

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 10-Q

(Mark One)

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

For the Quarterly Period Ended June 30, 2019

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
(State of incorporation)

25-0317820
(I.R.S. Employer Identification No.)

201 Isabella Street, Suite 200, Pittsburgh, Pennsylvania
(Address of principal executive offices)

15212-5872
(Zip code)

Investor Relations 212-836-2758
Office of the Secretary 212-836-2732
(Registrant's telephone number including area code)

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$1.00 per share	ARNC	New York Stock Exchange
\$.75 Cumulative Preferred Stock, par value \$100 per share	ARNC PR	NYSE American

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files). Yes No

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

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of July 30, 2019, there were 440,188,364 shares of common stock, par value \$1.00 per share, of the registrant outstanding.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements.

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

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Sales (C)	\$ 3,691	\$ 3,573	\$ 7,232	\$ 7,018
Cost of goods sold (exclusive of expenses below)	2,939	2,903	5,757	5,671
Selling, general administrative, and other expenses	178	158	356	330
Research and development expenses	17	29	39	52
Provision for depreciation and amortization	139	144	276	286
Restructuring and other charges (D)	499	15	511	22
Operating (loss) income	(81)	324	293	657
Interest expense	85	89	170	203
Other expense, net (E)	29	41	61	61
(Loss) income before income taxes	(195)	194	62	393
(Benefit) provision for income taxes (G)	(74)	74	(4)	130
Net (loss) income	<u>\$ (121)</u>	<u>\$ 120</u>	<u>\$ 66</u>	<u>\$ 263</u>
Amounts Attributable to Arconic Common Shareholders (I):				
Net (loss) income	\$ (121)	\$ 120	\$ 65	\$ 262
(Loss) earnings per share - basic	\$ (0.27)	\$ 0.25	\$ 0.14	\$ 0.54
(Loss) earnings per share - diluted	\$ (0.27)	\$ 0.24	\$ 0.14	\$ 0.53
Average Shares Outstanding (I):				
Average shares outstanding - basic	445	483	458	483
Average shares outstanding - diluted	445	502	462	502

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

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

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Net (loss) income	\$ (121)	\$ 120	\$ 66	\$ 263
Other comprehensive (loss) income, net of tax (J):				
Change in unrecognized net actuarial loss and prior service cost/ benefit related to pension and other postretirement benefits	23	29	63	172
Foreign currency translation adjustments	(30)	(201)	(4)	(79)
Net change in unrealized gains on available-for-sale securities	—	(2)	3	(2)
Net change in unrecognized gains/losses on cash flow hedges	(10)	4	(3)	(3)
Total Other comprehensive (loss) income, net of tax	(17)	(170)	59	88
Comprehensive (loss) income	\$ (138)	\$ (50)	\$ 125	\$ 351

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

Arconic and subsidiaries
Consolidated Balance Sheet (unaudited)
(in millions)

	June 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 1,357	\$ 2,277
Receivables from customers, less allowances of \$4 in 2019 and 2018 (K)	1,155	1,047
Other receivables (K)	640	451
Inventories (L)	2,606	2,492
Prepaid expenses and other current assets	260	314
Total current assets	6,018	6,581
Properties, plants, and equipment, net (M)	5,517	5,704
Goodwill (C)	4,500	4,500
Deferred income taxes	568	573
Intangibles, net (D and M)	686	919
Other noncurrent assets (N)	624	416
Total assets	\$ 17,913	\$ 18,693
Liabilities		
Current liabilities:		
Accounts payable, trade	\$ 2,095	\$ 2,129
Accrued compensation and retirement costs	384	370
Taxes, including income taxes	116	118
Accrued interest payable	113	113
Other current liabilities (N)	479	356
Short-term debt (O)	434	434
Total current liabilities	3,621	3,520
Long-term debt, less amount due within one year (O and P)	5,901	5,896
Accrued pension benefits (F)	2,079	2,230
Accrued other postretirement benefits (F)	641	723
Other noncurrent liabilities and deferred credits (B and N)	805	739
Total liabilities	13,047	13,108
Contingencies and commitments (R)		
Equity		
Arconic shareholders' equity:		
Preferred stock	55	55
Common stock (H)	440	483
Additional capital (H)	7,484	8,319
Accumulated deficit	(256)	(358)
Accumulated other comprehensive loss (J)	(2,869)	(2,926)
Total Arconic shareholders' equity	4,854	5,573
Noncontrolling interests	12	12
Total equity	4,866	5,585
Total liabilities and equity	\$ 17,913	\$ 18,693

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

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

	Six months ended	
	June 30,	
	2019	2018
Operating activities		
Net income	\$ 66	\$ 263
Adjustments to reconcile net income to cash used for operations:		
Depreciation and amortization	276	286
Deferred income taxes	(78)	47
Restructuring and other charges	511	22
Net loss from investing activities—asset sales	4	5
Net periodic pension benefit cost (F)	58	71
Stock-based compensation	27	29
Other	14	50
Changes in assets and liabilities, excluding effects of acquisitions, divestitures, and foreign currency translation adjustments:		
(Increase) in receivables	(743)	(709)
(Increase) in inventories	(117)	(220)
Decrease in prepaid expenses and other current assets	18	8
(Decrease) increase in accounts payable, trade	(29)	218
(Decrease) in accrued expenses	(46)	(84)
Increase in taxes, including income taxes	41	37
Pension contributions	(140)	(237)
(Increase) in noncurrent assets	(5)	(4)
(Decrease) in noncurrent liabilities	(9)	(42)
Cash used for operations	(152)	(260)
Financing Activities		
Net change in short-term borrowings (original maturities of three months or less)	—	5
Additions to debt (original maturities greater than three months)	226	300
Payments on debt (original maturities greater than three months)	(226)	(801)
Premiums paid on early redemption of debt	—	(17)
Proceeds from exercise of employee stock options	11	13
Dividends paid to shareholders	(39)	(60)
Repurchase of common stock (H)	(900)	—
Other	(14)	(17)
Cash used for financing activities	(942)	(577)
Investing Activities		
Capital expenditures	(304)	(288)
Proceeds from the sale of assets and businesses	12	5
Sales of investments	47	9
Cash receipts from sold receivables (K)	417	420
Other	(1)	—
Cash provided from investing activities	171	146
Effect of exchange rate changes on cash, cash equivalents and restricted cash	1	(2)
Net change in cash, cash equivalents and restricted cash	(922)	(693)
Cash, cash equivalents and restricted cash at beginning of period	2,282	2,153
Cash, cash equivalents and restricted cash at end of period	\$ 1,360	\$ 1,460

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

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

	Arconic Shareholders							Total Equity
	Preferred stock	Common stock	Additional capital	Accumulated deficit	Accumulated other comprehensive loss	Noncontrolling interests		
Balance at March 31, 2018	\$ 55	\$ 483	\$ 8,280	\$ (1,164)	\$ (2,386)	\$ 14	\$ 5,282	
Net income	—	—	—	120	—	—	120	
Other comprehensive loss (J)	—	—	—	—	(170)	—	(170)	
Cash dividends declared:								
Common @ \$0.06 per share	—	—	—	(29)	—	—	(29)	
Stock-based compensation	—	—	14	—	—	—	14	
Common stock issued: compensation plans	—	—	1	—	—	—	1	
Balance at June 30, 2018	<u>\$ 55</u>	<u>\$ 483</u>	<u>\$ 8,295</u>	<u>\$ (1,073)</u>	<u>\$ (2,556)</u>	<u>\$ 14</u>	<u>\$ 5,218</u>	

	Arconic Shareholders							Total Equity
	Preferred stock	Common stock	Additional capital	Accumulated deficit	Accumulated other comprehensive loss	Noncontrolling interests		
Balance at March 31, 2019	\$ 55	\$ 453	\$ 7,644	\$ (134)	\$ (2,852)	\$ 12	\$ 5,178	
Net loss	—	—	—	(121)	—	—	(121)	
Other comprehensive loss (J)	—	—	—	—	(17)	—	(17)	
Repurchase and retirement of common stock (H)	—	(13)	(187)	—	—	—	(200)	
Stock-based compensation	—	—	17	—	—	—	17	
Common stock issued: compensation plans	—	—	10	—	—	—	10	
Other	—	—	—	(1)	—	—	(1)	
Balance at June 30, 2019	<u>\$ 55</u>	<u>\$ 440</u>	<u>\$ 7,484</u>	<u>\$ (256)</u>	<u>\$ (2,869)</u>	<u>\$ 12</u>	<u>\$ 4,866</u>	

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

Arconic Shareholders							
	Preferred stock	Common stock	Additional capital	Accumulated deficit	Accumulated other comprehensive loss	Noncontrolling interests	Total Equity
Balance at December 31, 2017	\$ 55	\$ 481	\$ 8,266	\$ (1,248)	\$ (2,644)	\$ 14	\$ 4,924
Net income	—	—	—	263	—	—	263
Other comprehensive income (J)	—	—	—	—	88	—	88
Cash dividends declared:							
Preferred-Class A @ \$1.875 per share	—	—	—	(1)	—	—	(1)
Common @ \$0.18 per share	—	—	—	(87)	—	—	(87)
Stock-based compensation	—	—	29	—	—	—	29
Common stock issued: compensation plans	—	2	—	—	—	—	2
Balance at June 30, 2018	<u>\$ 55</u>	<u>\$ 483</u>	<u>\$ 8,295</u>	<u>\$ (1,073)</u>	<u>\$ (2,556)</u>	<u>\$ 14</u>	<u>\$ 5,218</u>

Arconic Shareholders							
	Preferred stock	Common stock	Additional capital	Accumulated deficit	Accumulated other comprehensive loss	Noncontrolling interests	Total Equity
Balance at December 31, 2018	\$ 55	\$ 483	\$ 8,319	\$ (358)	\$ (2,926)	\$ 12	\$ 5,585
Adoption of accounting standards (B)	—	—	—	75	(2)	—	73
Net income	—	—	—	66	—	—	66
Other comprehensive income (J)	—	—	—	—	59	—	59
Cash dividends declared:							
Preferred-Class A @ \$1.875 per share	—	—	—	(1)	—	—	(1)
Common @ \$0.08 per share	—	—	—	(38)	—	—	(38)
Repurchase and retirement of common stock (H)	—	(45)	(855)	—	—	—	(900)
Stock-based compensation	—	—	25	—	—	—	25
Common stock issued: compensation plans	—	2	(5)	—	—	—	(3)
Balance at June 30, 2019	<u>\$ 55</u>	<u>\$ 440</u>	<u>\$ 7,484</u>	<u>\$ (256)</u>	<u>\$ (2,869)</u>	<u>\$ 12</u>	<u>\$ 4,866</u>

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

Arconic and subsidiaries
Notes to the Consolidated Financial Statements (unaudited)
(dollars in millions, except per-share amounts)

A. Basis of Presentation

The interim Consolidated Financial Statements of Arconic Inc. and its subsidiaries (“Arconic” or the “Company”) are unaudited. These Consolidated Financial Statements include all adjustments, consisting only of normal recurring adjustments, considered necessary by management to fairly state the Company’s results of operations, financial position, and cash flows. The results reported in these Consolidated Financial Statements are not necessarily indicative of the results that may be expected for the entire year. The 2018 year-end balance sheet data was derived from audited financial statements but does not include all disclosures required by accounting principles generally accepted in the United States of America (“GAAP”). This Form 10-Q report should be read in conjunction with Arconic’s Annual Report on Form 10-K for the year ended December 31, 2018, which includes all disclosures required by GAAP. Certain amounts in previously issued financial statements were reclassified to conform to the current period presentation (see Note [C](#)).

B. Recently Adopted and Recently Issued Accounting Guidance

Adopted

In February 2016, the Financial Accounting Standards Board (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, initially measured at the present value of the future lease payments for all operating leases with a term greater than 12 months.

These changes became effective for Arconic on January 1, 2019 and have been applied using the modified retrospective approach as of the date of adoption, under which leases existing at, or entered into after, January 1, 2019 were required to be recognized and measured. Prior period amounts have not been adjusted and continue to be reflected in accordance with the Company’s historical accounting. The Company elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed the Company to carry forward the historical lease classification. The Company also elected to separate lease components from non-lease components for all classes of assets.

The adoption of this new standard resulted in the Company recording operating lease right-of-use assets and lease liabilities of approximately \$320 on the Consolidated Balance Sheet as of January 1, 2019. Also, the Company reclassified cash proceeds of \$119 from Other noncurrent liabilities and deferred credits, assets of \$24 from Properties, plants, and equipment, net, and deferred tax assets of \$22 from Other noncurrent assets to Accumulated deficit reflecting the cumulative effect of an accounting change related to the sale-leaseback of the Texarkana, Texas cast house (see Note [Q](#)). The adoption of the standard had no impact on the Statement of Consolidated Operations or Statement of Consolidated Cash Flows.

In August 2017, the FASB issued guidance that made more financial and nonfinancial hedging strategies eligible for hedge accounting. It also amended the presentation and disclosure requirements and changed 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 became effective for Arconic on January 1, 2019. For cash flow hedges, Arconic recorded a cumulative effect adjustment of \$2 related to eliminating the separate measurement of ineffectiveness by decreasing Accumulated other comprehensive loss and increasing Accumulated deficit on the accompanying Consolidated Balance Sheet. The amendments to presentation and disclosure are required prospectively. Arconic has determined that under the new accounting guidance it is able to more broadly use cash flow hedge accounting for its variable priced inventory purchases and customer sales.

In March 2019, the Securities and Exchange Commission (SEC) issued guidance to modernize and simplify certain disclosure requirements in a manner that reduces the costs and burdens on preparers while continuing to provide all material information to investors. This guidance became effective on May 2, 2019 and has been applied to filings thereafter. The adoption of this guidance did not have a material impact on the Notes to Consolidated Financial Statements.

Issued

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 2018, the FASB issued guidance that impacts disclosures for defined benefit pension plans and other postretirement benefit plans. These changes become effective for Arconic's annual report for the year ending December 31, 2020, with early adoption permitted. Management has determined that the adoption of this guidance will not have a material impact on the Consolidated Financial Statements.

C. Segment 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, building and construction, industrial applications, defense, and packaging. Arconic's segments are organized by product on a worldwide basis. In the first quarter of 2019, management transferred its aluminum extrusions operations (Aluminum Extrusions) from the Arconic Engineered Structures (AES) business unit within the Engineered Products and Solutions (EP&S) segment to the Global Rolled Products (GRP) segment, based on synergies with GRP including similar customer base, technologies, and manufacturing capabilities. Prior period financial information has been recast to conform to current year presentation.

Segment performance under Arconic's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is Segment operating profit. Arconic's definition of Segment operating profit is Operating income excluding Special items. Special items include Restructuring and other charges. Segment operating profit includes the impact of LIFO inventory accounting, metal price lag, intersegment profit eliminations, and derivative activities. Segment operating profit may not be comparable to similarly titled measures of other companies. Differences between segment totals and consolidated Arconic are in Corporate.

As a result of the reorganization of Aluminum Extrusions noted above, management assessed and concluded that the remaining AES business unit and the Aluminum Extrusions business unit represent reporting units for purposes of evaluating goodwill for impairment. Goodwill of \$110 was reallocated from the AES reporting unit to the Aluminum Extrusions reporting unit and these reporting units were evaluated for impairment during the first quarter of 2019. The estimated fair value of each of these reporting units substantially exceeded their carrying value; thus, there was no goodwill impairment. In the second quarter of 2019, management transferred its castings operations from the AES business unit to the Arconic Engines (AEN) business unit within the EP&S segment based on process expertise for investment castings that existed within AEN. As a result, goodwill of \$105 was reallocated from the AES reporting unit to the AEN reporting unit and these reporting units were evaluated for impairment during the second quarter of 2019. The estimated fair value of each of these reporting units substantially exceeded their carrying value; thus, there was no impairment. Also in the second quarter of 2019, as a result of the decline in the forecasted financial performance and related impairment of long-lived assets of the Disks asset group within the AEN business unit (see Note [M](#)), an additional evaluation of the AEN reporting unit goodwill was performed. The estimated fair value of the reporting unit was substantially in excess of its carrying value; thus, there was no impairment of goodwill.

The Company will continue to evaluate its organizational structure and portfolio in conjunction with its planned separation (see Note [S](#)), which may result in further changes to its reportable segments and the need to evaluate assets for impairment in future periods.

The operating results of Arconic's reportable segments were as follows:

	Engineered Products and Solutions	Global Rolled Products	Transportation and Construction Solutions	Total Segment
Second quarter ended June 30, 2019				
Sales:				
Third-party sales	\$ 1,565	\$ 1,577	\$ 548	\$ 3,690
Intersegment sales	—	55	—	55
Total sales	<u>\$ 1,565</u>	<u>\$ 1,632</u>	<u>\$ 548</u>	<u>\$ 3,745</u>
Profit and loss:				
Segment operating profit	\$ 286	\$ 145	\$ 107	\$ 538
Restructuring and other charges	442	2	25	469
Provision for depreciation and amortization	62	54	13	129
Second quarter ended June 30, 2018				
Sales:				
Third-party sales	\$ 1,474	\$ 1,573	\$ 562	\$ 3,609
Intersegment sales	—	61	—	61
Total sales	<u>\$ 1,474</u>	<u>\$ 1,634</u>	<u>\$ 562</u>	<u>\$ 3,670</u>
Profit and loss:				
Segment operating profit	\$ 224	\$ 111	\$ 97	\$ 432
Restructuring and other charges	8	2	—	10
Provision for depreciation and amortization	65	59	12	136
Six months ended June 30, 2019				
Sales:				
Third-party sales	\$ 3,067	\$ 3,080	\$ 1,083	\$ 7,230
Intersegment sales	—	110	—	110
Total sales	<u>\$ 3,067</u>	<u>\$ 3,190</u>	<u>\$ 1,083</u>	<u>\$ 7,340</u>
Profit and loss:				
Segment operating profit	\$ 539	\$ 252	\$ 194	\$ 985
Restructuring and other charges	456	8	34	498
Provision for depreciation and amortization	126	108	26	260
Six months ended June 30, 2018				
Sales:				
Third-party sales	\$ 2,900	\$ 3,054	\$ 1,099	\$ 7,053
Intersegment sales	—	118	—	118
Total sales	<u>\$ 2,900</u>	<u>\$ 3,172</u>	<u>\$ 1,099</u>	<u>\$ 7,171</u>
Profit and loss:				
Segment operating profit	\$ 433	\$ 235	\$ 164	\$ 832
Restructuring and other charges	9	1	—	10
Provision for depreciation and amortization	130	115	25	270

The following table reconciles Total segment operating profit to Consolidated (loss) income before income taxes:

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Total segment operating profit	\$ 538	\$ 432	\$ 985	\$ 832
Unallocated amounts:				
Restructuring and other charges	(499)	(15)	(511)	(22)
Corporate expense	(120)	(93)	(181)	(153)
Consolidated operating (loss) income	\$ (81)	\$ 324	\$ 293	\$ 657
Interest expense	(85)	(89)	(170)	(203)
Other expense, net	(29)	(41)	(61)	(61)
Consolidated (loss) income before income taxes	\$ (195)	\$ 194	\$ 62	\$ 393

The total assets of Arconic's reportable segment were as follows:

	June 30, 2019	December 31, 2018
Engineered Products and Solutions	\$ 9,681	\$ 9,797
Global Rolled Products	4,714	4,486
Transportation and Construction Solutions	1,216	1,089
Total segment assets	\$ 15,611	\$ 15,372

Segment assets at June 30, 2019 included operating lease right-of-use assets (see Notes B and N). Segment assets for the Engineered Products and Solutions segment at June 30, 2019 were impacted by a long-lived asset impairment charge of \$428 (see Note M).

The following table reconciles Total segment assets to Consolidated assets:

	June 30, 2019	December 31, 2018
Total segment assets	\$ 15,611	\$ 15,372
Unallocated amounts:		
Cash and cash equivalents	1,357	2,277
Deferred income taxes	568	573
Corporate fixed assets, net	302	305
Fair value of derivative contracts	5	37
Other	70	129
Consolidated assets	\$ 17,913	\$ 18,693

The following table disaggregates revenue by major end market served. Differences between segment totals and consolidated Arconic are in Corporate. For the second quarter and six months ended June 30, 2018, Corporate included \$38 of costs related to settlements of certain customer claims primarily related to product introductions.

	Engineered Products and Solutions	Global Rolled Products	Transportation and Construction Solutions	Total Segment
Second quarter ended June 30, 2019				
Aerospace	\$ 1,283	\$ 328	\$ —	\$ 1,611
Transportation	85	632	258	975
Building and construction	—	54	291	345
Industrial and Other	197	563	(1)	759
Total end-market revenue	<u>\$ 1,565</u>	<u>\$ 1,577</u>	<u>\$ 548</u>	<u>\$ 3,690</u>
Second quarter ended June 30, 2018				
Aerospace	\$ 1,187	\$ 280	\$ —	\$ 1,467
Transportation	93	638	253	984
Building and construction	—	60	297	357
Industrial and Other	194	595	12	801
Total end-market revenue	<u>\$ 1,474</u>	<u>\$ 1,573</u>	<u>\$ 562</u>	<u>\$ 3,609</u>
Six months ended June 30, 2019				
Aerospace	\$ 2,533	\$ 630	\$ —	\$ 3,163
Transportation	172	1,281	513	1,966
Building and construction	—	103	572	675
Industrial and Other	362	1,066	(2)	1,426
Total end-market revenue	<u>\$ 3,067</u>	<u>\$ 3,080</u>	<u>\$ 1,083</u>	<u>\$ 7,230</u>
Six months ended June 30, 2018				
Aerospace	\$ 2,328	\$ 528	\$ —	\$ 2,856
Transportation	166	1,260	496	1,922
Building and construction	—	108	582	690
Industrial and Other	406	1,158	21	1,585
Total end-market revenue	<u>\$ 2,900</u>	<u>\$ 3,054</u>	<u>\$ 1,099</u>	<u>\$ 7,053</u>

D. Restructuring and Other Charges

In the second quarter of 2019, Arconic recorded Restructuring and other charges of \$499 (\$397 after-tax), which included a \$428 (\$345 after-tax) charge for impairment of the Disks long-lived asset group (see Note M); a \$30 (\$22 after-tax) charge for layoff costs, including the separation of approximately 350 employees (131 in the Transportation and Construction Solutions segment, 125 in the Engineered Products and Solutions segment, 69 in Corporate, and 25 in the Global Rolled Products segment); a \$16 (\$12 after-tax) charge for impairment of a trade name intangible asset and properties, plant, and equipment; a \$12 (\$9 after-tax) charge for other exit costs from lease terminations, primarily related to the exit of the corporate aircraft; a \$12 (\$9 after-tax) loss on sale primarily related to a small additive business; accelerated depreciation of \$2 (\$2 after-tax); a \$2 (\$1 after-tax) charge for pension plan settlement accounting; and a benefit of \$3 (\$3 after-tax) for the reversal of a number of small layoff reserves related to prior periods.

In the six months ended June 30, 2019, Arconic recorded Restructuring and other charges of \$511 (\$407 after-tax), which included a \$428 (\$345 after-tax) charge for impairment of the Disks long-lived asset group; a \$95 (\$73 after-tax) charge for layoff costs, including the separation of approximately 1,127 employees (463 in Corporate, 301 in Engineered Products and Solutions segment, 252 in Transportation and Construction Solutions segment, and 111 in Global Rolled Products segment); a \$16 (\$12 after-tax) charge for impairment of a trade name intangible asset and properties, plant, and equipment; a \$12 (\$9 after-tax) charge for other exit costs from lease terminations, primarily related to the exit of the corporate aircraft; a \$12 (\$9 after-tax) loss on sale of assets primarily related to a small additive business; a \$4 (\$3 after-tax) charge for pension plan settlement

accounting; accelerated depreciation of \$2 (\$2 after-tax); a \$2 (\$1 after-tax) net charge for executive severance net of the benefit of forfeited executive stock compensation; and a \$1 (\$1 after-tax) charge for other miscellaneous items; partially offset by a benefit of \$58 (\$45 after-tax) related to the elimination of the life insurance benefit for the U.S. salaried and non-bargaining hourly retirees of the Company and its subsidiaries, and a benefit of \$3 (\$3 after-tax) for the reversal of a number of small layoff reserves related to prior periods.

In the second quarter of 2018, Arconic recorded Restructuring and other charges of \$15 (\$12 after-tax), which included \$9 (\$7 after-tax) for pension curtailment charges; a \$4 (\$3 after-tax) charge for layoff costs, including the separation of approximately 24 employees (all in the Engineered Products and Solutions segment); a charge of \$5 (\$4 after-tax) for exit costs primarily related to the New York office; a charge of \$2 (\$2 after-tax) for other miscellaneous items; and a benefit of \$5 (\$4 after-tax) for the reversal of a number of small layoff reserves related to prior periods.

In the six months ended June 30, 2018, Arconic recorded Restructuring and other charges of \$22 (\$17 after-tax), which included \$14 (\$11 after-tax) for pension curtailment charges; a charge of \$8 (\$6 after-tax) for layoff costs, including the separation of approximately 40 employees (24 in the Engineered Products and Solutions segment and 16 in Corporate); a charge of \$5 (\$4 after-tax) for exit costs primarily related to the New York office; a charge of \$4 (\$3 after-tax) for other miscellaneous items; and a benefit of \$9 (\$7 after-tax) for the reversal of a number of small layoff reserves related to prior periods.

As of June 30, 2019, approximately 583 of the 1,127 employees (previously 1,150) associated with the 2019 restructuring programs were separated. The 2018 and 2017 restructuring programs are essentially completed. Most of the remaining separations for the 2019 restructuring program are expected to be completed by the end of 2019. For the second quarter and six months ended June 30, 2019, Arconic made cash payments of \$26 and \$40, respectively.

Activity and reserve balances for restructuring and other charges were as follows:

	Layoff costs	Other exit costs	Total
Reserve balances at December 31, 2017	\$ 56	\$ 2	\$ 58
Cash payments	(47)	(2)	(49)
Restructuring charges	111	13	124
Other ⁽¹⁾	(110)	2	(108)
Reserve balances at December 31, 2018	<u>10</u>	<u>15</u>	<u>25</u>
Cash payments	(40)	(3)	(43)
Restructuring charges	39	472	511
Other ⁽²⁾	56	(479)	(423)
Reserve balances at June 30, 2019	<u>\$ 65</u>	<u>\$ 5</u>	<u>\$ 70</u>

Other includes adjustments of previously recorded restructuring charges and credits, and the effects of foreign currency translation.

- ⁽¹⁾ In 2018, Other for layoff costs included reclassifications of \$119 in pension costs and a \$28 credit in postretirement benefits, as the impacts were reflected in Arconic's separate liabilities for Accrued pension benefits and Accrued postretirement benefits, and the reversal of previously recorded restructuring charges of \$19.
- ⁽²⁾ In 2019, Other for layoff costs included reclassifications of a \$58 credit for elimination of life insurance benefits for U.S. salaried and non-bargaining hourly retirees and a \$4 pension settlement charge, as the impacts were reflected in Arconic's separate liabilities for Accrued pension benefits and Accrued postretirement benefits, and other credits of \$2.
- In 2019, Other for other exit costs included a \$428 charge for impairment of the Disks long-lived asset group; an impairment of a trade name intangible asset and properties, plant, and equipment of \$16; reclassifications for loss on sale of assets of \$12 primarily related to a small additive business; a charge for lease terminations of \$12; and accelerated depreciation of \$2 as the impacts were primarily reflected in various noncurrent asset accounts. Additionally, Other included the reclassification of \$9 in lease exit costs to right-of-use assets within Other noncurrent assets in accordance with the new lease accounting standard.

The remaining reserves are expected to be paid in cash during 2019, with the exception of approximately \$15, which is expected to be paid in 2020 related to severance payments.

E. Other Expense, Net

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Non-service related net periodic benefit cost	\$ 29	\$ 28	\$ 58	\$ 56
Interest income	(6)	(4)	(16)	(10)
Foreign currency (gains) losses, net	(4)	17	(4)	14
Net loss from asset sales	2	2	4	5
Other, net	8	(2)	19	(4)
	<u>\$ 29</u>	<u>\$ 41</u>	<u>\$ 61</u>	<u>\$ 61</u>

F. Pension and Other Postretirement Benefits

The components of net periodic benefit cost were as follows:

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
<u>Pension benefits</u>				
Service cost	\$ 6	\$ 8	\$ 13	\$ 28
Interest cost	59	55	118	110
Expected return on plan assets	(71)	(77)	(143)	(154)
Recognized net actuarial loss	34	42	69	84
Amortization of prior service cost (benefit)	1	1	1	2
Settlements	2	—	4	—
Curtailments	—	9	—	14
Net periodic benefit cost ⁽¹⁾	<u>\$ 31</u>	<u>\$ 38</u>	<u>\$ 62</u>	<u>\$ 84</u>
<u>Other postretirement benefits</u>				
Service cost	\$ 2	\$ 2	\$ 4	\$ 4
Interest cost	7	7	14	14
Recognized net actuarial loss	1	2	2	4
Amortization of prior service cost (benefit)	(2)	(2)	(3)	(4)
Curtailments	—	—	(58)	—
Net periodic benefit cost ⁽¹⁾	<u>\$ 8</u>	<u>\$ 9</u>	<u>\$ (41)</u>	<u>\$ 18</u>

⁽¹⁾ Service cost was included within Cost of goods sold, Selling, general administrative, and other expenses, and Research and development expenses; settlements and curtailments were included in Restructuring and other charges; and all other cost components were recorded in Other expense, net in the Statement of Consolidated Operations.

In the first quarter of 2019, the Company communicated to plan participants that, effective May 1, 2019, it will eliminate the life insurance benefit for its U.S. salaried and non-bargained hourly retirees of the Company and its subsidiaries. As a result of this change, in the first quarter of 2019, the Company recorded a decrease to the Accrued other postretirement benefits liability of \$63 which was offset by a curtailment benefit of \$58 in Restructuring and other charges and \$5 in Accumulated other comprehensive loss.

Additionally, in the first quarter of 2019, the Company communicated to plan participants that, effective December 31, 2019, it will eliminate certain health care subsidies for its U.S. salaried and non-bargained hourly retirees of the Company and its subsidiaries. As a result of this change, in the first quarter of 2019, the Company recorded a decrease to the Accrued other postretirement benefits liability of \$12 which was offset in Accumulated other comprehensive loss.

In the six months ended June 30, 2019, the Company applied settlement accounting to a U.S. pension plan due to lump sum payments to participants which resulted in settlement charges of \$4 that were recorded in Restructuring and other charges.

In June of 2019, the Company and the United Steelworkers (USW) reached a tentative three-year labor agreement covering approximately 3,400 employees at four U.S. locations; the previous labor agreement expired on May 15, 2019. The tentative agreement was ratified on July 11, 2019. In the second quarter of 2019, Arconic recognized \$9 in Cost of goods sold on the accompanying Statement of Consolidated Operations primarily for a one-time signing bonus for employees.

On July 25, 2019, the USW ratified a new four-year labor agreement covering approximately 560 employees at the Company's Niles, Ohio facility. The prior labor agreement expired on June 30, 2018.

On 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-bargaining hourly employees ceased. As a result of this change, in the first quarter of 2018, the Company recorded a decrease to the Accrued pension benefit liability of \$136 related to the reduction of future benefits (\$141 offset in Accumulated other comprehensive loss) and curtailment charges of \$5 in Restructuring and other charges.

On April 13, 2018, the United Auto Workers ratified a new five-year labor agreement, covering approximately 1,300 U.S. employees of Arconic, which expires on March 31, 2023. A provision within the agreement includes a retirement benefit increase for future retirees that participate in a defined benefit pension plan, which impacts approximately 300 of those employees. In addition, effective January 1, 2019, benefit accruals for future service ceased. As result of these changes, a curtailment charge of \$9 was recorded in Restructuring and other charges in the second quarter of 2018.

During the third quarter of 2016, the Pension Benefit Guaranty Corporation approved management's plan to separate the Alcoa Inc. pension plans between Arconic Inc. and Alcoa Corporation. The plan stipulated that Arconic make cash contributions of \$150 over a period of 30 months (from November 1, 2016) to its two largest pension plans. The Company satisfied the requirements of the plan by making payments of \$34, \$66, and \$50 in April 2019, March 2018, and April 2017, respectively.

G. Income Taxes

Arconic's year-to-date tax provision is comprised of the most recent estimated annual effective tax rate applied to year-to-date pre-tax ordinary income. The tax impact of unusual or infrequently occurring items, including changes in judgment about valuation allowances and effects of changes in tax laws or rates, are recorded discretely in the interim period in which they occur. In addition, the tax provision is adjusted for the interim period impact of non-benefited pre-tax losses.

For the six months ended June 30, 2019 and 2018, the estimated annual effective tax rate, before discrete items, applied to ordinary income was 35.3% and 27.0%, respectively. The rate in each period was higher than the U.S. federal statutory rate of 21% primarily due to estimated U.S. tax on Global Intangible Low-Taxed Income, the state tax impact of domestic taxable income, and foreign income taxed in higher rate jurisdictions. The rate for the six months ended June 30, 2019 was also increased by certain nondeductible costs related to the proposed separation transaction and the impairment of certain domestic and foreign long-lived assets.

For the second quarter of 2019 and 2018, the tax rate including discrete items was 37.9% and 38.1%, respectively. For the second quarter of 2019, the Company recorded a discrete benefit of \$36 related to a \$25 benefit to deduct prior year foreign taxes rather than claim a U.S. foreign tax credit, a \$12 benefit to remeasure certain deferred tax assets as a result of a foreign tax rate change, and a net charge for a number of small items of \$1. For the second quarter of 2018, the Company recorded a discrete charge of \$21 primarily related to revised estimates of the then provisional impact for the Tax Cuts and Jobs Act of 2017.

The tax provisions for the second quarter and six months ended June 30, 2019 and 2018 were comprised of the following:

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Pre-tax income at estimated annual effective income tax rate before discrete items	\$ (69)	\$ 52	\$ 22	\$ 106
Impact of change in estimated annual effective tax rate on previous quarter's pre-tax income	24	1	—	—
Interim period treatment of operational losses in foreign jurisdictions for which no tax benefit is recognized	7	—	9	1
Other discrete items	(36)	21	(35)	23
Provision for income taxes	<u>\$ (74)</u>	<u>\$ 74</u>	<u>\$ (4)</u>	<u>\$ 130</u>

H. Common Stock

On February 19, 2019, the Company entered into an accelerated share repurchase (ASR) agreement with JPMorgan Chase Bank to repurchase \$700 of its common stock (the “February 2019 ASR”), pursuant to the share repurchase programs previously authorized by its Board of Directors (the Board). Under the February 2019 ASR, Arconic received an initial delivery of shares on February 21, 2019 and additional shares on April 29, 2019. On May 2, 2019, the Company entered into an ASR agreement with JPMorgan Chase Bank to repurchase \$200 of its common stock (the “May 2019 ASR”), pursuant to the share repurchase programs previously authorized by its Board. Under the May 2019 ASR, Arconic received an initial delivery of shares on May 6, 2019 and additional shares on June 12, 2019. All of the shares repurchased during 2019 were immediately retired. After giving effect to the February 2019 ASR and May 2019 ASR, \$100 remains available under the prior authorizations by the Board for share repurchases through the end of 2020 (the “Prior Remaining Authorization”).

The following table provides details for the share repurchases during 2019.

Share delivery date	Number of shares	Average price	Total
February 21, 2019	31,908,831		
April 29, 2019	4,525,592		
February 2019 ASR total	36,434,423	\$19.21	\$700
May 6, 2019	7,455,732		
June 12, 2019	1,561,249		
May 2019 ASR total	9,016,981	\$22.18	\$200
2019 ASR total	45,451,404	\$19.80	\$900

On May 14, 2019, the Board authorized an additional share repurchase program of up to \$500 of its outstanding common stock (the “May 2019 Share Repurchase Program”). The Company has a total of \$600 repurchase authorization remaining pursuant to the May 2019 Share Repurchase Program and the Prior Remaining Authorization.

I. Earnings Per Share

Basic earnings per share (EPS) amounts are computed by dividing earnings, 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 information used to compute basic and diluted EPS attributable to Arconic common shareholders was as follows (shares in millions):

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Net (loss) income	\$ (121)	\$ 120	\$ 66	\$ 263
Less: preferred stock dividends declared	—	—	(1)	(1)
Net (loss) income available to Arconic common shareholders - basic	(121)	120	65	262
Add: Interest expense related to convertible notes	—	3	—	6
Net (loss) income available to Arconic common shareholders - diluted	\$ (121)	\$ 123	\$ 65	\$ 268
Average shares outstanding - basic	445	483	458	483
Effect of dilutive securities:				
Stock options	—	—	—	—
Stock and performance awards	—	5	4	5
Convertible notes	—	14	—	14
Average shares outstanding - diluted	445	502	462	502

Common stock outstanding at June 30, 2019 and 2018 was 440 and 483, respectively. The decrease in common stock outstanding at June 30, 2019 was primarily due to the impact of share repurchases of approximately 45 in the six months ended June 30, 2019 (see Note H). As average shares outstanding are used in the calculation for both basic and diluted EPS, the full

impact of share repurchases was not realized in EPS in the second quarter and six months ended June 30, 2019 as the share repurchases occurred at varying points during 2019.

The following shares were excluded from the calculation of average shares outstanding – diluted as their effect was anti-dilutive (shares in millions).

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Convertible notes	14	—	14	—
Stock options ⁽¹⁾	9	9	3	9
Stock and performance awards	4	—	—	—

⁽¹⁾ The average exercise price per share of options was \$25.03 and \$32.66 for the second quarter and six months ended June 30, 2019 and \$26.80 for the second quarter and six months ended June 30, 2018.

J. Accumulated Other Comprehensive Loss

The following table details the activity of the four components that comprise Accumulated other comprehensive loss:

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Pension and other postretirement benefits (F)				
Balance at beginning of period	\$ (2,304)	\$ (2,087)	\$ (2,344)	\$ (2,230)
Other comprehensive income:				
Unrecognized net actuarial loss and prior service cost/benefit	(6)	(15)	66	122
Tax benefit (expense)	1	3	(15)	(28)
Total Other comprehensive loss before reclassifications, net of tax	(5)	(12)	51	94
Amortization of net actuarial loss and prior service cost ⁽¹⁾	36	52	15	100
Tax expense ⁽²⁾	(8)	(11)	(3)	(22)
Total amount reclassified from Accumulated other comprehensive loss, net of tax ⁽⁵⁾	28	41	12	78
Total Other comprehensive income	23	29	63	172
Balance at end of period	<u>\$ (2,281)</u>	<u>\$ (2,058)</u>	<u>\$ (2,281)</u>	<u>\$ (2,058)</u>
Foreign currency translation				
Balance at beginning of period	\$ (557)	\$ (315)	\$ (583)	\$ (437)
Other comprehensive loss ⁽³⁾	(30)	(201)	(4)	(79)
Balance at end of period	<u>\$ (587)</u>	<u>\$ (516)</u>	<u>\$ (587)</u>	<u>\$ (516)</u>
Available-for-sale securities				
Balance at beginning of period	\$ —	\$ (2)	\$ (3)	\$ (2)
Other comprehensive (loss) income ⁽⁴⁾	—	(2)	3	(2)
Balance at end of period	<u>\$ —</u>	<u>\$ (4)</u>	<u>\$ —</u>	<u>\$ (4)</u>
Cash flow hedges				
Balance at beginning of period	\$ 9	\$ 18	\$ 4	\$ 25
Adoption of accounting standards (B)	—	—	(2)	—
Other comprehensive (loss) income:				
Net change from periodic revaluations	(13)	9	(5)	3
Tax benefit (expense)	3	(1)	2	—
Total Other comprehensive (loss) income before reclassifications, net of tax	(10)	8	(3)	3
Net amount reclassified to earnings	(1)	(4)	(1)	(7)
Tax benefit ⁽²⁾	1	—	1	1
Total amount reclassified from Accumulated other comprehensive loss, net of tax ⁽⁵⁾	—	(4)	—	(6)
Total Other comprehensive (loss) income	(10)	4	(3)	(3)
Balance at end of period	<u>\$ (1)</u>	<u>\$ 22</u>	<u>\$ (1)</u>	<u>\$ 22</u>
Total balance at end of period	<u>\$ (2,869)</u>	<u>\$ (2,556)</u>	<u>\$ (2,869)</u>	<u>\$ (2,556)</u>

(1) These amounts were recorded in Other expense, net (see Note E).

(2) These amounts were included in Provision for income taxes on the accompanying Statement of Consolidated Operations.

(3) In all periods presented, no amounts were reclassified to earnings.

(4) Realized gains and losses were included in Other expense, net on the accompanying Statement of Consolidated Operations.

(5) A positive amount indicates a corresponding charge to earnings and a negative amount indicates a corresponding benefit to earnings.

K. Receivables

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 using a bankruptcy remote special purpose entity, which is a consolidated subsidiary of Arconic. This arrangement provides up to a maximum funding of \$400 for receivables sold. Arconic maintains a beneficial interest, or a right to collect cash, on the sold receivables that have not been funded (deferred purchase program). On March 30, 2012, Arconic initially sold \$304 of customer receivables in exchange for \$50 in cash and \$254 of deferred purchase program under the arrangement. Arconic has received additional net cash funding of \$300 (\$3,258 in draws and \$2,958 in repayments) since the program's inception, including net cash draws totaling \$0 (\$300 in draws and \$300 in repayments) for the six months ended June 30, 2019.

As of June 30, 2019 and December 31, 2018, the deferred purchase program receivable was \$426 and \$234, 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 gross amount of receivables sold and total cash collected under this program since its inception was \$45,626 and \$44,921, respectively. Arconic services the customer receivables for the financial institutions at market rates; therefore, no servicing asset or liability was recorded.

Cash receipts from customer payments on sold receivables (which are cash receipts on the underlying trade receivables that have been previously sold in this program) as well as cash receipts and cash disbursements from draws and repayments under the program are presented as cash receipts from sold receivables within investing activities in the Statement of Consolidated Cash Flows.

L. Inventories

	June 30, 2019	December 31, 2018
Finished goods	\$ 701	\$ 668
Work-in-process	1,447	1,371
Purchased raw materials	361	366
Operating supplies	97	87
Total inventories	<u>\$ 2,606</u>	<u>\$ 2,492</u>

At June 30, 2019 and December 31, 2018, the portion of inventories valued on a last-in, first-out (LIFO) basis was \$1,343 and \$1,292, respectively. If valued on an average-cost basis, total inventories would have been \$506 and \$530 higher at June 30, 2019 and December 31, 2018, respectively.

M. Long-Lived Assets

	June 30, 2019	December 31, 2018
Land and land rights	\$ 136	\$ 136
Structures	2,378	2,364
Machinery and equipment	9,249	9,234
	11,763	11,734
Less: accumulated depreciation and amortization	7,013	6,769
	4,750	4,965
Construction work-in-progress	767	739
	<u>\$ 5,517</u>	<u>\$ 5,704</u>

During the second quarter of 2019, the Company updated its five-year strategic plan and determined that there was a decline in the forecasted financial performance for the Disks asset group within the Engineered Products and Solutions segment. As such, the Company evaluated the recoverability of the Disks long-lived assets by comparing the carrying value to the undiscounted cash flows of the Disks asset group. The carrying value exceeded the undiscounted cash flows and therefore the Disks long-lived assets were deemed to be impaired. The impairment charge was measured as the amount of carrying value in excess of fair value of the long-lived assets, with fair value determined using a discounted cash flow model and a combination of sales comparison and cost approach valuation methods including an estimate for economic obsolescence. The impairment charge of \$428 recorded in the second quarter of 2019 impacted properties, plant and equipment; intangible assets; and certain other

noncurrent assets by \$198, \$197 and \$33, respectively. The impairment charge was recorded in Restructuring and other charges in the Statement of Consolidated Operations.

N. Leases

The Company determines whether a contract contains a lease at inception. The Company leases land and buildings, plant equipment, vehicles, and computer equipment which have been classified as operating leases. Certain real estate leases include one or more options to renew; the exercise of lease renewal options is at the Company's discretion. The Company includes renewal option periods in the lease term when it is determined that the options are reasonably certain to be exercised. Certain of Arconic's real estate lease agreements include rental payments that either have fixed contractual increases over time or adjust periodically for inflation. Certain of the Company's lease agreements include variable lease payments. The variable portion of payments is not included in the initial measurement of the right-of-use asset or lease liability due to the uncertainty of the payment amount and is recorded as lease cost in the period incurred. The Company also rents or subleases certain real estate to third parties, which is not material to the consolidated financial statements.

Operating lease right-of-use assets and lease liabilities with an initial term greater than 12 months are recorded on the balance sheet at the present value of the future minimum lease payments over the lease term at the lease commencement date and are recognized as lease expense on a straight-line basis over the lease term. The Company uses an incremental collateralized borrowing rate based on the information available at the lease commencement date in determining the present value of future payments, as most of its leases do not provide an implicit rate. The operating lease right-of-use assets also include any lease prepayments made and were reduced by lease incentives and accrued exit costs as of the adoption date.

Operating lease cost, which includes short-term leases and variable lease payments and approximates cash paid, was \$37 and \$36 in the second quarter of 2019 and 2018, respectively, and \$74 in both the six months ended June 30, 2019 and 2018.

Operating lease right-of-use assets and lease liabilities in the Consolidated Balance Sheet were as follows:

	June 30, 2019
Right-of-use assets classified in Other noncurrent assets	\$ 277
Current portion of lease liabilities classified in Other current liabilities	77
Long-term portion of lease liabilities classified in Other noncurrent liabilities and deferred credits	211
Total lease liabilities	<u>\$ 288</u>

Future minimum contractual operating lease obligations were as follows:

	June 30, 2019	December 31, 2018
2019	\$ 48	\$ 94
2020	78	74
2021	57	54
2022	43	40
2023	32	30
Thereafter	90	87
Total lease payments	<u>\$ 348</u>	<u>\$ 379</u>
Less: Imputed interest	(60)	
Present value of lease liabilities	<u>\$ 288</u>	

Right-of-use assets obtained in exchange for operating lease obligations in the second quarter and six months ended June 30, 2019 were \$12 and \$18, respectively. The weighted-average remaining lease term and weighted-average discount rate at June 30, 2019 was 6 years and 6.1%, respectively.

O. Debt

	June 30, 2019	December 31, 2018
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	250	250
Other ⁽¹⁾	(24)	(29)
	<u>6,306</u>	<u>6,301</u>
Less: amount due within one year	405	405
Total long-term debt	<u>\$ 5,901</u>	<u>\$ 5,896</u>

⁽¹⁾ Includes various financing arrangements related to subsidiaries, unamortized debt discounts related to outstanding notes and bonds listed in the table above, an equity option related to the convertible notes due in 2019, and unamortized debt issuance costs.

Credit Facilities. Arconic maintains a Five-Year Revolving Credit Agreement (the “Credit Agreement”) with a syndicate of lenders and issuers named therein that matures on June 29, 2023 and provides for a senior unsecured revolving credit facility of \$3,000. There were no amounts outstanding at June 30, 2019 or December 31, 2018, and no amounts were borrowed during 2019 or 2018 under the Credit Agreement. In addition to the Credit Agreement, Arconic has a number of other credit agreements that provide a combined borrowing capacity of \$715 as of June 30, 2019, of which \$315 is due to expire in 2019 and \$400 is due to expire in 2020. 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. During the six months ended June 30, 2019, Arconic borrowed and repaid \$225 and \$225, respectively, under these other credit facilities. The weighted-average interest rate and weighted-average days outstanding during the second quarter and six months ended June 30, 2019 were 3.9% and 84 days and 3.9% and 37 days, respectively.

P. Fair Value of Financial Instruments

The carrying values of Cash and cash equivalents, Restricted cash, Derivatives, Noncurrent receivables, and Short-term debt included in the Consolidated Balance Sheet approximate their fair value. The Company holds exchange-traded fixed income securities which are considered available-for-sale securities that are carried at fair value which is based on quoted market prices which are classified in Level 1 of the fair value hierarchy. The fair value of Long-term debt, less amount due within one year 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.

	June 30, 2019		December 31, 2018	
	Carrying value	Fair value	Carrying value	Fair value
Long-term debt, less amount due within one year	\$ 5,901	\$ 6,240	\$ 5,896	\$ 5,873

Restricted cash was \$3 and \$6 at June 30, 2019 and December 31, 2018, respectively.

Q. Acquisitions and Divestitures

2019 Divestitures. On May 31, 2019, Arconic sold a small additive manufacturing facility within the Engineered Products and Solutions segment for \$1 in cash, which resulted in a loss on sale of \$13 related to the non-cash impairment of the net book value of the business recorded in Restructuring and other charges in the Statement of Consolidated Operations. The sale is subject to certain post-closing adjustments.

On July 15, 2019, Arconic reached an agreement to sell inventories and properties, plant and equipment related to a small energy business within the Engineered Products and Solutions segment for \$13 in cash, subject to certain post-closing adjustments. The sale is expected to close in the third quarter of 2019. As the sale agreement was substantially complete as of June 30, 2019 and the sale price was estimated to be less than the carrying value, the Company recorded an inventory impairment of \$9 in the second quarter of 2019 in Cost of goods sold in the Statement of Consolidated Operations associated with the sale. The remaining net book value of the assets sold is expected to approximate the proceeds to be received.

2018 Divestitures. On April 2, 2018, Arconic completed the sale of its Latin America extrusions business to a subsidiary of Hydro Extruded Solutions AS for \$2 following the settlement of post-closing and other adjustments in December 2018. As a result of entering into the agreement to sell the Latin America extrusions business in December 2017, a charge of \$41 was recognized in the fourth quarter of 2017 in Restructuring and other charges in the Statement of Consolidated Operations related to the non-cash impairment of the net book value of the business and an additional charge of \$2 related to a post-closing adjustment was recognized in the fourth quarter of 2018. The operating results and assets and liabilities of the business were included in the Transportation and Construction Solutions segment. This business generated sales of \$25 in the first quarter of 2018 and had 612 employees at the time of divestiture.

On July 31, 2018, the Company announced that it had initiated a sale process of its Building and Construction Systems (BCS) business, as part of the Company's ongoing strategy and portfolio review. In the first quarter of 2019, the Company decided to no longer pursue the sale of BCS and the business continues to be reported in the Transportation and Construction Solutions segment.

On October 31, 2018, the Company sold its Texarkana, Texas rolling mill and cast house, which had a combined net book value of \$63, to Ta Chen International, Inc. for \$302 in cash, including the settlement of post-closing adjustments, plus additional contingent consideration of up to \$50. The contingent consideration relates to the achievement of various milestones within 36 months of the transaction closing date associated with operationalizing the rolling mill equipment. The operating results and assets and liabilities of the business were included in the Global Rolled Products segment. The Texarkana rolling mill facility had previously been idle since late 2009. In early 2016, the Company restarted the Texarkana cast house to meet demand for aluminum slab. As part of the agreement, the Company will continue to produce aluminum slab at the facility for a period of 18 months through a lease back of the cast house building and equipment, after which time, Ta Chen will perform toll processing of metal for the Company for a period of six months. The Company will supply Ta Chen with cold-rolled aluminum coil during this 24-month period.

The sale of the rolling mill and cast house had been accounted for separately. The gain on the sale of the rolling mill of \$154, including the fair value of contingent consideration of \$5, was recorded in Restructuring and other charges in the Statement of Consolidated Operations in the fourth quarter of 2018. The Company continues to reevaluate its estimate of the remaining \$45 of contingent consideration to which it will be entitled at the end of each reporting period and recognize any changes thereto in the Statement of Consolidated Operations.

The Company had continuing involvement related to the lease back of the cast house. As a result, in 2018, the Company continued to treat the cast house building and equipment that it sold to Ta Chen as owned and therefore reflected the following balances in its Consolidated Balance Sheet at December 31, 2018: assets of \$24 in Properties, plants, and equipment, net; cash proceeds of \$119 in Other noncurrent liabilities and deferred credits (which included a deferred gain of \$95); and a deferred tax asset of \$22 in Other noncurrent assets. In the first quarter of 2019, in conjunction with the adoption of the new lease accounting standard (see Note B), the Company's continuing involvement no longer requires deferral of the recognition of the cast house sale. As such, the cash proceeds, fixed assets, and deferred tax asset related to the cast house were reclassified to Accumulated deficit as a cumulative effect of an accounting change.

R. 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 \$275 at June 30, 2019 and \$266 at December 31, 2018 (of which \$95 and \$81, respectively, were classified as a current liability), and reflects the most probable costs to remediate identified environmental conditions for which costs can be reasonably estimated. Payments related to remediation expenses applied against the reserve were \$13 and \$16 in the second quarter and six months ended June 30, 2019, respectively, which includes 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 reserves related to a current Arconic site.

Massena, 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 June 30, 2019 and December 31, 2018, the reserve balance associated with this matter was \$210 and \$198, respectively. In the first quarter of 2019, Arconic received approval from the EPA of its final remedial design which is now under construction and is expected to be completed in 2022. During the second quarter of 2019, Arconic increased the reserve balance by \$25 due to changes required in the remedial design and post-construction monitoring. As the project proceeds, the liability may be updated due to factors such as changes in remedial requirements, site restoration costs, and ongoing operation and maintenance costs, among others.

Tax

Pursuant to the Tax Matters Agreement entered into between Arconic and Alcoa Corporation in connection with the separation transaction with Alcoa Corporation, Arconic shares responsibility with Alcoa Corporation, and Alcoa Corporation has agreed to partially indemnify Arconic for 49% of the ultimate liability, with respect to the following matter.

As previously reported, in July 2013, following a Spanish corporate income tax audit covering the 2006 through 2009 tax years, an assessment was received mainly disallowing certain interest deductions claimed by a Spanish consolidated tax group owned by the Company. In August 2013, the Company filed an appeal of this assessment in Spain's Central Tax Administrative Court, which was denied in January 2015. Arconic filed another appeal in Spain's National Court in March 2015 which was denied in July 2018. The National Court's decision requires the assessment for the 2006 through 2009 tax years to be reissued to take into account the outcome of the 2003 to 2005 audit which was closed in 2017. The Company estimates the revised assessment to be \$173 (€152), including interest.

In March 2019, the Supreme Court of Spain accepted the Company's petition to review the National Court's decision. The Company is in the process of filing a formal appeal of the assessment with the Supreme Court of Spain, who will review the assessment on its merits and render a final decision. In the event the Company receives an unfavorable ruling from the Supreme Court of Spain, a portion of the assessment may be offset with existing net operating losses and tax credits 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.

Arconic has an income tax reserve, including interest, of \$60 (€52) and an indemnification receivable of \$29 (€25), representing Alcoa Corporation's 49% share of the liability. The reserve and indemnification receivable were established in the third quarter of 2018.

Additionally, while the tax years 2010 through 2013 are closed to audit, it is possible that the Company may receive assessments for tax years subsequent to 2013. Any potential assessment for an individual tax year is not expected to be material to the Company's consolidated operations.

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.

Behrens et al. v. Arconic Inc. et al. On June 6, 2019, 247 plaintiffs comprised of survivors and estates of decedents of the Grenfell Tower fire filed a complaint against “Arconic Inc., Alcoa Inc. and Arconic Architectural Products, LLC,” (collectively “Arconic”), as well as Saint-Gobain Corporation, d/b/a Celotex and Whirlpool Corporation, in the Court of Common Pleas of Philadelphia County. The complaint alleges claims under Pennsylvania state law for products liability and wrongful death related to the fire. In particular, the plaintiffs allege that Arconic knowingly supplied a dangerous product (Reynobond PE) for installation on the Grenfell Tower despite knowing that Reynobond PE was unfit for use above a certain height. Arconic removed the case to the United States District Court for the Eastern District of Pennsylvania on June 19, 2019. The Court’s current scheduling order provides defendants until August 29, 2019 to file motions to dismiss the complaint.

Howard v. Arconic Inc. et al. As previously reported, a purported class action complaint related to the Grenfell Tower fire was filed on August 11, 2017 in the United States District Court for the Western District of Pennsylvania against Arconic Inc. and Klaus Kleinfeld. A related purported class action complaint was filed in the United States District Court for the Western District of Pennsylvania on August 25, 2017, under the caption *Sullivan v. Arconic Inc. et al.*, against Arconic Inc., two former Arconic executives, several current and former Arconic directors, and banks that acted as underwriters for Arconic’s September 18, 2014 preferred stock offering (the “Preferred Offering”). The plaintiff in *Sullivan* had previously filed a purported class action against the same defendants on July 18, 2017 in the Southern District of New York and, on August 25, 2017, voluntarily dismissed that action without prejudice. On February 7, 2018, on motion from certain putative class members, the court consolidated *Howard* and *Sullivan*, closed *Sullivan*, and appointed lead plaintiffs in the consolidated case. On April 9, 2018, the lead plaintiffs in the consolidated purported class action filed a consolidated amended complaint. The consolidated amended complaint alleged that the registration statement for the Preferred Offering contained false and misleading statements and omitted to state material information, including by allegedly failing to disclose material uncertainties and trends resulting from sales of Reynobond PE for unsafe uses and by allegedly expressing a belief that appropriate risk management and compliance programs had been adopted while concealing the risks posed by Reynobond PE sales. The consolidated amended complaint also alleged that between November 4, 2013 and June 23, 2017 Arconic and Kleinfeld made false and misleading statements and failed to disclose material information about the Company’s commitment to safety, business and financial prospects, and the risks of the Reynobond PE product, including in Arconic’s Form 10-Ks for the fiscal years ended December 31, 2013, 2014, 2015 and 2016, its Form 10-Qs and quarterly financial press releases from the fourth quarter of 2013 through the first quarter of 2017, its 2013, 2014, 2015 and 2016 Annual Reports, its 2016 Annual Highlights Report, and on its official website. The consolidated amended complaint sought, among other things, unspecified compensatory damages and an award of attorney and expert fees and expenses. On June 8, 2018, all defendants moved to dismiss the consolidated amended complaint for failure to state a claim. On June 21, 2019, the Court granted the defendants’ motion to dismiss in full, dismissing the consolidated amended complaint in its entirety without prejudice. On July 23, 2019, the lead plaintiffs filed a second amended complaint. The second amended complaint alleges generally the same claims as the consolidated amended complaint with certain additional allegations, as well as claims that the risk factors set forth in the registration statement for the Preferred Offering were inadequate and that certain additional statements in the sources identified above were misleading. The second amended complaint seeks, among other things, unspecified compensatory damages and an award of attorney and expert fees and expenses.

Raul v. Albaugh, et al. As previously reported, on June 22, 2018, a derivative complaint was filed nominally on behalf of Arconic by a purported Arconic shareholder against all current members of Arconic’s Board of Directors, Klaus Kleinfeld and Ken Giacobbe, naming Arconic as a nominal defendant, in the United States District Court for the District of Delaware. The complaint raises similar allegations as the consolidated amended complaint in *Howard*, as well as allegations that the defendants improperly authorized the sale of Reynobond PE for unsafe uses, and asserts claims under Section 14(a) of the Securities Exchange Act of 1934 and Delaware state law. On July 13, 2018, the parties filed a stipulation agreeing to stay this case until the final resolution of the *Howard* case, the Grenfell Tower public inquiry in London, and the investigation by the London Metropolitan Police Service and on June 23, 2018, the Court approved the stay.

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 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 appointed a Special Litigation Committee of the Board to review, investigate, and make recommendations to the Board regarding the appropriate course of action with respect to these shareholder demand letters. On May 22, 2019, the Special Litigation Committee, following completion of its investigation into the claims demanded in the demand letters, recommended to the Board that it reject the demands to authorize commencement of litigation. On May 28, 2019, the Board adopted the Special Litigation Committee’s findings and recommendations and rejected the demands that it authorize commencement of actions to assert the claims set forth in the demand letters.

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, tax and antitrust 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 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

Guarantees

At June 30, 2019, Arconic had 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 2019 and 2026, was \$31 at June 30, 2019.

Pursuant to the Separation and Distribution Agreement between Arconic and Alcoa Corporation, Arconic was required to provide certain guarantees for Alcoa Corporation, which had a combined fair value of \$8 and \$6 at June 30, 2019 and December 31, 2018, respectively, and were included in Other noncurrent liabilities and deferred credits on the accompanying Consolidated Balance Sheet. Arconic was required to provide a guarantee up to an estimated present value amount of approximately \$1,215 and \$1,087 at June 30, 2019 and December 31, 2018, respectively, related to a long-term supply agreement for energy for an Alcoa Corporation facility in the event of an Alcoa Corporation payment default. This guarantee expires in 2047. For this guarantee, subject to its provisions, Arconic is secondarily liable in the event of a payment default by Alcoa Corporation. Arconic currently views the risk of an Alcoa Corporation payment default on its obligations under the contract to be remote.

Letters of Credit

Arconic has outstanding letters of credit, primarily related to workers' compensation, environmental obligations, and leasing obligations. The total amount committed under these letters of credit, which automatically renew or expire at various dates, mostly in 2019, was \$137 at June 30, 2019.

Pursuant to the Separation and Distribution Agreement, Arconic was required to retain letters of credit of \$54 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.

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 surety bonds, which expire at various dates, primarily in 2019, was \$50 at June 30, 2019.

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 \$24 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.

S. Proposed Separation Transaction

On February 8, 2019, Arconic announced, as part of its strategy and portfolio review, a separation of its portfolio into two independent, publicly-traded companies. One company will be named Howmet Aerospace Inc. and comprises the Engineered Products and Forgings businesses and the other company will be named Arconic Corporation and comprises the Global Rolled Products businesses. The Company will also consider the sale of businesses that do not best fit into Engineered Products and Forgings and Global Rolled Products. The businesses of the current Transportation and Construction Solutions segment will be divided, with BCS to become part of Arconic Corporation and the Arconic Wheel and Transportation Products business to become part of Howmet Aerospace. The Company is targeting to complete the separation in the second quarter of 2020. The separation transaction is subject to a number of conditions, including, but not limited to, final approval by Arconic's Board of Directors, receipt of a favorable opinion of legal counsel with respect to the tax-free nature of the transaction for U.S. federal income tax purposes, completion of financing, and the effectiveness of a Form 10 registration statement to be filed with the

U.S. Securities and Exchange Commission. Arconic may, at any time and for any reason until the proposed transaction is complete, abandon the separation plan or modify or change its terms. In the second quarter and six months ended June 30, 2019, Arconic recognized \$16 and \$19, respectively, in Selling, general administrative, and other expenses on the accompanying Statement of Consolidated Operations for costs related to the proposed separation transaction.

T. 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:

See Note [F](#) for details of a three-year labor agreement with the USW at four locations.

See Note [F](#) for details of a four-year labor agreement with the USW at the Company's Niles, Ohio facility.

See Note [Q](#) for details of the anticipated divestiture of a small manufacturing facility.

On August 2, 2019, the Company announced that it had entered into a letter agreement with John C. Plant providing for an extension of Mr. Plant's term of employment as Chief Executive Officer through the earlier of August 6, 2020 and the date on which the expected separation occurs; the agreement provides that if the separation occurs prior to August 6, 2020, Mr. Plant will serve as an Advisor to the Company and its Board of Directors through August 6, 2020. Additionally, on August 2, 2019, the Company announced that Elmer Doty, President and Chief Operating Officer, will separate from employment with the Company, effective August 16, 2019. Mr. Doty will continue to serve as a non-employee director of the Company.

Report of Independent Registered Public Accounting Firm*

To the Shareholders and Board of Directors of Arconic Inc.

Results of Review of Interim Financial Statements

We have reviewed the accompanying consolidated balance sheet of Arconic Inc. and its subsidiaries (the "Company") as of June 30, 2019, and the related statements of consolidated operations, of consolidated comprehensive income (loss), and of changes in consolidated equity for the three-month and six-month periods ended June 30, 2019 and 2018 and the statements of consolidated cash flows for the six-month periods ended June 30, 2019 and 2018, including the related notes (collectively referred to as the "interim financial statements"). Based on our reviews, we are not aware of any material modifications that should be made to the accompanying interim financial statements for them to be in conformity with accounting principles generally accepted in the United States of America.

We have previously audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of the Company as of December 31, 2018, and the related consolidated statements of operations, comprehensive (loss) income, changes in equity, and cash flows for the year then ended (not presented herein), and in our report dated February 21, 2019, we expressed an unqualified opinion on those consolidated financial statements. In our opinion, the information set forth in the accompanying consolidated balance sheet information as of December 31, 2018, is fairly stated, in all material respects, in relation to the consolidated balance sheet from which it has been derived.

Basis for Review Results

These interim financial statements are the responsibility of the Company's management. 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 review in accordance with the standards of the PCAOB. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with the standards of the PCAOB, the objective of which is the expression of an opinion regarding the financial statements taken as a whole. Accordingly, we do not express such an opinion.

/s/ PricewaterhouseCoopers LLP
PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
August 2, 2019

* The Company notes that PricewaterhouseCoopers LLP is not subject to the liability provisions of Section 11 of the Securities Act of 1933 for its report on the unaudited interim financial statements because that report is not a "report" or a "part" of a registration statement within the meaning of Sections 7 and 11 of the Act.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

(dollars in millions, except per share amounts; 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, building and construction, industrial applications, defense, and packaging.

Results of Operations

Earnings Summary:

Sales. Sales were \$3,691 in the second quarter of 2019 compared to \$3,573 in the second quarter of 2018 and \$7,232 in the six months ended June 30, 2019 compared to \$7,018 in the six months ended June 30, 2018. The increase of \$118, or 3%, in the second quarter of 2019 and \$214, or 3%, in the six months ended June 30, 2019, was primarily due to volume growth across all segments, primarily in the aerospace, commercial transportation, packaging, building and construction, industrial and automotive end markets; favorable product pricing and mix in the Global Rolled Products (GRP) segment; favorable aerospace product pricing in the Engineered Products and Solutions (EP&S) segment when fulfilling volume above contractual share, renewing contracts, and selling non-contractual spot business; and costs incurred in the second quarter of 2018 of \$38 related to settlements of certain customer claims primarily related to product introductions that did not recur in 2019; partially offset by lower sales of \$55 and \$133 in the second quarter and six months ended June, 30, 2019, respectively, related to the completed ramp down of Arconic's North American packaging operations (in December 2018) and the divestitures of the extrusions business in Latin America (divested in April 2018) and the forgings business in Eger, Hungary (divested in December 2018); lower aluminum prices; and unfavorable foreign currency movements.

Cost of goods sold (COGS). COGS as a percentage of Sales was 79.6% in the second quarter of 2019 compared to 81.2% in the second quarter of 2018 and 79.6% in the six months ended June 30, 2019 compared to 80.8% in the six months ended June 30, 2018. The decrease in the second quarter and six months ended June 30, 2019 was primarily due to lower aluminum prices; favorable product pricing; net cost savings; costs of \$38 incurred in 2018 related to settlements of certain customer claims noted above; and a charge of \$23 related to a physical inventory adjustment at one plant in the GRP segment (this plant was previously included in the EP&S segment prior to the transfer of the aluminum extrusions operations from EP&S to GRP in the first quarter of 2019) incurred in 2018 that did not recur in 2019; partially offset by unfavorable product mix; a charge for environmental remediation at Grasse River of \$25; the impairment of energy business assets of \$9; and a charge of \$9 primarily for a one-time signing bonus for employees associated with the collective bargaining agreement negotiation. In June of 2019 the Company and the United Steelworkers reached a tentative three-year labor agreement covering approximately 3,400 employees at four U.S. locations; the previous labor agreement expired on May 15, 2019. The tentative agreement was ratified on July 11, 2019. Additionally, in the second quarter of 2019, the Company recorded a charge of \$4 for equipment and inventory damage, as well as higher operating costs related to a fire at a fasteners plant in France. The Company anticipates a charge of approximately \$5 to \$10 in the third quarter of 2019, with additional impacts in subsequent quarters as the business continues to recover from the fire. The Company has insurance with a deductible of \$10.

Selling, general administrative, and other expenses (SG&A). SG&A expenses were \$178 in the second quarter of 2019 compared to \$158 in the second quarter of 2018 and \$356 in the six months ended June 30, 2019 compared to \$330 in the six months ended June 30, 2018. The increase of \$20, or 13%, in the second quarter of 2019 and \$26, or 8%, in the six months ended June 30, 2019, was primarily due to costs associated with the planned separation of Arconic and higher annual incentive compensation accruals and executive compensation costs, partially offset by lower costs driven by overhead cost reductions. The six months ended June 30, 2019 was also impacted by \$6 in strategy and portfolio review costs.

Research and development expenses (R&D). R&D expenses were \$17 in the second quarter of 2019 compared to \$29 in the second quarter of 2018 and \$39 in the six months ended June 30, 2019 compared to \$52 in the six months ended June 30, 2018. The decrease of \$12, or 41%, in the second quarter of 2019 and \$13, or 25%, in the six months ended June 30, 2019, was primarily due to the consolidation of the Company's primary R&D facility in conjunction with ongoing cost reduction efforts.

Restructuring and other charges. Restructuring and other charges was \$499 in the second quarter of 2019 compared to \$15 in the second quarter of 2018 and \$511 in the six months ended June 30, 2019 compared to \$22 in the six months ended June 30, 2018. The increase of \$484 in the second quarter of 2019 and \$489 in the six months ended June 30, 2019, was primarily due to a charge for impairment of a long-lived asset group of \$428 in the second quarter and six months ended June, 30, 2019 (see Note M to the Consolidated Financial Statements), increases in layoff charges of \$26 and \$87 in the second quarter and six months ended June, 30, 2019, respectively, a charge for impairment of a trade name intangible asset and properties, plant, and equipment of \$16 in the second quarter and six months ended June, 30, 2019, a charge for other exit costs from lease

termination of \$12 in the second quarter and six months ended June, 30, 2019, and a loss on sale primarily related to a small additive business of \$12 in the second quarter and six months ended June, 30, 2019. The six months ended June 30, 2019 was also impacted by a credit of \$58 related to the elimination of life insurance benefits for U.S. salaried and non-bargaining hourly retirees of the Company and its subsidiaries. See Note [D](#) to the Consolidated Financial Statements.

Interest expense. Interest expense was \$85 in the second quarter of 2019 compared to \$89 in the second quarter of 2018 and \$170 in the six months ended June 30, 2019 compared to \$203 in the six months ended June 30, 2018. The decrease of \$4, or 4%, in the second quarter of 2019 and \$33, or 16%, in the six months ended June 30, 2019, was primarily due to lower debt outstanding. The six months ended June 30, 2018 was also impacted by a charge of \$19 related to the premium paid on the early redemption of the Company's outstanding 5.72% Senior Notes due 2019 incurred in 2018 that did not recur in 2019.

Other expense, net. Other expense, net was \$29 in the second quarter of 2019 compared to \$41 in the second quarter of 2018 and \$61 in both the six months ended June 30, 2019 and 2018. The decrease of \$12, or 29%, in the second quarter of 2019 was primarily due to favorable foreign currency movements partially offset by an increase in deferred compensation arrangements related to investment performance. The six months ended June 30, 2019 was consistent with the prior period but was also impacted by favorable foreign currency movements offset by an increase in deferred compensation arrangements related to investment performance.

(Benefit) provision for income taxes. The tax rate including discrete items was 37.9% in the second quarter of 2019 compared to 38.1% in the second quarter of 2018. A discrete tax benefit of \$36 was recorded in the second quarter of 2019 compared to a discrete tax charge of \$21 in the second quarter of 2018. The estimated annual effective tax rate before discrete items applied to ordinary income, was 35.3% in the second quarter of 2019 compared to 27.0% in the second quarter of 2018. See Note [G](#) to the Consolidated Financial Statements.

Net (loss) income. Net loss was \$121 in the second quarter of 2019 or \$0.27 per diluted share, compared to Net income of \$120 in the second quarter of 2018, or \$0.24 per diluted share, and Net income of \$66 in the six months ended June 30, 2019, or \$0.14 per diluted share, compared to Net income of \$263 in the six months ended June 30, 2018, or \$0.53 per diluted share. The decrease of \$241 in the second quarter of 2019 and \$197 in the six months ended June 30, 2019, was primarily due to higher Restructuring and other charges, and higher SG&A expenses, partially offset by volume growth, favorable product pricing, net cost savings, lower Income taxes, lower Interest expense, and lower R&D expenses.

Segment Information

In the first quarter of 2019, the Company transferred its aluminum extrusions operations (Aluminum Extrusions) from the Arconic Engineered Structures (AES) business unit within the Engineered Products and Solutions (EP&S) segment to the Global Rolled Products (GRP) segment, based on synergies with GRP including similar customer base, technologies, and manufacturing capabilities. Prior period financial information has been recast to conform to current year presentation. Segment performance under Arconic's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is Segment operating profit. Arconic's definition of Segment operating profit is Operating income excluding Special items. Special items include Restructuring and other charges. Segment operating profit includes the impact of LIFO inventory accounting, metal price lag, intersegment profit eliminations, and derivative activities. Segment operating profit may not be comparable to similarly titled measures of other companies. Differences between segment totals and consolidated Arconic are in Corporate.

Arconic produces aerospace engine parts and components, aerospace fastening systems, and aluminum sheet and plate products for Boeing 737 MAX airplanes. The temporary reduction in the production rate of the 737 MAX airplanes that was announced by Boeing in April 2019 did not have a significant impact on the Company's revenues or segment operating profit in the second quarter. A significant reduction in the production rate could have a negative impact on revenues and segment operating profit in the second half of 2019 in the EP&S and GRP segments.

Engineered Products and Solutions

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Third-party sales	\$ 1,565	\$ 1,474	\$ 3,067	\$ 2,900
Segment operating profit	286	224	539	433

Third-party sales for the Engineered Products and Solutions segment increased \$91, or 6%, in the second quarter of 2019 compared to the second quarter of 2018 and \$167, or 6%, in the six months ended June 30, 2019 compared to the six months ended June 30, 2018, primarily as a result of higher volumes and favorable product pricing in the aerospace end market, partially offset by unfavorable foreign currency movements and the absence of sales of \$9 and \$19 in the second quarter and six months ended June 30, 2019, respectively, from the forgings business in Eger, Hungary (divested in December 2018).

Segment operating profit for the Engineered Products and Solutions segment increased \$62, or 28%, in the second quarter of 2019 compared to the second quarter of 2018 and \$106, or 24%, in the six months ended June 30, 2019 compared to the six months ended June 30, 2018, due to higher aerospace volumes and pricing, as well as net cost savings, partially offset by the unfavorable impact of new product introductions in aerospace engines and unfavorable product mix.

On December 31, 2018, as part of the Company's ongoing strategy and portfolio review, Arconic completed the sale of its Eger, Hungary forgings business to Angstrom Automotive Group LLC.

In the second half of 2019 compared to the second half of 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 continue to grow due to the ramp-up of certain aerospace programs. Net cost savings and favorable pricing are expected to continue.

Global Rolled Products

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Third-party sales	\$ 1,577	\$ 1,573	\$ 3,080	\$ 3,054
Intersegment sales	55	61	110	118
Total sales	\$ 1,632	\$ 1,634	\$ 3,190	\$ 3,172
Segment operating profit	145	111	252	235
Third-party aluminum shipments (kmt)	367	330	698	652

Third-party sales for the Global Rolled Products segment increased \$4 in the second quarter of 2019 compared to the second quarter of 2018 and \$26, or 1%, in the six months ended June 30, 2019 compared to the six months ended June 30, 2018 primarily as a result of higher volumes in the aerospace, packaging, automotive, and industrial end markets and favorable product mix, partially offset by lower aluminum prices, the absence of sales of \$46 and \$89 in the second quarter and six months ended June 30, 2019, respectively, from the completed ramp down of Arconic's North American packaging operations (completed in December 2018), and unfavorable foreign currency movements.

Segment operating profit for the Global Rolled Products segment increased \$34, or 31%, in the second quarter of 2019 compared to the second quarter of 2018 and \$17, or 7%, in the six months ended June 30, 2019 compared to the six months ended June 30, 2018, due to favorable pricing adjustments on industrial and commercial transportation products, higher volumes as noted previously, favorable aluminum price impacts, and a charge related to a physical inventory adjustment at one plant incurred in 2018 that did not recur in 2019, partially offset by operational headwinds in the Aluminum Extrusions business and the Tennessee plant transition to industrial production.

In the second half of 2019 compared to the second half of 2018, demand in the North America commercial transportation and industrial end markets is expected to grow as a result of the International Trade Commission initiated common alloy trade case. Demand from the commercial airframe end market is expected to be up as the ramp-up of new programs is partially offset by lower build rates for aluminum intensive wide-body programs. Demand in the automotive end market is expected to be flat and strong demand from the packaging end market is expected to continue. Favorable pricing and net productivity improvements are also anticipated to continue.

Transportation and Construction Solutions

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Third-party sales	\$ 548	\$ 562	\$ 1,083	\$ 1,099
Segment operating profit	107	97	194	164

Third-party sales for the Transportation and Construction Solutions segment decreased \$14, or 2%, in the second quarter of 2019 compared to the second quarter of 2018 and \$16, or 1%, in the six months ended June 30, 2019 compared to the six months ended June 30, 2018, as higher volumes in the commercial transportation and building and construction end markets were more than offset by lower aluminum prices and unfavorable foreign currency movements. The six months ended June 30, 2019 was also impacted by the absence of sales of \$25 from the extrusions business in Latin America (divested in April 2018).

Segment operating profit for the Transportation and Construction Solutions segment increased \$10, or 10%, in the second quarter of 2019 compared to the second quarter of 2018 and \$30, or 18%, in the six months ended June 30, 2019 compared to the six months ended June 30, 2018, principally as a result of net cost savings and higher volumes as noted previously.

On April 2, 2018, Arconic completed the sale of its Latin America extrusions business to a subsidiary of Hydro Extruded Solutions AS.

On July 31, 2018, the Company announced that it had initiated a sale process of its Building and Construction Systems (BCS) business, as part of the Company's ongoing strategy and portfolio review. In the first quarter of 2019, the Company decided to no longer pursue the sale of BCS and the business continues to be reported in the Transportation and Construction Solutions segment.

In the second half of 2019 compared to the second half of 2018, continued growth in the North American and European commercial transportation and building and construction markets is anticipated but at a slower pace than experienced in the first half of 2019 due to the expected slowdown in the North American heavy-duty truck market. Demand for innovative products and net cost savings are anticipated to continue.

Reconciliation of Total segment operating profit to Consolidated (loss) income before income taxes

	Second quarter ended		Six months ended	
	June 30,		June 30,	
	2019	2018	2019	2018
Total segment operating profit	\$ 538	\$ 432	\$ 985	\$ 832
Unallocated amounts:				
Restructuring and other charges	(499)	(15)	(511)	(22)
Corporate expense	(120)	(93)	(181)	(153)
Consolidated operating (loss) income	\$ (81)	\$ 324	\$ 293	\$ 657
Interest expense	(85)	(89)	(170)	(203)
Other expense, net	(29)	(41)	(61)	(61)
Consolidated (loss) income before income taxes	\$ (195)	\$ 194	\$ 62	\$ 393

See Restructuring and other charges, Interest expense, and Other expense, net discussions above under Results of Operations for reference.

Corporate expense increased \$27, or 29%, in the second quarter of 2019 compared to the second quarter of 2018 and \$28, or 18%, in the six months ended June 30, 2019 compared to the six months ended June 30, 2018, primarily due to an increase in environmental remediation costs for Grasse River of \$25, costs associated with the planned separation of Arconic, higher annual incentive compensation accruals and executive compensation costs, collective bargaining agreement negotiation costs of \$9, impairment of energy business assets of \$9, and costs related to a fire at a fasteners plant, partially offset by costs incurred in the second quarter of 2018 related to settlements of certain customer claims primarily related to product introductions that did not recur in 2019, lower costs driven by overhead cost reductions, lower research and development expenses, and a decrease in legal and other advisory costs related to Grenfell Tower. The six months ended June 30, 2019 was also impacted by costs associated with the strategy and portfolio review.

Environmental Matters

See the Environmental Matters section of Note [R](#) to the Consolidated Financial Statements in Part I Item 1 of this Form 10-Q.

Subsequent Events

See Note [T](#) to the Consolidated Financial Statements in Part I Item 1 of this Form 10-Q.

Liquidity and Capital Resources

Operating Activities

Cash used for operations was \$152 in the six months ended June 30, 2019 compared to \$260 in the six months ended June 30, 2018. The decrease in cash used of \$108, or 42%, was primarily due to higher operating results and lower pension contributions of \$97, partially offset by higher working capital of \$126. The components of the change in working capital included unfavorable changes of \$247 in accounts payable and \$34 in receivables, partially offset by favorable changes of \$103 in inventories and \$38 in accrued expenses.

Financing Activities

Cash used for financing activities was \$942 in the six months ended June 30, 2019 compared to \$577 in the six months ended June 30, 2018. The increase in cash used of \$365, or 63%, was primarily related to the repurchase of \$900 of common stock (see Note [H](#) to the Consolidated Financial Statements); partially offset by a decrease in payments on debt due to the redemption in the first quarter of 2018 of the then outstanding 5.72% Notes due in 2019 with aggregate principal amount of \$500; a decrease in dividends paid to shareholders of \$21; and premiums paid on early redemption of debt of \$17.

Arconic maintains a Five-Year Revolving Credit Agreement (the “Credit Agreement”) with a syndicate of lenders and issuers named therein. In addition to the Credit Agreement, Arconic has a number of other credit agreements. See Note [O](#) to the Consolidated Financial Statements in Part I Item 1 of this Form 10-Q for reference.

Arconic’s costs 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 by the major credit rating agencies.

Arconic’s credit ratings from the three major credit rating agencies are as follows:

	Long-Term Debt	Short-Term Debt	Outlook	Date of Last Update
Standard and Poor’s	BBB-	A-3	Negative	April 26, 2019
Moody’s	Ba2	Speculative Grade Liquidity-2	Stable	June 7, 2019
Fitch	BB+	B	Positive	February 12, 2019

Investing Activities

Cash provided from investing activities was \$171 in the six months ended June 30, 2019 compared to \$146 in the six months ended June 30, 2018. The increase in cash provided of \$25, or 17%, was primarily due to the sale of fixed-income securities of \$47 in the first quarter of 2019, partially offset by higher capital expenditures of \$16.

Recently Adopted and Recently Issued Accounting Guidance

See Note [B](#) to the Consolidated Financial Statements in Part I Item 1 of this Form 10-Q.

Forward-Looking Statements

This report contains statements that relate to future events and expectations and as such constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as “anticipates,” “believes,” “could,” “estimates,” “expects,” “forecasts,” “goal,” “guidance,” “intends,” “may,” “outlook,” “plans,” “projects,” “seeks,” “sees,” “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 and expectations 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 regarding future strategic actions, including share repurchases, which may be subject to market conditions, legal requirements and other considerations; and statements about Arconic’s strategies, outlook, business and financial prospects. These statements reflect beliefs and assumptions that are based on Arconic’s perception of historical trends, current conditions and expected future developments, as well as other factors Arconic believes are appropriate in the circumstances. Forward-looking statements are not guarantees of future performance and are subject to

risks, uncertainties, and changes in circumstances that are difficult to predict, which could cause actual results to differ materially from those indicated by these statements. Such risks and uncertainties include, but are not limited to: (a) uncertainties regarding the planned separation, including whether it will be completed pursuant to the targeted timing, asset perimeters, and other anticipated terms, if at all; (b) the impact of the separation on the businesses of Arconic; (c) the risk that the businesses will not be separated successfully or such separation may be more difficult, time-consuming or costly than expected, which could result in additional demands on Arconic's resources, systems, procedures and controls, disruption of its ongoing business, and diversion of management's attention from other business concerns; (d) deterioration in global economic and financial market conditions generally; (e) unfavorable changes in the markets served by Arconic; (f) the inability to achieve the level of revenue growth, cash generation, cost savings, improvement in profitability and margins, fiscal discipline, or strengthening of competitiveness and operations anticipated or targeted; (g) competition from new product offerings, disruptive technologies or other developments; (h) political, economic, and regulatory risks relating to Arconic's global operations, including compliance with U.S. and foreign trade and tax laws, sanctions, embargoes and other regulations; (i) manufacturing difficulties or other issues that impact product performance, quality or safety; (j) Arconic's inability to realize expected benefits, in each case as planned and by targeted completion dates, from acquisitions, divestitures, facility closures, curtailments, expansions, or joint ventures; (k) the impact of potential cyber attacks and information technology or data security breaches; (l) the loss of significant customers or adverse changes in customers' business or financial conditions; (m) adverse changes in discount rates or investment returns on pension assets; (n) the impact of changes in aluminum prices and foreign currency exchange rates on costs and results; (o) the outcome of contingencies, including legal proceedings, government or regulatory investigations, and environmental remediation, which can expose Arconic to substantial costs and liabilities; and (p) the other risk factors summarized in Arconic's Form 10-K for the year ended December 31, 2018 and other reports filed with the U.S. Securities and Exchange Commission. Market projections are subject to the risks discussed above 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.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

Not material.

Item 4. 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) Changes in Internal Control over Financial Reporting

There have been no changes in internal control over financial reporting during the second quarter of 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings.

See the Reynobond PE and Massena, NY sections of Note [R](#) to the Consolidated Financial Statements in Part I Item 1 of this Form 10-Q.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

The following table presents information with respect to Arconic common stock purchases made by the Company during the quarter ended June 30, 2019.

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽¹⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
April 1 - April 30, 2019 ⁽²⁾	4,525,592	\$ 19.21	4,525,592	\$ 300,000,000
May 1 - May 31, 2019 ⁽³⁾	7,455,732	\$ 22.18	7,455,732	\$ 600,000,000
June 1 - June 30, 2019 ⁽³⁾	1,561,249	\$ 22.18	1,561,249	\$ 600,000,000
Total for quarter ended June 30, 2019	13,542,573		13,542,573	

- (1) On February 5, 2018, the Company announced that its Board of Directors (the Board) had authorized the repurchase of up to \$500 million of the Company's outstanding common stock (the "February 2018 Share Repurchase Program"). There was no stated expiration for the February 2018 Share Repurchase Program, and no shares were repurchased during 2018. On February 8, 2019, the Company announced that the Board had authorized the repurchase of an additional \$500 million of the Company's outstanding common stock, effective through the end of 2020. On May 20, 2019, the Company announced that the Board had authorized the repurchase of a further \$500 million of the Company's outstanding common stock (the "May 2019 Share Repurchase Program"). There was no stated expiration for the May 2019 Share Repurchase Program.
- (2) On February 19, 2019, the Company entered into an accelerated share repurchase (ASR) agreement with JPMorgan Chase Bank ("JPM") to repurchase \$700 million of its common stock, and received an initial delivery of 31,908,831 shares. The term of the ASR concluded on April 25, 2019, with JPM delivering 4,525,592 additional shares to Arconic on April 29, 2019. A total of 36,434,423 shares, at an average price of \$19.21 per share, were repurchased under the agreement.
- (3) On May 2, 2019, the Company entered into an ASR agreement with JPM to repurchase \$200 million of its common stock, and received an initial delivery of 7,455,732 shares. The term of the ASR concluded on June 10, 2019, with JPM delivering 1,561,249 additional shares to Arconic on June 12, 2019. A total of 9,016,981 shares, at an average price of \$22.18 per share, were repurchased under the agreement.

Item 6. Exhibits.

10(a).	2013 Arconic Stock Incentive Plan, as Amended and Restated, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 17, 2019.
10(b).	Change in Control Severance Plan, as amended and restated, effective May 14, 2019, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated May 17, 2019.
10(c).	Executive Severance Plan, as amended and restated, effective May 14, 2019, incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated May 17, 2019.
10(d).	Special Retention Award Agreement - Neil E. Marchuk, effective May 14, 2019.
10(e).	Letter Agreement, by and between Arconic Inc. and John C. Plant, dated as of August 1, 2019, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated August 2, 2019.
15.	Letter regarding unaudited interim financial information.
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 - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL 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.
104.	Cover Page Interactive Data File - the cover page from this Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, formatted in Inline XBRL (included within the Exhibit 101 attachments).

SIGNATURES

Pursuant to the requirements 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.	
August 2, 2019	/s/ Ken Giacobbe
Date	Ken Giacobbe
	Executive Vice President and
	Chief Financial Officer
	(Principal Financial Officer)
August 2, 2019	/s/ Paul Myron
Date	Paul Myron
	Vice President and Controller
	(Principal Accounting Officer)

August 2, 2019

Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 20549

Commissioners:

We are aware that our report dated August 2, 2019 on our review of interim financial statements of Arconic Inc., which appears in this Quarterly Report on Form 10-Q, is incorporated by reference in the Registration Statements on Form S-8 (Nos. 333-32516, 333-106411, 333-128445, 333-146330, 333-153369, 333-155668, 333-159123, 333-168428, 333-170801, 333-182899, 333-189882, 333-203275, 333-209772, 333-212246, 333-229727, 333-229914, and 333-232219) of Arconic Inc.

Very truly yours,

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania

Certifications

I, John C. Plant, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Arconic Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2019

/s/ John C. Plant

Name: John C. Plant

Title: Chairman and Chief Executive Officer

I, Ken Giacobbe, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Arconic Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 2, 2019

/s/ Ken Giacobbe

Name: Ken Giacobbe

Title: Executive Vice President and Chief Financial Officer

Certification
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), each of the undersigned officers of Arconic Inc., a Delaware corporation (the “Company”), does hereby certify that:

The Quarterly Report on Form 10-Q for the period ended June 30, 2019 (the “Form 10-Q”) of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 2, 2019

/s/ John C. Plant

Name: John C. Plant

Title: Chairman and Chief Executive Officer

Dated: August 2, 2019

/s/ Ken Giacobbe

Name: Ken Giacobbe

Title: Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished to the Securities and Exchange Commission as an exhibit to the Form 10-Q and shall not be considered filed as part of the Form 10-Q.