payments	58	58	—	—	—
Deferred revenue arrangements	30	12	18	—	—
Uncertain tax positions	75	—	—	—	75
Financing activities:					
Total debt	6,844	29	1,883	1,870	3,062
Dividends to shareholders	—	—	—	—	—
Investing activities:					
Capital projects	426	340	86	—	—
Totals	$14,070	$2,219	$ 3,935	$ 3,157	$ 4,759

Obligations for Operating Activities

Energy-related purchase obligations consist primarily of electricity and natural gas contracts with expiration dates ranging from one year to six years. Raw material purchase obligations consist mostly of aluminum, titanium sponge, and various other metals with expiration dates ranging from less than one year to four 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. Operating leases represent multi-year obligations for certain land and buildings, 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 2042.

Estimated minimum required pension funding and postretirement benefit payments are based on actuarial estimates using current assumptions for discount rates, long-term rate of return on plan assets, rate of compensation increases, and health care cost trend rates, among others. It is Arconic's policy to fund amounts for pension plans sufficient to meet the minimum requirements set forth in applicable country benefits laws and tax laws. Arconic 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 to be paid within one year primarily relate to severance costs and special layoff benefit payments.

Deferred revenue arrangements require Arconic to deliver product to a customer over the specified contract period through 2020 for a sheet and plate contract. While these obligations are not expected to result in cash payments, they represent contractual obligations for which the Company would be obligated 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.

Obligations for Financing Activities

Arconic has historically paid quarterly dividends on its preferred and common stock. Including dividends on preferred stock, Arconic paid $162 in dividends to shareholders during 2017. This amount includes dividends related to a class of preferred stock issued in September 2014, which converted to common stock on October 2, 2017 (see Financing Activities under Liquidity and Capital Resources above). Because all dividends are subject to approval by Arconic's Board of Directors, amounts are not included in the preceding table unless such authorization has occurred. As of December 31, 2017, there were 481,416,537 shares of outstanding common stock and 546,024 shares of outstanding Class A preferred stock. The annual preferred stock dividend is at a rate of $3.75 per share and the annual common stock dividend expected to be paid is $0.24 per share for 2018.

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 $700 in 2018.

Off-Balance Sheet Arrangements.

At December 31, 2017, Arconic has outstanding bank guarantees related to tax matters, outstanding debt, workers' compensation, environmental obligations, energy contracts, and customs duties, among others. The total amount committed under these guarantees, which expire at various dates between 2018 and 2026 was $29 at December 31, 2017.

Pursuant to the Separation and Distribution Agreement, Arconic was required to provide certain guarantees for Alcoa Corporation, which had a combined fair value of $8 and $35 at December 31, 2017 and 2016, respectively, and were included in Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet. Arconic was required to provide payment guarantees for Alcoa Corporation issued on behalf of a third party, and amounts outstanding under these payment guarantees were $197 and $354 at December 31, 2017 and 2016, respectively. These guarantees expire at various times between 2018 and 2024, and relate to project financing for Alcoa Corporation's aluminum complex in Saudi Arabia. Furthermore, Arconic was required to provide guarantees related to two long-term supply agreements for energy for Alcoa Corporation facilities in the event of an Alcoa Corporation payment default. In October 2017, Alcoa Corporation announced that it had terminated one of the two agreements, the electricity contract with Luminant Generation Company LLC that was tied to its Rockdale Operations, effective as of October 1, 2017. As a result of the termination of the Rockdale electricity contract, Arconic recorded income of $25 in the fourth quarter of 2017 associated with reversing the fair value of the electricity contract guarantee. For the remaining long-term supply agreement, Arconic is required to provide a guarantee up to an estimated present value amount of approximately $1,297.

Arconic was also required to provide guarantees of $50 related to two Alcoa Corporation energy supply contracts. These guarantees expired in March 2017. Additionally, Arconic was required to provide guarantees of $53 related to certain Alcoa Corporation environmental liabilities. Notification of a change in guarantor to Alcoa Corporation was made to the appropriate environmental agencies and as such, Arconic no longer provides these guarantees.

In December 2016, Arconic entered into a one-year claims purchase agreement with a bank covering claims up to $245 related to the Saudi Arabian joint venture and two long-term energy supply agreements. The majority of the premium was paid by Alcoa Corporation. The agreement matured in December 2017 and was not renewed in 2018 due to the decline in exposure to guarantee claims including a substantial reduction in the guarantees related to the Saudi Arabian joint venture and also the elimination of the guarantee related to the Rockdale energy contract. The decision to enter into a claims purchase agreement will be made on an annual basis going forward.

Arconic has outstanding letters of credit primarily related to workers' compensation, energy contracts and leasing obligations. The total amount committed under these letters of credit, which automatically renew or expire at various dates, mostly in 2018, was $120 at December 31, 2017.

Pursuant to the Separation and Distribution Agreement, Arconic was required to retain letters of credit of $62 that had previously been provided related to both Arconic and Alcoa Corporation workers' compensation claims which occurred prior to November 1, 2016. Alcoa Corporation workers' compensation claims and letter of credit fees paid by Arconic are being

Table of Contents

proportionally billed to and are being fully reimbursed by Alcoa Corporation. Additionally, Arconic was required to provide letters of credit for certain Alcoa Corporation equipment leases and energy contracts and, as a result, Arconic had $103 of outstanding letters of credit relating to these liabilities. The entire $103 of outstanding letters of credit were canceled in 2017 when Alcoa Corporation issued its own letters of credit to cover these obligations.
Arconic 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 $54 at December 31, 2017.
As part of the Separation Transaction, Arconic was required to provide surety bonds related to Alcoa Corporation workers' compensation claims which occurred prior to November 1, 2016 and, as a result, Arconic has $25 in outstanding surety bonds relating to these liabilities. Alcoa Corporation workers' compensation claims and surety bond fees paid by Arconic are being proportionally billed to and are being fully reimbursed by Alcoa Corporation.
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 accompanying Notes. Areas that require significant judgments, estimates, and assumptions include accounting for environmental and litigation matters; the testing of goodwill, other intangible assets, and properties, plants, and equipment for impairment; estimating fair value of businesses acquired or divested; pension plans and other postretirement benefits obligations; stock-based compensation; 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 and accompanying Notes provide a meaningful and fair perspective of the Company.
A summary of the Company's significant accounting policies is included in Note A 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.
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. Claims for recovery are recognized when probable and as agreements are reached with third parties. The estimates also include costs related to other potentially responsible parties to the extent that Arconic 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 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, among others. 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.

Goodwill. Goodwill is not amortized; instead, it is 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 realign a business. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include deterioration in general economic conditions, negative developments in equity and credit markets, adverse changes in the markets in which an entity

Table of Contents

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, among others. The fair value that could be realized in an actual transaction may differ from that used to evaluate the impairment of goodwill.

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. Arconic has eight reporting units, of which four are included in the Engineered Products and Solutions segment, three are included in the Transportation and Construction Solutions segment, and the remaining reporting unit is the Global Rolled Products segment. More than 85% of Arconic's total goodwill at December 31, 2017 is allocated to two reporting units as follows: Arconic Fastening Systems and Rings (AFSR) ($2,221) and Arconic Power and Propulsion (APP) ($1,686) businesses, both of which are included in the Engineered Products and Solutions segment. These amounts include an allocation of Corporate's goodwill.

In January 2018, management announced a change in the organizational structure of the Engineered Products and Solutions segment, from four business units to three business units, with a focus on aligning its internal structure to core markets and customers and reducing cost. As a result of this change, goodwill will be reallocated to the three new reporting units and evaluated for impairment during the first quarter of 2018. The Company does not expect any goodwill impairment as a result of this realignment.

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 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 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 quantitative impairment test.

Arconic determines annually, based on facts and circumstances, which of its reporting units will be subject to the qualitative assessment. For those reporting units where a qualitative assessment is either not performed or for which the conclusion is that an impairment is more likely than not, a quantitative impairment test will be performed. Arconic's policy is that a quantitative impairment test be performed for each reporting unit at least once during every three-year period.

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 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 one reporting unit, Arconic Wheel and Transportation Products (within the Transportation and Construction Solutions segment). Management concluded that it was not more likely than not that the estimated fair value of the reporting unit was less than its carrying value. As such, no further analysis was required.

Under the quantitative impairment test, the evaluation of impairment involves comparing the current fair value of each reporting unit to its carrying value, including goodwill. Arconic uses a discounted cash flow (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. Most of these assumptions 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 WACC rate for the individual reporting units is estimated with the assistance of valuation experts. Arconic would recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value without

exceeding the total amount of goodwill allocated to that reporting unit.

During the 2017 annual review of goodwill, management proceeded directly to the quantitative impairment test for six reporting units as follows: AFSR, APP, Arconic Titanium and Engineered Products (ATEP), and Arconic Forgings and Extrusions (AFE), which are all included in the Engineered Products and Solutions segment, Global Rolled Products, and Building and Construction Systems, which is included in the Transportation and Construction Solutions segment. The estimated fair value for five of the six reporting units exceeded its respective carrying value, resulting in no impairment. However, the

---

Table of Contents

estimated fair value of AFE was lower than its carrying value. As such, in the fourth quarter of 2017, Arconic recorded an impairment for the full amount of goodwill in the AFE reporting unit of $719. The decrease in the AFE fair value was primarily due to unfavorable performance that is impacting operating margins and a higher discount rate due to an increase in the risk-free rate of return, while the carrying value increased compared to prior year.
Goodwill impairment tests in 2016 and 2015 indicated that goodwill was not impaired for any of the Company's reporting units, except for the soft alloy extrusion business in Brazil which is included in the Transportation and Construction Solutions segment. In the fourth quarter of 2015, for the soft alloy extrusion business in Brazil, the estimated fair value as determined by the DCF model was lower than the associated carrying value of its reporting unit's goodwill. As a result, management determined that the implied fair value of the reporting unit's goodwill was zero. Arconic recorded a goodwill impairment of $25 in 2015. The impairment of goodwill resulted from headwinds from the downturn in the Brazilian economy and the continued erosion of gross margin despite the execution of cost reduction strategies. As a result of the goodwill impairment, there is no goodwill remaining for the reporting unit.
Properties, Plants, and Equipment and Other Intangible Assets. Properties, plants, and equipment and Other intangible assets 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 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.
Discontinued Operations and Assets Held For Sale. The fair values of all businesses to be divested are estimated using accepted valuation techniques such as a DCF model, valuations performed by third parties, earnings multiples, or indicative bids, when available. A number of significant estimates and assumptions are involved in the application of these techniques, including the forecasting of markets and market share, sales volumes and prices, costs and expenses, and multiple other factors. Management considers historical experience and all available information at the time the estimates are made; however, the fair value that is ultimately realized upon the divestiture of a business may differ from the estimated fair value reflected in the Consolidated Financial Statements.
Pension and Other Postretirement Benefits. 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, including finance and banking, industrials, transportation, and utilities, among others. The yield curve model parallels the plans' projected cash flows, which have an average duration of 11 years. 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. In 2017, 2016, and 2015, the discount rate used to determine benefit obligations for U.S. pension and other postretirement benefit plans was 3.75%, 4.20%, and 4.29%, respectively. The impact on the liabilities of a change in the discount rate of 1/4 of 1% would be approximately $225 and either a charge or credit of approximately $3 to after-tax earnings in the following year.
In conjunction with the annual measurement of the funded status of Arconic's pension and other postretirement benefit plans at December 31, 2015, management elected to change the manner in which the interest cost component of net periodic benefit cost will be determined in 2016 and beyond. Previously, the interest cost component was determined by multiplying the single equivalent rate described above and the aggregate discounted cash flows of the plans' projected benefit obligations. Under the new methodology, the interest cost component will be determined by aggregating the product of the discounted cash flows of the plans' projected benefit obligations for each year and an individual spot rate (referred to as the "spot rate" approach). This change resulted in a lower interest cost component of

net periodic benefit cost under the new methodology compared to the previous methodology in 2017 and 2016 of $34 and $84, respectively, for pension plans and $6 and $14, respectively, for other postretirement benefit plans. Management believes this new methodology, which represents a change in an accounting estimate, is a better measure of the interest cost as each year’s cash flows are specifically linked to the interest rates of bond payments in the same respective year.

Table of Contents

The expected long-term rate of return on plan assets is generally applied to a five-year market-related value of plan assets (a 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 a combination of historical asset return information and forward-looking returns by asset class. As it relates to historical asset return information, management focuses on various historical moving averages when developing this assumption. While consideration is given to recent performance and historical returns, the assumption represents a long-term, prospective return. Management also incorporates expected future returns on current and planned asset allocations using information from various external investment managers and consultants, as well as management's own judgment.

For 2017, 2016, and 2015, management used 7.75% as its 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. These rates fell within the respective range of the 20-year moving average of actual performance and the expected future return developed by asset class. In 2015, the decrease of 25 basis points in the expected long-term rate of return was due to a decrease in the 20-year moving average of actual performance. For 2018, management anticipates that 7.00% will be the expected long-term rate of return. The decrease of 75 basis points in the expected long-term rate is due to a decrease in the expected return by asset class and the 20-year moving average.

A change in the assumption for the expected long-term rate of return on plan assets of 1/4 of 1% would impact after-tax earnings by approximately $9 for 2018.

In 2017, a net loss of $220 (after-tax) was recorded in other comprehensive loss, primarily due to the decrease in the discount rate of 45 basis points and asset performance less than expected, which was partially offset by the amortization of actuarial losses. In 2016, a net benefit of $1,601 (after-tax and noncontrolling interest) was recorded in other comprehensive loss, primarily due to the transfer of $2,080 to Alcoa Corporation which was partially offset by a net charge of $479. The charge was due to the unfavorable performance of the plan assets and a 9 basis point decrease in the discount rate, which was partially offset by the amortization of actuarial losses. In 2015, a net charge of $10 (after-tax and noncontrolling interest) was recorded in other comprehensive loss, primarily due to the unfavorable performance of the plan assets, which was mostly offset by the amortization of actuarial losses and a 29 basis point increase in the discount rate.

In January 2018, the Company announced the freeze of its U.S. defined benefit pension plans for salaried and non-bargained hourly employees, effective April 1, 2018. Benefit accruals for future service and compensation under all of the Company's qualified and non-qualified defined benefit pension plans for U.S. salaried and non-bargained hourly employees (the "Pension Plans") will cease. In connection with this change, effective April 1, 2018, impacted employees will commence receiving an employer contribution of 3% of eligible compensation under the Arconic Salaried Retirement Savings Plan, and, for the period from April 1, 2018 through December 31, 2018, an additional transition employer contribution of 3% of eligible compensation.

As a result of this change to the Pension Plans, in the first quarter of 2018, the Company expects to record a liability decrease of approximately $140 related to the reduction of future benefits and a curtailment charge of approximately $5 pre-tax. For the full year 2018, the Company expects pension-related expense to be lower by approximately $50 pre-tax compared to 2017 full year expenses. The lower pension expense expectation is based on preliminary year-end December 31, 2017 results and is inclusive of the change to the Pension Plans described above as well as expected changes in other pension-related assumptions.

Additionally, in accordance with accounting guidance effective January 1, 2018 that requires the other components of net periodic benefit cost to be presented separately from the service cost component, approximately $110 of pension-related expense in 2018 is expected to be recorded in the Other income, net line item in the Statement of Consolidated Operations.

Stock-based Compensation. Arconic recognizes compensation expense for employee equity grants using the non-substantive vesting period approach, in which the expense is recognized ratably over the requisite service period based on the grant date fair value. Forfeitures are accounted for as they occur. The fair value of new stock options is

estimated on the date of grant using a lattice-pricing model. The fair value of performance awards containing a market condition is valued using a Monte Carlo valuation model. Determining the fair value at the grant date requires judgment, including estimates for the average risk-free interest rate, dividend yield, volatility, 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.

As part of Arconic's stock-based compensation plan design, 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. Compensation expense recorded in 2017, 2016, and 2015 was $54 ($36 after-tax), $76 ($51 after-tax), and $77 ($51 after-tax), respectively. Of these amounts, $15, $19, and $15 in 2017, 2016, and 2015, respectively, pertains to the acceleration of expense related to retirement-eligible employees.

Table of Contents

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.

Income Taxes. The provision for income taxes is 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 Arconic's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not 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 Arconic'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.

In 2017, Arconic released $98 of certain U.S. state valuation allowances. After weighing all available positive and negative evidence, management determined that the underlying net deferred tax assets were more likely than not realizable based on projected taxable income estimates taking into account expected post-separation apportionment data. Valuation allowances of $750 remain against other net state deferred tax assets expected to expire before utilization. The need for valuation allowances against net state deferred tax assets will be reassessed on a continuous basis in future periods and, as a result, the allowance may increase or decrease based on changes in facts and circumstances.

Arconic also recorded an additional valuation allowance of $675 which offsets additional losses reported on the Spanish tax return filed in 2017 related to the Separation Transaction that are not more likely than not to be realized. There is no net impact to the provision for income taxes, as the additional valuation allowance fully offsets the current year tax benefit in Spain.

Arconic's foreign tax credits in the United States have a 10-year carryforward period with expirations ranging from 2018 to 2027 (as of December 31, 2017). Valuation allowances were initially established in prior years on a portion of the foreign tax credit carryforwards, primarily due to insufficient foreign source income to allow for full utilization of the credits within the expiration period. After consideration of all available evidence including potential tax planning strategies and earnings of foreign subsidiaries projected to be distributable as taxable foreign dividends, incremental valuation allowances of $302 and $134 were recognized in 2016 and 2015, respectively. Foreign tax credits of $57, $128, and $15 expired at the end of 2017, 2016, and 2015, respectively, resulting in a corresponding decrease to the valuation allowance. During 2017, an additional valuation allowance of $23 was recorded for current year excess foreign tax credits, offset by a net $14 reduction for other adjustments. At December 31, 2017, the cumulative amount of the valuation allowance was $379. The need for this valuation allowance will be reassessed on a continuous basis in future periods and, as a result, the allowance may increase or decrease based on changes in facts and circumstances, including the impact of the 2017 Act.

Arconic will continue its analysis of the 2017 Act, including any additional guidance that may be issued. Further analysis could result in changes to assumptions related to the realizability of certain deferred tax assets including, but not limited to, foreign tax credits, alternative minimum tax credits, and state tax loss carryforwards. Provisional

estimates of the impact of the 2017 Act on the realizability of certain deferred tax assets have been made based on information and computations that were available, prepared, and analyzed as of February 2, 2018. In accordance with Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act, issued by the Securities and Exchange Commission, Arconic will reassess the need for valuation allowances on these deferred tax assets as necessary during 2018.
In 2016, Arconic recognized a $1,267 discrete income tax charge for valuation allowances related to the Separation Transaction, including $925 with respect to Alcoa Corporation's net deferred tax assets in the United States, $302 with respect to Arconic's foreign tax credits in the United States, $42 with respect to certain deferred tax assets in Luxembourg, and $(2) related to the net impact of other smaller items. After weighing all positive and negative evidence, as described above,

Table of Contents

management determined that the net deferred tax assets of Alcoa Corporation were not more likely than not to be realized due to lack of historical and projected domestic source taxable income. As such, a valuation allowance was recorded immediately prior to separation.

In addition, Arconic recognized a $42 discrete income tax charge in 2016 for a valuation allowance on the full value of certain net deferred tax assets in Luxembourg. Sources of taxable income which previously supported the net deferred tax asset are no longer available as a result of the Separation Transaction. The need for this valuation allowance will be reassessed on a continuous basis in future periods and, as a result, the allowance may increase or decrease based on changes in facts and circumstances.

In 2016, Arconic also recognized discrete income tax benefits related to the release of valuation allowances on certain net deferred tax assets in Russia and Canada of $19 and $20, respectively. After weighing all available evidence, management determined that it was more likely than not that the net income tax benefits associated with the underlying deferred tax assets would be realizable based on historical cumulative income and projected taxable income.

Arconic also recorded additional valuation allowances in Australia of $93 related to the Separation Transaction, in Spain of $163 related to a tax law change and in Luxembourg of $280 related to the Separation Transaction as well as a tax law change. These valuation allowances fully offset current year changes in deferred tax asset balances of each respective jurisdiction, resulting in no net impact to tax expense. The need for a valuation allowance will be reassessed on a continuous basis in future periods by each jurisdiction and, as a result, the allowances may increase or decrease based on changes in facts and circumstances.

In 2015, Arconic recognized an additional $141 discrete income tax charge for valuation allowances on certain deferred tax assets in Iceland and Suriname. Of this amount, an $85 valuation allowance was established on the full value of the deferred tax assets in Suriname, which were related mostly to employee benefits and tax loss carryforwards. These deferred tax assets have an expiration period ranging from 2016 to 2022 (as of December 31, 2015). The remaining $56 charge relates to a valuation allowance established on a portion of the deferred tax assets recorded in Iceland. These deferred tax assets have an expiration period ranging from 2017 to 2023. After weighing all available positive and negative evidence, as described above, management determined that it was no longer more likely than not that Arconic will realize the tax benefit of either of these deferred tax assets. This was mainly driven by a decline in the outlook of the Primary Metals business, combined with prior year cumulative losses and a short expiration period.

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 limitations 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

Arconic buys products from and provides services to Alcoa Corporation following the separation at negotiated prices between the parties. These transactions were not material to the financial position or results of operations of Arconic for all periods presented. Effective May 2017, upon disposition of the remaining common stock that Arconic held in Alcoa Corporation, they are no longer deemed a related party.

Recently Adopted Accounting Guidance

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

Table of Contents

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.
Not material.

Item 8. Financial Statements and Supplementary Data.

Management's Reports to Arconic Shareholders

Management's Report on Financial Statements and Practices

The accompanying Consolidated Financial Statements of Arconic Inc. and its subsidiaries (the "Company") were prepared by management, which is responsible for their integrity and objectivity. The statements were prepared in accordance with accounting principles generally accepted in the United States of America and include amounts that are based on management's best judgments and estimates. The other financial information included in the annual report is consistent with that in the financial statements.

Management also 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 for the Company. In order to evaluate the effectiveness of internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, management has conducted an assessment, including testing, using the criteria in Internal Control—Integrated Framework (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's system of internal control over financial reporting is 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. 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 accounting principles generally accepted in the United States of America, 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.

Based on the assessment, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2017, based on criteria in Internal Control—Integrated Framework (2013) issued by the COSO.

The effectiveness of the Company'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 herein.

/s/ Charles P. Blankenship
Charles P. Blankenship
Chief Executive Officer

/s/ Ken Giacobbe
Ken Giacobbe

Executive Vice President and
Chief Financial Officer

57

Table of Contents

Report of Independent Registered Public Accounting Firm
To the Shareholders and Board of Directors of Arconic Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Arconic Inc. and its subsidiaries as of December 31, 2017 and December 31, 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 December 31, 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.

Table of Contents

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 23, 2018

We have served as the Company's auditor since 1950.

Table of Contents

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

For the year ended December 31,	2017	2016	2015
Sales (N)	$12,960	$12,394	$12,413
Cost of goods sold (exclusive of expenses below)	10,357	9,811	10,104
Selling, general administrative, and other expenses (C)	731	942	765
Research and development expenses	111	132	169
Provision for depreciation and amortization	551	535	508
Impairment of goodwill (A and E)	719	—	25
Restructuring and other charges (D)	165	155	214
Operating income	326	819	628
Interest expense (S)	496	499	473
Other income, net (L)	(640)	(94)	(28)
Income from continuing operations before income taxes	470	414	183
Provision for income taxes (Q)	544	1,476	339
Loss from continuing operations after income taxes	(74)	(1,062)	(156)
Income (loss) from discontinued operations after income taxes (C)	—	184	(41)
Net loss	(74)	(878)	(197)
Less: Net income from continuing operations attributable to noncontrolling interests	—	—	1
Less: Net income from discontinued operations attributable to noncontrolling interests (C)	—	63	124
Net loss Attributable to Arconic	$(74)	$(941)	$(322)
Amounts Attributable to Arconic Common Shareholders (P):			
Net loss	$(127)	$(1,010)	$(391)
(Loss) earnings per share—basic:			
Continuing operations	$(0.28)	$(2.58)	$(0.54)
Discontinued operations	—	0.27	(0.39)
Net loss per share-basic	$(0.28)	$(2.31)	$(0.93)
(Loss) earnings per share—diluted			
Continuing operations	$(0.28)	$(2.58)	$(0.54)
Discontinued operations	—	0.27	(0.39)
Net loss per share-diluted	$(0.28)	$(2.31)	$(0.93)

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

Table of Contents

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

	Arconic			Noncontrolling Interests			Total		
For the year ended December 31,	2017	2016	2015	2017	2016	2015	2017	2016	2015
Net (loss) income	$(74)	$(941)	$(322)	$—	$63	$125	$(74)	$(878)	$(197)
Other comprehensive (loss) income, net of tax (B):									
Change in unrecognized net actuarial loss and prior service cost/benefit related to pension and other postretirement benefits	(220)	(479)	(10)	—	(3)	8	(220)	(482)	(2)
Foreign currency translation adjustments	252	268	(1,566)	2	182	(429)	254	450	(1,995)
Net change in unrealized gains on available-for-sale securities	(134)	137	(5)	—	—	—	(134)	137	(5)
Net change in unrecognized gains (losses) on cash flow hedges	26	(617)	827	—	5	(1)	26	(612)	826
Total Other comprehensive (loss) income, net of tax	(76)	(691)	(754)	2	184	(422)	(74)	(507)	(1,176)
Comprehensive (loss) income	$(150)	$(1,632)	$(1,076)	$2	$247	$(297)	$(148)	$(1,385)	$(1,373)

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

Table of Contents

Arconic and subsidiaries
Consolidated Balance Sheet
(in millions)

December 31,	2017	2016
Assets		
Current assets:		
Cash and cash equivalents (U)	$2,150	$1,863
Receivables from customers, less allowances of $8 in 2017 and $13 in 2016 (R)	1,035	974
Other receivables (C and R)	339	477
Inventories (G)	2,480	2,253
Prepaid expenses and other current assets	374	325
Total current assets	6,378	5,892
Properties, plants, and equipment, net (H)	5,594	5,499
Goodwill (A and E)	4,535	5,148
Deferred income taxes (Q)	743	1,234
Investment in common stock of Alcoa Corporation (C and U)	—	1,020
Intangibles, net (E)	987	988
Other noncurrent assets	481	257
Total Assets	$18,718	$20,038
Liabilities		
Current liabilities:		
Accounts payable, trade	$1,839	$1,744
Accrued compensation and retirement costs	399	398
Taxes, including income taxes	75	85
Accrued interest payable	124	153
Other current liabilities	349	329
Short-term debt (I and U)	38	40
Total current liabilities	2,824	2,749
Long-term debt, less amount due within one year (I and U)	6,806	8,044
Accrued pension benefits (T)	2,564	2,345
Accrued other postretirement benefits (T)	841	889
Other noncurrent liabilities and deferred credits (J)	759	870
Total liabilities	13,794	14,897
Contingencies and commitments (K)		
Equity		
Arconic shareholders' equity:		
Preferred stock (O)	55	55
Mandatory convertible preferred stock (O)	—	3
Common stock (O)	481	438
Additional capital	8,266	8,214
Accumulated deficit	(1,248)	(1,027)
Accumulated other comprehensive loss (B)	(2,644)	(2,568)
Total Arconic shareholders' equity	4,910	5,115
Noncontrolling interests	14	26
Total equity	4,924	5,141
Total Liabilities and Equity	$18,718	$20,038

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

Table of Contents

Arconic and subsidiaries
Statement of Consolidated Cash Flows
(in millions)

For the year ended December 31,	2017	2016	2015
Cash from Operations			
Net loss	$(74)	$(878)	$(197)
Adjustments to reconcile net loss to cash from operations:			
Depreciation, depletion and amortization	551	1,132	1,280
Deferred income taxes	434	1,125	34
Equity income, net of dividends	—	42	158
Impairment of goodwill (A and E)	719	—	25
Restructuring and other charges	165	257	1,195
Net gain from investing activities—asset sales	(513)	(156)	(74)
Net periodic pension benefit cost	217	304	485
Stock-based compensation	67	86	92
Excess tax benefits from stock-based payment arrangements	—	—	(9)
Other	61	60	(32)
Changes in assets and liabilities, excluding effects of acquisitions, divestitures, and foreign currency translation adjustments:			
(Increase) decrease in receivables	(124)	(238)	212
(Increase) in inventories	(192)	(29)	(64)
Decrease (increase) in prepaid expenses and other current assets	11	(76)	46
Increase (decrease) in accounts payable, trade	62	232	(90)
(Decrease) in accrued expenses	(116)	(394)	(437)
(Decrease) increase in taxes, including income taxes	(23)	93	25
Pension contributions	(310)	(290)	(470)
(Increase) in noncurrent assets	(41)	(152)	(370)
(Decrease) in noncurrent liabilities	(193)	(248)	(227)
Cash provided from operations	701	870	1,582
Financing Activities			
Net change in short-term borrowings (original maturities of three months or less)	(2)	(3)	(16)
Additions to debt (original maturities greater than three months)	816	1,962	1,901
Payments on debt (original maturities greater than three months)	(1,634)	(2,734)	(2,030)
Proceeds from exercise of employee stock options	50	4	25
Excess tax benefits from stock-based payment arrangements	—	—	9
Dividends paid to shareholders	(162)	(228)	(223)
Distributions to noncontrolling interests	(14)	(226)	(106)
Contributions from noncontrolling interests	—	51	2
Net cash transferred from Alcoa Corporation at separation	—	421	—
Other	(17)	(1)	(3)
Cash used for financing activities	(963)	(754)	(441)
Investing Activities			
Capital expenditures	(596)	(1,125)	(1,180)
Acquisitions, net of cash acquired (F and M)	—	10	97
Proceeds from the sale of assets and businesses (M)	(9)	692	112
Additions to investments	(2)	(52)	(134)
Sales of investments (C and M)	890	280	40
Net change in restricted cash	12	14	(20)

Other (C)	245	16	25
Cash provided from (used for) investing activities	540	(165)	(1,060)
Effect of exchange rate changes on cash and cash equivalents	9	(7)	(39)
Net change in cash and cash equivalents	287	(56)	42
Cash and cash equivalents at beginning of year	1,863	1,919	1,877
Cash and cash equivalents at end of year	$2,150	$1,863	$1,919

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

63

Table of Contents

Arconic and subsidiaries
Statement of Changes in Consolidated Equity
(in millions, except per-share amounts)

	Arconic Shareholders								
	Preferred stock	Mandatory convertible preferred stock	Common stock	Additional capital	Retained earnings (deficit)	Treasury stock	Accumulated Other Comprehensive Loss	Noncontrolling interests	Total equity
Balance at December 31, 2014	$55	$ 3	$1,304	$9,284	$9,379	$(3,042)	$ (4,677)	$ 2,488	$14,794
Net (loss) income	—	—	—	—	(322)	—	—	125	(197)
Other comprehensive loss (B)	—	—	—	—	—	—	(754)	(422)	(1,176)
Cash dividends declared:									
Preferred–Class A @ $3.75 per share	—	—	—	—	(2)	—	—	—	(2)
Preferred–Class B @ $26.8750 per share	—	—	—	—	(67)	—	—	—	(67)
Common @ $0.12 per share	—	—	—	—	(154)	—	—	—	(154)
Equity option on convertible notes (F)	—	—	—	55	—	—	—	—	55
Stock-based compensation (O)	—	—	—	92	—	—	—	—	92
Common stock issued: compensation plans (O)	—	—	—	(195)	—	217	—	—	22
Issuance of common stock (F and O)	—	—	87	783	—	—	—	—	870
Distributions	—	—	—	—	—	—	—	(106)	(106)
Contributions	—	—	—	—	—	—	—	2	2
Other	—	—	—	—	—	—	—	(2)	(2)
Balance at December 31, 2015	$55	$ 3	$1,391	$10,019	$8,834	$(2,825)	$ (5,431)	$ 2,085	$14,131
Net (loss) income	—	—	—	—	(941)	—	—	63	(878)
Other comprehensive (loss) income (B)	—	—	—	—	—	—	(691)	184	(507)
Cash dividends declared:									
Preferred–Class A @ $3.75 per share	—	—	—	—	(2)	—	—	—	(2)
Preferred–Class B @ $26.8750 per share	—	—	—	—	(67)	—	—	—	(67)
Common @ $0.36 per share	—	—	—	—	(159)	—	—	—	(159)
Stock-based compensation (O)	—	—	—	86	—	—	—	—	86
Common stock issued: compensation plans (O)	—	—	—	(205)	—	186	—	—	(19)
Retirement of Treasury stock (O)	—	—	(76)	(2,563)	—	2,639	—	—	—
Reverse stock split (O)	—	—	(877)	877	—	—	—	—	—
Distribution of Alcoa Corporation	—	—	—	—	(8,692)	—	3,554	(2,133)	(7,271)
Distributions	—	—	—	—	—	—	—	(226)	(226)
Contributions	—	—	—	—	—	—	—	51	51
Other	—	—	—	—	—	—	—	2	2
Balance at December 31, 2016	$55	$ 3	$438	$8,214	$(1,027)	$—	$ (2,568)	$ 26	$5,141
Net loss	—	—	—	—	(74)	—	—	—	(74)

Other comprehensive loss (B)	—	—	—	—	—	—	(76)	2	(74)
Cash dividends declared:									
Preferred–Class A @ $3.75 per share	—	—	—	—	(2)	—	—	—	(2)
Preferred–Class B @ $20.1563 per share	—	—	—	—	(51)	—	—	—	(51)
Common @ $0.24 per share	—	—	—	—	(109)	—	—	—	(109)
Stock-based compensation (O)	—	—	—	67	—	—	—	—	67
Common stock issued: compensation plans (O)	—	—	—	21	—	—	—	—	21
Conversion of mandatory convertible preferred stock (O)	—	(3)	39	(36)	—	—	—	—	—
Issuance of common stock (F and O)	—	—	4	—	—	—	—	—	4
Distributions	—	—	—	—	—	—	—	(14)	(14)
Other	—	—	—	—	15	—	—	—	15
Balance at December 31, 2017	$55	$ —	$481	$8,266	$(1,248)	$—	$ (2,644)	$ 14	$4,924

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

Table of Contents

Arconic and subsidiaries
Notes to the Consolidated Financial Statements
(dollars in millions, except per-share amounts)
A. Summary of Significant Accounting Policies

Basis of Presentation. The Consolidated Financial Statements of Arconic Inc. and subsidiaries ("Arconic" or the "Company") 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 period. Actual results could differ from those estimates upon subsequent resolution of identified matters. Certain prior year amounts have been reclassified to conform to the current year presentation.

The separation of Alcoa Inc. into two standalone, publicly-traded companies, Arconic Inc. (the new name for Alcoa Inc.) and Alcoa Corporation, became effective on November 1, 2016 (the "Separation Transaction"). The financial results of Alcoa Corporation for all periods prior to the Separation Transaction have been retrospectively reflected in the Statement of Consolidated Operations as discontinued operations and, as such, have been excluded from continuing operations and segment results for all periods presented prior to the Separation Transaction. The cash flows and comprehensive income related to Alcoa Corporation have not been segregated and are included in the Statement of Consolidated Cash Flows and Statement of Consolidated Comprehensive (Loss) Income, respectively, for all periods presented. See Note C for additional information related to the Separation Transaction and discontinued operations.

Principles of Consolidation. The Consolidated Financial Statements include the accounts of Arconic and companies in which Arconic has a controlling interest. Intercompany transactions have been eliminated. Investments in affiliates in which Arconic cannot exercise significant influence are accounted for on the cost method.

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

Related Party Transactions. Arconic buys products from and provides services to Alcoa Corporation following the separation at negotiated prices between the parties. These transactions were not material to the financial position or results of operations of Arconic for all periods presented. Effective May 2017, upon disposition of the remaining common stock that Arconic held in Alcoa Corporation, they are no longer deemed a related party.

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 and net realizable value, with cost for approximately half of U.S. inventories determined under the last-in, first-out (LIFO) method. The cost of other inventories is determined under a combination of the first-in, first-out (FIFO) and average-cost methods.

Properties, Plants, and Equipment. Properties, plants, and equipment are recorded at cost. Depreciation is recorded principally on the straight-line method at rates based on the estimated useful lives of the assets. The following table details the weighted-average useful lives of structures and machinery and equipment by reporting segment (numbers in years):

Segment	Structures	Machinery and equipment
Engineered Products and Solutions	29	17
Global Rolled Products	31	21
Transportation and Construction Solutions	27	18

Gains or losses from the sale of assets are generally recorded in Other income, net (see policy below for assets classified as held for sale and discontinued operations). Repairs and maintenance are charged to expense as incurred. Interest related to the construction of qualifying assets is capitalized as part of the construction costs.

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. See Note F for information regarding asset impairments.

Goodwill. Goodwill is not amortized; instead, it is 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 realign a business. A significant amount of judgment is involved in determining if an indicator of impairment has occurred. Such indicators may include 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, among others. The fair value that could be realized in an actual transaction may differ from that used to evaluate the impairment of goodwill.

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. Arconic has eight reporting units, of which four are included in the Engineered Products and Solutions segment, three are included in the Transportation and Construction Solutions segment, and the remaining reporting unit is the Global Rolled Products segment. More than 85% of Arconic’s total goodwill at December 31, 2017 is allocated to two reporting units as follows: Arconic Fastening Systems and Rings (AFSR) ($2,221) and Arconic Power and Propulsion (APP) ($1,686) businesses, both of which are included in the Engineered Products and Solutions segment. These amounts include an allocation of Corporate’s 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 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 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 quantitative impairment test.

Arconic determines annually, based on facts and circumstances, which of its reporting units will be subject to the qualitative assessment. For those reporting units where a qualitative assessment is either not performed or for which the conclusion is that an impairment is more likely than not, a quantitative impairment test will be performed. Arconic’s policy is that a quantitative impairment test be performed for each reporting unit at least once during every three-year period.

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 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 one reporting unit, Arconic Wheel and Transportation Products (within the Transportation and Construction Solutions segment). Management concluded that it was not more likely than not that the estimated fair value of the reporting unit was less than its carrying value. As such, no further analysis was required.

Under the quantitative impairment test, the evaluation of impairment involves comparing the current fair value of each reporting unit to its carrying value, including goodwill. Arconic uses a discounted cash flow model (DCF) 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. Most of these assumptions 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 WACC rate for the individual reporting units is estimated with the assistance of valuation experts. Arconic would recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value without exceeding the total amount of goodwill allocated to that reporting unit.

During the 2017 annual review of goodwill, management proceeded directly to the quantitative impairment test for six reporting units as follows: AFSR, APP, Arconic Titanium and Engineered Products (ATEP), and Arconic Forgings and

Table of Contents

Extrusions (AFE), which are all included in the Engineered Products and Solutions segment, Global Rolled Products, and Building and Construction Systems, which is included in the Transportation and Construction Solutions segment. The estimated fair value for five of the six reporting units exceeded its respective carrying value, resulting in no impairment. However, the estimated fair value of AFE was lower than its carrying value. As such, in the fourth quarter of 2017, Arconic recorded an impairment for the full amount of goodwill in the AFE reporting unit of $719. The decrease in the AFE fair value was primarily due to unfavorable performance that is impacting operating margins and a higher discount rate due to an increase in the risk-free rate of return, while the carrying value increased compared to prior year.

Goodwill impairment tests in 2016 and 2015 indicated that goodwill was not impaired for any of the Company's reporting units, except for the soft alloy extrusion business in Brazil which is included in the Transportation and Construction Solutions segment. In the fourth quarter of 2015, for the soft alloy extrusion business in Brazil, the estimated fair value as determined by the DCF model was lower than the associated carrying value of its reporting unit's goodwill. As a result, management determined that the implied fair value of the reporting unit's goodwill was zero. Arconic recorded a goodwill impairment of $25 in 2015. The impairment of goodwill resulted from headwinds from the downturn in the Brazilian economy and the continued erosion of gross margin despite the execution of cost reduction strategies. As a result of the goodwill impairment, there is no goodwill remaining for the reporting unit.

Other Intangible Assets. Intangible assets with indefinite useful lives are not amortized while 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 reporting segment (numbers in years):

Segment	Software	Other intangible assets
Engineered Products and Solutions	6	34
Global Rolled Products	6	9
Transportation and Construction Solutions	5	16

Revenue Recognition. Arconic recognizes revenues 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).

In certain circumstances, Arconic receives advanced payments from its customers for product to be delivered in future periods. These advanced payments are recorded as deferred revenue until the product is delivered and title and risk of loss have passed to the customer in accordance with the terms of the contract. Deferred revenue is included in Other current liabilities and Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet.

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. Claims for recovery are recognized when probable and as agreements are reached with third parties. The estimates also include costs related to other potentially responsible parties to the extent that Arconic 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 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, among others. 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.

Income Taxes. The provision for income taxes is 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)

Table of Contents

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 Arconic's assets and liabilities and are adjusted for changes in tax rates and tax laws when enacted.

Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not 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 Arconic'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 limitations 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.

Stock-based Compensation. Arconic recognizes compensation expense for employee equity grants using the non-substantive vesting period approach, in which the expense is recognized ratably over the requisite service period based on the grant date fair value. Forfeitures are accounted for as they occur. The fair value of new stock options is estimated on the date of grant using a lattice-pricing model. The fair value of performance awards containing a market condition is valued using a Monte Carlo valuation model. Determining the fair value at the grant date requires judgment, including estimates for the average risk-free interest rate, dividend yield, volatility, 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.

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

Acquisitions. Arconic's business acquisitions are accounted for using the acquisition method. The purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values. Any excess purchase price over the fair value of the net assets acquired is recorded as goodwill. For all acquisitions, operating results are included in the Statement of Consolidated Operations from the date of the acquisition.

Discontinued Operations and Assets Held For Sale. For those businesses where management has committed to a plan to divest, each business is valued at the lower of its carrying amount or estimated fair value less cost to sell. If the carrying amount of the business exceeds its estimated fair value, an impairment loss is recognized. Fair value is estimated using accepted valuation techniques such as a DCF model, valuations performed by third parties, earnings multiples, or indicative bids, when available. A number of significant estimates and assumptions are involved in the

application of these techniques, including the forecasting of markets and market share, sales volumes and prices, costs and expenses, and multiple other factors. Management considers historical experience and all available information at the time the estimates are made; however, the fair value that is ultimately realized upon the divestiture of a business may differ from the estimated fair value reflected in the Consolidated Financial Statements. Depreciation and amortization expense is not recorded on assets of a business to be divested once they are classified as held for sale. Businesses to be divested are generally classified in the Consolidated Financial Statements as either discontinued operations or held for sale.

For businesses classified as discontinued operations, the balance sheet amounts and results of operations are reclassified from their historical presentation to assets and liabilities of discontinued operations on the Consolidated Balance Sheet and to

Table of Contents

discontinued operations on the Statement of Consolidated Operations, respectively, for all periods presented. The gains or losses associated with these divested businesses are recorded in discontinued operations on the Statement of Consolidated Operations. The Statement of Consolidated Cash Flows is not required to be reclassified for discontinued operations for any period. Segment information does not include the assets or operating results of businesses classified as discontinued operations for all periods presented. These businesses are expected to be disposed of within one year.
For businesses classified as held for sale that do not qualify for discontinued operations treatment, the balance sheet and cash flow amounts are reclassified from their historical presentation to assets and liabilities of operations held for sale for all periods presented. The results of operations continue to be reported in continuing operations. The gains or losses associated with these divested businesses are recorded in Restructuring and other charges on the Statement of Consolidated Operations. The segment information includes the assets and operating results of businesses classified as held for sale for all periods presented.
Recently Adopted Accounting Guidance. On January 1, 2017, Arconic adopted changes issued by the Financial Accounting Standards Board ("FASB") to employee share-based payment accounting. Previously, an entity determined for each share-based payment award whether the difference between the deduction for tax purposes and the compensation cost recognized for financial reporting purposes resulted in either an excess tax benefit or a tax deficiency. Excess tax benefits were recognized in additional paid-in capital; tax deficiencies were recognized either as an offset to accumulated excess tax benefits, if any, or in the income statement. Excess tax benefits were not recognized until the deduction reduced 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 Statement of Consolidated Operations. 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. In addition, the presentation of excess tax benefits related to share-based payment awards in the statement of cash flows changed. Previously, excess tax benefits were 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. Further, for a share-based award to qualify for equity classification it previously could not be partially settled 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 prospective transition method was utilized for excess tax benefits in the Statement of Consolidated Cash Flows. Management determined that the adoption of this guidance did not have a material impact on the Consolidated Financial Statements.

On January 1, 2017, Arconic adopted changes issued by the FASB eliminating 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. In addition, 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. Management determined that the adoption of this guidance had no impact on the Consolidated Financial Statements.

On January 1, 2017, Arconic 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 dedesignation of that hedging relationship provided that all other hedge accounting criteria continue to be met. Management determined that the adoption of this guidance did not have a material impact on the Consolidated Financial Statements.

On January 1, 2017, Arconic adopted changes issued by the FASB to the accounting for Intra-Entity transactions, other than inventory. Previously, no immediate tax impact was recognized in the consolidated financial statements as a result of intra-entity transfers of assets. The previous standard precluded an entity from reflecting a tax benefit or expense from an intra-entity transfer between entities that file separate tax returns, whether or not such entities were in different tax jurisdictions, until the asset was sold to a third party or otherwise recovered. The previous standard also prohibited recognition by the buyer of 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. Management determined that the adoption of this guidance did not have a material impact on the Consolidated Financial Statements.

On January 1, 2017, Arconic adopted changes issued by the FASB to the subsequent measurement of goodwill by eliminating step 2 from the goodwill impairment test, which previously required measurement of any goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. An entity will

---

Table of Contents

perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value without exceeding the total amount of goodwill allocated to that reporting unit. Arconic applied this new guidance on a prospective basis. See Goodwill policy above for further details.

On January 1, 2017, Arconic adopted changes issued by the FASB which narrow the definition of a business and require an entity to evaluate if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets, which would not constitute the acquisition of a business. The guidance also requires a business to include at least one substantive process and narrows the definition of outputs. Arconic applied this new guidance on a prospective basis. Management determined that the adoption of this guidance had no impact on the Consolidated Financial Statements.

On January 1, 2017, Arconic adopted changes issued by the FASB to the subsequent measurement of inventory. Previously, 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 required 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 did not apply to inventories measured using LIFO (last-in, first-out) or the retail inventory method. Arconic applies the net realizable value market option to measure non-LIFO inventories at the lower of cost or market. Management determined that the adoption of this guidance did not have a material impact on the Consolidated Financial Statements.

Recently Issued Accounting Guidance. 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 of the new guidance by one year, making these changes effective for Arconic on January 1, 2018.

Arconic will adopt the new guidance using the modified retrospective transition approach, reflecting the cumulative effect of initially applying the new standard to revenue recognition in the first quarter of 2018. The Company had formed a project assessment and adoption team that reviewed contract terms to assess the impact of adopting the new guidance on the Consolidated Financial Statements. While the Company generally recognizes revenue at a point in time upon delivery and transfer of title and risk of loss for most arrangements, based on the contract reviews performed, certain contracts within the Engineered Products and Solutions segment were identified as potentially moving to over time revenue recognition. The Company modified certain contract terms in conjunction with its customers to remain at point-in-time revenue recognition. These modifications will not result in significant changes to revenue, business practices or controls. Management has determined that the adoption of this guidance will not have a material impact on the Consolidated Financial Statements. The Company is in the process of identifying appropriate changes to its business processes and controls, as well as preparing for revisions to accounting policies and expanded disclosures related to revenue recognition in the notes to the Consolidated Financial Statements.

In January 2016, the FASB issued changes to 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 using the measurement alternative of 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. Also, the impairment assessment of equity investments without readily determinable fair values has been simplified by requiring a qualitative assessment to identify impairment. Also, the new guidance will require changes in fair value of equity securities to be recognized immediately as a component of net income instead of being reported in accumulated other comprehensive loss until the gain (loss) is realized. These changes became effective for Arconic on January 1, 2018 and have been applied on a prospective basis. Arconic elected the measurement alternative for its equity investments that do not have readily determinable fair values. Management determined that the adoption of this guidance will not have a material impact on the Consolidated Financial Statements.

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 Arconic on January 1, 2019. Arconic's current operating lease portfolio is primarily comprised of land and buildings, plant equipment, vehicles, and computer equipment. A cross-functional implementation team is in process of determining the scope of arrangements that will be subject to this standard as well as assessing the impact to the Company's systems, processes and internal controls. Management is evaluating the impact of these changes on the Consolidated Financial Statements, which will require right of use assets and lease liabilities be recorded in the consolidated balance sheet for operating leases. Therefore, an estimate of the impact is not currently determinable. However, the adoption is not expected to have a material impact on the Statement of Consolidated Operations.

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 Arconic on January 1, 2020. Management is currently evaluating the potential impact of these changes on the Consolidated Financial Statements.

In August 2016, the FASB issued changes to the classification of certain cash receipts and cash payments within the statement of cash flows. The guidance identifies eight specific cash flow items and the sections where they must be presented within the statement of cash flows. These changes became effective for Arconic on January 1, 2018 and will be applied retrospectively. As of result of the adoption, Arconic will reclassify cash received related to beneficial interest in previously transferred trade accounts receivables from operating activities to investing activities in the Statement of Consolidated Cash Flows. This reclassification is expected to have a material impact on the Statement of Consolidated Cash Flows, but does not reflect a change in our underlying business or activities. Additionally, Arconic will reclassify cash paid for debt prepayments including extinguishment costs from operating activities to financing activities in the Statement of Consolidated Cash Flows.

In November 2016, the FASB issued changes to the classification of cash and cash equivalents within the statement of cash flow. Restricted cash and restricted cash equivalents will be included within the cash and cash equivalents line on the cash flow statement and a reconciliation must be prepared to the statement of financial position. Transfers between restricted cash and restricted cash equivalents and cash and cash equivalents will no longer be presented as cash flow activities in the statement of cash flows and for material balances of restricted cash and restricted cash equivalents an entity must disclose information regarding the nature of the restrictions. These changes became effective for Arconic on January 1, 2018 and will be applied retrospectively. Management has determined that the adoption of this guidance will not have a material impact on the Statement of Consolidated Cash Flows.

In March 2017, the FASB issued changes to shorten the amortization period for certain callable debt securities held at a premium. Specifically, the amendments require the premium to be amortized to the earliest call date. The amendments do not require an accounting change for securities held at a discount; the discount continues to be amortized to maturity. These changes become effective for Arconic on January 1, 2019 and early adoption is permitted. Management has determined that the adoption of this guidance will not have a material impact on the Consolidated Financial Statements.

In March 2017, the FASB issued changes to the presentation of net periodic pension cost and net periodic postretirement benefit cost. The new guidance requires registrants to present the service cost component of net periodic benefit cost in the same income statement line item or items as other employee compensation costs arising from services rendered during the period. Also, only the service cost component will be eligible for asset capitalization. Registrants will present the other components of net periodic benefit cost separately from the service cost component; and, the line item or items used in the income statement to present the other components of net periodic benefit cost must be disclosed. These changes became effective for Arconic on January 1, 2018 and will be adopted retrospectively for the presentation of the service cost component and the other components of net periodic benefit cost in the income statement, and prospectively for the asset capitalization of the service cost component of net periodic benefit cost. The Company currently records non-service related net periodic pension cost and net periodic postretirement benefit cost within Cost of goods sold, Selling, general, administrative and other expenses and Research and development expenses and upon the adoption of this standard will be recorded separately from service cost in the Other income, net line item in the Statement of Consolidated Operations. The impact of the retrospective

Table of Contents

adoption of this guidance will be an increase to consolidated Operating income of approximately $154 and $135 while there will be no impact to consolidated Net loss for the years ended December 31, 2017 and 2016, respectively. The prospective adoption of the asset capitalization of only the service cost component will have an impact of approximately $20 in the first quarter of 2018 Statement of Consolidated Operations.

In May 2017, the FASB issued clarification to guidance on the modification accounting criteria for share-based payment awards. The new guidance requires registrants to apply modification accounting unless three specific criteria are met. The three criteria are 1) the fair value of the award is the same before and after the modification, 2) the vesting conditions are the same before and after the modification and 3) the classification as a debt or equity award is the same before and after the modification. These changes became effective for Arconic on January 1, 2018 and are to be applied prospectively to new awards granted after adoption. Management determined that the adoption of this guidance will not have a material impact on the Consolidated Financial Statements.

In August 2017, the FASB issued guidance that will make more financial and nonfinancial hedging strategies eligible for hedge accounting. It also amends the presentation and disclosure requirements and changes how companies assess effectiveness. It is intended to more closely align hedge accounting with companies' risk management strategies, simplify the application of hedge accounting, and increase transparency as to the scope and results of hedging programs. These changes become effective for Arconic on January 1, 2019. For cash flow and net investment hedges existing at the date of adoption, Arconic will apply a cumulative-effect adjustment related to eliminating the separate measurement of ineffectiveness to accumulated other comprehensive income with a corresponding adjustment to the opening balance of retained earnings as of the beginning of the fiscal year in which the amendment is adopted. The amended presentation and disclosure guidance is required only prospectively. Management is currently evaluating the potential impact of this guidance on the Consolidated Financial Statements.

In February 2018, the FASB issued guidance that allows a reclassification from Accumulated other comprehensive loss to Accumulated deficit for stranded tax effects resulting from the Tax Cuts and Jobs Act enacted on December 22, 2017. These changes become effective for Arconic on January 1, 2019. Management is currently evaluating the potential impact of this guidance on the Consolidated Financial Statements.

Table of Contents

B. Accumulated Other Comprehensive Loss

The following table details the activity of the four components that comprise Accumulated other comprehensive loss for both Arconic's shareholders and noncontrolling interests:

	Arconic			Noncontrolling Interests		
	2017	2016	2015	2017	2016	2015
Pension and other postretirement benefits (U)						
Balance at beginning of period	$(2,010)	$(3,611)	$(3,601)	$—	$(56)	$(64)
Other comprehensive (loss) income:						
Unrecognized net actuarial loss and prior service cost/benefit	(466)	(1,112)	(478)	—	(9)	5
Tax benefit (expense)	102	380	170	—	3	(1)
Total Other comprehensive (loss) income before reclassifications, net of tax	(364)	(732)	(308)	—	(6)	4
Amortization of net actuarial loss and prior service cost/benefit[1]	222	389	458	—	4	6
Tax expense[2]	(78)	(136)	(160)	—	(1)	(2)
Total amount reclassified from Accumulated other comprehensive loss, net of tax[8]	144	253	298	—	3	4
Total Other comprehensive (loss) income	(220)	(479)	(10)	—	(3)	8
Transfer to Alcoa Corporation	—	2,080	—	—	59	—
Balance at end of period	$(2,230)	$(2,010)	$(3,611)	$—	$—	$(56)
Foreign currency translation						
Balance at beginning of period	$(689)	$(2,412)	$(846)	$(2)	$(780)	$(351)
Other comprehensive income (loss)[3]	252	268	(1,566)	2	182	(429)
Transfer to Alcoa Corporation	—	1,455	—	—	596	—
Balance at end of period	$(437)	$(689)	$(2,412)	$—	$(2)	$(780)
Available-for-sale securities						
Balance at beginning of period	$132	$(5)	$—	$—	$—	$—
Other comprehensive (loss) income [4]	(134)	137	(5)	—	—	—
Transfer to Alcoa Corporation	—	—	—	—	—	—
Balance at end of period	$(2)	$132	$(5)	$—	$—	$—
Cash flow hedges						
Balance at beginning of period	$(1)	$597	$(230)	—	$(3)	$(2)
Other comprehensive income (loss):						
Net change from periodic revaluations	37	(843)	1,138	—	36	(1)
Tax (expense) benefit	(9)	252	(340)	—	(10)	—
Total Other comprehensive income (loss) before reclassifications, net of tax	28	(591)	798	—	26	(1)
Net amount reclassified to earnings:						
Aluminum contracts[5]	(2)	1	21	—	—	—
Energy contracts[6]	—	(49)	6	—	(34)	—
Foreign exchange contracts[5]	—	—	5	—	—	—
Interest rate contracts[7]	—	9	1	—	5	—
Nickel contracts[6]	(1)	1	2	—	—	—
Sub-total	(3)	(38)	35	—	(29)	—
Tax benefit (expense)[2]	1	12	(6)	—	8	—
Total amount reclassified from Accumulated other comprehensive loss, net of tax[8]	(2)	(26)	29	—	(21)	—
Total Other comprehensive income (loss)	26	(617)	827	—	5	(1)
Transfer to Alcoa Corporation	—	19	—	—	(2)	—

Balance at end of period	$25	$(1	)$597	$—	$—	$ (3	)

73

Table of Contents

(1) These amounts were included in the computation of net periodic benefit cost for pension and other postretirement benefits (see Note T).
(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) Realized gains and losses were included in Other income, net on the accompanying Statement of Consolidated Operations.
(5) These amounts were included in Sales on the accompanying Statement of Consolidated Operations.
(6) These amounts were included in Cost of goods sold on the accompanying Statement of Consolidated Operations.
(7) These amounts were included in Interest expense on the accompanying Statement of Consolidated Operations.
(8) 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 7.

C. Separation Transaction and Discontinued Operations

On November 1, 2016, Arconic completed the Separation Transaction. Alcoa Inc., which was re-named Arconic Inc., continues to own the Global Rolled Products (except for the Warrick, IN rolling operations and the equity interest in the rolling mill at the joint venture in Saudi Arabia), Engineered Products and Solutions, and Transportation and Construction Solutions segments. Alcoa Corporation includes the Alumina and Primary Metals segments and the aforementioned Warrick, IN rolling operations and equity interest in the rolling mill at the joint venture in Saudi Arabia, both of which were formally part of the Global Rolled Products segment.

Arconic completed the Separation Transaction by distribution on November 1, 2016 of 80.1% of the outstanding common stock of Alcoa Corporation to the Company's shareholders of record (the "Distribution") as of the close of business on October 20, 2016 (the "Record Date"). Arconic retained 19.9% of the Alcoa Corporation common stock (36,311,767 shares). In the Distribution, each Company shareholder received one share of Alcoa Corporation common stock for every three shares of Arconic common stock held as of the close of business on the Record Date. Shareholders received cash in lieu of fractional shares of Alcoa Corporation common stock. The Company had recorded the retained interest as a cost method investment in Investment in common stock of Alcoa Corporation in the December 2016 Consolidated Balance Sheet. The fair value of Arconic's retained interest in Alcoa Corporation was $1,020 at December 31, 2016 and was based on the closing stock price of Alcoa Corporation as of December 31, 2016 multiplied by the number of shares of Alcoa Corporation common stock owned by the Company at that date.

In February 2017, Arconic sold 23,353,000 of its shares of Alcoa Corporation common stock at $38.03 per share, which resulted in cash proceeds of $888 which were recorded in Sales of investments within Investing Activities in the accompanying Statement of Consolidated Cash Flows, and a gain of $351 which was recorded in Other income, net in the accompanying Statement of Consolidated Operations. In April and May 2017, the Company acquired a portion of its outstanding notes held by two investment banks (the "Investment Banks") in exchange for cash and the Company's remaining 12,958,767 Alcoa Corporation shares (valued at $35.91 per share) (the "Debt-for-Equity Exchange") (See Note I). A gain of $167 on the Debt-for-Equity Exchange was recorded in Other income, net in the accompanying Statement of Consolidated Operations. As of May 4, 2017, the Company no longer maintained a retained interest in Alcoa Corporation common stock.

On October 31, 2016, Arconic entered into several agreements with Alcoa Corporation that govern the relationship of the parties following the completion of the Separation Transaction. These agreements include the following: Separation and Distribution Agreement, Transition Services Agreement, Tax Matters Agreement, Employee Matters Agreement, Alcoa Corporation to Arconic Inc. Patent, Know-How, and Trade Secret License Agreement, Arconic Inc. to Alcoa Corporation Patent, Know-How, and Trade Secret License Agreement, Alcoa Corporation to Arconic Inc. Trademark License Agreement, Toll Processing and Services Agreement (the "Toll Processing Agreement"), Master Agreement for the Supply of Primary Aluminum, Massena Lease and Operations Agreement, Fusina Lease and Operations Agreement, and Stockholder and Registration Rights Agreement.

Effective November 1, 2016, Arconic entered into a Toll Processing Agreement with Alcoa Corporation for the tolling of metal for the Warrick, IN rolling mill which became a part of Alcoa Corporation upon completion of the Separation Transaction. As part of this arrangement, Arconic provides a toll processing service to Alcoa Corporation to produce can sheet products at its facility in Tennessee through the expected end date of the contract, December 31, 2018. Alcoa Corporation supplies all required raw materials to Arconic and Arconic processes the raw materials into finished can sheet coils ready for shipment to the end customer. Tolling revenues for 2017 and the two-month period ended December 31, 2016 and accounts receivable at

74

Table of Contents

December 31, 2017 and December 31, 2016 were not material to the consolidated results of operations and financial position for the years ended December 31, 2017 and December 31, 2016.
As part of the Separation Transaction, Arconic was required to provide maximum potential future payment guarantees for Alcoa Corporation issued on behalf of a third party, guarantees related to two long-term Alcoa Corporation energy supply agreements, guarantees related to certain Alcoa Corporation environmental liabilities and energy supply contracts, letters of credit and surety bonds related to Alcoa Corporation workers' compensation claims which occurred prior to November 1, 2016, and letters of credit for certain Alcoa Corporation equipment leases and energy contracts (see Note K).
As part of the Separation Transaction, Arconic had recorded a receivable in the December 2016 Consolidated Balance Sheet for the net after-tax proceeds from Alcoa Corporation's sale of the Yadkin Hydroelectric Project. The transaction closed and the Company received proceeds of $238 in the first quarter of 2017 and the remaining $5 in the second quarter of 2017. The $243 proceeds were included in Other within Investing Activities in the Statement of Consolidated Cash Flows.
The results of operations of Alcoa Corporation were presented as discontinued operations in the Statement of Consolidated Operations as summarized below:

	Ten months ended October 31, 2016	Year ended December 31, 2015
Sales	$ 6,752	$ 10,121
Cost of goods sold (exclusive of expenses below)	5,655	7,965
Selling, general administrative, and other expenses	164	214
Research and development	28	69
Provision for depreciation, depletion and amortization	593	772
Restructuring and other charges	102	981
Interest expense	28	25
Other (income) expenses, net	(75)	30
Income from discontinued operations before income taxes	257	65
Provision for income taxes	73	106
Income (loss) from discontinued operations after income taxes	184	(41)
Less: Net income from discontinued operations attributable to noncontrolling interests	63	124
Net income (loss) from discontinued operations	$ 121	$ (165)

During 2017, 2016 and 2015, Arconic recognized $18 ($12 after-tax), $193 ($158 after-tax) and $24 ($24 after-tax), respectively, in Selling, general administrative, and other expenses on the accompanying Statement of Consolidated Operations for costs related to the Separation Transaction. In addition, Arconic also incurred capital expenditures and debt issuance costs of $110 during 2016 related to the Separation Transaction. None of the aforementioned costs and expenses related to the Separation Transaction were reclassified into discontinued operations.
On November 1, 2016, management evaluated the net assets of Alcoa Corporation for potential impairment and determined that no impairment charge was required.
The cash flows related to Alcoa Corporation have not been segregated and are included in the Statement of Consolidated Cash Flows for 2016 and all prior periods presented. The following table presents depreciation, depletion and amortization, restructuring and other charges, and purchases of property, plant and equipment of the discontinued operations related to Alcoa Corporation:

For the year ended December 31,	2016	2015
Depreciation, depletion and amortization	$593	$772
Restructuring and other charges	$102	$981
Capital expenditures	$298	$391

75

Table of Contents

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
Asset impairments	$58	$80	$—
Layoff costs	64	70	97
Net loss on divestitures of businesses (F)	57	3	136
Other	(3)	27	(11)
Reversals of previously recorded layoff costs	(11)	(25)	(8)
Restructuring and other charges	$165	$155	$214

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, Arconic recorded Restructuring and other charges of $165 ($143 after-tax), which were comprised of the following components: $69 ($47 after-tax) for layoff costs related to cost reduction initiatives including the separation of approximately 880 employees (400 in the Engineered Products and Solutions segment, 245 in the Global Rolled Products segment, 135 in the Transportation and Construction Solutions segment and 100 in Corporate), a charge of $60 ($60 after-tax) related to the sale of the Fusina, Italy rolling mill; a charge of $41 ($41 after-tax) for the impairment of assets associated with the agreement to sell the Latin America Extrusions business (see Note F); a net benefit of $6 ($4 after-tax), for the reversal of forfeited executive stock compensation of $13, partially offset by a charge of $7 for the related severance; a net charge of $12 ($7 after-tax) for other miscellaneous items; and a favorable benefit of $11 ($8 after-tax) for the reversal of a number of small layoff reserves related to prior periods.

As of December 31, 2017, approximately 300 of the 880 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 $28 were made against layoff reserves related to 2017 restructuring programs.

2016 Actions. In 2016, Arconic recorded Restructuring and other charges of $155 ($114 after-tax), which were comprised of the following components: $57 ($46 after-tax) for costs related to the exit of certain legacy Firth Rixson operations in the U.K.; $37 ($24 after-tax) for exit costs related to the decision to permanently shut down a can sheet facility; $20 ($14 after-tax) for costs related to the closures of five facilities, primarily in the Transportation and Construction Solutions segment and Engineered Products and Solutions segment, including the separation of approximately 280 employees; $53 ($33 after-tax) for other layoff costs, including the separation of approximately 1,315 employees (1,045 in the Engineered Products and Solutions segment, 210 in Corporate, 30 in the Global Rolled Products segment and 30 in the Transportation and Construction Solutions segment); $11 ($8 after-tax) for other miscellaneous items, including $3 ($2 after-tax) for the sale of Remmele Medical; $2 ($1 after-tax) for a pension settlement; and $25 ($12 after-tax) for the reversal of a number of small layoff reserves related to prior periods.

In 2016, management made the decision to exit certain legacy Firth Rixson facilities in the U.K. Costs related to these actions included asset impairments and accelerated depreciation of $51; other exit costs of $4; and $2 for the separation of 60 employees.

Also in 2016, management approved the shutdown and demolition of the can sheet facility in Tennessee upon completion of the Toll Processing Agreement with Alcoa Corporation. Costs related to this action included $21 in asset impairments; $9 in other exit costs; and $7 for the separation of 145 employees. The other exit costs of $9 represent $4 in asset retirement obligations and $3 in environmental remediation, both of which were triggered by the decision to permanently shut down and demolish the can sheet facility in Tennessee, and $2 in other exit costs.

As of December 31, 2017, approximately 1,280 of the 1,700 (previously 1,750) employees were separated. The total number of employees associated with 2016 restructuring programs was updated to reflect employees, who were initially identified for separation, accepting other positions within Arconic and natural attrition. The remaining

separations for 2016 restructuring programs are expected to be completed by the end of 2018. In 2017 and 2016, cash payments of $26 and $16 were made against layoff reserves related to 2016 restructuring programs.

Table of Contents

2015 Actions. In 2015, Arconic recorded Restructuring and other charges of $214 ($192 after-tax), which were comprised of the following components: a $136 ($134 after-tax) net loss related to the March 2015 divestiture of a rolling mill in Russia and post-closing adjustments associated with the December 2014 divestitures of three rolling mills located in Spain and France; $97 ($70 after-tax) for layoff costs, including the separation of approximately 1,505 employees (590 in the Engineered Products and Solutions segment, 425 in the Transportation and Construction Solutions segment, 400 in Corporate and 90 in the Global Rolled Products segment); an $18 ($13 after-tax) gain on the sale of land related to one of the rolling mills in Australia that was permanently closed in December 2014; a net charge of $7 ($4 after-tax) for other miscellaneous items; and $8 ($3 after-tax) for the reversal of a number of small layoff reserves related to prior periods.

As of December 31, 2017, the separations associated with the 2015 restructuring programs were essentially complete. In 2017, 2016 and 2015, cash payments of $5, $55 and $18, respectively, were made against layoff reserves related to 2015 restructuring programs.

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

	2017	2016	2015
Engineered Products and Solutions	$30	$78	$46
Global Rolled Products	72	40	121
Transportation and Construction Solutions	52	14	8
Segment total	154	132	175
Corporate	11	23	39
Total restructuring and other charges	$165	$155	$214

Activity and reserve balances for restructuring charges were as follows:

	Layoff costs	Other exit costs	Total
Reserve balances at December 31, 2014	$ 48	$ 20	$68
2015:			
Cash payments	(45)	(12)	(57)
Restructuring charges	97	7	104
Other*	(16)	(6)	(22)
Reserve balances at December 31, 2015	84	9	93
2016:			
Cash payments	(73)	(13)	(86)
Restructuring charges	70	27	97
Other*	(31)	(14)	(45)
Reserve balances at December 31, 2016	50	9	59
2017:			
Cash payments	(59)	(6)	(65)
Restructuring charges	64	1	65
Other*	1	(2)	(1)
Reserve balances at December 31, 2017	$ 56	$ 2	$58

* Other includes reversals of previously recorded restructuring charges and the effects of foreign currency translation. In 2017, Other for layoff costs also includes the reclassification of a stock awards reversal of $13. In 2016, Other for other exit costs also included a reclassification of $8 in asset retirement and $2 in environmental obligations, as these liabilities were included in Arconic's separate reserves for asset retirement obligations and environmental remediation. Other for other exit costs also included a reclassification of $4 in legal obligations, as these liabilities were included in Arconic's separate reserves for legal costs. In 2015, Other for other exit costs included a reclassification of $5 for certain obligations included in Arconic's separate reserves for warranties, lease terminations

and tax indemnities.

Table of Contents

The remaining reserves are expected to be paid in cash during 2018.

E. Goodwill and Other Intangible Assets

The following table details the changes in the carrying amount of goodwill:

	Engineered Products and Solutions	Global Rolled Products	Transportation and Construction Solutions	Corporate*	Total
Balances at December 31, 2015					
Goodwill	$ 4,660	$ 201	$ 111	$ 330	$ 5,302
Accumulated impairment losses	—	—	(53)	—	(53)
	4,660	201	58	330	5,249
Acquisitions and Divestitures (F)	47	—	—	—	47
Translation and other	(128)	(20)	(1)	1	(148)
Balances at December 31, 2016					
Goodwill	4,579	181	110	331	5,201
Accumulated impairment losses	—	—	(53)	—	(53)
	4,579	181	57	331	5,148
Impairment (A)	(719)	—	—	—	(719)
Translation and other	89	12	3	2	106
Balances at December 31, 2017					
Goodwill	4,668	193	113	333	5,307
Accumulated impairment losses	(719)	—	(53)	—	(772)
	$ 3,949	$ 193	$ 60	$ 333	$ 4,535

* As of December 31, 2017, the amount reflected in Corporate is allocated to Arconic's three reportable segments ($256 to Engineered Products and Solutions, $59 to Global Rolled Products and $18 to Transportation and Construction Solutions) for purposes of impairment testing (see Goodwill policy in Note A). This goodwill is reflected in Corporate for segment reporting purposes because it is not included in management's assessment of performance by the three reportable segments.

In 2017, Arconic recognized an impairment of goodwill in the amount of $719 related to the annual impairment review of the AFE reporting unit which is included in the Engineered Products and Solutions segment. In 2015, Arconic recognized an impairment of goodwill in the amount of $25 related to the annual impairment review of the soft alloy extrusion business reporting unit which is included in the Transportation and Construction Solutions segment (see Goodwill policy in Note A).

Other intangible assets were as follows:

December 31, 2017	Gross carrying amount	Accumulated amortization
Computer software	$ 789	$ (674)
Patents and licenses	110	(107)
Other intangibles	953	(116)
Total amortizable intangible assets	1,852	(897)
Indefinite-lived trade names and trademarks	32	—
Total other intangible assets	$ 1,884	$ (897)

Table of Contents

December 31, 2016	Gross carrying amount	Accumulated amortization
Computer software	$ 755	$ (623)
Patents and licenses	110	(102)
Other intangibles	897	(81)
Total amortizable intangible assets	1,762	(806)
Indefinite-lived trade names and trademarks	32	—
Total other intangible assets	$ 1,794	$ (806)

Computer software consists primarily of software costs associated with an enterprise business solution (EBS) within Arconic 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 $71, $65, and $67, respectively, and is expected to be in the range of approximately $60 to $75 annually from 2018 to 2022.

F. Acquisitions and Divestitures

Pro forma results of the Company, assuming all acquisitions described below were made at the beginning of the earliest prior period presented, would not have been materially different from the results reported.

2017 Divestitures. In March 2017, Arconic completed the sale of its Fusina, Italy rolling mill to Slim Aluminium. While owned by Arconic, the operating results and assets and liabilities of the Fusina, Italy rolling mill were included in the Global Rolled Products segment. As part of the transaction, Arconic injected $10 of cash into the business and provided a third-party guarantee with a fair value of $5 related to Slim Aluminium's environmental remediation. The Company recorded a loss on the sale of $60, which was recorded in Restructuring and other charges (see Note D) on the Statement of Consolidated Operations for 2017. The rolling mill generated third-party sales of approximately $54 and $165 for 2017 and 2016, respectively. At the time of the divestiture, the rolling mill had approximately 312 employees.

In December 2017, Arconic entered into an agreement to sell its Latin America Extrusions business for $10 million in cash, subject to working capital and other adjustments. The Latin America Extrusions business operates primarily in Brazil and is part of the Company's Transportation and Construction Solutions segment. Following customary regulatory and anti-trust approvals, the ownership of this business is expected to be transferred to a subsidiary of Hydro Extruded Solutions AS in the first half of 2018. As a result of the transaction, Arconic recognized a charge of $41 million in the fourth quarter of 2017 primarily related to the non-cash impairment of the net book value of the business (See Notes A and D).

2016 Divestitures. In April 2016, Arconic completed the sale of the Remmele Medical business to LISI MEDICAL for $102 in cash ($99 net of transaction costs), which was included in Proceeds from the sale of assets and businesses on the accompanying Statement of Consolidated Cash Flows. This business, which was part of the RTI International Metals Inc. (RTI) acquisition (see below), manufactured precision-machined metal products for customers in the minimally invasive surgical device and implantable device markets. Since this transaction occurred within a year of the completion of the RTI acquisition, no gain was recorded on this transaction as the excess of the proceeds over the carrying value of the net assets of this business was reflected as a purchase price adjustment (decrease to goodwill of $44) to the final allocation of the purchase price related to Arconic's acquisition of RTI. While owned by Arconic, the operating results and assets and liabilities of this business were included in the Engineered Products and Solutions segment. This business generated sales of approximately $20 from January 1, 2016 through the divestiture date, April 29, 2016, and, at the time of the divestiture, had approximately 330 employees.

2015 Acquisitions. In March 2015, Arconic completed the acquisition of an aerospace structural castings company, TITAL, for $204 (€188) in cash (an additional $1 (€1) was paid in September 2015 to settle working capital in accordance with the purchase agreement). TITAL, a privately held company with approximately 650 employees at the time of the acquisition and based in Germany, produces aluminum and titanium investment casting products for the aerospace and defense markets. The purpose of this acquisition was to capture increasing demand for advanced jet

engine components made of titanium, establish titanium-casting capabilities in Europe, and expand existing aluminum casting capacity. The assets, including the associated goodwill, and liabilities of this business were included within Arconic's Engineered Products and Solutions segment since the date of acquisition. Based on the preliminary allocation of the purchase price, goodwill of $118 was recorded for this transaction. In the first quarter of 2016, the allocation of the purchase price was finalized, based, in part, on the completion of a

---

third-party valuation of certain assets acquired, resulting in a $1 reduction of the initial goodwill amount. None of the $117 in goodwill is deductible for income tax purposes and no other intangible assets were identified.

In July 2015, Arconic completed the acquisition of RTI, a U.S. company that was publicly traded on the New York Stock Exchange under the ticker symbol "RTI." Arconic purchased all outstanding shares of RTI common stock in a stock-for-stock transaction valued at $870 (based on the $9.96 per share July 23, 2015 closing price of Arconic's common stock). Each issued and outstanding share of RTI common stock prior to the completion of the transaction was converted into the right to receive 2.8315 shares of Arconic common stock. In total, Arconic issued 29,132,471 shares (87,397,414 shares pre-reverse stock split – see Note O) of its common stock to consummate this transaction, which was not reflected in the accompanying Statement of Consolidated Cash Flows as it represents a noncash financing activity. The exchange ratio was the quotient of a $41 per RTI common share acquisition price and the $14.48 per share March 6, 2015 closing price of Arconic's common stock. In addition to the transaction price, Arconic also paid $25 ($19 after-tax) in professional fees and costs related to this acquisition. This amount was recorded in Selling, general administrative, and other expenses on the accompanying Statement of Consolidated Operations.

RTI is a global supplier of titanium and specialty metal products and services for the commercial aerospace, defense, energy, and medical device end markets. The purpose of this acquisition was to expand Arconic's range of titanium offerings and add advanced technologies and materials, primarily related to the aerospace end market. In 2014, RTI generated net sales of $794 and had approximately 2,600 employees. The operating results and assets and liabilities of RTI were included within Arconic's Engineered Products and Solutions segment since the date of acquisition. Third-party sales and Adjusted EBITDA (Arconic's primary segment performance measure – see Note N) of RTI from the acquisition date through December 31, 2015 were $309 and $21, respectively. During the third quarter of 2016, the final purchase price allocation was completed.

Arconic recognized goodwill of $298, which represents the earnings growth potential of RTI, Arconic's ability to expand its titanium capabilities in the aerospace market, and expected synergies from combining the operations of the two companies. This goodwill was allocated to a new Arconic reporting unit associated with the Engineered Products and Solutions segment, ATEP, which consists solely of the acquired RTI business. None of this goodwill is deductible for income tax purposes. Arconic also recorded intangible assets of $37 consisting mainly of customer relationships which are being amortized over a period of 20 years.

As part of this acquisition, Arconic assumed the obligation to repay two tranches of convertible debt; one tranche was due and settled in cash on December 1, 2015 (principal amount of $115) and the other tranche is due on October 15, 2019 (principal amount of $403), unless earlier converted or purchased by Arconic at the holder's option under specific conditions. Upon conversion of the 2019 convertible notes, holders will receive, at Arconic's election, cash, shares of common stock (approximately 14,294,000 shares using the December 31, 2017 conversion rate of 35.5119 shares per $1,000 (not in millions) bond or per-share conversion price of $28.1596), or a combination of cash and shares. On the maturity date, each holder of outstanding notes will be entitled to receive $1,000 (not in millions) in cash for each $1,000 (not in millions) bond, together with accrued and unpaid interest. The cash conversion feature requires the convertible notes to be bifurcated into a liability component and an equity component. The fair value of the liability component was determined by calculating the net present value of the cash flows of the convertible notes using the interest rate of a similar instrument without a conversion feature. The fair value of the equity component is the difference between the fair value of the entire instrument on the date of acquisition and the fair value of the liability and is included as Additional capital on the accompanying Consolidated Balance Sheet.

2015 Divestitures. In 2015, Arconic completed the divestiture of an operation in Russia (see below) and had post-closing adjustments, as provided for in the respective purchase agreements, related to a divestiture completed in December 2014. The divestiture and post-closing adjustments combined resulted in net cash paid of $11 and a net loss of $137, which was recorded in Restructuring and other charges (see Note D) on the accompanying Statement of Consolidated Operations.

In March 2015, Arconic completed the sale of a rolling mill located in Belaya Kalitva, Russia to a wholly-owned subsidiary of Stupino Titanium Company. While owned by Arconic, the operating results and assets and liabilities of the rolling mill were included in the Global Rolled Products segment. The rolling mill generated sales of approximately $130 in 2014 and, at the time of divestiture, had approximately 1,870 employees.

2014 Acquisitions. In November 2014, Arconic acquired Firth Rixson. The purchase price included an earn-out agreement that required Arconic to make earn-out payments up to an aggregate maximum amount of $150 through December 31, 2020 upon certain conditions. This earn-out was contingent on the Firth Rixson forging business in Savannah, Georgia achieving certain identified financial targets through December 31, 2020. During the fourth quarter of 2016, management determined that payment of the maximum amount was not probable based on the forecasted financial performance of this location. Therefore, the fair value of this liability was reduced by $56 with a corresponding credit to Other income, net on the accompanying Statement of Consolidated Operations. During the fourth quarter of 2017, management determined that payment of the

Table of Contents

remaining amount of the contingent liability was not probable based on the forecasted financial performance of this location. Therefore, the fair value of this liability was reduced by $81 to zero at December 31, 2017 with a corresponding credit to Other income, net on the accompanying Statement of Consolidated Operations.

G. Inventories

December 31,	2017	2016
Finished goods	$669	$625
Work-in-process	1,349	1,144
Purchased raw materials	381	408
Operating supplies	81	76
	$2,480	$2,253

At December 31, 2017 and 2016, the total amount of inventories valued on a LIFO basis was $1,208 and $947, respectively. If valued on an average-cost basis, total inventories would have been $481 and $371 higher at December 31, 2017 and 2016, respectively. During 2017 and 2016, reductions in LIFO inventory quantities caused partial liquidations of the lower cost LIFO inventory base. These liquidations resulted in the recognition of immaterial income amounts in 2017, 2016, and 2015.

H. Properties, Plants, and Equipment, Net

December 31,	2017	2016
Land and land rights	$140	$135
Structures:		
Engineered Products and Solutions	784	733
Global Rolled Products	1,090	1,061
Transportation and Construction Solutions	268	254
Other	253	248
	2,395	2,296
Machinery and equipment:		
Engineered Products and Solutions	3,054	2,728
Global Rolled Products	4,641	4,570
Transportation and Construction Solutions	777	723
Other	358	337
	8,830	8,358
	11,365	10,789
Less: accumulated depreciation and amortization	6,392	6,073
	4,973	4,716
Construction work-in-progress	621	783
	$5,594	$5,499

Table of Contents

I. Debt
Long-Term Debt.

December 31,	2017	2016
6.50% Bonds, due 2018	$—	$250
6.75% Notes, due 2018	—	750
5.72% Notes, due 2019	500	750
1.63% Convertible Notes, due 2019*	403	403
6.150% Notes, due 2020	1,000	1,000
5.40% Notes, due 2021	1,250	1,250
5.87% Notes, due 2022	627	627
5.125% Notes, due 2024	1,250	1,250
5.90% Notes, due 2027	625	625
6.75% Bonds, due 2028	300	300
5.95% Notes due 2037	625	625
Iowa Finance Authority Loan, due 2042 (4.75%)	250	250
Other**	(23)	(32)
	6,807	8,048
Less: amount due within one year	1	4
	$6,806	$8,044

* Amount was assumed in conjunction with the acquisition of RTI (see Note F).

** Other includes various financing arrangements related to subsidiaries, unamortized debt discounts related to the outstanding notes and bonds listed in the table above, an equity option related to the convertible notes due in 2019 (see Note F), adjustments to the carrying value of long-term debt related to an interest swap contract accounted for as a fair value hedge that was unwound during 2017, and unamortized debt issuance costs.

The principal amount of long-term debt maturing in each of the next five years is $1 in 2018, $903 in 2019, $1,000 in 2020, $1,250 in 2021, and $627 in 2022.

Public Debt—In April 2017, the Company announced three separate cash tender offers by the Investment Banks for the purchase of the Company's 6.50% Bonds due 2018 (the "6.50% Bonds"), 6.75% Notes due 2018 (the "6.75% Notes"), and 5.72% Notes due 2019 (the "5.72% Notes"), up to a maximum purchase amount of $1,000 aggregate principal amount of notes, subject to certain conditions.

The Investment Banks purchased notes totaling $805 aggregate principal amount, including $150 aggregate principal amount of 6.50% Bonds, $405 aggregate principal amount of 6.75% Notes, and $250 aggregate principal amount of $5.72% Notes.

During the second quarter of 2017, the Company agreed to acquire the notes from the Investment Banks for $409 in cash plus its remaining investment in Alcoa Corporation common stock (12,958,767 shares valued at $35.91 per share) for total consideration of $874 including accrued and unpaid interest. The Company recorded a charge of $58 ($27 in cash) primarily for the premium for the early redemption of the notes, a benefit of $8 for the proceeds of a related interest rate swap agreement, and a charge of $2 for legal fees associated with the transaction in Interest expense, and recorded a gain of $167 in Other income, net in the accompanying Statement of Consolidated Operations for the Debt-for-Equity Exchange.

On June 19, 2017, the Company completed the early redemption of its remaining outstanding 6.50% Bonds, with aggregate principal amount of $100, and its remaining outstanding 6.75% Notes, with aggregate principal amount of $345, for $479 in cash including accrued and unpaid interest. As a result of the early redemption of the 6.50% Bonds and 6.75% Notes, the Company recorded a charge of $24 in Interest expense in the accompanying Statement of

Consolidated Operations for the premium paid for the early redemption of these notes in excess of their carrying value.

In December 2016, Arconic elected to call for redemption the $750 in outstanding principal of its 5.55% Notes due February 2017 (the “2017 Notes”) under the provisions of the 2017 Notes. The total cash paid to the holders of the called 2017 Notes was $770, which includes $17 in accrued and unpaid interest from the last interest payment date up to, but not including, the

settlement date, and a $3 purchase premium. The purchase premium was recorded in Interest expense on the accompanying Statement of Consolidated Operations. This transaction was completed on December 30, 2016.
The Company has the option to redeem certain of its Notes and Bonds in whole or part, at any time at a redemption price equal to the greater of principal amount or the sum of the present values of the remaining scheduled payments, discounted using a defined treasury rate plus a spread, plus in either case accrued and unpaid interest to the redemption date.
Credit Facilities. On July 25, 2014, Arconic entered into a Five-Year Revolving Credit Agreement ("the Credit Agreement") with a syndicate of lenders and issuers named therein which provides for a senior unsecured revolving credit facility (the "Credit Facility"). The proceeds are to be used to provide working capital or for other general corporate purposes of Arconic. By an Extension Request and Amendment Letter dated as of June 5, 2015, the maturity date of the Credit Facility was extended to July 25, 2020. In September 2016, Arconic entered into an amendment to the Credit Agreement to permit the Separation Transaction and to amend certain terms of the Credit Agreement including the replacement of the existing financial covenant with a leverage ratio and reduction of total commitments available from $4,000 to $3,000. The amendment became effective on the separation date of November 1, 2016. The previous financial covenant, based upon Consolidated Net Worth (as defined in the Credit Agreement) was replaced. Arconic is required to maintain a ratio of Indebtedness (as defined in the Credit Agreement), to Consolidated EBITDA (as defined in the Credit Agreement) of 4.50 to 1.00 for the period of the four fiscal quarters most recently ended, declining to 3.50 to 1.00 on December 31, 2019 and thereafter.
The Credit Agreement includes additional covenants, including, among others, (a) limitations on Arconic's ability to incur liens securing indebtedness for borrowed money, (b) limitations on Arconic's ability to consummate a merger, consolidation or sale of all or substantially all of its assets, and (c) limitations on Arconic's ability to change the nature of its business. As of December 31, 2017, Arconic was in compliance with all such covenants.
The Credit Facility matures on July 25, 2020, unless extended or earlier terminated in accordance with the provisions of the Credit Agreement. Arconic may make one additional one-year extension request during the remaining term of the Credit Facility, subject to the lender consent requirements set forth in the Credit Agreement. Under the provisions of the Credit Agreement, Arconic will pay a fee up to 0.30% (based on Arconic's long-term debt ratings as of December 31, 2017) of the total commitment per annum to maintain the Credit Facility.
The Credit Facility is unsecured and amounts payable under it will rank pari passu with all other unsecured, unsubordinated indebtedness of Arconic. Borrowings under the Credit Facility may be denominated in U.S. dollars or euros. Loans will bear interest at a base rate or a rate equal to LIBOR, plus, in each case, an applicable margin based on the credit ratings of Arconic's outstanding senior unsecured long-term debt. The applicable margin on base rate loans and LIBOR loans will be 0.70% and 1.70% per annum, respectively, based on Arconic's long-term debt ratings as of December 31, 2017. Loans may be prepaid without premium or penalty, subject to customary breakage costs.
The obligation of Arconic to pay amounts outstanding under the Credit Facility may be accelerated upon the occurrence of an "Event of Default" as defined in the Credit Agreement. Such Events of Default include, among others, (a) Arconic's failure to pay the principal of, or interest on, borrowings under the Credit Facility, (b) any representation or warranty of Arconic in the Credit Agreement proving to be materially false or misleading, (c) Arconic's breach of any of its covenants contained in the Credit Agreement, and (d) the bankruptcy or insolvency of Arconic.
There were no amounts outstanding at December 31, 2017 and 2016 and no amounts were borrowed during 2017, 2016 or 2015 under the Credit Facility. In addition to the Credit Facility above, Arconic has a number of other credit facilities that provide a combined borrowing capacity of $715 as of December 31, 2017, of which $640 is due to expire in 2018 and $75 is due to expire in 2019. The purpose of any borrowings under these credit arrangements is to provide for working capital requirements and for other general corporate purposes. The covenants contained in all these arrangements are the same as the Credit Agreement (see above).
In 2017, 2016 and 2015, Arconic borrowed and repaid $810, $1,950, and $1,890, respectively, under the respective credit arrangements. The weighted-average interest rate and weighted-average days outstanding of the respective borrowings during 2017, 2016 and 2015 were 2.6%, 1.9%, and 1.6%, respectively, and 46 days, 49 days, and 69 days, respectively.

Short-Term Debt. At December 31, 2017 and 2016, short-term debt was $38 and $40, respectively. These amounts included $33 and $31 at December 31, 2017 and 2016, respectively, related to accounts payable settlement arrangements with certain vendors and third-party intermediaries. These arrangements provide that, at the vendor's request, the third-party intermediary advances the amount of the scheduled payment to the vendor, less an appropriate discount, before the scheduled payment date and Arconic makes payment to the third-party intermediary on the date stipulated in accordance with the commercial terms negotiated with its vendors. Arconic records imputed interest related to these arrangements in Interest expense on the accompanying Statement of Consolidated Operations.

Table of Contents

Commercial Paper. Arconic had no outstanding commercial paper at December 31, 2017 and 2016. In 2017 and 2016, the average outstanding commercial paper was $67 and $127, respectively. Commercial paper matures at various times within one year and had an annual weighted average interest rate of 1.6%, 1.1%, and 0.6% during 2017, 2016, and 2015, respectively.

J. Other Noncurrent Liabilities and Deferred Credits

December 31,	2017	2016
Environmental remediation (L)	$253	$260
Income taxes (Q)	162	154
Accrued compensation and retirement costs	218	216
Contingent payment related to an acquisition (F)	—	78
Other	126	162
	$759	$870

K. Contingencies and Commitments

Contingencies

Environmental Matters. Arconic participates in environmental assessments and cleanups at more than 100 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 the nature and extent of contamination, changes in remedial requirements, and technological changes, among others.

Arconic's remediation reserve balance was $294 at December 31, 2017 and $308 at December 31, 2016 (of which $41 and $48, respectively, was classified as a current liability), and reflects the most probable costs to remediate identified environmental conditions for which costs can be reasonably estimated. In 2017, the remediation reserve increased by $5 due to a net charge associated with a number of sites and was recorded in Costs of goods sold on the accompanying Statement of Consolidated Operations. The change in the reserve also reflects an increase of $8 due to a reclassification of amounts included in other reserves within Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet, and a decrease of $1 due to the effects of foreign currency translation. Payments related to remediation expenses applied against the reserve were $26 in 2017 and include expenditures currently mandated, as well as those not required by any regulatory authority or third party.

Included in annual operating expenses are the recurring costs of managing hazardous substances and environmental programs. These costs are estimated to be approximately 1% or less of cost of goods sold.

The following discussion provides details regarding the current status of the most significant remediation reserve related to a current Arconic site.

Massena West, NY—Arconic has an ongoing remediation project related to the Grasse River, which is adjacent to Arconic's Massena plant site. Many years ago, it was determined that sediments and fish in the river contain varying levels of polychlorinated biphenyls (PCBs). The project, which was selected by the U.S. Environmental Protection Agency (EPA) in a Record of Decision issued in April 2013, is aimed at capping PCB contaminated sediments with concentration in excess of one part per million in the main channel of the river and dredging PCB contaminated sediments in the near-shore areas where total PCBs exceed one part per million. At December 31, 2017 and December 31, 2016, the reserve balance associated with this matter was $215 and $228, respectively. Arconic is in the planning and design phase of the project, which phase is now expected to be completed in 2018. Originally, the design was scheduled to be completed and approved by the EPA in 2017, but in the third quarter of 2017, the New York State Department of Environmental Conservation (DEC) sent a letter to EPA requesting revisions to the draft design. That caused EPA to delay their review and comment on the draft design. EPA has now responded to the DEC letter and

while issues remain, Arconic is now able to recommence work on the final design. Following submittal of the final design and EPA approval, the actual remediation fieldwork is expected to commence and take approximately four years. The majority of the project funding is expected to be incurred between 2018 and 2022.

Table of Contents

Tax. Pursuant to the Tax Matters Agreement (see Note C), dated as of October 31, 2016, entered into between the Company and Alcoa Corporation in connection with the Separation, the Company shares responsibility with Alcoa Corporation for, and Alcoa Corporation has agreed to partially indemnify the Company with respect to the following matter.

As previously reported, 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 the Company. An appeal of this assessment in Spain's Central Tax Administrative Court by the Company was denied in October 2013. In December 2013, the Company filed an appeal of the assessment in Spain's National Court.

On January 16, 2017, Spain's National Court issued a decision in favor of the Company related to the assessment received in September 2010. The Spanish Tax Administration did not file an appeal within the applicable period. Based on this decision and recent confirming correspondence from the Spanish Tax Administration, the matter is now closed. The Company will not be responsible for any assessment related to the 2003 through 2005 tax years.

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, the Company filed an appeal of this second assessment in Spain's Central Tax Administrative Court, which was denied in January 2015. The Company filed an appeal of this second assessment in Spain's National Court in March 2015. Spain's National Court has not yet rendered a decision related to the assessment received in July 2013. The assessment for the 2006 through 2009 tax years is $155 (€130), including interest.

The Company believes it has meritorious arguments to support its tax position and intends to vigorously litigate the assessments through Spain's court system. However, in the event the Company is unsuccessful, a portion of the assessments may be offset with existing net operating losses available to the Spanish consolidated tax group, which would be shared between the Company and Alcoa Corporation as provided for in the Tax Matters Agreement. Additionally, while the tax years 2010 through 2013 are closed to audit, it is possible that the Company may receive similar assessments for tax years subsequent to 2013. At this time, the Company is unable to reasonably predict an ultimate outcome for this matter.
Reynobond PE. As previously reported, on June 13, 2017, the Grenfell Tower in London, UK caught fire resulting in fatalities, injuries and damage. A French subsidiary of Arconic, Arconic Architectural Products SAS (AAP SAS), supplied a product, Reynobond PE, to its customer, a cladding system fabricator, which used the product as one component of the overall cladding system on Grenfell Tower. The fabricator supplied its portion of the cladding system to the façade installer, who then completed and installed the system under the direction of the general contractor. Neither Arconic nor AAP SAS was involved in the design or installation of the system used at the Grenfell Tower, nor did it have a role in any other aspect of the building's refurbishment or original design. Regulatory investigations into the overall Grenfell Tower matter are being conducted, including a criminal investigation by the London Metro Police, a Public Inquiry by the British government and a consumer protection inquiry by a French public authority. AAP SAS sought and received core participant status in the Public Inquiry. The Company will no longer sell the PE product for architectural use on buildings.

In August and September 2017, two purported class action complaints were filed against Arconic and certain officers, directors and/or other parties, alleging that, in light of the Grenfell Tower fire, certain Company filings with the Securities and Exchange Commission contained false and misleading disclosures and omissions in violation of the federal securities laws. Those cases remain pending.
While the Company believes that these cases are without merit and intends to challenge them vigorously, there can be no assurances regarding the ultimate resolution of these matters. Given the preliminary nature of these matters and the uncertainty of litigation, the Company cannot reasonably estimate at this time the likelihood of an unfavorable

outcome or the possible loss or range of losses in the event of an unfavorable outcome. The Board of Directors has also received letters, purportedly sent on behalf of shareholders, reciting allegations similar to those made in the federal court lawsuits and demanding that the Board authorize the Company to initiate litigation against members of management, the Board and others. The Board of Directors has appointed a Special Litigation Committee to review these shareholder demand letters and is considering the appropriate course of action. In addition, lawsuits are pending in state court in New York and federal court in Pennsylvania, initiated, respectively, by another purported shareholder and by the Company, concerning the shareholder's claimed right, which the Company contests, to inspect the Company's books and records related to the Grenfell Tower fire and Reynobond PE.

Other. In addition to the matters discussed above, various other lawsuits, claims, and proceedings have been or may be instituted or asserted against Arconic, including those pertaining to environmental, product liability, safety and health, employment, and tax matters. While the amounts claimed in these other matters may be substantial, the ultimate liability cannot

Table of Contents

currently be determined because of the considerable uncertainties that exist. Therefore, it is possible that the Company's liquidity or results of operations in a 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 results of operations, financial position or cash flows of the Company.

Commitments

Purchase Obligations. Arconic has entered into purchase commitments for raw materials, energy and other goods and services, which total $861 in 2018, $176 in 2019, $74 in 2020, $13 in 2021, $6 in 2022, and $5 thereafter.

Operating Leases. Certain land and buildings, plant equipment, vehicles, and computer equipment are under operating lease agreements. Total expense for all leases was $113 in 2017, $110 in 2016, and $112 in 2015. Under long-term operating leases, minimum annual rentals are $108 in 2018, $88 in 2019, $62 in 2020, $46 in 2021, $38 in 2022, and $100 thereafter.

Guarantees. At December 31, 2017, Arconic has outstanding bank guarantees related to tax matters, outstanding debt, workers' compensation, environmental obligations, energy contracts, and customs duties, among others. The total amount committed under these guarantees, which expire at various dates between 2018 and 2026 was $29 at December 31, 2017.

Pursuant to the Separation and Distribution Agreement, Arconic was required to provide certain guarantees for Alcoa Corporation, which had a combined fair value of $8 and $35 at December 31, 2017 and 2016, respectively, and were included in Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet. Arconic was required to provide payment guarantees for Alcoa Corporation issued on behalf of a third party, and amounts outstanding under these payment guarantees were $197 and $354 at December 31, 2017 and 2016, respectively. These guarantees expire at various times between 2018 and 2024, and relate to project financing for Alcoa Corporation's aluminum complex in Saudi Arabia. Furthermore, Arconic was required to provide guarantees related to two long-term supply agreements for energy for Alcoa Corporation facilities in the event of an Alcoa Corporation payment default. In October 2017, Alcoa Corporation announced that it had terminated one of the two agreements, the electricity contract with Luminant Generation Company LLC that was tied to its Rockdale Operations, effective as of October 1, 2017. As a result of the termination of the Rockdale electricity contract, Arconic recorded income of $25 in the fourth quarter of 2017 associated with reversing the fair value of the electricity contract guarantee. For the remaining long-term supply agreement, Arconic is required to provide a guarantee up to an estimated present value amount of approximately $1,297.

Arconic was also required to provide guarantees of $50 related to two Alcoa Corporation energy supply contracts. These guarantees expired in March 2017. Additionally, Arconic was required to provide guarantees of $53 related to certain Alcoa Corporation environmental liabilities. Notification of a change in guarantor to Alcoa Corporation was made to the appropriate environmental agencies and as such, Arconic no longer provides these guarantees.

In December 2016, Arconic entered into a one-year claims purchase agreement with a bank covering claims up to $245 related to the Saudi Arabian joint venture and two long-term energy supply agreements. The majority of the premium was paid by Alcoa Corporation. The agreement matured in December 2017 and was not renewed in 2018 due to the decline in exposure to guarantee claims including a substantial reduction in the guarantees related to the Saudi Arabian joint venture and also the elimination of the guarantee related to the Rockdale energy contract. The decision to enter into a claims purchase agreement will be made on an annual basis going forward.

Letters of Credit. Arconic has outstanding letters of credit primarily related to workers' compensation, energy contracts and leasing obligations. The total amount committed under these letters of credit, which automatically renew or expire at various dates, mostly in 2018, was $120 at December 31, 2017.

Pursuant to the Separation and Distribution Agreement, Arconic was required to retain letters of credit of $62 that had previously been provided related to both Arconic and Alcoa Corporation workers' compensation claims which occurred prior to November 1, 2016. Alcoa Corporation workers' compensation claims and letter of credit fees paid by Arconic are being proportionally billed to and are being fully reimbursed by Alcoa Corporation. Additionally, Arconic was required to provide letters of credit for certain Alcoa Corporation equipment leases and energy contracts and, as a

result, Arconic had $103 of outstanding letters of credit relating to these liabilities. The entire $103 of outstanding letters of credit were canceled in 2017 when Alcoa Corporation issued its own letters of credit to cover these obligations.

Surety Bonds. Arconic 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 $54 at December 31, 2017.

Table of Contents

Pursuant to the Separation and Distribution Agreement, Arconic was required to provide surety bonds related to Alcoa Corporation workers' compensation claims which occurred prior to November 1, 2016 and, as a result, Arconic has $25 in outstanding surety bonds relating to these liabilities. Alcoa Corporation workers' compensation claims and surety bond fees paid by Arconic are being proportionately billed to and are being fully reimbursed by Alcoa Corporation.

L. Other Income, Net

	2017	2016	2015
Equity income	$—	$(7)	$—
Interest income	(19)	(16)	(16)
Foreign currency (gains) losses, net	(5)	(4)	51
Net (gain) loss from asset sales	(513)	11	(42)
Net loss (gain) on mark-to-market derivative contracts	—	1	(3)
Other, net	(103)	(79)	(18)
	$(640)	$(94)	$(28)

In 2017, Net gain from assets sales included a gain on the sale of a portion of Arconic's investment in Alcoa Corporation common stock of $351 (see Note C) and a gain of $167 on the Debt-for-Equity Exchange (see Note I). In 2017, Other, net included an adjustment of $81 to the contingent earn-out liability related to the 2014 acquisition of Firth Rixson (see Note F) and an adjustment of $25 associated with a separation-related guarantee liability (see Note K). In 2016, Other, net included an adjustment of $56 to the contingent earn-out liability and a post-closing adjustment of $20, both related to the acquisition of Firth Rixson. In 2015, Net gain from asset sales included a gain of $19 related to the sale of land around Arconic's former Sherwin, TX site and a gain of $19 related to the sale of the remaining equity investment in a China rolling mill.

M. Cash Flow Information

Cash paid for interest and income taxes was as follows:

	2017	2016	2015
Interest, net of amount capitalized	$508	$524	$487
Income taxes, net of amount refunded	$118	$324	$345

The details related to cash paid for acquisitions were as follows:

	2017	2016	2015
Assets acquired	$ —	$ —	$2,003
Liabilities assumed	—	—	(868)
Equity issued	—	—	(870)
Working capital adjustment	—	(10)	—
Increase in Arconic's shareholders' equity	—	—	(60)
Cash paid	—	(10)	205
Less: cash acquired	—	—	302
Net cash paid	$ —	$(10)	$(97)

During 2016, Arconic sold various securities held by its captive insurance company for $130, and an equity interest in a natural gas pipeline of $145 (Alcoa Corporation), both of which were included in Sales of investments on the accompanying Statement of Consolidated Cash Flows.

In 2016, Arconic received $457 in proceeds from the redemption of certain company-owned life insurance policies, sold its Intalco smelter wharf property (Alcoa Corporation) for $120, and sold the Remmele Medical business (see Note F) for $102. These amounts were included in Proceeds from the sale of assets and businesses on the accompanying Statement of Consolidated Cash Flows.

Noncash Financing and Investing Activities. On October 2, 2017, all outstanding 24,975,978 depositary shares (each depositary share representing a 1/10th interest in a share of the mandatory convertible preferred stock) were converted

at a rate

87

---

of 1.56996 into 39,211,286 common shares; 24,022 depositary shares were previously tendered for early conversion into 31,420 shares of Arconic common stock. No gain or loss was recognized associated with this equity transaction (see Note O).

In the second quarter of 2017, the Company completed the Debt-for-Equity Exchange with the Investment Banks of the remaining portion of Arconic's retained interest in Alcoa Corporation common stock for a portion of the Company's outstanding notes held by the Investment Banks for $465 including accrued and unpaid interest (see Note I).

On October 5, 2016, Arconic completed a 1-for-3 Reverse Stock Split (see Note O). The Reverse Stock Split reduced the number of shares of common stock outstanding from approximately 1.3 billion shares to approximately 0.4 billion shares. The par value of the common stock remained at $1.00 per share. Accordingly, Common stock and Additional capital in the Company's Consolidated Balance Sheet at December 31, 2016 reflect a decrease and increase of $877, respectively.

In August 2016, Arconic retired its outstanding treasury stock consisting of approximately 76 million shares (see Note O). As a result, Common stock and Additional capital were decreased by $76 and $2,563, respectively, to reflect the retirement of the treasury shares.

In July 2015, Arconic purchased all outstanding shares of RTI common stock in a stock-for-stock transaction valued at $870 (see Note F). As a result, Arconic issued 29 million shares (87 million shares—pre-Reverse Stock Split—see Note O) of its common stock to consummate this transaction.

N. Segment and Geographic Area Information

Arconic is a global leader in lightweight metals engineering and manufacturing. Arconic's innovative, multi-material products, which include aluminum, titanium, and nickel, are used worldwide in aerospace, automotive, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications. Arconic's segments are organized by product on a worldwide basis. In the first quarter of 2017, the Company changed its primary measure of segment performance from After-tax operating income (ATOI) to Adjusted earnings before interest, tax, depreciation and amortization ("Adjusted EBITDA"). Segment performance under Arconic's management reporting system is evaluated based on a number of factors; however, the primary measure of performance in 2017 was Adjusted EBITDA. Arconic's definition of Adjusted EBITDA is net margin plus an add-back for depreciation 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 and amortization. Prior period information has been recast to conform to current year presentation. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies.

Items required to reconcile Combined segment adjusted EBITDA to Net loss attributable to Arconic include: the Provision for depreciation and amortization; Impairment of goodwill; Restructuring and other charges; the impact of LIFO inventory accounting; metal price lag (the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by the respective segment — generally, when the price of metal increases, metal price lag is favorable, and when the price of metal decreases, metal price lag is unfavorable); corporate expense (general administrative and selling expenses of operating the corporate headquarters and other global administrative facilities and corporate research and development expenses); other items, including intersegment profit eliminations; Other income, net; Interest expense; Income tax expense; and the results of discontinued operations.

The accounting policies of the segments are the same as those described in the Summary of Significant Accounting Policies (see Note A). Transactions among segments are established based on negotiation among the parties. Differences between segment totals and Arconic's consolidated totals for line items not reconciled are in Corporate.

Arconic's operations consist of three worldwide reportable segments as follows:

Engineered Products and Solutions. This segment produces products that are used mostly in the aerospace (commercial and defense), industrial, commercial transportation, and power generation end markets. Such products include fastening systems (titanium, steel, and nickel superalloys) and seamless rolled rings (mostly nickel superalloys); investment castings (nickel superalloys, titanium, and aluminum), including airfoils and forged jet engine components (e.g., jet engine disks); and extruded, machined and formed aircraft parts (titanium and aluminum), all of which are sold directly to customers and through distributors. More than 75% of the third-party

sales in this segment are from the aerospace end market. A small part of this segment also produces various forged, extruded, and machined metal products (titanium, aluminum and steel) for the oil and gas, automotive, and land and sea defense end markets. Seasonal decreases in sales are generally experienced in the third quarter of the year due to the European summer slowdown across all end markets.

Table of Contents

Global Rolled Products. This segment produces aluminum sheet and plate for a variety of end markets. This segment includes sheet and plate sold directly to customers and through distributors in the aerospace, automotive, commercial transportation, packaging, building and construction, and industrial products (mainly used in the production of machinery and equipment and consumer durables) end markets. A small portion of this segment also produces aseptic foil for the packaging end market. While the customer base for flat-rolled products is large, a significant amount of sales of sheet and plate is to a relatively small number of customers.
Transportation and Construction Solutions. This segment produces products that are used mostly in the commercial transportation and nonresidential building and construction end markets. Such products include integrated aluminum structural systems, architectural extrusions, and forged aluminum commercial vehicle wheels, which are sold directly to customers and through distributors. A small part of this segment also produces aluminum products for the industrial products end market.
The operating results and assets of Arconic's reportable segments were as follows:

	Engineered Products and Solutions	Global Rolled Products	Transportation and Construction Solutions	Total
2017				
Sales:				
Third-party sales	$ 5,935	$ 4,992	$ 1,985	$12,912
Intersegment sales	—	148	—	148
Total sales	$ 5,935	$ 5,140	$ 1,985	$13,060
Profit and loss:				
Depreciation and amortization	268	205	50	523
Adjusted EBITDA	1,224	599	321	2,144
2016				
Sales:				
Third-party sales	$ 5,728	$ 4,864	$ 1,802	$12,394
Intersegment sales	—	118	—	118
Total sales	$ 5,728	$ 4,982	$ 1,802	$12,512
Profit and loss:				
Depreciation and amortization	$ 255	$ 201	$ 48	$504
Adjusted EBITDA	1,195	577	291	2,063
2015				
Sales:				
Third-party sales	$ 5,342	$ 5,253	$ 1,882	$12,477
Intersegment sales	—	125	—	125
Total sales	$ 5,342	$ 5,378	$ 1,882	$12,602
Profit and loss:				
Depreciation and amortization	$ 233	$ 203	$ 43	$479
Adjusted EBITDA	1,111	512	271	1,894
2017				
Assets:				
Capital expenditures	$ 308	$ 178	$ 57	$543
Goodwill	3,949	193	60	4,202
Total assets	10,252	4,179	1,068	15,499
2016				
Assets:				
Capital expenditures	$ 333	$ 293	$ 63	$689

Goodwill	4,579	181	57	4,817
Total assets	10,542	3,891	982	15,415

89

Table of Contents

The following tables reconcile certain segment information to consolidated totals:

	2017	2016	2015
Sales:			
Total segment sales	$13,060	$12,512	$12,602
Elimination of intersegment sales	(148)	(118)	(125)
Corporate	48	—	(64)
Consolidated sales	$12,960	$12,394	$12,413

	2017	2016	2015
Combined segment adjusted EBITDA	$2,144	$2,063	$1,894
Unallocated amounts:			
Depreciation and amortization	(551)	(535)	(508)
Impairment of goodwill	(719)	—	(25)
Restructuring and other charges	(165)	(155)	(214)
Impact of LIFO	(110)	(18)	101
Metal price lag	72	27	(175)
Corporate expense	(274)	(454)	(371)
Other	(71)	(109)	(74)
Operating income	326	819	628
Interest expense	(496)	(499)	(473)
Other income, net	640	94	28
Income from continuing operations before income taxes	470	414	183
Provision for income taxes	(544)	(1,476)	(339)
Discontinued operations	—	121	(165)
Net income attributable to noncontrolling interest	—	—	(1)
Net loss attributable to Arconic	$(74)	$(941)	$(322)

December 31,	2017	2016
Assets:		
Total segment assets	$15,499	$15,415
Unallocated amounts:		
Cash and cash equivalents	2,150	1,863
Deferred income taxes	743	1,234
Corporate goodwill	333	331
Corporate fixed assets, net	310	308
LIFO reserve	(481)	(371)
Fair value of derivative contracts	91	24
Investment in common stock of Alcoa Corporation	—	1,020
Other	73	214
Consolidated assets	$18,718	$20,038

Table of Contents

Sales by major product grouping were as follows:

	2017	2016	2015
Sales:			
Flat-rolled aluminum	$4,992	$4,864	$5,253
Fastening systems and rings	2,102	2,060	2,168
Investment castings	1,983	1,870	1,812
Other extruded and forged products	1,565	1,495	1,332
Architectural aluminum systems	1,065	1,010	951
Aluminum wheels	805	689	790
Other	448	406	107
	$12,960	$12,394	$12,413

Geographic information for sales was as follows (based upon the country where the point of sale occurred):

	2017	2016	2015
Sales:			
United States	$8,167	$7,823	$8,044
France	965	930	802
Hungary	739	619	622
United Kingdom	721	711	698
China	615	582	565
Russia	500	433	455
Germany	309	284	264
Brazil	285	250	297
Canada	261	262	180
Japan	141	145	138
Italy	37	127	139
Other	220	228	209
	$12,960	$12,394	$12,413

Geographic information for long-lived assets was as follows (based upon the physical location of the assets):

December 31,	2017	2016
Long-lived assets:		
United States	$4,005	$3,966
China	347	336
Russia	276	295
United Kingdom	259	232
Hungary	227	194
France	159	118
Germany	88	64
Canada	63	58
Brazil	62	97
Other	108	139
	$5,594	$5,499

Table of Contents

O. Preferred and Common Stock

Preferred Stock. Arconic has two classes of preferred stock: Class A Preferred Stock and Class B Serial Preferred Stock. Class A Preferred Stock has 660,000 shares authorized at a par value of $100 per share with an annual 3.75 cumulative dividend preference per share. There were 546,024 of such shares outstanding at December 31, 2017 and 2016. Class B Serial Preferred Stock has 10,000,000 shares authorized at a par value of $1 per share. There were no shares outstanding at December 31, 2017 and 2,500,000 of such shares outstanding at December 31, 2016 (see below).

In September 2014, Arconic completed a public offering under its shelf registration statement for $1,250 of 25 million depositary shares, each of which represents a 1/10th interest in a share of Arconic's 5.375% Class B Mandatory Convertible Preferred Stock, Series 1, par value $1 per share, liquidation preference $500 per share (the "Mandatory Convertible Preferred Stock"). The 25 million depositary shares are equivalent to 2.5 million shares of Mandatory Convertible Preferred Stock. Each depositary share entitled the holder, through the depositary, to a proportional fractional interest in the rights and preferences of a share of Mandatory Convertible Preferred Stock, including conversion, dividend, liquidation, and voting rights, subject to terms of the deposit agreement. Arconic received $1,213 in net proceeds from the public offering reflecting an underwriting discount. The net proceeds were used, together with the net proceeds of issued debt, to finance the cash portion of the acquisition of Firth Rixson. The underwriting discount was recorded as a decrease to Additional capital. The Mandatory Convertible Preferred Stock constitutes a series of Arconic's Class B Serial Preferred Stock, which ranks senior to Arconic's common stock and junior to Arconic's Class A Preferred Stock and existing and future indebtedness. Holders of the Mandatory Convertible Preferred Stock generally have no voting rights.

Dividends on the Mandatory Convertible Preferred Stock were cumulative in nature and paid at the rate of $26.8750 per annum per share in 2016 and 2015, which commenced January 1, 2015 (paid on December 30, 2014).

On October 2, 2017, all outstanding 24,975,978 depositary shares were converted at a rate of 1.56996 into 39,211,286 common shares; 24,022 depositary shares were previously tendered for early conversion into 31,420 shares of Arconic common stock. No gain or loss was recognized associated with this equity transaction. Dividends on the Mandatory Convertible Preferred Stock were paid at the rate of $20.1563 per share in 2017.

Common Stock. Pursuant to the authorization provided at a special meeting of Arconic common shareholders held on October 5, 2016, shareholders approved a 1-for-3 reverse stock split of Arconic's outstanding and authorized shares of common stock (the "Reverse Stock Split"). As a result of the Reverse Stock Split, every three shares of issued and outstanding common stock were combined into one issued and outstanding share of common stock. The Reverse Stock Split reduced the number of shares of common stock outstanding from approximately 1.3 billion shares to approximately 0.4 billion shares. The par value of the common stock remained at $1 per share. Accordingly, Common stock and Additional capital in the accompanying Consolidated Balance Sheet at December 31, 2016 reflected a decrease and increase of $877, respectively. The number of authorized shares of common stock was also decreased from 1.8 billion shares to 0.6 billion shares. The Company's common stock began trading on a reverse stock split-adjusted basis on the NYSE on October 6, 2016.

In August 2016, Arconic retired its outstanding treasury stock consisting of approximately 25 million shares (76 million shares pre-Reverse Stock Split). As a result, Common stock and Additional capital in the accompanying 2016 Consolidated Balance Sheet were decreased by $76 and $2,563, respectively, to reflect the retirement of the treasury shares. As of December 31, 2017 and 2016, there was no outstanding treasury stock.

At December 31, 2017, 481,416,537 shares were issued and outstanding. Dividends paid in 2017 were $0.24 per annum or $0.06 per quarter and $0.36 per annum or $0.09 per quarter in 2016 and 2015. The current dividend yield as authorized by Arconic's Board of Directors is $0.24 per annum or $0.06 per quarter.

In July 2015, Arconic issued 29 million shares (87 million shares—pre-Reverse Stock Split) of common stock as consideration paid to acquire RTI (see Note F). Additionally, Arconic assumed the obligation to repay two tranches of convertible debt; one tranche was due and settled in cash on December 1, 2015 (principal amount of $115) and the other tranche is due on October 15, 2019 (principal amount of $403), unless earlier converted or purchased by Arconic at the holder's option under specific conditions. Upon conversion of the 2019 convertible notes, holders will receive, at Arconic's election, cash, shares of common stock (approximately 14,294,000 shares using the December 31, 2017 conversion rate of 35.5119 shares per $1,000 (not in millions) bond or per-share conversion price of $28.1596), or a

combination of cash and shares. On the maturity date, each holder of outstanding notes will be entitled to receive on such date $1,000 (not in millions) in cash for each $1,000 (not in millions) bond, together with accrued and unpaid interest.

As of December 31, 2017, 47 million shares of common stock were reserved for issuance under Arconic's stock-based compensation plans. As of December 31, 2017, 43 million shares remain available for issuance. Arconic issues new shares to satisfy the exercise of stock options and the conversion of stock awards.

Table of Contents

Share Activity (number of shares)

	Common stock	
	Treasury	Outstanding
Balance at end of 2014	87,150,169	1,216,663,661
Issued for stock-based compensation plans	(6,099,066)	6,099,066
Acquisition of RTI	—	87,397,414
Balance at end of 2015	81,051,103	1,310,160,141
Issued for stock-based compensation plans	(5,219,660)	5,302,128
Treasury stock retirement	(75,831,443)	—
Reverse Stock Split	—	(876,942,489)
Balance at end of 2016	—	438,519,780
Conversion of convertible notes	—	39,242,706
Issued for stock-based compensation plans	—	3,654,051
Balance at end of 2017	—	481,416,537

Stock-based Compensation

Arconic has a stock-based compensation plan under which stock options and restricted stock unit awards are granted in January each year to eligible employees. Most plan participants can choose whether to receive their award in the form of stock options, restricted stock unit 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 Arconic'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. Restricted stock unit awards typically vest over a three-year service period from the date of grant. Certain of these awards also include performance and market conditions. For the majority of performance stock awards issued in 2017, 2016, and 2015, the final number of shares earned will be based on Arconic's achievement of sales and profitability targets over the respective three-year performance periods. For awards issued in 2017, the award will be earned at the end of the three-year performance period. For awards issued in 2016 and 2015, one-third of the award will be earned each year based on the performance against the pre-established targets for that year. The performance stock awards earned over the three-year period vest at the end of the third year. Additionally, the 2017 awards will be scaled by a total shareholder return ("TSR") multiplier, which depends upon relative three-year performance against the TSRs of a group of peer companies.

In 2017, 2016 and 2015, Arconic recognized stock-based compensation expense of $54 ($36 after-tax), $76 ($51 after-tax), and $77 ($51 after-tax), respectively. The expense related to restricted stock unit awards in 2017, 2016 and 2015 was approximately 85%, 80% and 80%, respectively. No stock-based compensation expense was capitalized in any of those years. 2017 stock-based compensation expense was reduced by $13 for certain executive pre-vest cancellations which were recorded in Restructuring and other charges within the Statement of Consolidated Operations. At December 31, 2017, there was $43 (pre-tax) of unrecognized compensation expense related to non-vested stock option grants and non-vested restricted stock unit award grants. This expense is expected to be recognized over a weighted average period of 1.6 years. As part of Arconic's stock-based compensation plan design, 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 pre-tax compensation expense recognized in 2017, 2016 and 2015, $15, $19, and $15, 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 restricted stock unit awards, the fair value was equivalent to the closing market price of Arconic's common stock on the date of grant. The grant date fair value of the 2017 performance awards containing a market condition was $21.99 and was valued using a Monte Carlo model. A Monte Carlo simulation uses assumptions of stock price behavior to estimate the probability of satisfying market conditions and the resulting fair value of the award. The risk-free interest rate (1.5%) was based on a yield curve of interest rates at the time of the grant based on the remaining performance period. Because of limited historical information due to the Separation Transaction, volatility (38.0%) was estimated using

implied volatility and the representative price return approach, which uses price returns of comparable companies to develop a correlation assumption. For stock options, the fair value was estimated on the date of grant using a lattice-pricing model, which generated a result of $6.26, $4.78, and $10.07 per option in 2017, 2016, and 2015, respectively. The lattice-pricing model uses a number of assumptions to estimate the fair value of a stock option, including a risk-free interest rate, dividend yield, volatility, exercise behavior, and contractual life. The following

---

Table of Contents

paragraph describes in detail the assumptions used to estimate the fair value of stock options granted in 2017 (the assumptions used to estimate the fair value of stock options granted in 2016 and 2015 were not materially different, except as noted below).

The risk-free interest rate (2.4%) was based on a yield curve of interest rates at the time of the grant based on the contractual life of the option. The dividend yield (1.2%) was based on a one-year average. Volatility (38.1% for 2017, 44.5% for 2016, and 36.5% in 2015) was based on historical volatilities (except 2017 where we used comparable companies) and implied volatilities over the term of the option. Arconic 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 (5.9 years) was an output of the lattice-pricing model. The activity for stock options and stock awards during 2017 was as follows (options and awards in millions):

	Stock options		Stock awards	
	Number of options	Weighted average exercise price	Number of awards	Weighted average FMV per award
Outstanding, January 1, 2017	13	$ 24.14	8	$ 22.26
Granted	2	21.13	3	21.86
Exercised	(2)	20.65	—	—
Converted	—	—	(2)	24.95
Expired or forfeited	(2)	25.99	(2)	21.26
Performance share adjustment	—	—	—	21.48
Outstanding, December 31, 2017	11	23.94	7	21.49

As of December 31, 2017, the number of stock options outstanding had a weighted average remaining contractual life of 5.3 years and a total intrinsic value of $53. Additionally, 7.4 million of the stock options outstanding were fully vested and exercisable and had a weighted average remaining contractual life of 4.2 years, a weighted average exercise price of $25.90, and a total intrinsic value of $26 as of December 31, 2017. In 2017, 2016 and 2015, the cash received from stock option exercises was $50, $4, and $25 and the total tax benefit realized from these exercises was $4, $0, and $6, respectively. The total intrinsic value of stock options exercised during 2017, 2016 and 2015 was $13, $1, and $19, respectively.

Table of Contents

P. Earnings Per Share

Basic earnings per share (EPS) amounts are computed by dividing earnings (loss), after the deduction of preferred stock dividends declared, 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 number of shares and per share amounts for all periods presented below have been updated to reflect the Reverse Stock Split (see Note O). The information used to compute basic and diluted EPS attributable to Arconic common shareholders was as follows (shares in millions):

	2017	2016	2015
Net loss from continuing operations attributable to Arconic	$(74)	$(1,062)	$(156)
Net income from continuing operations attributable to noncontrolling interests	—	—	(1)
Less: preferred stock dividends declared	(53)	(69)	(69)
Loss from continuing operations available to Arconic common shareholders	(127)	(1,131)	(226)
Income (loss) from discontinued operations after income taxes and noncontrolling interests[(1)]	—	121	(165)
Net loss available to Arconic common shareholders—basic	(127)	(1,010)	(391)
Add: interest expense related to convertible notes	—	—	—
Add: dividends related to mandatory convertible preferred stock	—	—	—
Net loss available to Arconic common shareholders—diluted	$(127)	$(1,010)	$(391)
Average shares outstanding—basic	451	438	420
Effect of dilutive securities:			
Stock options	—	—	—
Stock and performance awards	—	—	—
Mandatory convertible preferred stock	—	—	—
Convertible notes	—	—	—
Average shares outstanding—diluted	451	438	420

(1) Calculated from the Statement of Consolidated Operations as Income (loss) from discontinued operations after income taxes less Net income from discontinued operations attributable to noncontrolling interests.

In 2017, basic average shares outstanding and diluted average shares outstanding were the same because the effect of potential shares of common stock was anti-dilutive as Arconic generated a net loss. As a result, 39 million share equivalents related to the mandatory convertible preferred stock, 14 million (weighted average) share equivalents related to convertible notes (acquired from RTI - see Note O), 11 million stock options, and 7 million stock awards were not included in the computation of diluted EPS. Had Arconic generated sufficient net income in 2017, 30 million, 14 million, 5 million, and 1 million potential shares of common stock related to the mandatory convertible preferred stock, convertible notes, stock awards, and stock options, respectively, would have been included in diluted average shares outstanding. The mandatory convertible preferred stock converted on October 2, 2017 (see Note O).

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 as Arconic generated a net loss. As a result, 39 million share equivalents related to the mandatory convertible preferred stock, 14 million share equivalents related to convertible notes, 13 million stock options, and 8 million stock awards were not included in the computation of diluted EPS. Had Arconic generated sufficient net income in 2016, 28 million, 10 million, 4 million, and 1 million potential shares of common stock related to the mandatory convertible preferred stock, convertible notes, stock awards, and stock options, respectively, would have been included in diluted average shares outstanding.

In 2015, basic average shares outstanding and diluted average shares outstanding were the same because the effect of potential shares of common stock was anti-dilutive as Arconic generated a net loss. As a result, 26 million share equivalents related to mandatory convertible preferred stock, 7 million stock awards, 11 million stock options, and 5 million share equivalents related to convertible notes were not included in the computation of diluted EPS. Had Arconic generated sufficient net income in 2015, 26 million, 5 million, 4 million, and 1 million potential shares of common stock related to the mandatory convertible preferred

95

Table of Contents

stock, convertible notes, stock awards, and stock options, respectively, would have been included in diluted average shares outstanding.

Options to purchase 3 million, 10 million, and 9 million shares of common stock at a weighted average exercise price of $33.32, $26.93, and $38.25 per share were outstanding as of December 31, 2017, 2016, and 2015, respectively, but were not included in the computation of diluted EPS because they were anti-dilutive, as the exercise prices of the options were greater than the average market price of Arconic's common stock.

Q. Income Taxes

The components of income from continuing operations before income taxes were as follows:

	2017	2016	2015
United States	$500	$84	$124
Foreign	(30)	330	59
	$470	$414	$183

The provision for income taxes consisted of the following:

	2017	2016	2015
Current:			
Federal*	$—	$—	$—
Foreign	98	133	115
State and local	(2)	1	(1)
	96	134	114
Deferred:			
Federal*	489	1,208	196
Foreign	37	136	29
State and local	(78)	(2)	—
	448	1,342	225
Total	$544	$1,476	$339

* Includes U.S. taxes related to foreign income

The exercise of employee stock options generated a tax charge of $1 in 2017 and a benefit of $0 and $2 in 2016 and 2015, respectively, representing only the difference between compensation expense recognized for financial reporting and tax purposes. The tax effects related to the exercise of employee stock options in 2017 were recorded to the income statement within the provision for income taxes. Tax effects related to 2016 and 2015 were recorded to equity. Payments either decreased current taxes payable or increased deferred tax assets (net operating losses) in the respective periods.

Arconic has unamortized tax-deductible goodwill of $24 resulting from intercompany stock sales and reorganizations. Arconic recognizes the tax benefits (at a 25% rate) associated with this tax-deductible goodwill as it is being amortized for local income tax purposes rather than in the period in which the transaction is consummated.

Table of Contents

A reconciliation of the U.S. federal statutory rate to Arconic’s effective tax rate was as follows (the effective tax rate for all periods was a provision on income):

	2017	2016	2015
U.S. federal statutory rate	35.0 %	35.0 %	35.0 %
Taxes on foreign operations	(7.5)	(10.2)	2.5
Federal benefit of state tax	3.1	0.4	0.3
Permanent differences on restructuring and other charges and asset disposals(1)	(167.4)	(107.8)	3.6
Non-deductible acquisition costs	0.3	8.4	7.1
Statutory tax rate and law changes(2)	52.5	(15.7)	(1.0)
Tax holidays	(3.0)	(0.8)	(3.9)
Tax credits	(0.7)	(1.2)	(2.8)
Changes in valuation allowances	137.9	426.8	145.8
Impairment of goodwill	53.5	—	4.8
Company-owned life insurance/split-dollar net premiums	—	23.0	(3.0)
Changes in uncertain tax positions	10.1	2.1	(2.2)
Other	1.9	(3.5)	(1.0)
Effective tax rate	115.7 %	356.5 %	185.2 %

(1) Additional losses were reported in Spain's 2017 tax return related to the Separation Transaction which are offset by an increased valuation allowance.

(2) On December 22, 2017, the United States enacted the Tax Cuts and Jobs Act of 2017 ("the 2017 Act”) resulting in significant changes to the Internal Revenue Code (see below). In December 2016, Spain and the United States enacted tax law changes which resulted in the remeasurement of certain deferred tax liabilities recorded by Arconic.

On December 22, 2017, the 2017 Act was signed into law, making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system, and a one-time transition tax on the non-previously taxed post-1986 foreign earnings and profits of certain U.S.-owned foreign corporations as of December 31, 2017. Also on December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118"), Income Tax Accounting Implications of the Tax Cuts and Jobs Act, was issued by the Securities and Exchange Commission to address the application of U.S. GAAP for financial reporting. SAB 118 permits the use of provisional amounts based on reasonable estimates in the financial statements. SAB 118 also provides that the tax impact may be considered incomplete in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the 2017 Act. Any adjustments to provisional or incomplete amounts should be included in income from continuing operations as an adjustment to tax expense or benefit in the reporting period that the amounts are determined within one year.

As of February 2, 2018, the Company has calculated a reasonable estimate of the impact of the 2017 Act’s tax rate reduction and one-time transition tax in its year end income tax provision in accordance with its understanding of the 2017 Act and guidance available and, as a result, has recorded a $272 tax charge in the fourth quarter of 2017, the period in which the legislation was enacted. We anticipate finalizing our accounting during 2018 in accordance with SAB 118.

U.S. deferred tax assets and liabilities as of the date of enactment of the 2017 Act are based on estimated temporary differences which will be updated and finalized with the filing of the 2017 U.S. income tax return. Changes to the estimated temporary differences will result in changes to the revaluation of the deferred tax assets and liabilities. As such, the impact of the 2017 Act’s tax rate reduction is a provisional amount under SAB 118 which will be updated during 2018.

The impact of the one-time transition tax on the deemed repatriation of non-previously taxed post-1986 foreign earnings and profits of certain U.S.-owned foreign corporations, net of foreign tax credits, is also considered a

provisional amount. The Company will continue to analyze the amount of foreign earnings and profits, the associated foreign tax credits, and additional guidance that may be issued during 2018 and will update the estimated deemed repatriation calculation as necessary under SAB 118. The Company has not yet gathered, prepared and analyzed all the necessary information in sufficient detail to determine whether any excess foreign tax credits that may result from the deemed repatriation will be realizable. The need for additional

Table of Contents

valuation allowance on foreign tax credits that may not be more likely than not to be realized in the future will be reassessed during 2018.

The components of net deferred tax assets and liabilities were as follows:

December 31,	2017 Deferred tax assets	2017 Deferred tax liabilities	2016 Deferred tax assets	2016 Deferred tax liabilities
Depreciation	$31	$ 693	$15	$ 817
Employee benefits	936	23	1,382	8
Loss provisions	134	14	181	1
Deferred income/expense	19	1,144	20	74
Tax loss carryforwards	3,305	—	1,540	—
Tax credit carryforwards	638	—	652	—
Other	24	33	164	19
	5,087	1,907	3,954	919
Valuation allowance	(2,584)	—	(1,940)	—
	$2,503	$ 1,907	$2,014	$ 919

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	$ 81	$ 781	$ 2,443	$—	$3,305
Tax credit carryforwards	531	97	10	—	638
Other	—	—	84	1,060	1,144
Valuation allowance	(467)	(646)	(1,376)	(95)	(2,584)
	$ 145	$ 232	$ 1,161	$965	$2,503

* 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. A substantial amount of Other relates to employee benefits that will become deductible for tax purposes over an extended period of time as contributions are made to employee benefit plans and payments are made to retirees.

The total deferred tax asset (net of valuation allowance) is supported by projections of future taxable income exclusive of reversing temporary differences (30%) and taxable temporary differences that reverse within the carryforward period (70%).

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 Arconic’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.

Table of Contents

In 2017, Arconic released $98 of certain U.S. state valuation allowances. After weighing all available positive and negative evidence, management determined that the underlying net deferred tax assets were more likely than not realizable based on projected taxable income estimates taking into account expected post-separation apportionment data. Valuation allowances of $750 remain against other net state deferred tax assets expected to expire before utilization. The need for valuation allowances against net state deferred tax assets will be reassessed on a continuous basis in future periods and, as a result, the allowance may increase or decrease based on changes in facts and circumstances.

Arconic also recorded an additional valuation allowance of $675 which offsets additional losses reported on the Spanish tax return filed in 2017 related to the Separation Transaction that are not more likely than not to be realized. There is no net impact to the provision for income taxes, as the additional valuation allowance fully offsets the current year tax benefit in Spain.

Arconic's foreign tax credits in the United States have a 10-year carryforward period with expirations ranging from 2018 to 2027 (as of December 31, 2017). Valuation allowances were initially established in prior years on a portion of the foreign tax credit carryforwards, primarily due to insufficient foreign source income to allow for full utilization of the credits within the expiration period. After consideration of all available evidence including potential tax planning strategies and earnings of foreign subsidiaries projected to be distributable as taxable foreign dividends, incremental valuation allowances of $302 and $134 were recognized in 2016 and 2015, respectively. Foreign tax credits of $57, $128, and $15 expired at the end of 2017, 2016, and 2015, respectively, resulting in a corresponding decrease to the valuation allowance. During 2017, an additional valuation allowance of $23 was recorded for current year excess foreign tax credits, offset by a net $14 reduction for other adjustments. At December 31, 2017, the cumulative amount of the valuation allowance was $379. The need for this valuation allowance will be reassessed on a continuous basis in future periods and, as a result, the allowance may increase or decrease based on changes in facts and circumstances, including the impact of the 2017 Act.

Arconic will continue its analysis of the 2017 Act, including any additional guidance that may be issued. Further analysis could result in changes to assumptions related to the realizability of certain deferred tax assets including, but not limited to, foreign tax credits, alternative minimum tax credits, and state tax loss carryforwards. Provisional estimates of the impact of the 2017 Act on the realizability of certain deferred tax assets have been made based on information and computations that were available, prepared, and analyzed as of February 2, 2018. In accordance with SAB 118, Arconic will reassess the need for valuation allowances on these deferred tax assets as necessary during 2018.

In 2016, Arconic recognized a $1,267 discrete income tax charge for valuation allowances related to the Separation Transaction, including $925 with respect to Alcoa Corporation's net deferred tax assets in the United States, $302 with respect to Arconic's foreign tax credits in the United States, $42 with respect to certain deferred tax assets in Luxembourg, and $(2) related to the net impact of other smaller items. After weighing all positive and negative evidence, as described above, management determined that the net deferred tax assets of Alcoa Corporation were not more likely than not to be realized due to lack of historical and projected domestic source taxable income. As such, a valuation allowance was recorded immediately prior to separation.

In addition, Arconic recognized a $42 discrete income tax charge in 2016 for a valuation allowance on the full value of certain net deferred tax assets in Luxembourg. Sources of taxable income which previously supported the net deferred tax asset are no longer available as a result of the Separation Transaction. The need for this valuation allowance will be reassessed on a continuous basis in future periods and, as a result, the allowance may increase or decrease based on changes in facts and circumstances.

In 2016, Arconic also recognized discrete income tax benefits related to the release of valuation allowances on certain net deferred tax assets in Russia and Canada of $19 and $20, respectively. After weighing all available evidence, management determined that it was more likely than not that the net income tax benefits associated with the underlying deferred tax assets would be realizable based on historic cumulative income and projected taxable income. Arconic also recorded additional valuation allowances in Australia of $93 related to the Separation Transaction, in Spain of $163 related to a tax law change and in Luxembourg of $280 related to the Separation Transaction as well as a tax law change. These valuation allowances fully offset current year changes in deferred tax asset balances of each

respective jurisdiction, resulting in no net impact to tax expense. The need for a valuation allowance will be reassessed on a continuous basis in future periods by each jurisdiction and, as a result, the allowances may increase or decrease based on changes in facts and circumstances.

In 2015, Arconic recognized an additional $141 discrete income tax charge for valuation allowances on certain deferred tax assets in Iceland and Suriname. Of this amount, an $85 valuation allowance was established on the full value of the deferred tax assets in Suriname, which were related mostly to employee benefits and tax loss carryforwards. These deferred tax assets have an expiration period ranging from 2016 to 2022 (as of December 31, 2015). The remaining $56 charge relates to a valuation

Table of Contents

allowance established on a portion of the deferred tax assets recorded in Iceland. These deferred tax assets have an expiration period ranging from 2017 to 2023. After weighing all available positive and negative evidence, as described above, management determined that it was no longer more likely than not that Arconic will realize the tax benefit of either of these deferred tax assets. This was mainly driven by a decline in the outlook of the Primary Metals business, combined with prior year cumulative losses and a short expiration period.
The following table details the changes in the valuation allowance:

December 31,	2017	2016	2015
Balance at beginning of year	$1,940	$1,291	$1,151
Increase to allowance	831	772	180
Release of allowance	(246)	(209)	(42)
Acquisitions and divestitures (F)	(1)	(1)	29
Tax apportionment, tax rate and tax law changes	(24)	106	(15)
Foreign currency translation	84	(19)	(12)
Balance at end of year	$2,584	$1,940	$1,291

As a result of the 2017 Act, the non-previously taxed post-1986 foreign earnings and profits (calculated based on U.S. tax principles) of certain U.S.-owned foreign corporations has been subject to U.S. tax under the one-time transition tax provisions. The cumulative amount of Arconic's foreign undistributed U.S. GAAP earnings is estimated to be less than the total foreign earnings and profits already subject to U.S. tax as of December 31, 2017. As such, Arconic expects to be able to repatriate these earnings back to the United States without additional income tax consequences other than foreign withholding taxes which will not have a material impact. At this time, management has no plans to distribute such earnings in the foreseeable future. The Company will continue to evaluate whether to repatriate all or a portion of the cumulative undistributed foreign earnings in light of the 2017 Act and consider that conclusion to be incomplete under SAB 118.
The 2017 Act creates a new requirement that certain income earned by foreign subsidiaries, Global Intangible Low Taxed Income (GILTI), must be included in the gross income of the U.S. shareholder. The 2017 Act also established the Base Erosion and Anti-Abuse Tax (BEAT). The Company is continuing to evaluate the impact of these provisions and has not yet completed a reasonable estimate where we do not have the necessary information available, prepared, and/or analyzed (including computations) as it relates to the impact of the GILTI and BEAT provisions. In addition, Arconic is permitted to make an accounting policy election to either treat taxes due on future inclusions in U.S. taxable income related to GILTI as a current period expense when incurred or factor such amounts into the Company's deferred tax calculation. Arconic has not yet made this policy decision and will update the GILTI and BEAT impact in accordance with SAB 118.
Arconic and its subsidiaries file income tax returns in the U.S. federal jurisdiction and various states and foreign jurisdictions. With a few minor exceptions, Arconic is no longer subject to income tax examinations by tax authorities for years prior to 2006. All U.S. tax years prior to 2017 have been audited by the Internal Revenue Service. Various state and foreign jurisdiction tax authorities are in the process of examining Arconic's income tax returns for various tax years through 2016.

Table of Contents

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	$28	$18	$7
Additions for tax positions of the current year	23	12	—
Additions for tax positions of prior years	27	—	14
Reductions for tax positions of prior years	—	—	(2)
Settlements with tax authorities	—	(1)	—
Expiration of the statute of limitations	(5)	(1)	(1)
Foreign currency translation	—	—	—
Balance at end of year	$73	$28	$18

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 approximately 15%, 6%, and 7%, respectively, of pre-tax book income. Arconic 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 in Note K for a matter for which no reserve has been recognized).

It is Arconic’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, Arconic recognized interest of $1 but did not recognize any interest or penalties in 2016 or 2015. Due to the expiration of the statute of limitations, settlements with tax authorities, and refunded overpayments, Arconic recognized interest income of $2 and $1 in 2017 and 2015, respectively, but did not recognize any interest income in 2016. As of December 31, 2017 and 2016, the amount accrued for the payment of interest and penalties was $2 and $2, respectively.

R. Receivables

Sale of Receivables Programs

Arconic has an arrangement with three financial institutions to sell certain customer receivables without recourse on a revolving basis. The sale of such receivables is completed through the use of a bankruptcy remote special purpose entity, which is a consolidated subsidiary of Arconic. This arrangement provides for minimum funding of $200 up to a maximum of $400 for receivables sold. On March 30, 2012, Arconic initially sold $304 of customer receivables in exchange for $50 in cash and $254 of deferred purchase program under this arrangement. Arconic has received additional net cash funding of $300 for receivables sold ($2,358 in draws and $2,058 in repayments) since the program’s inception, including $0 ($600 in draws and $600 in repayments) in 2017 and $100 ($500 in draws and $400 in repayments) in 2016.

As of December 31, 2017 and 2016, the deferred purchase program receivable was $187 and $83, respectively, which was included in Other receivables on the accompanying Consolidated Balance Sheet. The deferred purchase program receivable is reduced as collections of the underlying receivables occur; however, as this is a revolving program, the sale of new receivables will result in an increase in the deferred purchase program receivable. The net change in the deferred purchase program receivable was reflected in the (Increase) decrease in receivables line item on the accompanying Statement of Consolidated Cash Flows. This activity is reflected as an operating cash flow because the related customer receivables are the result of an operating activity with an insignificant, short-term interest rate risk. See Note A for additional information on new accounting guidance that will affect the Company during 2018.

In 2017 and 2016, the gross cash outflows and inflows associated with the deferred purchase program receivable were $5,471 and $5,367, respectively, and $5,340 and $5,406, respectively. The gross amount of receivables sold and total cash collected under this program since its inception was $35,409 and $34,872 respectively. Arconic services the customer receivables for the financial institutions at market rates; therefore, no servicing asset or liability was recorded.

Allowance for Doubtful Accounts

The following table details the changes in the allowance for doubtful accounts related to customer receivables and other receivables:

	Customer receivables			Other receivables		
December 31,	2017	2016	2015	2017	2016	2015
Balance at beginning of year	$ 13	$ 8	$ 6	$ 32	$ 34	$ 24
Provision for doubtful accounts	1	7	4	9	6	8
Write off of uncollectible accounts	(5)	(3)	(2)	(1)	(1)	2
Recoveries of prior write-offs	—	(1)	—	(3)	1	(1)
Other	(1)	2	—	(3)	(8)	1
Balance at end of year	$ 8	$ 13	$ 8	$ 34	$ 32	$ 34

S. Interest Cost Components

	2017	2016	2015
Amount charged to expense	$496	$499	$473
Amount capitalized	22	32	27
	$518	$531	$500

T. Pension and Other Postretirement Benefits

Arconic maintains pension plans covering most U.S. employees and certain employees in foreign locations. 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.

Arconic also maintains health care and life insurance postretirement benefit plans covering eligible U.S. retired employees and certain retirees from foreign locations. 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. Arconic 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.

Effective January 1, 2015, Arconic no longer offers postretirement health care benefits to Medicare-eligible, primarily non-bargaining, U.S. retirees through Company-sponsored plans. Qualifying retirees (hired prior to January 1, 2002), both current and future, may access these benefits in the marketplace by purchasing coverage directly from insurance carriers.

Effective August 1, 2016, in preparation for the Separation Transaction, certain U.S. pension and postretirement benefit plans were separated, requiring a remeasurement as of that date. Additionally, one pension plan was required to be remeasured as a result of settlement accounting. Together, these remeasurements resulted in an increase of $845 to Arconic's pension liability and an increase of $551 (net of tax) to the plans' unrecognized net actuarial loss (included in Accumulated other comprehensive loss).

Effective April 1, 2018, benefit accruals for future service and compensation under all of the Company's qualified and non-qualified defined benefit pension plans for U.S. salaried and non-bargained hourly employees (the "Pension Plans") will cease. In connection with this change, effective April 1, 2018, impacted employees will commence receiving an employer contribution of 3% of eligible compensation under the applicable Arconic Retirement Savings Plans, and, for the period from April 1, 2018 through December 31, 2018, an additional transition employer contribution of 3% of eligible compensation.

Table of Contents

The funded status of all of Arconic's pension and other postretirement benefit plans are measured as of December 31 each calendar year.

Obligations and Funded Status

	Pension benefits		Other postretirement benefits	
December 31,	2017	2016	2017	2016
Change in benefit obligation				
Benefit obligation at beginning of year	$7,026	$14,247	$ 980	$ 2,319
Service cost	90	165	7	13
Interest cost	234	435	30	63
Amendments	1	2	—	—
Actuarial (gains) losses	311	770	1	112
Transfer to Alcoa Corporation	—	(7,577)	—	(1,340)
Settlements	—	(82)	—	—
Benefits paid, net of participants' contributions	(425)	(794)	(98)	(197)
Medicare Part D subsidy receipts	—	—	7	9
Foreign currency translation impact	122	(140)	—	1
Benefit obligation at end of year[(1)]	$7,359	$7,026	$ 927	$ 980
Change in plan assets[(1)]				
Fair value of plan assets at beginning of year	$4,666	$10,928	$ —	$ —
Actual return on plan assets	212	89	—	—
Employer contributions	310	296	—	—
Participants' contributions	—	16	—	—
Benefits paid	(404)	(762)	—	—
Administrative expenses	(33)	(65)	—	—
Transfer to Alcoa Corporation	—	(5,610)	—	—
Settlements	—	(82)	—	—
Foreign currency translation impact	111	(144)	—	—
Fair value of plan assets at end of year[(1)]	$4,862	$4,666	$ —	$ —
Funded status*	$(2,497)	$(2,360)	$ (927)	$ (980)
Less: Amounts attributed to joint venture partners	—	—	—	—
Net funded status	$(2,497)	$(2,360)	$ (927)	$ (980)
Amounts recognized in the Consolidated Balance Sheet consist of:				
Noncurrent assets	$89	$6	$ —	$ —
Current liabilities	(22)	(21)	(86)	(91)
Noncurrent liabilities	(2,564)	(2,345)	(841)	(889)
Net amount recognized	$(2,497)	$(2,360)	$ (927)	$ (980)
Amounts recognized in Accumulated Other Comprehensive Loss consist of:				
Net actuarial loss	$3,240	$2,979	$ 146	$ 150
Prior service cost (benefit)	10	15	(37)	(45)
Total, before tax effect	3,250	2,994	109	105
Less: Amounts attributed to joint venture partners	—	—	—	—
Net amount recognized, before tax effect	$3,250	$2,994	$ 109	$ 105
Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive Loss consist of:				
Net actuarial loss (gain)	$481	$(1,992)	$ 1	$ (224)
Amortization of accumulated net actuarial loss	(220)	(380)	(5)	(24)
Prior service (benefit) cost	—	(42)	—	37

Amortization of prior service (cost) benefit	(5)	(13)	8	24
Total, before tax effect	256	(2,427)	4	(187)
Less: Amounts attributed to joint venture partners	—	38	—	—
Net amount recognized, before tax effect	$256	$(2,389)	$ 4	$ (187)

103

Table of Contents

(1) At December 31, 2017, the benefit obligation, fair value of plan assets, and funded status for U.S. pension plans were $6,018, $3,544, and $(2,474), respectively. At December 31, 2016, the benefit obligation, fair value of plan assets, and funded status for U.S. pension plans were $5,707, $3,495, and $(2,212), respectively.

Pension Plan Benefit Obligations

	Pension benefits	
	2017	2016
The projected benefit obligation and accumulated benefit obligation for all defined benefit pension plans was as follows:		
Projected benefit obligation	$7,359	$7,026
Accumulated benefit obligation	7,169	6,850
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	6,600	6,995
Fair value of plan assets	4,016	4,629
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	6,422	6,104
Fair value of plan assets	3,998	3,894

Components of Net Periodic Benefit Cost

	Pension benefits[1]			Other postretirement benefits[2]		
	2017	2016	2015	2017	2016	2015
Service cost	$90	$155	$175	$ 7	$ 13	$ 14
Interest cost	234	431	577	30	63	92
Expected return on plan assets	(332)	(677)	(753)	—	—	—
Recognized net actuarial loss	220	380	468	5	24	17
Amortization of prior service cost (benefit)	5	13	16	(8)	(24)	(37)
Settlements[3]	—	19	16	—	—	—
Curtailments[4]	—	—	9	—	—	(4)
Special termination benefits[5]	—	2	16	—	—	—
Net periodic benefit cost[6]	$217	$323	$524	$ 34	$ 76	$ 82
Discontinued operations	—	122	248	—	41	43
Net amount recognized in Statement of Consolidated Operations	$217	$201	$276	$ 34	$ 35	$ 39

Note: the footnotes below include components of Net Periodic Benefit Cost related to Alcoa Corporation through the completion of the Separation Transaction.

(1) In 2017, 2016 and 2015, net periodic benefit cost for U.S. pension plans was $206, $261, and $423, respectively.

(2) In 2017, 2016 and 2015, net periodic benefit cost for other postretirement benefits reflects a reduction of $11, $22, and $34, respectively, related to the recognition of the federal subsidy awarded under Medicare Part D.

(3) In 2016, settlements were due to workforce reductions (see Note D) and the payment of lump sum benefits and/or purchases of annuity contracts. In 2015, settlements were due to workforce reductions (see Note D) and the payment of lump sum benefits and/or purchases of annuity contracts.

(4) In 2015, curtailments were due to elimination of benefits or workforce reductions (see Note D).

(5) In 2016 and 2015, special termination benefits were due to workforce reductions (see Note D).

(6) Amounts attributed to joint venture partners are not included.

Table of Contents

Amounts Expected to be Recognized in Net Periodic Benefit Cost

	Pension benefits	Other postretirement benefits
	2018	2018
Net actuarial loss recognition	168	9
Prior service cost (benefit) recognition	3	(8)

Assumptions

Weighted average assumptions used to determine benefit obligations for U.S. pension and other postretirement benefit plans were as follows (assumptions for non-U.S. plans did not differ materially):

December 31,	2017	2016
Discount rate	3.75%	4.20%
Rate of compensation increase	3.50	3.50

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, including finance and banking, industrials, transportation, and utilities, among others. The yield curve model parallels the plans' projected cash flows, which have an average duration of 11 years. 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.

The rate of compensation increase is based upon actual experience. For 2018, the rate of compensation increase will be 3.5%, which approximates the five-year average.

Weighted average assumptions used to determine net periodic benefit cost for U.S. pension and other postretirement benefit plans were as follows (assumptions for non-U.S. plans did not differ materially):

	2017	2016	2015
Discount rate to calculate service cost*	4.20%	4.29%	4.00%
Discount rate to calculate interest cost*	3.60	3.15	4.00
Expected long-term rate of return on plan assets	7.75	7.75	7.75
Rate of compensation increase	3.50	3.50	3.50

* In all periods presented, the respective discount rates were used to determine net periodic benefit cost for most U.S. pension 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 new union labor agreements, settlements, and/or curtailments. The updated discount rates used were not significantly different from the discount rates presented.

In conjunction with the annual measurement of the funded status of Arconic's pension and other postretirement benefit plans at December 31, 2015, management elected to change the manner in which the interest cost component of net periodic benefit costs is determined in 2016 and beyond. Previously, the interest component was determined by multiplying the single equivalent rate and the aggregate discounted cash flows of the plans' projected benefit obligations. Under the new methodology, the interest cost component is determined by aggregating the product of the discounted cash flows of the plans' projected benefit obligations for each year and an individual spot rate (referred to as the "spot rate" approach). This change resulted in a lower interest cost component of net periodic benefit cost under the new methodology compared to the previous methodology in 2017 and 2016 of $34 and $84, respectively, for pension plans and $6 and $14, respectively, for other postretirement benefit plans. Management believes this new methodology, which represents a change in an accounting estimate, is a better measure of the interest cost as each year's cash flows are specifically linked to the interest rates of bond payments in the same respective year.

The expected long-term rate of return on plan assets is generally applied to a five-year market-related value of plan assets (a 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 a combination of historical asset return information and forward-looking returns by asset class. As it relates to historical asset return information, management focuses on various historical moving averages when developing this assumption. While consideration is given to recent performance and historical returns, the assumption represents a long-term, prospective return. Management also incorporates expected future returns on current and planned asset allocations using information from various external investment managers and consultants, as well as management's own judgment.

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. These rates fell within the respective range of the 20-year moving average of actual performance and the expected future return developed by asset class. In 2015, the decrease of 25 basis points in the expected long-term rate of return was due to a decrease in the 20-year moving average of actual performance. For 2018, management anticipates that 7.00% will be the expected long-term rate of return. The decrease of 75 basis points in the expected long-term rate is due to a decrease in the expected return by asset class and the 20-year moving average.

Assumed health care cost trend rates for U.S. other postretirement benefit plans were as follows (assumptions for non-U.S. plans did not differ materially):

	2017	2016	2015
Health care cost trend rate assumed for next year	5.50 %	5.50 %	5.50 %
Rate to which the cost trend rate gradually declines	4.50 %	4.50 %	4.50 %
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 Arconic'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 over the past three years has ranged from (2.2%) 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 the 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	$ 29	$ (28)
Effect on total of service and interest cost components	1	(1)

Plan Assets

Arconic's pension plans' investment policy and weighted average asset allocations at December 31, 2017 and 2016, by asset class, were as follows:

		Plan assets at December 31,	
Asset class	Policy range	2017	2016
Equities	20–55%	28 %	30 %
Fixed income	25–55%	47	42
Other investments	15–35%	25	28
Total		100 %	100 %

The principal objectives underlying the investment of the pension plans' assets are to ensure that Arconic 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.

Specific objectives for long-term investment strategy include reducing the volatility of pension assets relative to pension liabilities and achieving diversification across the balance of the asset portfolio. The use of derivative instruments is permitted where appropriate and necessary for achieving

overall investment policy objectives. The investment strategy has used long duration cash bonds and derivative instruments to offset a portion of the interest rate sensitivity of U.S. pension liabilities. Exposure to broad equity risk has been decreased and diversified through investments in discretionary and systematic macro hedge funds, long/short equity hedge funds, high yield bonds, emerging market debt and global and emerging market equities. Investments are further diversified by strategy, asset class, geography, and sector to enhance returns and mitigate downside risk. A large number of external investment managers are used to gain broad exposure to the financial markets and to mitigate manager-concentration risk.

Investment practices comply with the requirements of the Employee Retirement Income Security Act of 1974 (ERISA) and other applicable laws and regulations.

The following section describes the valuation methodologies used by the trustees to measure the fair value of pension plan assets, including an indication of the level in the fair value hierarchy in which each type of asset is generally classified (see Note U 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 the net asset value of shares held at December 31 (included in Level 1); and (iii) direct investments in long/short equity hedge funds and private equity (limited partnerships and venture capital partnerships) and are valued by investment managers based on the most recent financial information available, which typically represents significant unobservable data.

Fixed income. These securities consist of: (i) U.S. government debt and are generally valued using quoted prices (included in Level 1); (ii) publicly traded U.S. and non-U.S. fixed interest obligations (principally corporate and sovereign 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); (iii) cash and cash equivalents; and (iv) interest rate swaps and are generally valued using industry standard models with market-based observable inputs.

Other investments. These investments include, among others: (i) exchange traded funds, such as gold, and real estate investment trusts and are valued based on the closing price reported in an active market on which the investments are traded (included in Level 1) and (ii) direct investments of discretionary and systematic macro hedge funds and private real estate (includes limited partnerships) and are valued by investment managers based on the most recent financial information available, which typically represents significant unobservable data.

The fair value methods described above may not be indicative of net realizable value or reflective of future fair values. Additionally, while Arconic 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.

Table of Contents

The following table presents the fair value of pension plan assets classified under the appropriate level of the fair value hierarchy or net asset cost:

December 31, 2017	Level 1	Level 2	Net asset value	Total
Equities:				
Equity securities	$ 379	$—	$593	$972
Long/short equity hedge funds	—	—	230	230
Private equity	—	—	155	155
	$ 379	$—	$978	$1,357
Fixed income:				
Intermediate and long duration government/credit	$ 201	$981	$779	$1,961
Other	164	8	145	317
	$ 365	$989	$924	$2,278
Other investments:				
Real estate	$ 85	$—	$172	$257
Discretionary and systematic macro hedge funds	—	—	583	583
Other	77	7	275	359
	$ 162	$7	$1,030	$1,199
Net plan assets*	$ 906	$996	$2,932	$4,834

December 31, 2016	Level 1	Level 2	Net Asset Value	Total
Equities				
Equity securities	$393	$—	$431	$824
Long/short equity hedge funds	—	—	406	406
Private equity	—	—	165	165
	$393	$—	$1,002	$1,395
Fixed income:				
Intermediate and long duration government/credit	$23	$95	$655	$773
Other	1,060	51	74	1,185
	$1,083	$146	$729	$1,958
Other investments:				
Real estate	$81	$—	$185	$266
Discretionary and systematic macro hedge funds	—	—	784	784
Other	65	—	178	243
	$146	$—	$1,147	$1,293
Net plan assets**	$1,622	$146	$2,878	$4,646

* As of December 31, 2017, the total fair value of pension plans' assets excludes a net receivable of $28, which represents assets due from Alcoa Corporation as a result of plan separations and securities sold but not yet settled plus interest and dividends earned on various investments.

** As of December 31, 2016, the total fair value of pension plans' assets excludes a net receivable of $20, which represents assets due from Alcoa Corporation as a result of plan separations and securities sold not yet settled plus interest and dividends earned on various investments.

Funding and Cash Flows

It is Arconic's policy to fund amounts for pension plans sufficient to meet the minimum requirements set forth in applicable country benefits laws and tax laws. Periodically, Arconic contributes additional amounts as deemed appropriate. In 2017 and 2016, cash contributions to Arconic's pension plans were $310 and $290. The minimum

required contribution to pension plans in 2018 is estimated to be $350, of which $320 is for U.S. plans.

During the third quarter of 2016, the Pension Benefit Guaranty Corporation approved management's plan to separate the former Alcoa Inc. pension plans between Arconic and Alcoa Corporation in connection with the Separation Transaction. The plan stipulates that Arconic will make cash contributions totaling $150 over a period of 30 months to its two largest pension plans. The payments are expected to be made in increments no less than $50 each over the 30-month period, with the first

Table of Contents

payment due no later than six months after the separation date of November 1, 2016. The first payment of $50 was made on April 18, 2017.

Benefit payments expected to be paid to pension and other postretirement benefit plans' participants and expected Medicare Part D subsidy receipts are as follows utilizing the current assumptions outlined above:

Year ended December 31,	Pension benefits paid	Gross Other post-retirement benefits	Medicare Part D subsidy receipts	Net Other post-retirement benefits
2018	$ 435	$ 90	$ 5	$ 85
2019	440	90	5	85
2020	440	90	5	85
2021	445	90	5	85
2022	450	90	5	85
Thereafter	2,265	335	25	310
	$ 4,475	$ 785	$ 50	$ 735

Defined Contribution Plans

Arconic sponsors savings and investment plans in various countries, primarily in the United States. Expenses related to these plans were $89 in 2017, $71 in 2016, and $83 in 2015. In the United States, employees may contribute a portion of their compensation to the plans, and Arconic matches a portion of these contributions in equivalent form of the investments elected by the employee.

U. 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.

Table of Contents

The carrying values and fair values of Arconic's financial instruments were as follows:

December 31,	2017 Carrying value	2017 Fair value	2016 Carrying value	2016 Fair value
Cash and cash equivalents	$2,150	$2,150	$1,863	$1,863
Restricted cash	4	4	15	15
Derivatives – current asset	61	61	14	14
Noncurrent receivables	20	20	21	21
Derivatives – noncurrent asset	33	33	10	10
Available-for-sale securities	106	106	102	102
Investment in common stock of Alcoa Corporation	—	—	1,020	1,020
Short-term debt	38	38	40	40
Derivatives – current liability	45	45	5	5
Commercial paper	—	—	—	—
Derivatives – noncurrent liability	14	14	3	3
Contingent payment related to an acquisition	—	—	78	78
Long-term debt, less amount due within one year	6,806	7,443	8,044	8,519

The following methods were used to estimate the fair values of financial instruments:

Cash and cash equivalents, Restricted cash, Short-term debt, and Commercial paper. The carrying amounts approximate fair value because of the short maturity of the instruments. The fair value amounts for Cash and cash equivalents, Restricted cash, and Commercial paper were classified in Level 1, and Short-term debt was classified in Level 2.

Derivatives. The fair value of derivative contracts classified as Level 1 was based on identical unrestricted assets and liabilities. The fair value of derivative contracts classified as Level 2 was based on inputs other than quoted prices that are observable for the asset or liability (e.g. interest rates).

Noncurrent receivables. The fair value of noncurrent receivables was based on anticipated cash flows, which approximates carrying value, and was classified in Level 2 of the fair value hierarchy.

Available-for-sale securities. The fair value of such securities was based on quoted market prices. These financial instruments consist of exchange-traded fixed income securities, which are carried at fair value and were classified in Level 1 of the fair value hierarchy.

Investment in common stock of Alcoa Corporation (see Note C). The fair value was based on the closing stock price of Alcoa Corporation on the New York Stock Exchange at December 31, 2016 multiplied by the number of shares of Alcoa Corporation stock owned by Arconic as of December 31, 2016. This investment was classified in Level 1 of the fair value hierarchy.

Contingent payment related to an acquisition (see Note F). The fair value was based on the net present value of expected future cash flows and was classified in Level 3 of the fair value hierarchy.

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 Arconic 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.

Table of Contents

V. Subsequent Events

Management evaluated all activity of Arconic 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 noted below:

In January 2018, the Company announced the freeze of its U.S. defined benefit pension plans for salaried and non-bargained hourly employees, effective April 1, 2018. Benefit accruals for future service and compensation under all of the Company’s qualified and non-qualified defined benefit pension plans for U.S. salaried and non-bargained hourly employees (the “Pension Plans”) will cease. In connection with this change, effective April 1, 2018, impacted employees will commence receiving an employer contribution of 3% of eligible compensation under the Arconic Salaried Retirement Savings Plan, and, for the period from April 1, 2018 through December 31, 2018, an additional transition employer contribution of 3% of eligible compensation.

In January 2018, management announced a change in the organizational structure of the Engineered Products and Solutions segment, from four business units to three business units, with a focus on aligning its internal structure to core markets and customers and reducing cost. As a result of this change, goodwill will be reallocated to the three new reporting units and evaluated for impairment during the first quarter of 2018. The Company does not expect any goodwill impairment as a result of the realignment.

In February 2018, the Company announced that its Board of Directors authorized a share repurchase program of up to $500 of its outstanding common stock and a $500 early debt reduction. Under the share repurchase program, the Company may repurchase shares from time to time, in amounts, at prices, and at such times as the Company deems appropriate. Repurchases will be subject to market conditions, legal requirements and other considerations. Arconic is not obligated to repurchase any specific number of shares or to do so at any particular time, and the share repurchase program may be suspended, modified or terminated at any time without prior notice. For the early debt reduction, Arconic intends to redeem in March 2018 all of its outstanding 5.72% Notes due in 2019.

Beginning in the first quarter of 2018, the Company's primary measure of segment performance will change from Adjusted EBITDA to Operating income, which more closely aligns segment performance with Operating income as presented in the Statement of Consolidated Operations. As part of this change, LIFO and metal price lag will be included in the Operating income of the segments.

Table of Contents

Supplemental Financial Information (unaudited)
Quarterly Data
(in millions, except per-share amounts)

	First	Second	Third	Fourth[2]	Year
2017					
Sales	$3,192	$3,261	$3,236	$3,271	$12,960
Net income (loss) attributable to Arconic	$322	$212	$119	$(727)	$(74)
Earnings (loss) per share attributable to Arconic common shareholders[1]:					
Basic					
Net income (loss) per share—basic	$0.69	$0.44	$0.23	$(1.51)	$(0.28)
Diluted					
Net income (loss) per share—diluted	$0.65	$0.43	$0.22	$(1.51)	$(0.28)
2016					
Sales	$3,055	$3,234	$3,138	$2,967	$12,394
Net income (loss) attributable to Arconic	$16	$135	$166	$(1,258)	$(941)
Earnings (loss) per share attributable to Arconic common shareholders[1]:					
Basic					
Continuing operations	$0.21	$0.08	$0.11	$(2.98)	$(2.58)
Discontinued operations	(0.21)	0.19	0.23	0.07	0.27
Net income (loss) per share—basic	$0.00	$0.27	$0.34	$(2.91)	$(2.31)
Diluted					
Continuing operations	$0.21	$0.08	$0.11	$(2.98)	$(2.58)
Discontinued operations	(0.21)	0.19	0.22	0.07	0.27
Net income (loss) per share—basic	$0.00	$0.27	$0.33	$(2.91)	$(2.31)

(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, Arconic recorded an impairment of goodwill related to the forgings and extrusions business of $719 ($719 pre-tax); a provisional charge of $272 associated with the revaluation of U.S. net deferred tax assets due to a decrease in the U.S. corporate tax rate from 35% to 21%, as well as a one-time transition tax on the non-previously taxed earnings and profits of certain U.S.-owned foreign corporations as of December 31, 2017; a favorable adjustment to the Firth Rixson earn-out liability of $81 ($81 pre-tax); and a favorable adjustment to a separation-related guarantee liability of $18 ($25 pre-tax). In the fourth quarter of 2016, as a result of the Separation Transaction, Arconic recorded a charge of $1,267 for valuation allowances on certain deferred tax assets.

Table of Contents

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

Arconic'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 Securities Exchange Act of 1934, as of the end of the period covered by this report, and they have concluded that these controls and procedures are effective.

(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 beginning on page 57.

(c) Attestation Report of the Registered Public Accounting Firm

The effectiveness of Arconic'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 on pages 58-59.

(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.

Table of Contents

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by Item 401 of Regulation S-K regarding directors is contained under the caption “Item 1 Election of Directors” of the Proxy Statement and is incorporated by reference. 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 405 of Regulation S-K is contained under the caption “Section 16(a) Beneficial Ownership Reporting Compliance” of the Proxy Statement and is incorporated by reference.

The Company’s Code of Ethics for the CEO, CFO and Other Financial Professionals is publicly available on the Company’s Internet website at http://www.arconic.com under the section “Investors—Corporate Governance.” 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 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—Committees of the Board—Audit Committee” of the Proxy Statement and is incorporated by reference.

Item 11. Executive Compensation.

The information required by Item 402 of Regulation S-K is contained under the captions “Director Compensation”, “Executive Compensation” and “Corporate Governance—Recovery of Incentive Compensation” of the Proxy Statement. Such information is incorporated 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 “Item 3 Advisory Approval of Executive Compensation—Compensation Committee Report” of the Proxy Statement. Such information (other than the Compensation Committee Report, which shall not be deemed to be “filed”) is incorporated 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 by reference.

The information required by Item 403 of Regulation S-K is contained under the captions “Arconic Stock Ownership—Stock Ownership of Certain Beneficial Owners” and “— Stock Ownership of Directors and Executive Officers” of the Proxy Statement and is incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by Item 404 of Regulation S-K is contained under the captions “Executive Compensation” (excluding the information under the caption “Compensation Committee Report”) and “Corporate Governance— Related Person Transactions” of the Proxy Statement and is incorporated by reference.

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 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 Appointment of Independent Registered Public Accounting Firm—Report of the Audit Committee” and “— Audit and Non-Audit Fees” of the Proxy Statement and in Attachment A (Pre-Approval Policies and Procedures for Audit and Non-Audit Services) thereto and is incorporated by reference.

Table of Contents

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 59 through 114 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.

Exhibit Number	Description*
2(a).	Share Purchase Agreement, dated as of June 25, 2014, by and among Alcoa Inc., Alcoa IH Limited, FR Acquisition Corporation (US), Inc., FR Acquisitions Corporation (Europe) Limited, FR Acquisition Finance Subco (Luxembourg), S.à.r.l. and Oak Hill Capital Partners III, L.P. and Oak Hill Capital Management Partners III, L.P., collectively in their capacity as the Seller Representative, incorporated by reference to exhibit 2.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated June 27, 2014.
2(b).	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 (Commission file number 1-3610) dated November 4, 2016.
2(c).	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 (Commission file number 1-3610) dated November 4, 2016.
2(d).	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 (Commission file number 1-3610) dated November 4, 2016.
2(e).	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 (Commission file number 1-3610) dated November 4, 2016.
2(e)(1).	Amendment No. 1, dated December 13, 2016, to Employee Matters Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa Corporation, incorporated by reference to exhibit 2(e)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
2(f).	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 (Commission file number 1-3610) dated November 4, 2016.
2(g).	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 (Commission file number 1-3610) dated November 4, 2016.
2(h).	

Alcoa Corporation to Arconic Inc. Trademark License Agreement, dated as of October 31, 2016, by and between Alcoa USA Corp. and Arconic Inc., incorporated by reference to exhibit 2.7 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 4, 2016.

Table of Contents

2(h)(1)	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 (Commission file number 1-3610) for the quarter ended June 30, 2017.
2(i).	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 (Commission file number 1-3610) dated November 4, 2016.
2(j).	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 (Commission file number 1-3610) dated November 4, 2016.
2(k).	Massena Lease and Operations Agreement, dated as of October 31, 2016, by and between Arconic Inc. and Alcoa Corporation, incorporated by reference to exhibit 2.10 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 4, 2016.
2(l).	Agreement and Plan of Merger, dated October 12, 2017, by and between Arconic Inc., a Pennsylvania corporation, and Arconic Inc., a Delaware corporation, incorporated by reference to exhibit 2.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 4, 2018.
3(a).	Certificate of Incorporation of Arconic Inc., a Delaware corporation, incorporated by reference to exhibit 3.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 4, 2018.
3(b).	Bylaws of Arconic Inc., a Delaware corporation, incorporated by reference to exhibit 3.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 4, 2018.
4(a).	Form of Certificate for Shares of Common Stock of Arconic Inc., a Delaware corporation, incorporated by reference to exhibit 4.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 4, 2018.
4(b).	Bylaws. See exhibit 3(b) above.
4(c).	Form of Indenture, dated as of September 30, 1993, between Alcoa Inc. and The Bank of New York Trust Company, N.A., as successor to J. P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association), as successor Trustee to PNC Bank, National Association, as Trustee (undated form of Indenture incorporated by reference to exhibit 4(a) to Registration Statement No. 33-49997 on Form S-3).
4(c)(1).	First Supplemental Indenture, dated as of January 25, 2007, between Alcoa Inc. and The Bank of New York Trust Company, N.A., as successor to J.P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association), as successor Trustee to PNC Bank, National Association, as Trustee, incorporated by reference to exhibit 99.4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 25, 2007.
4(c)(2).	Second Supplemental Indenture, dated as of July 15, 2008, between Alcoa Inc. and The Bank of New York Mellon Trust Company, N.A., as successor in interest to J. P. Morgan Trust Company, National Association (formerly Chase Manhattan Trust Company, National Association, as successor to PNC Bank, National Association), as Trustee, incorporated by reference to exhibit 4(c) to the Company's Current Report on Form

	8-K (Commission file number 1-3610) dated July 15, 2008.
4(c)(3).	Fourth Supplemental Indenture, dated as of December 31, 2017, between Arconic Inc., a Pennsylvania corporation, Arconic Inc., a Delaware corporation, and The Bank of New York Mellon Trust Company, N.A., as trustee, incorporated by reference to exhibit 4.3 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 4, 2018.

4(d). Form of 6.75% Bonds Due 2028.

4(e). Form of 5.90% Notes Due 2027, incorporated by reference to exhibit 4(e) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.

4(f). Form of 5.95% Notes Due 2037, incorporated by reference to exhibit 4(f) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.

4(g). Form of 5.72% Notes Due 2019, incorporated by reference to exhibit 4.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated February 21, 2007.

4(h). Form of 5.87% Notes Due 2022, incorporated by reference to exhibit 4.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated February 21, 2007.

4(i). Form of 6.150% Notes Due 2020, incorporated by reference to exhibit 4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated August 3, 2010.

4(j). Form of 5.40% Notes Due 2021, incorporated by reference to exhibit 4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated April 21, 2011.

4(k). Form of 5.125% Notes Due 2024, incorporated by reference to exhibit 4.5 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated September 22, 2014.

4(l). Indenture, dated as of December 14, 2010, between RTI International Metals, Inc. and The Bank of New York Trust Company, N.A., as Trustee, incorporated by reference to exhibit 4(m) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2015.

4(l)(1). Third Supplemental Indenture, dated as of April 17, 2013, between RTI International Metals, Inc. and The Bank of New York Trust Company, N.A., as Trustee, incorporated by reference to exhibit 4(n) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2015.

4(l)(2). Fourth Supplemental Indenture, dated as of July 23, 2015, between RTI International Metals, Inc. and The Bank of New York Trust Company, N.A., as Trustee, incorporated by reference to exhibit 4.1 on Form 8-K (Commission file number 1-3610) dated July 23, 2015.

4(l)(3). Fifth Supplemental Indenture, dated as of November 30, 2017, between RTI International Metals, Inc. and The Bank of New York Trust Company, N.A., as Trustee, incorporated by reference to exhibit 4.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated December 4, 2017.

4(l)(4). Sixth Supplemental Indenture, dated as of December 31, 2017, between Arconic Inc., a Pennsylvania corporation, Arconic Inc., a Delaware corporation, and The Bank of New York Mellon Trust Company, N.A., as Trustee, incorporated by reference to exhibit 4.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 4, 2018.

4(l)(5). Form of 1.625% Convertible Senior Notes Due 2019. See exhibit 4(l)(1) above.

4(m). Arconic Bargaining Retirement Savings Plan (formerly known as the Alcoa Retirement Savings Plan for Bargaining Employees), as Amended and Restated effective January 1, 2015, incorporated by reference to

exhibit 4(p) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2015.

Table of Contents

4(n).	Arconic Hourly Non-Bargaining Retirement Savings Plan (formerly known as the Alcoa Retirement Savings Plan for Hourly Non-Bargaining Employees), as Amended and Restated effective January 1, 2015, incorporated by reference to exhibit 4(q) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2015.
4(o).	Arconic Fastener Systems and Rings Retirement Savings Plan (formerly known as the Alcoa Retirement Savings Plan for Fastener Systems Employees), as Amended and Restated effective January 1, 2015, incorporated by reference to exhibit 4(r) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2015.
4(p).	Arconic Salaried Retirement Savings Plan (formerly known as the Alcoa Retirement Savings Plan for Salaried Employees), as Amended and Restated effective January 1, 2015, incorporated by reference to exhibit 4(s) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2015.
4(q).	Arconic Retirement Savings Plan for ATEP Bargaining Employees, effective January 1, 2017, incorporated by reference to exhibit 4 to Post-Effective Amendment, dated December 30, 2016, to Registration Statement No. 333-32516 on Form S-8.
10(a).	Earnout Agreement, dated as of June 25, 2014, by and among Alcoa Inc., FR Acquisition Finance Subco (Luxembourg), S.à.r.l. and Oak Hill Capital Partners III, L.P. and Oak Hill Capital Management Partners III, L.P., collectively in their capacity as the Seller Representative, incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated June 27, 2014.
10(b).	Five-Year Revolving Credit Agreement, dated as of July 25, 2014, among Alcoa Inc., the Lenders and Issuers named therein, Citibank, N.A., as Administrative Agent for the Lenders and Issuers, and JPMorgan Chase Bank, N.A., as Syndication Agent, incorporated by reference to exhibit 10.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated July 31, 2014.
10(b)(1).	Extension Request and Amendment Letter, dated as of June 5, 2015, among Alcoa Inc., each lender and issuer party thereto, and Citibank, N.A., as Administrative Agent, effective July 7, 2015, incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated July 13, 2015.
10(b)(2).	Amendment No. 1, dated September 16, 2016, to the Five-Year Revolving Credit Agreement dated as of July 25, 2014, among Arconic Inc., the lenders and issuers named therein, Citibank, N.A., as administrative agent, and JPMorgan Chase Bank, N.A. as syndication agent, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated September 19, 2016.
10(b)(3).	Assumption Agreement, dated as of December 31, 2017, by Arconic Inc., a Delaware corporation, in favor of and for the benefit of the Lenders and Citibank, N.A., as administrative agent, incorporated by reference to exhibit 4.4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 4, 2018.
10(c).	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 the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2013.
10(d).	

Offer of Settlement of Alcoa Inc. before the Securities and Exchange Commission dated December 27, 2013, incorporated by reference to exhibit 10(m) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2013.

10(e). Securities and Exchange Commission Order dated January 9, 2014, incorporated by reference to exhibit 10(n) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2013.

Table of Contents

10(f).	Agreement, dated February 1, 2016, by and between Elliott Associates, L.P., Elliott International, L.P., Elliott International Capital Advisors Inc. and Alcoa Inc., incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated February 1, 2016.
10(g).	Settlement Agreement, dated as of May 22, 2017, by and among Elliott Associates, L.P., Elliott International, L.P., Elliott International Capital Advisors Inc. and Arconic Inc., incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated May 22, 2017 (reporting an event on May 21, 2017).
10(h).	Letter Agreement, by and among Arconic Inc. and Elliott Associates, L.P., Elliott International, L.P. and Elliott International Capital Advisors Inc., dated as of December 19, 2017, incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated December 19, 2017.
10(i).	Registration Rights Agreement, by and among Arconic Inc. and Elliott Associates, L.P., Elliott International, L.P. and Elliott International Capital Advisors Inc., dated as of December 19, 2017, incorporated by reference to exhibit 10.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated December 19, 2017.
10(i)(1).	Amendment to Registration Rights Agreement, by and among Arconic Inc. and Elliott Associates, L.P., Elliott International, L.P. and Elliott International Capital Advisors Inc., dated as of February 2, 2018, incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated February 6, 2018.
10(j).	Alcoa Internal Revenue Code Section 162(m) Compliant Annual Cash Incentive Compensation Plan, as Amended and Restated, incorporated by reference to Exhibit 10(b) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated May 11, 2016.
10(k).	2004 Summary Description of the Alcoa Incentive Compensation Plan, incorporated by reference to exhibit 10(g) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(k)(1).	Incentive Compensation Plan of Alcoa Inc., as revised and restated effective November 8, 2007, incorporated by reference to exhibit 10(k)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2007.
10(k)(2).	Amendment to Incentive Compensation Plan of Alcoa Inc., effective December 18, 2009, incorporated by reference to exhibit 10(n)(2) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2009.
10(l).	Arconic Employees' Excess Benefits Plan C (formerly referred to as the Alcoa Inc. Employees' Excess Benefits Plan, Plan C), as amended and restated effective August 1, 2016, incorporated by reference to exhibit 10(j) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(l)(1).	First Amendment to Arconic Employees' Excess Benefits Plan C (as amended and restated effective August 1, 2016), effective January 1, 2018.
10(l)(2).	

	Second Amendment to Arconic Employees' Excess Benefits Plan C (as amended and restated effective August 1, 2016), effective January 1, 2018.
10(l)(3)	Third Amendment to Arconic Employees' Excess Benefits Plan C (as amended and restated effective August 1, 2016), incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 8, 2018.

Table of Contents

10(m).	Deferred Fee Plan for Directors, as amended effective July 9, 1999, incorporated by reference to exhibit 10(g)(1) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 1999.
10(n).	Amended and Restated Deferred Fee Plan for Directors, effective November 1, 2016, incorporated by reference to exhibit 10(c) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2016.
10(o).	Non-Employee Director Compensation Policy, effective November 1, 2016, incorporated by reference to exhibit 10(d) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2016.
10(p).	Non-Employee Director Compensation Policy, effective December 5, 2017.
10(q).	Fee Continuation Plan for Non-Employee Directors, incorporated by reference to exhibit 10(k) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1989.
10(q)(1).	Amendment to Fee Continuation Plan for Non-Employee Directors, effective November 10, 1995, incorporated by reference to exhibit 10(i)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1995.
10(q)(2).	Second Amendment to the Fee Continuation Plan for Non-Employee Directors, effective September 15, 2006, incorporated by reference to exhibit 10.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated September 20, 2006.
10(r).	Arconic Deferred Compensation Plan, as amended and restated effective August 1, 2016, incorporated by reference to exhibit 10(p) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(r)(1).	First Amendment to the Arconic Deferred Compensation Plan (as amended and restated effective August 1, 2016), effective January 1, 2018.
10(s).	Summary of the Executive Split Dollar Life Insurance Plan, dated November 1990, incorporated by reference to exhibit 10(m) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1990.
10(t).	Amended and Restated Dividend Equivalent Compensation Plan, effective January 1, 1997, incorporated by reference to exhibit 10(h) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2004.
10(u).	Form of Indemnity Agreement between the Company and individual directors or officers, incorporated by reference to exhibit 10(j) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 1987.)
10(v).	Form of Indemnification Agreement between the Company and individual directors or officers, incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated January 25, 2018.

10(w).	Amended and Restated 2009 Alcoa Stock Incentive Plan, dated February 15, 2011, incorporated by reference to exhibit 10(z)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2010.

10(x).	Arconic Supplemental Pension Plan for Senior Executives (formerly referred to as the Alcoa Supplemental Pension Plan for Senior Executives), as amended and restated effective August 1, 2016, incorporated by reference to exhibit 10(v) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(x)(1).	First Amendment to Arconic Supplemental Pension Plan for Senior Executives (as amended and restated effective August 1, 2016), effective January 1, 2018.
10(x)(2).	Second Amendment to Arconic Supplemental Pension Plan for Senior Executives (as amended and restated effective August 1, 2016), effective January 1, 2018.
10(y).	Deferred Fee Estate Enhancement Plan for Directors, effective July 10, 1998, incorporated by reference to exhibit 10(r) to the Company's Annual Report on Form 10-K (Commission file number 1- 3610) for the year ended December 31, 1998.
10(z).	Arconic Inc. Change in Control Severance Plan, as amended and restated effective February 1, 2018, incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated February 6, 2018.
10(aa).	Letter Agreement, dated August 14, 2007, between Alcoa Inc. and Klaus Kleinfeld, incorporated by reference to exhibit 10(b) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2007.
10(bb).	Executive Severance Agreement, as amended and restated effective December 8, 2008, between Alcoa Inc. and Klaus Kleinfeld, incorporated by reference to exhibit 10(gg) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2008.
10(bb)(1).	Letter Agreement between Arconic Inc. and Klaus Kleinfeld, dated February 27, 2017, incorporated by reference to exhibit 10(y)(1) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(cc).	Separation Agreement between Arconic Inc. and Klaus Kleinfeld, dated July 31, 2017, incorporated by reference to exhibit 10(c) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2017.
10(dd).	Form of Executive Severance Agreement between the Company and new officers entered into after July 22, 2010, incorporated by reference to exhibit 10(a) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended September 30, 2010.
10(ee).	Arconic Inc. Executive Severance Plan, as effective February 27, 2017, incorporated by reference to exhibit 10(aa) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(ff)	Letter Agreement, by and between Alcoa Inc. and Katherine H. Ramundo, dated as of July 28, 2016.
10(gg)	Letter Agreement between Arconic Inc. and David P. Hess, dated May 17, 2017, incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated May 22, 2017 (reporting an event on May 17, 2017).

10(hh)	Letter Agreement, by and between Arconic Inc. and Charles P. Blankenship, dated as of October 19, 2017, incorporated by reference to exhibit 10.1 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated October 23, 2017
10(ii)	Letter Agreement, by and between Arconic Inc. and Mark J. Krakowiak, dated as of January 20, 2018.

Table of Contents

10(jj).	Arconic Global Pension Plan, as amended and restated effective August 1, 2016, incorporated by reference to exhibit 10(bb) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(kk).	Global Expatriate Employee Policy (pre-January 1, 2003), incorporated by reference to exhibit 10(uu) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2005.
10(ll).	Summary Description of Equity Choice Program for Performance Equity Award Participants, dated November 2005, incorporated by reference to exhibit 10.6 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated November 16, 2005.
10(mm).	2013 Arconic Stock Incentive Plan, as Amended and Restated, incorporated by reference to exhibit 10(a) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated May 11, 2016.
10(mm)(1).	Terms and Conditions (Australian Addendum) to the 2013 Arconic Stock Incentive Plan, effective May 3, 2013, incorporated by reference to exhibit 10(d) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated May 8, 2013.
10(mm)(2).	First Amendment to the 2013 Arconic Stock Incentive Plan, as amended and restated, incorporated by reference to exhibit 10.4 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated February 6, 2018.
10(nn).	RTI International Metals, Inc. 2004 Stock Plan, incorporated by reference to exhibit 4(b) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated July 23, 2015.
10(oo).	RTI International Metals, Inc. 2014 Stock and Incentive Plan, incorporated by reference to exhibit 4(a) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated July 23, 2015.
10(oo)(1).	First Amendment to the RTI International Metals, Inc. 2014 Stock and Incentive Plan, as amended and assumed by Arconic Inc., dated January 19, 2018.
10(pp).	Form of Award Agreement for Stock Options, effective May 8, 2009, incorporated by reference to exhibit 10.2 to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated May 13, 2009.
10(qq).	Form of Award Agreement for Stock Options, effective January 1, 2010, incorporated by reference to exhibit 10(ddd) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2009.
10(rr).	Terms and Conditions for Stock Options, effective January 1, 2011, incorporated by reference to exhibit 10(c) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2011.
10(ss).	Terms and Conditions for Stock Option Awards, effective May 3, 2013, incorporated by reference to exhibit 10(b) to the Company's Current Report on Form 8-K (Commission file number 1-3610) dated May 8, 2013.
10(tt).	

	Terms and Conditions for Stock Option Awards under the 2013 Arconic Stock Incentive Plan, effective July 22, 2016, incorporated by reference to Exhibit 10(d) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2016.
10(uu).	Global Stock Option Award Agreement, effective January 19, 2018.
10(vv).	Stock Option Award Agreement - Chief Executive Officer (Charles P. Blankenship) Initial Equity Award, effective January 19, 2018.

122

10(ww).	Terms and Conditions for Restricted Share Units, effective January 1, 2011, incorporated by reference to exhibit 10(b) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2011.
10(xx).	Terms and Conditions for Restricted Share Units, effective May 3, 2013, incorporated by reference to exhibit 10(c) to the Company's Current Report on Form 8-K (Commission file number 1- 3610) dated May 8, 2013.
10(yy).	Terms and Conditions for Restricted Share Units under the 2013 Arconic Stock Incentive Plan, effective July 22, 2016, incorporated by reference to Exhibit 10(c) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2016.
10(zz).	Terms and Conditions for Restricted Share Units for Annual Director Awards under the 2013 Arconic Stock Incentive Plan, effective November 30, 2016, incorporated by reference to exhibit 10(vv) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(aaa).	Terms and Conditions for Deferred Fee Restricted Share Units for Director Awards under the 2013 Arconic Stock Incentive Plan, effective November 30, 2016, incorporated by reference to exhibit 10(ww) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(bbb).	Terms and Conditions for Restricted Share Units issued on or after January 13, 2017, under the 2013 Arconic Stock Incentive Plan, effective January 13, 2017, incorporated by reference to exhibit 10(xx) to the Company's Annual Report on Form 10-K (Commission file number 1-3610) for the year ended December 31, 2016.
10(ccc).	Terms and Conditions for Restricted Share Units - Interim CEO (David P. Hess) Award, effective October 23, 2017.
10(ddd).	Terms and Conditions for Restricted Share Units - Non-Executive Chairman (John C. Plant) Director Award, effective October 23, 2017.
10(eee).	Global Restricted Share Unit Award Agreement, effective January 19, 2018.
10(fff).	Terms and Conditions for Restricted Share Units issued on or after January 19, 2018, under the 2013 Arconic Stock Incentive Plan, effective January 19, 2018.
10(ggg).	Restricted Share Unit Award Agreement - Chief Executive Officer (Charles P. Blankenship) Initial Equity Award, effective January 19, 2018.
10(hhh).	Restricted Share Unit Award Agreement - Sign-On Award - Mark J. Krakowiak (2018 Grant), effective February 15, 2018.
10(iii).	Terms and Conditions for Special Retention Awards under the 2013 Arconic Stock Incentive Plan, effective January 1, 2015, incorporated by reference to exhibit 10(a) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2015.
10(jjj).	

Terms and Conditions for Special Retention Awards under the 2013 Arconic Stock Incentive Plan, effective July 22, 2016, incorporated by reference to exhibit 10(e) to the Company's Quarterly Report on Form 10-Q (Commission file number 1-3610) for the quarter ended June 30, 2016.

10(kkk). Global Special Retention Award Agreement, effective January 19, 2018.

Table of Contents

12. Computation of Ratio of Earnings to Fixed Charges.

21. Subsidiaries of the Registrant.

23. Consent of Independent Registered Public Accounting Firm.

24. Power of Attorney for certain directors.

31. Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

32. Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101. INS XBRL Instance Document.

101. SCH XBRL Taxonomy Extension Schema Document.

101. CAL XBRL Taxonomy Extension Calculation Linkbase Document.

101. DEF XBRL Taxonomy Extension Definition Linkbase Document.

101. LAB XBRL Taxonomy Extension Label Linkbase Document.

101. PRE XBRL Taxonomy Extension Presentation Linkbase Document.

* Exhibit Nos. 10(j) through 10(kkk) are management contracts or compensatory plans 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.

None.

Table of Contents

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.

ARCONIC INC.

February 23, 2018 By /s/ Paul Myron
Paul Myron
Vice President and Controller (Also signing as Principal Accounting Officer)

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 and on the dates indicated.

Signature	Title	Date
/s/ Charles P. Blankenship	Chief Executive Officer	February 23, 2018
Charles P. Blankenship	(Principal Executive Officer and Director)	
/s/ Ken Giacobbe		February 23, 2018
Ken Giacobbe	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	

James F. Albaugh, Christopher L. Ayers, Arthur D. Collins, Jr., Elmer L. Doty, Rajiv L. Gupta, David P. Hess, Sean O. Mahoney, David J. Miller, E. Stanley O'Neal, John C. Plant, Patricia F. Russo and Ulrich R. Schmidt, each as a Director, on February 23, 2018, by Paul Myron, their Attorney-in-Fact.*

*By /s/ Paul Myron
Paul Myron
Attorney-in-Fact