

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

Form 10-K

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

For the fiscal year ended March 31, 2018

Or

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

For the transition period from to .

Commission file number 001-32312

Novelis Inc.

(Exact name of Registrant as specified in its charter)

Canada
(State or other jurisdiction of
incorporation or organization)
3560 Lenox Road, Suite 2000,
Atlanta, GA
(Address of principal executive offices)

98-0442987
(I.R.S. Employer
Identification Number)
30326
(Zip Code)

(404) 760-4000
(Registrant's telephone number, including area code)

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

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

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933. Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"). Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act 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

The Registrant is a voluntary filer and is not subject to the filing requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934. However, the Registrant 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.

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes No

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

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

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.

As of May 7, 2018, the Registrant had 1,000 common shares outstanding. All of the Registrant's outstanding shares were held indirectly by Hindalco Industries Ltd., the Registrant's parent company.

DOCUMENTS INCORPORATED BY REFERENCE: None

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND MARKET DATA

This document contains forward-looking statements that are based on current expectations, estimates, forecasts and projections about the industry in which we operate, and beliefs and assumptions made by our management. Such statements include, in particular, statements about our plans, strategies and prospects under the headings “Item 1. Business,” “Item 1A. Risk Factors” and “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “estimate” and variations of such words and similar expressions are intended to identify such forward-looking statements. Examples of forward-looking statements in this Annual Report on Form 10-K include, but are not limited to, our expectations with respect to the impact of metal price movements on our financial performance; the effectiveness of our hedging programs and controls; and our future borrowing availability. These statements are based on beliefs and assumptions of Novelis’ management, which in turn are based on currently available information. These statements are not guarantees of future performance and involve assumptions and risks and uncertainties that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed, implied or forecasted in such forward-looking statements. We do not intend, and we disclaim any obligation, to update any forward-looking statements, whether as a result of new information, future events or otherwise.

This document also contains information concerning our markets and products generally, which is forward-looking in nature and is based on a variety of assumptions regarding the ways in which these markets and product categories will develop. These assumptions have been derived from information currently available to us and to the third party industry analysts quoted herein. This information includes, but is not limited to, product shipments and share of production. Actual market results may differ from those predicted. We do not know what impact any of these differences may have on our business, our results of operations, financial condition, and cash flow. For a discussion of some of the specific factors that may cause Novelis’ actual results to differ materially from those projected in any forward-looking statements, see the following sections of this report: Part I, Item IA. Risk Factors, Part II. Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations and Critical Accounting Policies and Estimates.

In this Annual Report on Form 10-K, unless otherwise specified, the terms “we,” “our,” “us,” “Company,” and “Novelis” refer to Novelis Inc., a company incorporated in Canada under the Canadian Business Corporations Act, and its subsidiaries. References herein to “Hindalco” refer to Hindalco Industries Limited, which acquired Novelis in May 2007.

Exchange Rate Data

We report our financial statements in United States (U.S.) dollars. The following table sets forth exchange rate information expressed in terms of Canadian dollars per U.S. dollar based on exchange data published daily from Citibank as of 16:00 Greenwich Mean Time (GMT) (11:00 A.M. Eastern Standard Time). The rates set forth below may differ from the actual rates used in our accounting processes and in the preparation of our consolidated financial statements.

Period	At Period End	Average Rate (A)	High	Low
Year Ended March 31, 2014	1.1044	1.0577	1.1127	1.0074
Year Ended March 31, 2015	1.2666	1.1467	1.2681	1.0665
Year Ended March 31, 2016	1.2978	1.3115	1.4015	1.2065
Year Ended March 31, 2017	1.3289	1.3137	1.3439	1.2542
Year Ended March 31, 2018	1.2889	1.2826	1.3667	1.2305

(A) This represents the average of the 16:00 GMT buying rates on the last day of each month during the period.

All dollar figures herein are in U.S. dollars unless otherwise indicated.

Commonly Referenced Data

As used in this Annual Report, consolidated “aluminum rolled product shipments,” “flat rolled product shipments,” or “shipments” refers to aluminum rolled product shipments to third parties. “Aluminum rolled product shipments,” “flat rolled product shipments,” or “shipments” associated with the regions refers to aluminum rolled product shipments to third parties and intersegment shipments to other Novelis regions. Shipment amounts also include tolling shipments. References to “total shipments” include aluminum rolled product shipments as well as certain other non-rolled product shipments, primarily scrap, used beverage cans (UBCs), ingots, billets, and primary remelt. The term “aluminum rolled products” is synonymous with the terms “flat rolled products” and “FRP” which are commonly used by manufacturers and third party analysts in our industry. All tonnages are stated in metric tonnes. One metric tonne is equivalent to 2,204.6 pounds. One kilotonne (kt) is 1,000 metric tonnes.

A significant amount of our business is conducted under a conversion model, which allows us to pass through increases or decreases in the price of aluminum to our customers. Nearly all of our flat-rolled products have a price structure with three components: (i) a base aluminum price quoted off the London Metal Exchange (LME); (ii) a local market premium; and (iii) a “conversion premium” to produce the rolled product which reflects, among other factors, the competitive market conditions for that product. The use of the term “conversion premium” in this Annual Report, refers to the conversion costs plus a margin we charge our customers to produce the rolled product which reflects, among other factors, the competitive market conditions for that product, exclusive of the pass through aluminum price.

PART I

Item 1. Business

Overview

Novelis is the leading producer of flat-rolled aluminum products and the world's largest recycler of aluminum. We work alongside our customers to provide innovative solutions to the beverage can, automotive and high-end specialty markets. Operating an integrated network of technically advanced rolling and recycling facilities across North America, South America, Europe and Asia, Novelis leverages its global manufacturing and recycling footprint to deliver consistent, high-quality products around the world. In fiscal year 2018, we had shipment volumes of 3,333 kt and "Net sales" of \$11,462 million for the year ended March 31, 2018.

Our History

Organization and Description of Business

All of the common shares of Novelis are owned directly by AV Metals Inc. and indirectly by Hindalco Industries Limited. We produce flat-rolled aluminum products and provide innovative solutions to the beverage can, automotive and high-end specialty markets. We also have aluminum recycling operations in many of our plants. As of March 31, 2018, we had manufacturing operations in ten countries on four continents: North America, South America, Europe and Asia, through 24 operating facilities, including recycling operations in eleven of these plants.

Our Industry

The aluminum rolled products market represents the global supply of, and demand for, aluminum sheet, plate and foil produced either from sheet ingot or continuously cast roll-stock in rolling mills operated by both independent aluminum rolled products producers and integrated aluminum companies.

Aluminum rolled products are semi-finished aluminum products that constitute the raw material for the manufacture of finished goods ranging from automotive structures and body panels to food and beverage cans. There are two major types of manufacturing processes for aluminum rolled products differing mainly in the process used to achieve the initial stage of processing:

- *hot mills* — which require sheet ingot, a rectangular slab of aluminum, as starter material; and
- *continuous casting mills* — which can convert molten metal directly into semi-finished sheet.

Both processes require subsequent rolling, which we refer to as cold rolling, and finishing steps such as annealing, coating, leveling or slitting to achieve the desired thickness, width and metal properties. Most customers receive shipments in the form of aluminum coil, a large roll of metal, which can be utilized in their fabrication processes.

Industry Sources of Metal

There are two sources of input material: (1) recycled aluminum, produced by remelting post-industrial and post-consumer scraps; and (2) primary aluminum, produced from alumina (extracted from bauxite), processed in a smelter.

Primary aluminum and sheet ingot can generally be purchased at prices set on the LME, plus a local market premium that varies by geographic region of delivery, alloying material, form (ingot or molten metal) and purity.

Recycled aluminum is generally purchased at a discount compared to the price of primary aluminum depending on type and quality of the scrap, geographic region, and other market factors.

Industry End-use Markets

Aluminum rolled products companies produce and sell a wide range of products, which can be grouped into five end-use markets: (1) packaging; (2) transportation; (3) architectural; (4) industrial; and (5) consumer durables and other. Within each end-use market, aluminum rolled products are manufactured with a variety of alloy mixtures; a range of tempers (hardness), gauges (thickness) and widths; and various coatings and finishes. Large customers typically have customized needs resulting in the development of close relationships, including technical development relationships, with their supplying mills.

Aluminum, because of its light weight, recyclability and formability, has a wide variety of uses in end-use markets. The recyclability of aluminum enables it to be used, collected, melted and returned to the original product form an unlimited number of times, unlike paper and polyethylene terephthalate (PET) plastic, which deteriorate with every iteration of recycling.

Packaging. Aluminum is used in beverage cans and bottles, food cans, beverage screw caps and foil, among others. Packaging is the largest aluminum rolled products application, according to market data from Commodity Research Unit International Limited (CRU), an independent business analysis and consultancy group. Beverage cans are one of the largest aluminum rolled products applications. In addition to their recyclability, aluminum beverage cans offer advantages in fabricating efficiency and product shelf life. Fabricators are able to produce and fill beverage cans at very high speeds, and non-porous aluminum cans provide longer shelf life than PET plastic containers. Additionally, the use of aluminum to package beverages such as craft beer is increasing, as aluminum blocks sunlight and therefore maintains the quality and taste of the product longer. Aluminum cans are light, stackable and use space efficiently, making them convenient and cost-efficient to ship.

Beverage can sheet is sold in coil form for the production of can bodies, ends and tabs. The material can be ordered as rolled, degreased, pre-lubricated, pre-treated and/or lacquered. Typically, can makers define their own specifications for material to be delivered in terms of alloy, gauge, width and surface finish.

Foil wrap or packaging foil is another packaging application and it includes household and institutional aluminum foil. Container foil is used to produce semi-rigid containers such as pie plates and take-out food trays.

Transportation. Aluminum rolled products are used in vehicle structures (also known as "body-in-white") as well as automotive body panel applications, including hoods, deck lids, fenders and lift gates. These uses typically result from cooperative efforts between aluminum rolled products manufacturers and their customers that yield solutions for specific requirements in alloy selection, fabrication procedure, surface quality and joining. There has been recent growth in certain geographic markets in passenger and commercial vehicle applications due to the lighter weight, better fuel economy and improved emissions performance associated with these applications. We expect increased growth in this end-use market driven by government regulations requiring improved emissions and better fuel economy; while also maintaining or improving vehicle performance and safety.

Heat exchangers, such as radiators and air conditioners, are an important application for aluminum rolled products in the transportation end-use market. Original equipment manufacturers also use aluminum sheet, with specially treated surfaces and other specific properties, for interior and exterior applications. Newly developed alloys are being used in transportation tanks and rigid containers allowing for safer and more economical transportation of hazardous and corrosive materials.

Aluminum is also used in aerospace applications, as well as in the construction of ships' hulls, superstructures and passenger rail cars because of its strength, light weight, formability and corrosion resistance.

Architectural. Construction is the largest application within this end-use market. Aluminum rolled products developed for the construction industry are often decorative and non-flammable, offer insulating properties, are durable and corrosion resistant, and have a high strength-to-weight ratio. Aluminum siding, gutters, and downspouts comprise a significant amount of construction volume. Other applications include doors, windows, awnings, canopies, facades, roofs and ceilings.

Industrial. Industrial applications include heat exchangers, process and electrical machinery, lighting fixtures, furniture and insulation.

Consumer Durables and Other. Aluminum's lightweight characteristics, high formability, ability to conduct electricity and dissipate heat and its corrosion resistance makes it useful in a wide variety of electronic applications. Uses of aluminum rolled products in electronics include flat screen televisions, personal computers, laptops, mobile devices, and digital music players. Other uses of aluminum rolled products in consumer durables include microwaves, coffee makers, air conditioners and cooking utensils.

Market Structure and Competition

The aluminum rolled products market is highly competitive and is characterized by economies of scale; and significant capital investments are required to achieve and maintain technological capabilities and demanding customer qualification standards. Our primary competitors are as follows:

North America

Alcoa, Inc. (Alcoa)
Aleris International, Inc. (Aleris)
Arconic Inc. (Arconic)
Constellium N.V. (Constellium)
Golden Aluminum
Gränges AB
Maaden - Saudi Arabian Mining Company
Shandong Nanshan Aluminum Co., Ltd.
UACJ Corporation/ Tri-Arrows Aluminum Inc. (Tri-Arrows)

Europe

Aleris
Amag Austria Metall AG
Arconic
Constellium
Elval Hellenic Aluminium Industry S.A.
Henan Zhongfu Industrial Co., Ltd.
Nanshan
Norsk Hydro A.S.A.
Shandong Nanshan Aluminum Co., Ltd.

Asia

Arconic
Binzhou Weiqiao Aluminium Science & Technology Co., Ltd.
China Zhongwang Holdings Limited
Chinalco Group
Henan Mingtai Aluminum Industrial Co., Ltd.
Henan Zhongfu Industrial Co., Ltd.
Kobe Steel Ltd.
Shandong Nanshan Aluminum Co., Ltd.
Southwest Aluminum (Group) Co., Ltd.
UACJ Corporation

South America

Arconic
Companhia Brasileira de Alumínio
Hulamin Limited
Norsk Hydro A.S.A.
Shandong Nanshan Aluminum Co., Ltd.

The factors influencing competition vary by region and end-use market, but generally we compete on the basis of our value proposition; which includes price, product quality, the ability to meet customers' specifications, range of products offered, lead times, technical support and customer service. In some end-use markets, competition is also affected by fabricators' requirements that suppliers complete a qualification process to supply their plants. This process can be rigorous and may take many months to complete. As a result, obtaining business from these customers can be a lengthy and expensive process. However, the ability to obtain and maintain these qualifications can represent a competitive advantage.

In addition to competition from others within the aluminum rolled products industry, we also face competition from non-aluminum material producers. In the packaging end-use market (primarily beverage and food cans), aluminum rolled products compete mainly with glass, PET plastic, and in some regions, steel. In the transportation end-use market, aluminum rolled products compete mainly with steel and composites. Aluminum competes with wood, plastic, cement and steel in building products applications. In the consumer durables end-use market, aluminum rolled products compete mainly with plastic, steel, and magnesium. Additionally, aluminum competes with steel, copper, plastic, and glass in industrial applications. Factors affecting competition with substitute materials include price, ease to manufacture, consumer preference and performance characteristics.

Key Factors Affecting Supply and Demand

The following factors have historically affected the supply of aluminum rolled products:

Production Capacity and Alternative Technology. The addition of rolling capacity requires large capital investments and significant plant construction or expansion, and typically requires long lead-time equipment orders. Advances in technological capabilities allow aluminum rolled products producers to better align product portfolios and supply with industry demand. There are lower cost ways to enter the industry such as continuous casting, which offers the ability to increase capacity in smaller increments than is possible with hot mill additions; however, the continuous casting process results in a more limited range of products.

Trade. Some trade flows occur between regions despite shipping costs, import duties and the lack of localized customer support. Higher value-added products are more likely to be traded internationally, especially if demand in certain markets exceeds local supply. With respect to less technically demanding applications, emerging markets with low cost inputs may export commodity aluminum rolled products to larger, more mature markets, as we have seen with China.

The following factors have historically affected the demand for aluminum rolled products:

Economic Growth. We believe that economic growth is a significant driver of aluminum rolled products demand. In mature markets, growth in demand has typically correlated closely with industrial production growth. In many emerging markets, growth in demand typically exceeds industrial production growth largely because of expanding infrastructures, capital investments and rising incomes that often accompany economic growth in these markets.

Substitution Trends. Manufacturers' willingness to substitute other materials for aluminum in their products and competition from substitution materials suppliers also affect demand. There has been a strong substitution trend toward aluminum in the use of vehicles as automobile manufacturers look for ways to meet fuel efficiency regulations, improve performance and reduce carbon emissions in a cost-efficient manner. As a result of aluminum's durability, strength and light weight, automobile manufacturers are substituting heavier alternatives such as steel and iron with aluminum. Carbon fiber and plastics are other lightweight material options, but their relatively high cost and limited end-of-life recyclability reduce their competitiveness as widespread material substitutes today. Consequently, demand for flat rolled aluminum products has increased. We also see strong substitution trends toward aluminum and away from steel in the beverage can market in certain regions.

Seasonality. During our third fiscal quarter, we typically experience seasonal slowdowns resulting in lower shipment volumes, although this has been less significant as our product portfolio shifts and diversifies. This is a result of declines in overall production output due primarily to holidays and cooler weather in North America and Europe, our two largest operating regions. We also experience downtime at our mills and customers' mills due to scheduled plant maintenance and are impacted to a lesser extent by the seasonal downturn in construction activity.

Sustainability. Growing awareness of environmentalism and demand for recyclable products has increased the demand for aluminum rolled products. Unlike other commonly recycled materials such as paper or PET plastic, aluminum can be infinitely recycled without affecting the quality of the product. Additionally, the recycling process uses approximately 95% less energy than is required to produce primary aluminum from mining and smelting, with an equivalent reduction in greenhouse gas emissions.

Our Business Strategy

Our objective as the world's largest aluminum rolling and recycling company is to lead the aluminum industry as the partner of choice for innovative solutions. We will maximize shareholder value through free cash flow generation and increasing return on capital employed. To achieve these objectives, we will focus on the following areas:

Defend the Core

Novelis is the leading global flat rolled aluminum supplier in the beverage can and automotive markets. We intend to protect our leadership position by continuing to deliver best-in-class customer service with improved quality, service and innovative solutions that differentiate Novelis products. We are committed to producing the best quality products and providing reliable on-time delivery in order to be a true partner in innovation and sustainable supply solutions. We are focused on building and maintaining strong, positive relationships with all of our customers.

In addition, we will maintain a competitive cost structure by managing metal input costs and employing initiatives to improve operational efficiencies across our global network. This includes a commitment to employee safety, product quality and system reliability. As a manufacturing organization, our primary concern is the health and safety of our employees. We are

committed to building a culture of safety across all levels of the organization. We are focused on optimizing our manufacturing and recycling operations to increase asset utilization and productivity. We continue to pursue a standardization of our manufacturing processes where possible, while still allowing the flexibility to respond to local market demands.

Utilizing recycled material allows us to diversify our metal supply, helps control metal costs and provides environmental benefits. We define recycled content as the total amount of scrap metal used in production less melt loss. The percentage of recycled content within our aluminum rolled product shipments increased from 33% to 57% from fiscal 2011 to fiscal 2018. We work closely with our customers on innovation to drive more sustainable products for society. We are the only company of its size offering high-recycled content aluminum sheet for beverage and specialty product customers. We are also working closely with our automotive customers to redesign automotive alloys to be made with more recycled inputs, as well as purchasing the aluminum scrap resulting from our automotive customers' closed-loop recycling systems.

Strengthen our Product Portfolio

We maintain a focus on capturing global growth in beverage can, automotive and specialty products markets. Our management approach helps us to systematically identify opportunities that improve the profitability of our operations through product portfolio analysis. This ensures that we grow in attractive market segments, while also taking actions to exit unattractive ones. We will continue to focus on these core product markets to drive enhanced profitability, but will also continue to broaden our customer base and explore new verticals and product markets that fit within our overall strategic vision, which is to lead the aluminum industry as the partner of choice for innovative solutions.

Invest in Growth Opportunities

Over the past several years, we invested in world-class assets and technical capabilities to position ourselves to meet increasing global demand for aluminum from the automotive market. We now have automotive finishing lines in North America, Europe, and Asia operating near full production levels. In February 2018, we announced to add approximately 200 kt of additional automotive finishing capacity in North America with a greenfield expansion in Guthrie, Kentucky. Construction is underway at this new facility, which is expected to be commissioned in 2020. We will continue to explore other potential opportunities that will drive profitable volume growth in the automotive and other core end markets, while maintaining a balanced and disciplined financial approach in our decision making process.

Raw Materials and Suppliers

The input materials we use in manufacturing include primary aluminum, recycled aluminum, sheet ingot, alloying elements and grain refiners. These raw materials are generally available from several sources and are not generally subject to supply constraints in normal market conditions. We also consume considerable amounts of energy in the operation of our facilities.

Aluminum

We obtain aluminum from a number of sources, including the following:

Primary Aluminum Sourcing. We purchased or tolled approximately 1,470 kt of primary aluminum in fiscal 2018 in the form of sheet ingot, standard ingot and molten metal.

Aluminum Products Recycling. We operate facilities in several plants to recycle post-consumer aluminum, such as UBCs collected through recycling programs. In addition, we have agreements with several of our large customers where we have a closed-looped system whereby we take production scrap material from their fabricating activity and re-melt, cast and roll it to re-supply these customers with aluminum sheet. Other sources of recycled material include lithographic plates, and products with longer lifespans, like vehicles and buildings, which are starting to become high volume sources of recycled material. We purchased or tolled approximately 1,822 kt of recycled material inputs (less melt loss) in fiscal 2018.

The overall benefit we receive from utilizing recycled metal is influenced by: 1) the overall price levels of the LME and local market premiums, 2) the spread between the price for recycled aluminum and the LME primary aluminum price and 3) our consumption levels of the recycled material inputs.

Our recycled content performance and methodology are detailed in our annual sustainability report, which can be found at www.novelis.com/sustainability. Information in our sustainability report does not constitute part of this Annual Report on Form 10-K.

Energy

We use several sources of energy in the manufacturing and delivery of our aluminum rolled products. In fiscal 2018, natural gas and electricity represented approximately 98% of our energy consumption by cost. We also use fuel oil and transport fuel. The majority of energy usage occurs at our casting centers and during the hot rolling process. Our cold rolling facilities require relatively less energy. We purchase our natural gas on the open market, which subjects us to market pricing fluctuations. We have in the past and may continue to seek to stabilize our future exposure to natural gas prices through the use of derivative instruments. A portion of our electricity requirements are purchased pursuant to long-term contracts in the local regions in which we operate. A number of our facilities are located in regions with regulated prices, which affords relatively stable costs. We have fixed pricing on some of our energy supply arrangements.

Our Operating Segments

Due in part to the regional nature of supply and demand of aluminum rolled products and in order to best serve our customers, we manage our activities on the basis of geographical areas and are organized under four operating segments: North America, Europe, Asia and South America. Each segment manufactures aluminum sheet and light gauge products, and recycles aluminum.

The table below shows "Net sales" and total shipments by segment. For additional financial information related to our operating segments, see Note 20 — Segment, Geographical Area, Major Customer and Major Supplier Information to our accompanying audited consolidated financial statements.

Net sales in millions Shipments in kilotonnes	Year Ended March 31,		
	2018	2017	2016
Consolidated			
Net sales	\$ 11,462	\$ 9,591	\$ 9,872
Total shipments	3,333	3,176	3,325
North America (A)			
Net sales	\$ 3,951	\$ 3,228	\$ 3,266
Total shipments	1,090	1,014	1,049
Europe (A)			
Net sales	\$ 3,447	\$ 2,968	\$ 3,223
Total shipments	938	951	1,076
Asia (A)			
Net sales	\$ 2,110	\$ 1,791	\$ 1,992
Total shipments	719	699	770
South America (A)			
Net sales	\$ 1,931	\$ 1,510	\$ 1,575
Total shipments	653	562	569

(A) "Net sales" and "Total shipments" by segment include intersegment sales and the results of our affiliates on a proportionately consolidated basis, which is consistent with the way we manage our business segments.

The following is a description of our operating segments during all or part of March 31, 2018:

North America

Novelis North America operates eight aluminum rolled products facilities. This includes two fully dedicated recycling facilities and one facility with recycling operations. These sites manufacture a broad range of aluminum sheet and light gauge products. End-use markets for this segment include beverage and food cans, containers and packaging, automotive and other transportation applications, architectural and other industrial applications. The majority of North America's volumes are currently directed toward the beverage can sheet market.

In response to the lightweighting trend in the automotive industry, we have expanded our Oswego, New York facility by constructing three automotive finishing lines and supporting automotive scrap recycling capabilities.

Recycling is important in the manufacturing process and we have three facilities in North America that re-melt post-consumer aluminum and recycled process material. Most of the recycled material is from UBCs and automotive scrap, and the material is cast into sheet ingot at our plants in Greensboro, Georgia; Berea, Kentucky; and Oswego, New York.

Europe

Novelis Europe operates ten aluminum rolled product facilities. This includes two fully dedicated recycling facilities and two facilities with recycling operations. These sites manufacture a broad range of sheet and foil products. We also have distribution centers in Italy and sales offices in several European countries. End-use markets for this segment include beverage and food can, automotive, architectural and industrial products, foil products and technical products. Beverage and food can represent the largest end-use market in terms of shipment volume for Europe.

We have built a fully integrated recycling facility at our Nachterstedt, Germany plant, which was commissioned in fiscal 2015 and is the largest aluminum recycling facility in the world. Additionally, a second automotive finishing line at our Nachterstedt, Germany facility was commissioned in fiscal 2016, to further expand our production of aluminum automotive sheet products in Europe.

Asia

Novelis Asia operates four aluminum rolled product facilities. This includes three facilities with recycling operations at the Ulsan and Yeongju, South Korea plants and the Bin Doung, Vietnam plant. These sites manufacture a broad range of aluminum sheet and light gauge products. The Changzhou, China facility focuses primarily on heat treatment. End-use markets include beverage and food cans, electronics, architectural, automotive, foil, industrial and other products. The beverage can market represents the largest end-use market in terms of volume.

South America

Novelis South America operates two aluminum rolled product facilities. This includes one facility with recycling operations. These facilities manufacture a broad range of can sheet, industrial sheet and light gauge products. The main markets are beverage and food can, specialty, industrial, foil and other packaging and transportation end-use applications. Beverage can represents the largest end-use application in terms of shipment volume.

Financial Information About Geographic Areas

Certain financial information about geographic areas is contained in Note 20 — Segment, Geographical Area, Major Customer and Major Supplier Information to our accompanying audited consolidated financial statements.

Our Customers

We focus significant efforts on developing and maintaining close working relationships with our customers and end-users. Our major customers include:

Beverage and Food Cans

Anheuser-Busch InBev
Ardagh Group
Ball Corporation
Can-Pack S.A.
Crown Holdings Inc., formerly Crown Cork & Seal Company
Pepsico
Various bottlers of the Coca-Cola System

Construction, Industrial and Other

Agfa Graphics
Aluflexpack
Amcor
Facchini S.A.
Feron
Klöckner Metals
Lotte Aluminum Co. Ltd.
Prefa
Reynolds Consumer Products LLC

Ryerson Inc.

ThyssenKrupp

Automotive

BMW Group
Daimler Group
Fiat Chrysler Automobiles N.V.
Ford Motor Company
General Motors LLC
Hyundai Motors Corporation
Jaguar Land Rover Limited
NIO
Volkswagen Group

Electronics

LG International Corporation
Samsung Electronics Co., Ltd.

Our single largest end-use product is beverage can sheet. We sell can sheet directly to beverage makers and bottlers as well as to can fabricators that sell the cans they produce to bottlers. In certain cases, we operate under umbrella agreements with beverage makers and bottlers under which they direct their can fabricators to source their requirements for beverage can body, end and tab stock from us.

Additional information related to our top customers is contained in Note 20 — Segment, Geographical Area, Major Customer and Major Supplier Information to our accompanying audited consolidated financial statements.

Distribution and Backlog

We have two principal distribution channels for the end-use markets in which we operate: direct sales to our customers and sales to distributors.

	Year Ended March 31,		
	2018	2017	2016
Direct sales as a percentage of total "Net sales"	97%	94%	95%
Distributor sales as a percentage of total "Net sales"	3%	6%	5%

Direct Sales

We supply various end-use markets all over the world through a direct sales force operating from individual facilities or sales offices, as well as from regional sales offices. The direct sales channel typically serves very large, sophisticated fabricators and original equipment manufacturers. Longstanding relationships are maintained with leading companies in industries using aluminum rolled products. Supply contracts for large global customers generally range from one to five years in length and historically there has been a high degree of renewal business with these customers. Given the customized nature of products and in some cases, large order sizes, switching costs are significant, thus adding to the overall consistency of the customer base.

We also use third party agents or traders in some regions to complement our own sales force. These agents provide service to our customers in countries where we do not have local expertise.

Distributors

We also sell our products through third party aluminum distributors. Customers of distributors are widely dispersed, and sales through this channel are highly fragmented. Distributors sell mostly commodity or less specialized products into many end-use markets in small quantities, including the architectural and industrial markets. We collaborate with our distributors to develop new end-use products and improve the supply chain and order efficiencies.

Backlog

We believe order backlog is not a material aspect of our business.

Research and Development

The table below summarizes our "Research and development expenses", which include mini-scale production lines equipped with hot mills, can lines and continuous casters (in millions).

	Year Ended March 31,		
	2018	2017	2016
Research and development expenses	\$ 64	\$ 58	\$ 54

We conduct research and development activities in order to meet current and future customer requirements, improve our products and reduce our conversion costs. We have a global research and technology center in Kennesaw, Georgia, which offers state of the art research and development capabilities to help Novelis meet the global long-term demand for aluminum used for the automotive, beverage can and specialty markets.

Our Employees

The table below summarizes our approximate number of employees by region, including our proportionate share of those employed by less than wholly owned affiliates.

Employees	North America (A)	Europe	Asia	South America	Total
March 31, 2018	3,400	4,770	1,400	1,570	11,140
March 31, 2017	3,310	4,880	1,670	1,590	11,450

(A) Includes employees within our Corporate headquarters located in Atlanta, Georgia.

We consider our employee relations to be satisfactory. A substantial portion of our employees are represented by labor unions and their employment conditions are governed by collective bargaining agreements. Collective bargaining agreements are negotiated on a site, regional or national level, and are of varying durations.

Intellectual Property

We actively review intellectual property arising from our operations and our research and development activities and, when appropriate, we apply for patents in appropriate jurisdictions. We currently hold patents and patent applications on approximately 237 different items of intellectual property. While these patents and patent applications are important to our business on an aggregate basis, no single patent or patent application is deemed to be material to our business.

We have applied for, or received registrations for, the "Novelis" word trademark and the Novelis logo trademark in approximately 50 countries where we have significant sales or operations. Novelis uses the Aditya Birla logo under license from Aditya Birla Management Corporation Private Limited.

We have also registered the word "Novelis" and several derivations thereof as domain names in numerous top level domains around the world to protect our presence on the world wide web.

Environment, Health and Safety

We own and operate numerous manufacturing and other facilities in various countries around the world. Our operations are subject to environmental laws and regulations from various jurisdictions, which govern, among other things, air emissions, wastewater discharges, the handling, storage and disposal of hazardous substances and wastes, the remediation of contaminated sites, post-mining reclamation and restoration of natural resources, and employee health and safety. Future

environmental regulations may impose stricter compliance requirements on the industries in which we operate. Additional equipment or process changes at some of our facilities may be needed to meet future requirements. The cost of meeting these requirements may be significant. Failure to comply with such laws and regulations could subject us to administrative, civil or criminal penalties, obligations to pay damages or other costs, and injunctions and other orders, including orders to cease operations.

We are involved in proceedings under the U.S. Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, or analogous state provisions regarding our liability arising from the usage, storage, treatment or disposal of hazardous substances and wastes at a number of sites in the United States, as well as similar proceedings under the laws and regulations of the other jurisdictions in which we have operations, including Brazil and certain countries in the European Union. Many of these jurisdictions have laws that impose joint and several liability, without regard to fault or the legality of the original conduct, for the costs of environmental remediation, natural resource damages, third party claims, and other expenses. In addition, we are, from time to time, subject to environmental reviews and investigations by relevant governmental authorities.

We have established procedures for regularly evaluating environmental loss contingencies, including those arising from environmental reviews and investigations and any other environmental remediation or compliance matters. We believe we have a reasonable basis for evaluating these environmental loss contingencies, and we also believe we have made reasonable estimates for the costs that are reasonably possible for these environmental loss contingencies. Accordingly, we have established liabilities based on our estimates for the currently anticipated costs that are deemed probable associated with these environmental matters. Management has determined that the currently anticipated costs associated with these environmental matters will not, individually or in the aggregate, materially impair our operations or materially adversely affect our financial condition.

Available Information

We are a voluntary filer and not subject to the reporting and information requirements of the Securities Exchange Act of 1934, as amended (Exchange Act). However, we file periodic reports and other information with the Securities and Exchange Commission (SEC). We make these filings available on our website free of charge, the URL of which is <http://www.novelis.com>, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The SEC maintains a website (<http://www.sec.gov>) that contains our annual, quarterly and current reports and other information we file electronically with the SEC. You can read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Information on our website does not constitute part of this Annual Report on Form 10-K.

Item 1A. Risk Factors

In addition to the factors discussed elsewhere in this report, you should consider the following factors, which could materially affect our business, financial condition or results of operations in the future. The following factors, among others, could cause our actual results to differ from those projected in any forward looking statements we make.

Competitive and Strategic Risks

Certain of our customers are significant to our revenues, and we could be adversely affected by changes in the business or financial condition of these significant customers or by the loss of their business.

Our ten largest customers accounted for approximately 65%, 63%, and 60% of our total “Net sales” for the year ended March 31, 2018, 2017 and 2016, respectively. A significant downturn in the business or financial condition of our significant customers could materially adversely affect our results of operations and cash flows. In addition, some of our customer contracts are subject to renewal, renegotiation or re-pricing at periodic intervals or upon changes in competitive supply conditions. Our failure to successfully renew, renegotiate or re-price such agreements could result in a reduction or loss in customer purchase volume or revenue. Additionally, in the event of further consolidation among our customers, our customers may be able to use increased leverage in negotiating prices and other contract terms. Consolidation in our customer base may also lead to reduced demand for our products or cancellations of sales orders, which could adversely affect our results of operations and cash flows.

We also factor and forfeit trade receivables from time to time to manage working capital. Any deterioration of the financial condition or downgrade of the credit rating of certain of our customers may make it more difficult or costly for us to engage in these activities, which could negatively impact our cash flows and liquidity.

We face significant price and other forms of competition from other aluminum rolled products producers and producers of other materials

The markets in which we operate are highly competitive. We compete primarily on the basis of our value proposition, including price, product quality, ability to meet customers' specifications, range of products offered, lead times, technical support and customer service. Some of our competitors may benefit from more efficient technologies, lower raw material and energy costs and may be able to sustain longer periods of price competition. Any increase in competition resulting from new market entrants or increases in production capacity by our competitors could cause us to lose market share or lose a large customer, or force us to reduce prices to remain competitive.

Further, aluminum competes with other materials, such as steel, plastics, composite materials and glass for various applications, including packaging, automotive, architectural, industrial, and consumer durables end-use markets. Our customers may choose materials other than aluminum to achieve desired attributes for their products. For example, customers in the automotive industry seeking to reduce vehicle weight may increase their use of high-strength steel and other materials rather than aluminum for certain applications.

We may not realize the anticipated benefits of acquisitions, divestitures, joint ventures or other strategic investments.

As part of our strategy for growth, we have in the past and may in the future pursue acquisitions, divestitures, joint ventures or other strategic investments, which may not be completed or, if completed, may not produce the benefits we anticipate. There are numerous risks commonly encountered in strategic transactions, including the risk that management's time and energy may be diverted, disrupting our existing businesses; risks associated with managing joint ownership structures with shared decision making authority; difficulty retaining key employees of an acquired business; difficulties due to limited prior experience in any new markets we may enter; risks that we may not be able to complete a transaction that has been announced, effectively integrate businesses acquired or generate benefits we anticipated.

The United States Environmental Protection Agency announced, in April 2018, completion of its midterm evaluation process for greenhouse gas emission standards and its determination that the standards should be rolled back. A reduction in fuel efficiency standards could impact our customers' choice of aluminum to achieve vehicle light weighting objectives to meet fuel economy standards. In addition, although certain automotive companies have increased their use of aluminum in recent years, there is no assurance that our automotive customers will not turn to steel or other materials in the future, due to the price of aluminum or other factors.

Operational Risks

If we are unable to obtain sufficient quantities of primary aluminum, recycled aluminum, sheet ingot and other raw materials used in the production of our products, our ability to produce and deliver products or to manufacture products using the desired mix of metal inputs could be adversely affected.

The supply risks relating to our metal inputs vary by input type. For example, we produce sheet ingot internally and source the remainder of our requirements from multiple third parties in various jurisdictions, usually under contracts having a duration of at least one year. If our suppliers are unable to deliver sufficient quantities of aluminum on a timely basis, our production could be disrupted and our net sales, profitability and cash flows could be adversely affected. Although aluminum is traded on the world markets, developing alternative suppliers of sheet ingot could be time consuming and expensive.

Our operations consume energy and our profitability and cash flows may decline if energy costs were to rise, or if our energy supplies were interrupted.

We consume substantial amounts of energy in our rolling and casting operations. The factors affecting our energy costs and supply reliability tend to be specific to each of our facilities. A number of factors could materially affect our energy position adversely including:

- increases in costs of natural gas;
- increases in costs of supplied electricity;
- increases in fuel oil related to transportation;
- interruptions in energy supply due to equipment failure or other causes; and
- the inability to extend energy supply contracts upon expiration on economical terms.

If energy costs were to rise, or if energy supplies or supply arrangements were disrupted, our profitability and cash flows could decline.

A majority of our facilities are staffed by a unionized workforce, and union disputes and other employee relations issues could materially adversely affect our financial results.

A substantial portion of our employees are represented by labor unions under collective bargaining agreements with varying durations and expiration dates. We may not be able to satisfactorily renegotiate our collective bargaining agreements when they expire. In addition, existing collective bargaining agreements may not prevent a strike or work stoppage at our facilities in the future.

Loss of our key management and other personnel, or an inability to attract and retain such management and other personnel, could adversely impact our business.

We employ all of our senior executive officers and other highly-skilled key employees on an at-will basis, and their employment can be terminated by us or them at any time, for any reason and without notice, subject, in certain cases, to severance payment obligations. Competition for qualified employees among companies that rely heavily on engineering and technology is intense, and if our highly skilled key employees leave us, we may be unable to promptly attract and retain qualified replacement personnel, which could result in our inability to improve manufacturing operations, conduct research activities successfully, develop marketable products and compete effectively for growth in key markets.

We could be adversely affected by unplanned disruptions at our operating facilities.

We have in recent periods experienced production interruptions at our plants due to the breakdown of equipment, fires, weather events and other causes. We may experience such disruptions in the future due to similar uncontrollable events. Because many of our customers are, to varying degrees, dependent on planned deliveries from our plants, any customers that have to reschedule their own production due to our missed deliveries could pursue claims against us and reduce their future business with us. We may incur costs to correct any of these problems, in addition to facing claims from customers. Further, our reputation among actual and potential customers may be harmed, resulting in loss of business. While we maintain insurance policies covering, among other things, physical damage, business interruptions and product liability, these policies may not cover all of our losses.

Our business has been and will continue to be exposed to various economic and political risks associated with our global operations.

Due to the global reach of our business, we are subject to financial, political, economic and other business risks in connection with doing business abroad. Operating in different regions and countries exposes us to a number of risks, including political and economic instability that may disrupt economic activity; changes in international trade regulation, including duties and tariffs; and differences in labor conditions.

Our financial condition and results of operations depend significantly on worldwide economic conditions. During the past fiscal year, economic conditions strengthened in all of the geographic regions in which we operate. However, future adverse developments in the US and global economy, including higher interest rates and higher levels of unemployment, could adversely affect demand in the end-use markets we serve. In addition, uncertainty about current or future global economic conditions poses a risk because our customers may postpone purchases in response to negative financial news and tighter credit.

We face risks relating to certain joint ventures, subsidiaries and assets that we do not entirely control.

Some of our activities are, and will in the future be, conducted through entities that we do not entirely control or wholly-own. These entities include our Alunorf, Germany, Ulsan, Korea and Logan, Kentucky joint ventures and our Sierre, Switzerland facility. Under the governing documents of some of these businesses, we share decision making authority and operational control which may result in conflicts over management over these businesses. In addition, because we do not exercise control over the business practices of our joint venture partners, we could be subject to reputational damage or other consequences of improper conduct by our joint venture partners or their inability to fulfill their obligations under the joint venture.

Security breaches and other disruptions to our information technology networks and systems could interfere with our operations, and could compromise the confidentiality of our proprietary information.

We rely upon information technology networks and systems, some of which are managed by third parties, to process, transmit and store electronic information, and to manage or support a variety of business and manufacturing processes and activities. Additionally, we collect and store sensitive data, including intellectual property, proprietary business information, as well as personally identifiable information of our employees, in data centers and on information technology networks. These activities are subject to various laws and regulations in the United States and abroad regarding privacy and data security. These laws and regulations are evolving. For example, in April 2016, the European Union approved a new data protection regulation known as the General Data Protection Regulation, which is due to become effective in May 2018.

We have implemented systems and processes, and we continue to invest in solutions, intended to secure our information technology systems, prevent unauthorized access to or loss of sensitive data, ensure business continuity and comply with applicable laws. Despite these measures, our information technology networks and systems may be vulnerable to damage, disruptions or shutdowns due to attacks by hackers or breaches due to errors or malfeasance by employees, contractors and others who have access to our networks and systems, or other disruptions during the process of upgrading or replacing computer software or hardware, power outages, computer viruses, telecommunication or utility failures or natural disasters or other catastrophic events. The occurrence of any of these events could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability or regulatory penalties under laws protecting the privacy of personal information, disrupt operations and reduce the competitive advantage we hope to derive from our investment in new or proprietary business initiatives.

Financial Risks

Our results and short term liquidity can be negatively impacted by timing differences between the prices we pay under purchase contracts and metal prices we charge our customers.

Our purchase and sales contracts for primary aluminum are based on the LME price plus a regional market premium, which is a surcharge in addition to the LME price. There are typically timing differences between the pricing periods for purchases and sales where purchase prices we pay tend to be fixed and paid earlier than sales prices we charge our customers. This creates a price exposure we call "metal price lag." We use derivative instruments to manage the timing differences related to LME associated with metal price lag. The majority of our premium exposure hedging occurs in North America, however, exposure here is not fully hedged. In our Europe and Asia regions, the derivative market for local market premiums is not robust or efficient enough for us to offset the impacts of LMP price movements beyond a small volume. The

timing difference associated with metal price lag could positively or negatively impact our operating results and short term liquidity position.

A deterioration of our financial condition or a downgrade of our ratings by a credit rating agency could limit our ability or increase our costs to enter into hedging and financing transactions, and our business relationships and financial condition could be adversely affected.

A deterioration of our financial condition or a downgrade of our credit ratings for any reason could increase our borrowing costs, limit our access to the capital or credit markets or liquidity facilities, adversely affect our ability to obtain new financing on favorable terms or at all, result in more restrictive covenants for future indebtedness incurrences and have an adverse effect on our business relationships with customers, suppliers and hedging counterparties. We enter into various forms of hedging activities against currency, interest rate, energy and metal price fluctuations. Financial strength and credit ratings are important to the availability and terms of these hedging activities. As a result, any deterioration of our financial condition or downgrade of our credit ratings may make it more difficult or costly for us to engage in these activities in the future.

Adverse changes in currency exchange rates could negatively affect our financial results or cash flows and the competitiveness of our aluminum rolled products relative to other materials.

We are exposed to the effects of changes in the exchange rates of the U.S. dollar, the Euro, the British pound, the Brazilian real, the Korean won, the Swiss franc and other currencies. We have implemented a hedging policy that attempts to manage currency exchange rate risks to an acceptable level based on management's judgment of the appropriate trade-off between risk, opportunity and cost; however, this hedging policy may not successfully or completely eliminate the effects of currency exchange rate fluctuations which could have a material adverse effect on our financial results and cash flows.

We prepare our consolidated financial statements in U.S. dollars, but a portion of our earnings and expenditures are denominated in other currencies, primarily the Euro, the Korean won and the Brazilian real. Changes in exchange rates will result in increases or decreases in our operating results and may also affect the book value of our assets located outside the U.S.

Our results of operations, cash flows and liquidity could be adversely affected if we were unable to transact in derivative instruments or if counterparties to our derivative instruments fail to honor their agreements.

We use various derivative instruments to manage the risks arising from fluctuations in aluminum prices, exchange rates, energy prices and interest rates. If for any reason we were unable to transact in derivative instruments to manage these risks, our results of operations, cash flows and liquidity could be adversely affected. In addition, we may be exposed to losses in the future if the counterparties to our derivative instruments fail to honor their agreements. In particular, deterioration in the financial condition of our counterparties and any resulting failure to pay amounts owed to us or to perform on obligations or services owed to us could have a negative effect on our business and financial condition. Further, if major financial institutions consolidate and are forced to operate under more restrictive capital constraints and regulations, there could be less liquidity in the derivative markets, which could have a negative effect on our ability to hedge and transact with creditworthy counterparties.

We could be required to make unexpected contributions to our defined benefit pension plans as a result of adverse changes in interest rates and the capital markets.

Most of our pension obligations relate to funded defined benefit pension plans for our employees in the U.S., the U.K. Switzerland, and Canada, unfunded pension benefits in Germany and lump sum indemnities payable to our employees in France, Italy and Korea upon retirement or termination. Our pension plan assets consist primarily of funds invested in listed stocks and bonds. Our estimates of liabilities and expenses for pensions and other postretirement benefits incorporate a number of assumptions, including expected long-term rates of return on plan assets and interest rates used to discount future benefits. Our results of operations, liquidity or shareholder's (deficit) equity in a particular period could be adversely affected by capital market returns that are less than their assumed long-term rate of return or a decline of the rate used to discount future benefits. These factors or others may require us to make unexpected cash contributions to the pension plans in the future, preventing the use of such cash for other purposes.

Our goodwill, other intangible assets and other long-lived assets could become impaired, which could require us to take non-cash charges against earnings.

We assess, at least annually and potentially more frequently, whether the value of our goodwill has been impaired. We assess the recoverability of finite-lived other intangible assets and other long-lived assets whenever events or changes in circumstances indicate we may not be able to recover the asset's carrying amount. Any impairment of goodwill, other intangible assets, or long-lived assets as a result of such analysis would result in a non-cash charge against earnings, which could materially adversely affect our reported results of operations. A significant and sustained decline in our future cash flows, a significant adverse change in the economic environment or slower growth rates could result in the need to perform additional impairment analysis in future periods.

Additional tax expense, tax liabilities or tax compliance costs could adversely impact our profitability.

We are subject to income taxation in many jurisdictions. Judgment is required in determining our worldwide income tax provision and accordingly there are many transactions and computations for which our final income tax determination is uncertain. We are routinely audited by income tax authorities in many tax jurisdictions. Although we believe the recorded tax estimates are reasonable, the ultimate outcome from any audit (or related litigation) could be materially different from amounts reflected in our income tax provisions and accruals. Future settlements of income tax audits may have a material effect on earnings between the period of initial recognition of tax estimates in the financial statements and the point of ultimate tax audit settlement. Additionally, it is possible that future income tax legislation in any jurisdiction to which we are subject may be enacted that could have a material impact on our worldwide income tax provision beginning with the period that such legislation becomes effective. For example, the U.S. Tax Cuts and Jobs Act of 2017, which was enacted in the United States on December 22, 2017, reduces the U.S. corporate statutory tax rate, eliminates or limits tax deductions for several expenses that previously were deductible, imposes a mandatory deemed repatriation tax on undistributed historic earnings of foreign subsidiaries, requires a minimum tax on earnings generated by foreign subsidiaries and permits a tax-free repatriation of foreign earnings through a dividends received deduction. We performed a preliminary assessment of the impact of the new regulation on Novelis, and as discussed further in the Management Discussion and Analysis and the Company's financial statement, we will continue to evaluate the overall impact of the Act on our effective tax rate and balance sheet in light of future regulations and interpretive guidance from tax authorities and our own additional analysis.

The covenants in our senior secured credit facilities and the indentures governing our Senior Notes impose operating and financial restrictions on us.

Our senior secured credit facilities and the indentures governing our Senior Notes impose certain operating and financial restrictions on us. These restrictions limit our ability and the ability of our restricted subsidiaries, among other things, to:

- incur additional debt and provide additional guarantees;
- pay dividends and make other restricted payments, including certain investments;
- create or permit certain liens;
- make certain asset sales;
- use the proceeds from the sales of assets and subsidiary stock;
- create or permit restrictions on the ability of our restricted subsidiaries to pay dividends or make other distributions to us;
- engage in certain transactions with affiliates;
- enter into sale and leaseback transactions; and
- consolidate, merge or transfer all or substantially all of our assets or the assets of our restricted subsidiaries.

See Note 10 — Debt for additional discussion.

Other Legal and Regulatory Risks

Our global operations are subject to changes in laws and government regulations that may adversely affect our business and operations.

Compliance with U.S. and foreign laws and regulations, such as import and export requirements, embargoes and trade sanctions laws, anti-corruption laws, tax laws, foreign exchange controls and cash repatriation restrictions and data privacy regulations, increases our costs of doing business outside the U.S.

Global uncertainty about the direction of U.S. trade policy and the rising threat of changes in tariffs and trade barriers

in countries where we do business could cause our customers to delay or reduce spending on our products. In March 2018, the U.S. government formalized new tariffs on imported aluminum and steel following an investigation conducted by the U.S. Department of Commerce under Section 232 of the Trade Expansion Act of 1962. Higher costs of aluminum to US industries resulting from the tariffs may increase costs to our customers and could result in reduced demand in the end-use markets we serve, including automotive and beverage cans. Also, other countries may retaliate against the US by imposing tariffs on American exports which could reduce demand for our customers' products outside the U.S. The current U.S. administration has also indicated its intention to withdraw from or substantially modify various international trade agreements, including the North American Free Trade Agreement. Depending on the nature of these changes, our business could be adversely impacted.

On April 6, 2018, United Company Rusal Plc (Rusal) and multiple other Russian entities and individuals were added to the list of Specially Designated Nationals and Blocked Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury. According to U.S. government estimates, Rusal is responsible for seven percent of global aluminum production. Immediately prior to imposition of the sanctions, Novelis purchased Rusal-produced metal for some of its regional operations primarily through intermediaries and intermittently from Rusal directly on a spot-sale basis. In response to the sanctions, Novelis is seeking alternate sources of supply to eliminate its reliance on aluminum produced by Rusal following the imposition of sanctions. The impact of sanctions against Rusal has broad implications for the global aluminum market, including tighter supplies and increased prices. As a result of these market changes, Novelis may experience production disruptions for some of its customers. Although we expect these impacts to be limited, we cannot predict with certainty the severity or duration of supply disruptions resulting from the Russia sanctions.

We are subject to a broad range of environmental, health and safety laws and regulations, and we may be exposed to substantial environmental, health and safety costs and liabilities.

We are subject to a broad range of environmental, health and safety laws and regulations in the jurisdictions in which we operate. These laws and regulations impose stringent environmental, health and safety protection standards and permitting requirements regarding, among other things, air emissions, wastewater storage, treatment and discharges, the use and handling of hazardous or toxic materials, waste disposal practices, the remediation of environmental contamination, post-mining reclamation and working conditions for our employees. The costs of complying with these laws and regulations, including participation in assessments and remediation of contaminated sites and installation of pollution control facilities, have been, and in the future could be, significant. In addition, these laws and regulations may also result in substantial environmental liabilities associated with divested assets, third party locations and past activities.

Further, increased concern over climate change has led to new and proposed legislative and regulatory initiatives, such as cap- and-trade systems and additional limits on emissions of greenhouse gases. Additional new regulation could directly and indirectly affect our customers and suppliers (through an increase in the cost of production or their ability to produce satisfactory products) or our business (through an impact on our inventory availability, cost of sales, operations or demand for the products we sell). Any increased costs of these energy sources because of new laws could be passed along to us and our customers and suppliers, which could also have a negative impact on our profitability.

We may be exposed to significant legal proceedings or investigations.

From time to time, we are involved in, or the subject of, disputes, proceedings and investigations with respect to a variety of matters, including environmental, health and safety, product liability, employee, tax, personal injury, contractual and other matters as well as other disputes and proceedings that arise in the ordinary course of business. Any claims against us or any investigations involving us, whether meritorious or not, could be costly to defend or comply with and could divert management's attention as well as operational resources. Any such dispute, litigation or investigation, whether currently pending or threatened in the future, may have a material adverse effect on our financial results and cash flows. We generally maintain insurance against many product liability risks, but there can be no assurance that this coverage will be adequate for any liabilities ultimately incurred. In addition, there is no assurance that insurance will continue to be available on terms acceptable to us.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our global headquarters are located in Atlanta, Georgia. Our global research and technology center is located in Kennesaw, Georgia, which contains state-of-the-art research and development capabilities to help us better partner and innovate with our customers. Our global casting engineering and technology center is located in Spokane, Washington. Our regional headquarters are located in the following cities: North America - Atlanta, Georgia; Europe - Künsnacht, Switzerland; Asia - Seoul, South Korea; and South America - Sao Paulo, Brazil. We also have a research facility in Spokane, Washington specializing in molten metal processing.

The total number of operating facilities within our operating segments during all or part of the year ended March 31, 2018 is shown in the table below, including operating facilities we jointly own and operate with third parties.

	Total Operating Facilities	Facilities with Recycling Operations
North America	8	3
Europe	10	4
Asia	4	3
South America	2	1
Total	24	11

The following tables provide information, by operating segment, about the plant locations, processes and major end-use markets/applications for the aluminum rolled products, recycling and primary metal facilities we operated during all or part of the year ended March 31, 2018.

North America

<u>Locations</u>	<u>Plant Processes</u>	<u>Major Products</u>
Berea, Kentucky	Recycling, sheet ingot casting	Sheet ingot from recycled metal
Fairmont, West Virginia	Cold rolling, finishing	Container, HVAC and auto fin material
Greensboro, Georgia	Recycling, sheet ingot casting	Sheet ingot from recycled metal
Kingston, Ontario	Cold rolling, finishing	Automotive sheet, construction sheet, industrial sheet
Russellville, Kentucky (A)	Hot rolling, cold rolling, finishing, casting	Can stock, industrial sheet
Oswego, New York	Sheet ingot casting, hot rolling, cold rolling, recycling, brazing, finishing, heat treatment	Can stock, automotive sheet, construction sheet, industrial sheet, semi-finished coil
Terre Haute, Indiana	Cold rolling, finishing	Container and industrial material
Warren, Ohio	Coating	Can stock coating

(A) Our Logan facility, located in Russellville, KY, is a processing joint venture between us and Tri-Arrows Aluminum Inc. (Tri-Arrows). We own 40% of the outstanding common shares of Logan.

Europe

<u>Locations</u>	<u>Plant Processes</u>	<u>Major Products</u>
Bresso, Italy	Finishing, painting	Painted sheet, construction sheet
Göttingen, Germany	Cold rolling, finishing, painting	Can stock, food can, painted sheet
Latchford, United Kingdom	Recycling	Sheet ingot from recycled metal
Ludenscheid, Germany	Foil rolling, finishing, converting	Foil, packaging
Nachterstedt, Germany	Cold rolling, finishing, painting, recycling, heat treatment	Automotive sheet, can stock, industrial sheet, painted sheet, construction sheet, sheet ingot
Neuss, Germany (A)	Hot rolling, cold rolling, recycling	Can stock, foilstock, feeder stock for finishing operations
Ohle, Germany	Cold rolling, finishing, converting	Foil, packaging
Pieve, Italy	Continuous casting, cold rolling, finishing, recycling	Coil for finishing operations, industrial sheet
Sierre, Switzerland (B)	Sheet ingot casting, hot rolling, cold rolling, finishing	Automotive sheet, industrial sheet
Crick, United Kingdom	Finishing	Automotive sheet

(A) Aluminium Norf GmbH (Alunorf), located in Neuss, Germany, is operated as a 50/50 joint venture between us and Hydro Aluminium Deutschland GmbH (Hydro). This joint venture is known as "Alunorf". Together, with Hydro, we operate Alunorf as a production cooperative, with each party supplying its own primary metal inputs for transformation at the facility. See Note 8 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further information about this affiliate.

(B) In fiscal year ended March 31, 2018, Novelis agreed to acquire operating facilities and manufacturing assets at its Sierre, Switzerland plant that have historically been leased. A service company will be jointly owned and operated by the parties and Novelis will acquire from Constellium N.V. (Constellium) a 50% interest in the service company.

Asia

<u>Locations</u>	<u>Plant Processes</u>	<u>Major Products</u>
Binh Doung, Vietnam (A)	Recycling	Recycled material
Changzhou, China	Heat treatment	Automotive sheet
Ulsan, South Korea (B)	Sheet ingot casting, hot rolling, cold rolling, recycling, finishing	Can stock, construction sheet, industrial sheet, electronics, automotive sheet for finishing operations, foilstock, and recycled material
Yeongju, South Korea	Sheet ingot casting, hot rolling, cold rolling, recycling, finishing	Can stock, construction sheet, industrial sheet, electronics, foilstock and recycled material

(A) We ceased operations at our Binh Doung plant in fiscal 2018.

(B) Operated as a joint venture between Novelis Korea Ltd. (Novelis Korea) and Kobe Steel Ltd. (Kobe) in which interests are shared 50.1% and 49.9%, respectively. Ulsan Aluminum, Ltd. (UAL) is the name of the joint venture that was created. See Note 8 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further information about this affiliate.

South America

<u>Locations</u>	<u>Plant Processes</u>	<u>Major Products</u>
Pindamonhangaba, Brazil	Sheet ingot casting, hot rolling, cold rolling, recycling, finishing, coating	Can stock, construction sheet, industrial sheet, foilstock, sheet ingot
Santo Andre, Brazil	Foil rolling, finishing	Foil

Item 3. Legal Proceedings

We are a party to litigation incidental to our business from time to time. For additional information regarding litigation to which we are a party, see Note 19 — Commitments and Contingencies to our accompanying audited consolidated financial statements, which are incorporated by reference into this item.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

There is no established public trading market for the Company's common stock. All of the common shares of Novelis are owned directly by AV Metals Inc. and indirectly by Hindalco Industries Limited. None of the equity securities of the Company are authorized for issuance under any equity compensation plan.

Dividends or returns of capital are at the discretion of the board of directors and will depend on, among other things, our financial resources, cash flows generated by our business, our cash requirements, restrictions under and covenant compliance under the instruments governing our indebtedness, being in compliance with the appropriate indentures and covenants under the instruments that govern our indebtedness that would allow us to legally pay dividends or return capital and other relevant factors.

Item 6. Selected Financial Data

The selected consolidated financial data should be read in conjunction with our consolidated financial statements for the respective periods and the related notes included elsewhere in this Form 10-K.

All of our common shares were indirectly held by Hindalco; thus, earnings per share data are not reported. Amounts in the tables below are in millions.

	March 31,				
	2018	2017	2016	2015	2014
Net sales	\$ 11,462	\$ 9,591	\$ 9,872	\$ 11,147	\$ 9,767
Net income (loss) attributable to our common shareholder	\$ 635	\$ 45	\$ (38)	\$ 148	\$ 104
Return of capital (A)	\$ —	\$ —	\$ —	\$ —	\$ 250

	March 31,				
	2018	2017	2016	2015	2014
Total assets (B)	\$ 9,503	\$ 8,373	\$ 8,280	\$ 9,102	\$ 9,114
Long-term debt (including current portion)	\$ 4,457	\$ 4,558	\$ 4,468	\$ 4,457	\$ 4,451
Short-term borrowings	\$ 49	\$ 294	\$ 579	\$ 846	\$ 723
Cash and cash equivalents	\$ 920	\$ 594	\$ 556	\$ 628	\$ 509
Total equity (deficit)	\$ 823	\$ (77)	\$ (59)	\$ (70)	\$ 268

(A) In March 2014, we declared a return of capital to our shareholder in the amount of \$250 million, which we subsequently paid on April 30, 2014.

(B) Refer to Note 1 — Business and Summary of Significant Accounting Policies for further information in regards to revisions made to the years ended March 31, 2017 and 2016 consolidated balance sheet, consolidated statement of cash flows and footnote disclosures.

OVERVIEW AND REFERENCES

Novelis is the world's leading aluminum rolled products producer based on shipment volume in fiscal 2018. We produce aluminum sheet and light gauge products for use in the packaging market, which includes beverage and food can and foil products, as well as for use in the automotive, transportation, electronics, architectural and industrial product markets. We are also the world's largest recycler of aluminum and have recycling operations in many of our plants to recycle both post-consumer aluminum and post-industrial aluminum. As of March 31, 2018, we had manufacturing operations in ten countries on four continents, which include 24 operating plants, and recycling operations in eleven of these plants.

The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those discussed below and elsewhere in this Annual Report, particularly in "Special Note Regarding Forward-Looking Statements and Market Data" and "Risk Factors."

HIGHLIGHTS

We reported "Net income attributable to our common shareholder" of \$635 million for the fiscal year ended March 31, 2018, compared to \$45 million for the fiscal year ended March 31, 2017. The increase is primarily due to higher segment income as a result of the factors discussed below, and a pre-tax gain of \$318 million, partially offset by tax expense of \$77 million, related to the sale of shares in Ulsan Aluminum Ltd. (UAL), a new wholly owned subsidiary formed by Novelis Korea in the second quarter of year ended March 31, 2018,

We reported "Segment income" of \$1,215 million compared to \$1,085 million in the prior year. The increase is primarily due to; higher can and automotive shipments as a result of strong demand and solid global operational performance, diligent operating cost management, a continued focus on asset efficiency and prioritizing optimization of the product portfolio. In addition, the increase is due to favorable foreign currency impact and lower metal input costs. As a result of these factors, net cash provided by operating activities was \$586 million and free cash flow was \$406 million.

We have reduced our net debt leverage ratio (net debt/segment income) to 3.0x at March 31, 2018 as compared to 3.9x in the prior year. This reduction in net leverage combined with strong financial results has provided us with the financial flexibility to seek strategic investments, particularly in the growing automotive segment. During the fourth quarter of fiscal 2018, we announced plans to expand our production footprint in North America with an investment in automotive finishing capacity in Guthrie, Kentucky. We also agreed to acquire operating facilities and manufacturing assets at our Sierre, Switzerland plant, that have historically been leased.

BUSINESS AND INDUSTRY CLIMATE

Economic growth and material substitution continue to drive increasing global demand for aluminum and rolled products. Global can sheet overcapacity, increased competition from Chinese suppliers of flat rolled aluminum products, and customer consolidation are also adding downward pricing pressures in the can sheet market.

Meanwhile, the demand for aluminum in the automotive industry continues to grow, which drove the investments we made in our automotive sheet finishing capacity in North America, Europe and Asia. This demand has been primarily driven by the benefits that result from using lighter weight materials in the vehicles, as companies respond to government regulations, which are driving improved emissions and better fuel economy; while also maintaining or improving vehicle safety and performance.

Key Sales and Shipment Trends

(in millions, except shipments which are in kt)

	Three Months Ended				Year Ended	Three Months Ended				Year Ended
	Jun 30, 2016	Sept 30, 2016	Dec 31, 2016	Mar 31, 2017	Mar 31, 2017	Jun 30, 2017	Sept 30, 2017	Dec 31, 2017	Mar 31, 2018	Mar 31, 2018
Net sales	\$ 2,296	\$ 2,361	\$ 2,313	\$ 2,621	\$ 9,591	\$ 2,669	\$ 2,794	\$ 2,933	\$ 3,066	\$ 11,462
Percentage increase (decrease) in net sales versus comparable previous year period	(13)%	(5)%	(2)%	9%	(3)%	16%	18%	27%	17%	20%
Rolled product shipments:										
North America	242	252	247	269	1,010	273	274	269	273	1,089
Europe	246	236	226	235	943	235	237	222	236	930
Asia	178	176	162	174	690	180	180	177	174	711
South America	103	121	125	125	474	110	131	146	136	523
Eliminations	(14)	(12)	(10)	(14)	(50)	(13)	(20)	(18)	(14)	(65)
Total	755	773	750	789	3,067	785	802	796	805	3,188

The following summarizes the percentage increase (decrease) in rolled product shipments versus the comparable previous year period:

North America	(7)%	(6)%	(2)%	8%	(2)%	13%	9%	9%	1%	8%
Europe	(2)%	(6)%	(3)%	(4)%	(4)%	(4)%	—%	(2)%	—%	(1)%
Asia	(8)%	(6)%	(16)%	(7)%	(9)%	1%	2%	9%	—%	3%
South America	(4)%	3%	(5)%	(7)%	(3)%	7%	8%	17%	9%	10%
Total	(2)%	(2)%	(4)%	—%	(2)%	4%	4%	6%	2%	4%

Business Model and Key Concepts

Conversion Business Model

A significant amount of our business is conducted under a conversion model, which allows us to pass through increases or decreases in the price of aluminum to our customers. Nearly all of our flat-rolled products have a price structure with three components: (i) a base aluminum price quoted off the LME; (ii) a local market premium; and (iii) a "conversion premium" to produce the rolled product which reflects, among other factors, the competitive market conditions for that product. Base aluminum prices are typically driven by macroeconomic factors and global supply and demand for aluminum. The local market premiums tend to vary based on the supply and demand for metal in a particular region and associated transportation costs.

In North America, Europe and South America, we pass through local market premiums to our customers which are recorded through "Net sales." In Asia we purchase our metal inputs based on the LME and incur a local market premium; however, many of our competitors in this region price their metal off the Shanghai Futures Exchange, which does not include a local market premium, making it difficult for us to fully pass through this component of our metal input cost to some of our customers.

LME Base Aluminum Prices and Local Market Premiums

The average (based on the simple average of the monthly averages) and closing prices for aluminum set on the LME for the years ended March 31, 2018, 2017, and 2016 are as follows:

	Year Ended March 31,			Percent Change	
				Year Ended	Year Ended
	2018	2017	2016	March 31, 2018 versus March 31, 2017	March 31, 2017 versus March 31, 2016
London Metal Exchange Prices					
Aluminum (per metric tonne, and presented in U.S. dollars):					
Closing cash price as of beginning of period	\$ 1,947	\$ 1,492	\$ 1,789	30%	(17)%
Average cash price during period	\$ 2,045	\$ 1,688	\$ 1,592	21%	6 %
Closing cash price as of end of period	\$ 1,997	\$ 1,947	\$ 1,492	3%	30 %

For the year ended March 31, 2018, there has been less volatility in local market premium price movements. Although there have been significant percentage changes year over year, the decreased volatility did not have a significant impact on metal price lag. The weighted average local market premium was as follows:

	Year Ended March 31,			Percent Change	
				Year Ended	Year Ended
	2018	2017	2016	March 31, 2018 versus March 31, 2017	March 31, 2017 versus March 31, 2016
Weighted average local market premium (per metric tonne, and presented in U.S. dollars)	\$ 192	\$ 151	\$ 194	27%	(22)%

Metal Price Lag and Related Hedging Activities

Increases or decreases in the price of aluminum based on the average LME base aluminum prices and local market premiums directly impact “Net sales,” “Cost of goods sold (exclusive of depreciation and amortization)” and working capital. The timing of these impacts varies based on contractual arrangements with customers and metal suppliers in each region. These timing impacts are referred to as metal price lag. Metal price lag exists due to: (i) the period of time between the pricing of our purchases of metal, holding and processing the metal, and the pricing of the sale of finished inventory to our customers, and (ii) certain customer contracts containing fixed forward price commitments which result in exposure to changes in metal prices for the period of time between when our sales price fixes and the sale actually occurs.

We use LME aluminum forward contracts to preserve our conversion margins and manage the timing differences associated with the LME base metal component of “Net sales,” and “Cost of goods sold (exclusive of depreciation and amortization).” These derivatives directly hedge the economic risk of future LME base metal price fluctuations to better match the purchase price of metal with the sales price of metal. The majority of our local market premium hedging occurs in North America; however, exposure here is not fully hedged. In our Europe and Asia regions, the derivative market for local market premiums is not robust or efficient enough for us to offset the impacts of LMP price movements beyond a small volume. As a consequence, volatility in local market premiums can have a significant impact on our results of operations and cash flows.

We elect to apply hedge accounting to better match the recognition of gains or losses on certain derivative instruments with the recognition of the underlying exposure being hedged in the statement of operations. For undesignated metal derivatives, there are timing differences between the recognition of unrealized gains or losses on the derivatives and the recognition of the underlying exposure in the statement of operations. The recognition of unrealized gains and losses on undesignated metal derivative positions typically precedes inventory cost recognition, customer delivery and revenue recognition. The timing difference between the recognition of unrealized gains and losses on undesignated metal derivatives and cost or revenue recognition impacts “Income before income taxes” and “Net income.” Gains and losses on metal derivative contracts are not recognized in “Segment income” until realized.

See *Segment Review* below for the impact of metal price lag on each of our segments.

Foreign Currency and Related Hedging Activities

We operate a global business and conduct business in various currencies around the world. We have exposure to foreign currency risk as fluctuations in foreign exchange rates impact our operating results as we translate the operating results from various functional currencies into our U.S. dollar reporting currency at the current average rates. We also record foreign exchange remeasurement gains and losses when business transactions are denominated in currencies other than the functional currency of that operation. Global economic uncertainty is contributing to higher levels of volatility among the currency pairs in which we conduct business. The following table presents the exchange rates as of the end of each period and the average of the month-end exchange rates for the years ended March 31, 2018, 2017, and 2016:

	Exchange Rate as of Year Ended March 31,			Average Exchange Rate Year Ended March 31,		
	2018	2017	2016	2018	2017	2016
U.S. dollar per Euro	1.230	1.068	1.139	1.180	1.098	1.102
Brazilian real per U.S. dollar	3.324	3.168	3.559	3.231	3.290	3.624
South Korean won per U.S. dollar	1,067	1,116	1,154	1,106	1,148	1,158
Canadian dollar per U.S. dollar	1.289	1.329	1.298	1.283	1.314	1.312
Swiss franc per Euro	1.178	1.069	1.094	1.139	1.084	1.076

Exchange rate movements have an impact on our operating results. In Europe, where we have predominantly local currency selling prices and operating costs, we benefit as the Euro strengthens, but are adversely affected as the Euro weakens. In South Korea, where we have local currency operating costs and U.S. dollar denominated selling prices for exports, we benefit as the won weakens but are adversely affected as the won strengthens. In Brazil, where we have predominately U.S. dollar selling prices and local currency manufacturing costs, we benefit as the real weakens, but are adversely affected as the real strengthens.

We use foreign exchange forward contracts and cross-currency swaps to manage our exposure arising from recorded assets and liabilities, firm commitments, and forecasted cash flows denominated in currencies other than the functional currency of certain operations, which include capital expenditures and net investment in foreign subsidiaries. The impact of foreign exchange remeasurement, net of related hedges, was a net loss of \$1 million in fiscal 2018, a net gain of \$5 million in fiscal 2017, and a net gain of \$2 million in fiscal 2016. The movement of currency exchange rates during fiscal 2018, fiscal 2017 and fiscal 2016 resulted in \$4 million of net unrealized losses, \$8 million of net unrealized gains, and \$8 million of net unrealized losses, respectively, on undesignated foreign currency derivatives.

See *Segment Review* below for the impact of foreign currency on each of our segments.

Results of Operations

Year Ended March 31, 2018 Compared with the Year Ended March 31, 2017

"Net Sales" were \$11,462 million, an increase of 20%, driven by a 30% increase in average base aluminum prices, a 4% increase in flat rolled product shipments, and a 27% increase in local market premiums.

"Cost of goods sold (exclusive of depreciation and amortization)" was \$9,719 million, an increase of 21%, primarily due to an increase in flat rolled product shipments and higher average aluminum prices. Total metal input costs included in "Cost of goods sold (exclusive of depreciation and amortization)" increased \$1,521 million.

"Income before income taxes" for the year ended March 31, 2018 was \$855 million, compared to \$197 million for the year ended March 31, 2017. In addition to the factors noted above, the following items affected "Income before income taxes:"

- An increase in "Selling, general and administrative expenses" of \$68 million primarily related to an increase in the fair value of Long Term Incentive Plan (LTIP) awards, increases in factoring expense and professional fees;
- A decline in interest expense of \$39 million due to the refinancing of the 2017 Notes, 2020 Notes and Term Loan at lower interest rates;
- "Loss on extinguishment of debt" in the prior year of \$134 million related to the extinguishment of the 2017 Notes, 2020 Notes and Term Loan;
- A gain on sale of a business of \$318 million, related to the sale of shares of UAL to Kobe and the deconsolidation of the remaining assets to form the equity method investment in September 2017. This gain was compared to a loss of \$27 million in the prior fiscal year, which was recognized on the sale of our interest in Aluminium Company of Malaysia Berhad (ALCOM);
- "Restructuring and impairment, net" of \$34 million primarily related to restructuring actions in Europe, compared to \$10 million of restructuring expenses in the prior fiscal year, related to severance and other charges across our regions; and
- Increased stability in the current year local market premiums, resulted in a \$4 million metal price lag gain, compared to a \$31 million metal price lag loss during the prior fiscal year.

We recognized \$233 million of tax expense for the year ended March 31, 2018, which resulted in an effective tax rate of 27%. This rate is due to a \$77 million expense on the sale of a business, tax losses in jurisdictions where we believe it more likely than not that we will not be able to utilize those losses and therefore have a valuation allowance recorded, offset by a non-cash income tax benefit of \$19 million for the remeasurement of deferred tax assets and liabilities in accordance with the Tax Cuts and Jobs Act. We recognized \$151 million of tax expense for the year ended March 31, 2017, primarily due to tax losses in jurisdictions where we believe it to be more likely than not that we will not be able to utilize those losses and therefore have a valuation allowance recorded and the net impact of foreign exchange translation and remeasurement of deferred income taxes, offset by dividends not subject to tax.

We reported "Net income attributable to our common shareholder" of \$635 million for the current year, compared to "Net loss attributable to our common shareholder" of \$45 million for the prior year, primarily as a result of the factors discussed above.

Segment Review

Due in part to the regional nature of supply and demand of aluminum rolled products and in order to best serve our customers, we manage our activities on the basis of geographical regions and are organized under four operating segments: North America, Europe, Asia and South America.

In order to reconcile the financial information for the segments shown in the tables below to the relevant U.S. GAAP-based measures, "Eliminations and other" adjust for proportional consolidation of each line item, and eliminate intersegment shipments (in kt) and intersegment "Net sales." The tables below show selected segment financial information (in millions, except shipments which are in kt).

Selected Operating Results Year Ended March 31, 2018	North America	Europe	Asia	South America	Eliminations and other	Total
Net sales	\$ 3,951	\$ 3,447	\$ 2,110	\$ 1,931	\$ 23	\$ 11,462
Shipments						
Rolled products - third party	1,083	914	696	495	—	3,188
Rolled products - intersegment	6	16	15	28	(65)	—
Total rolled products	1,089	930	711	523	(65)	3,188
Non-rolled products	1	8	8	130	(2)	145
Total shipments	1,090	938	719	653	(67)	3,333

Selected Operating Results Year Ended March 31, 2017	North America	Europe	Asia	South America	Eliminations and other	Total
Net sales	\$ 3,228	\$ 2,968	\$ 1,791	\$ 1,510	\$ 94	\$ 9,591
Shipments						
Rolled products - third party	1,009	927	682	449	—	3,067
Rolled products - intersegment	1	16	8	25	(50)	—
Total rolled products	1,010	943	690	474	(50)	3,067
Non-rolled products	4	8	9	88	—	109
Total shipments	1,014	951	699	562	(50)	3,176

The following table reconciles changes in “Segment income” for the year ended March 31, 2017 to the year ended March 31, 2018 (in millions).

Changes in Segment income	North America	Europe	Asia	South America	Eliminations (A)	Total
Segment income - Year Ended March 31, 2017 (B)	\$ 380	\$ 208	\$ 163	\$ 337	\$ (3)	\$ 1,085
Volume	84	(15)	24	59	(13)	139
Conversion premium and product mix	10	9	(22)	(45)	9	(39)
Conversion costs	22	6	9	24	4	65
Foreign exchange	1	25	1	(12)	—	15
Selling, general & administrative and research & development costs (C)	(28)	(12)	(2)	(25)	(5)	(72)
Other changes (D)	5	(2)	(6)	25	—	22
Segment income - Year Ended March 31, 2018	\$ 474	\$ 219	\$ 167	\$ 363	\$ (8)	\$ 1,215

- (A) The recognition of "Segment income" by a region on an intersegment shipment could occur in a period prior to the recognition of "Segment income" on a consolidated basis, depending on the timing of when the inventory is sold to the third party customer. The "Eliminations" column adjusts regional "Segment income" for intersegment shipments that occur in a period prior to recognition of "Segment income" on a consolidated basis. The "Eliminations" column also reflects adjustments for changes in regional volume, conversion premium and product mix, and conversion costs related to intersegment shipments for consolidation.
- (B) Effective in the first quarter of fiscal 2018, management removed the impact of metal price lag from "Segment income" in order to enhance the visibility of the underlying operating performance of the Company. This change does not impact our consolidated financial statements. Segment information for prior periods presented has been updated to reflect this change.
- (C) Selling, general & administrative costs and research & development costs include costs incurred directly by each segment and all corporate related costs.
- (D) This line includes items such as State of Espirito Santo grants an indirect tax incentive (ICMS) for companies who fulfill certain requirements. According to this incentive, the Company can recognize a presumed ICMS credit, thus reducing the amounts due to the State. The mentioned incentive is recorded in our consolidated results of operations.

North America

“Net sales” increased \$723 million, or 22%, primarily due to higher average aluminum prices and higher can and automotive shipments.

“Segment income” was \$474 million, an increase of 25%, primarily due to favorable operating and metal costs as well as higher automotive and can volumes, higher pricing and favorable product mix as a result of automotive growth. These positive factors were partially offset by unfavorable selling, general and administrative costs.

Europe

“Net sales” increased \$479 million, or 16%, primarily due to higher average aluminum prices and higher automotive shipments; partially offset by lower can and specialty shipments.

“Segment income” was \$219 million, an increase of 5%, primarily due to favorable product mix as a result of our portfolio optimization efforts, favorable currency impact, higher automotive volumes and favorable cost absorption. These positive factors were partially offset by lower can and specialties volumes, and higher selling, general and administrative costs.

Asia

“Net sales” increased \$319 million, or 18%, due to higher average aluminum prices and higher can and automotive shipments; partially offset by lower specialty shipments.

“Segment income” was \$167 million, a increase of 2%, primarily due to higher automotive and can shipments and favorable operating and metal costs, partially offset by lower can pricing and product mix.

South America

“Net sales” increased \$421 million, or 28%, due to higher average aluminum prices and higher specialties and can shipments.

“Segment income” was \$363 million, an increase of 8%, primarily due to higher can and specialties volumes and favorable operating and metal costs. These positive factors were partially offset by unfavorable price and product mix and higher selling, general and administrative costs.

Reconciliation of "Net income attributable to our common shareholder" to segment income

Costs such as depreciation and amortization, interest expense and unrealized (gains) losses on changes in the fair value of derivatives (except for derivatives used to manage our foreign currency remeasurement activities) are not utilized by our chief operating decision maker in evaluating segment performance. The table below reconciles "Net income attributable to our common shareholder" to income from reportable segments for the year ended March 31, 2018 and 2017 (in millions).

	Year Ended March 31,	
	2018	2017
Net income attributable to our common shareholder	\$ 635	\$ 45
Noncontrolling interests	(13)	1
Income tax provision	233	151
Depreciation and amortization	354	360
Interest expense and amortization of debt issuance costs	255	294
Adjustment to reconcile proportional consolidation	51	28
Unrealized gains on change in fair value of derivative instruments, net	(20)	(5)
Realized gains on derivative instruments not included in segment income	—	(5)
Gain on assets held for sale	—	(2)
Loss on extinguishment of debt	—	134
Restructuring and impairment, net	34	10
Loss on sale of fixed assets	7	6
(Gain) loss on sale of a business (A)	(318)	27
Metal price lag (B)	(4)	31
Other, net	1	10
Total of reportable segments	\$ 1,215	\$ 1,085

(A) In September 2017, Novelis Korea Ltd., a subsidiary of Novelis Inc., sold a portion of its shares in Ulsan Aluminum, Ltd. (UAL) for \$314 million, which resulted in a gain on sale of investments. For additional information related to the transaction, see Note 8 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions.

(B) Effective in the first quarter of fiscal 2018, management removed the impact of metal price lag from Segment Income in order to enhance the visibility of the underlying operating performance of the Company. The impact of metal price lag is now reported as a separate line item in this reconciliation. This change does not impact our consolidated financial statements. Segment Income for prior periods presented has been updated to reflect this change. For additional information related to metal price lag, see Note 14 — Financial Instruments and Commodity Contracts.

Results of Operations

Year Ended March 31, 2017 Compared with the Year Ended March 31, 2016

"Net sales" were \$9.6 billion, a decrease of 3% driven by a 2% decrease in flat rolled product shipments and a 22% decrease in local market premiums, partially offset by a 6% increase in average base aluminum prices and a favorable impact from our strategic shift to higher conversion premium products.

"Cost of goods sold (exclusive of depreciation and amortization)" was \$8.0 billion, a decrease of 9%, due to lower flat rolled product shipments and cost improvements which contributed to lower average metal costs. Total metal input costs included in "Cost of goods sold (exclusive of depreciation and amortization)" decreased \$638 million.

"Income before income taxes" for the year ended March 31, 2017 was \$197 million compared to \$8 million in the year ended March 31, 2016. In addition to the factors noted above, the following items affected "Income before income taxes:"

- Increased stability in the current year local market premiums, resulted in a \$31 million metal price lag loss during the year ended March 31, 2017 compared to a \$172 million metal price lag loss during the year ended March 31, 2016;
- "Restructuring and impairment, net" of \$10 million for the year ended March 31, 2017, includes \$5 million of severance charges and \$3 million of other charges across our regions. Additionally, there were \$2 million of impairment charges related to assets in North America. In the prior year, we incurred \$48 million, which related to \$21 million of charges related to capitalized software impairments, \$14 million of severance and other charges related to restructuring actions at our global headquarters, \$10 million of severance and other charges across our regions and \$3 million of other impairment;
- A decline in interest expense of \$33 million primarily resulting from the refinancing of the 2017 Notes, 2020 Notes and Term Loan, due to lower interest rates;
- "Loss on extinguishment of debt" in the current year of \$134 million relates to the extinguishment of the 2017 Notes, 2020 Notes and Term Loan. In the prior year, the loss related to an amendment leading to a partial extinguishment of the Term Loan;
- A loss of \$27 million was recognized on the sale of our interest in Aluminium Company of Malaysia Berhad, which was reported in "Other (income) expense, net"; and
- A gain of \$10 million was recognized related to the settlement of a business interruption recovery claim due to an outage at the hotmill in the Logan facility in North America for the year ended March 31, 2016. There was no such gain recorded in the current year.

We recognized \$151 million of tax expense for the year ended March 31, 2017, due to the results of operations at statutory tax rates, as well as due to tax losses in jurisdictions where we believe it is more likely than not that we will not be able to utilize those losses and therefore have a valuation allowance recorded and tax rate differences on foreign earnings, offset by dividends not subject to tax. We recognized \$46 million of tax expense for the year ended March 31, 2016, primarily due to the results of operations at statutory tax rates, tax losses in jurisdictions where we believe it to be more likely than not that we will not be able to utilize those losses and therefore have a valuation allowance recorded and the net impact of foreign exchange translation and remeasurement of deferred income taxes, offset by dividends not subject to tax.

We reported "Net income attributable to our common shareholder" of \$45 million for the year ended March 31, 2017 as compared to "Net loss attributable to our common shareholder" of \$38 million for the year ended March 31, 2016, primarily as a result of the factors discussed above.

Segment Review

The tables below show selected segment financial information (in millions, except shipments which are in kt). For additional financial information related to our operating segments, see Note 20 — Segment, Geographical Area, Major Customer and Major Supplier Information. In order to reconcile the financial information for the segments shown in the tables below to the relevant U.S. GAAP-based measures, "Eliminations and other" must adjust for proportional consolidation of each line item, and eliminate intersegment shipments (in kt) and intersegment "Net sales."

Selected Operating Results Year Ended March 31, 2017	North America	Europe	Asia	South America	Eliminations and other	Total
Net sales	\$ 3,228	\$ 2,968	\$ 1,791	\$ 1,510	\$ 94	\$ 9,591
Shipments						
Rolled products - third party	1,009	927	682	449	—	3,067
Rolled products - intersegment	1	16	8	25	(50)	—
Total rolled products	1,010	943	690	474	(50)	3,067
Non-rolled products	4	8	9	88	—	109
Total shipments	1,014	951	699	562	(50)	3,176

Selected Operating Results Year Ended March 31, 2016	North America	Europe	Asia	South America	Eliminations and other	Total
Net sales	\$ 3,266	\$ 3,223	\$ 1,992	\$ 1,575	\$ (184)	\$ 9,872
Shipments						
Rolled products - third party	1,031	918	718	456	—	3,123
Rolled products - intersegment	1	60	42	34	(137)	—
Total rolled products	1,032	978	760	490	(137)	3,123
Non-rolled products	17	98	10	79	(2)	202
Total shipments	1,049	1,076	770	569	(139)	3,325

The following table reconciles changes in “Segment income” for the year ended March 31, 2016 to the year ended March 31, 2017 (in millions).

Changes in Segment income	North America	Europe	Asia	South America	Eliminations (A)	Total
Segment income - Year Ended March 31, 2016						
(B)	\$ 338	\$ 203	\$ 142	\$ 280	\$ —	\$ 963
Volume	(22)	(34)	(36)	(18)	74	(36)
Conversion premium and product mix	(2)	12	(10)	18	—	18
Conversion costs	84	40	52	11	(75)	112
Foreign exchange	(4)	4	11	52	—	63
Primary operations	—	—	—	(1)	—	(1)
Selling, general & administrative and research & development costs (C)	(5)	(11)	—	(7)	(2)	(25)
Other changes	(9)	(6)	4	2	—	(9)
Segment income - Year Ended March 31, 2017	\$ 380	\$ 208	\$ 163	\$ 337	\$ (3)	\$ 1,085

(A) The recognition of "Segment income" by a region on an intersegment shipment could occur in a period prior to the recognition of "Segment income" on a consolidated basis, depending on the timing of when the inventory is sold to the third party customer. The "Eliminations" column adjusts regional "Segment income" for intersegment shipments that occur in a period prior to recognition of "Segment income" on a consolidated basis. The "Eliminations" column also reflects adjustments for changes in regional volume, conversion premium and product mix, and conversion costs related to intersegment shipments for consolidation.

(B) Effective in the first quarter of fiscal 2018, management removed the impact of metal price lag from Segment Income in order to enhance the visibility of the underlying operating performance of the Company. This change does not impact our consolidated financial statements. Segment information for prior periods presented has been updated to reflect this change.

(C) Selling, general & administrative costs and research & development costs include costs incurred directly by each segment and all corporate related costs.

North America

“Net sales” decreased \$38 million, or 1%, primarily due to lower can shipments partially offset by higher automotive shipments and higher average aluminum prices as we continue to adjust our product mix.

“Segment income” was \$384 million, an increase of 49%, due to strong operational performance resulting from lower metal input and conversion costs, favorable metal price lag due to reduced local market premium volatility, operational efficiencies and higher automotive shipments. These positive factors were partially offset by lower volumes associated with can and specialties shipments and higher fixed costs related to the commissioning of our third automotive line.

Europe

“Net sales” decreased \$255 million, or 8%, primarily due to lower can and specialties shipments, partially offset by higher automotive shipments and higher average aluminum prices.

“Segment income” was \$180 million, an increase of 55%, primarily related to lower metal input costs resulting from increased production and usage of internally manufactured sheet ingot from our new recycling facility in Nachterstedt, Germany and favorable product mix as a result of our portfolio optimization efforts. These benefits were partially offset by reduced can and specialty volumes.

Asia

“Net sales” decreased \$201 million, or 10%, due to lower can shipments, lower can pricing, partially offset by higher average aluminum prices.

“Segment income” was \$153 million, an increase of 13%, primarily due to lower metal input costs associated with increased usage of internally manufactured sheet ingot, a decrease in the local market premium which is a cost we incur and are

unable to fully pass along to some of our customers, favorable product mix within can and automotive, and foreign currency exchange rates. These factors were partially offset by lower can shipments and can pricing.

South America

“Net sales” decreased \$65 million, or 4%, due to lower can shipments partially offset by favorable pricing conditions.

“Segment income” was \$340 million, an increase of 21%, primarily due to foreign currency benefits, favorable can pricing, lower metal input costs, and operational efficiencies, which were partially offset by lower can shipments.

Reconciliation of "Net income (loss) attributable to our common shareholder" to segment income

Costs such as depreciation and amortization, interest expense and unrealized (gains) losses on changes in the fair value of derivatives (except for derivatives used to manage our foreign currency remeasurement activities) are not utilized by our chief operating decision maker in evaluating segment performance. The table below reconciles "Net income attributable to our common shareholder" to income from reportable segments for the year ended March 31, 2017 and 2016 (in millions)

	Year Ended March 31,	
	2017	2016
Net income (loss) attributable to our common shareholder	\$ 45	\$ (38)
Noncontrolling interests	1	—
Income tax provision	151	46
Depreciation and amortization	360	353
Interest expense and amortization of debt issuance costs	294	327
Adjustment to reconcile proportional consolidation	28	30
Unrealized (gains) losses on change in fair value of derivative instruments, net	(5)	4
Realized (gains) losses on derivative instruments not included in segment income	(5)	1
Gain on assets held for sale	(2)	—
Loss on extinguishment of debt	134	13
Restructuring and impairment, net	10	48
Loss on sale of fixed assets	6	4
Loss on sale of a business	27	—
Metal price lag (A)	31	172
Other, net	10	3
Total of reportable segments	\$ 1,085	\$ 963

(A) Effective in the first quarter of fiscal 2018, management removed the impact of metal price lag from Segment Income in order to enhance the visibility of the underlying operating performance of the Company. The impact of metal price lag is now reported as a separate line item in this reconciliation. This change does not impact our consolidated financial statements. Segment Income for prior periods presented has been updated to reflect this change. For additional information related to metal price lag, see Note 14 — Financial Instruments and Commodity Contracts.

Liquidity and Capital Resources

Our investments in the business were funded through cash flows generated by our operations and a combination of local financing and our senior secured credit facilities. Most of our recent strategic expansion projects are operating close to full capacity and are generating additional operating cash flow. We expect to be able to fund our continued expansions, service our debt obligations, and provide sufficient liquidity to operate our business through one or more of the following: the generation of operating cash flows; our existing debt facilities, including refinancing; and new debt issuances, as necessary.

During the fourth quarter of fiscal 2018, we agreed to acquire operating facilities and manufacturing assets from Constellium N.V. (Constellium), that have historically been leased, for approximately €200 million at our Sierre, Switzerland plant. In addition, we announced plans to expand our production footprint in the U.S. with an investment in automotive finishing capacity in Guthrie, Kentucky. We plan to complete these strategic transactions to further solidify our market leading position in automotive aluminum sheet.

Non-Guarantor Information

As of March 31, 2018, the Company's subsidiaries that are not guarantors represented the following approximate percentages of (a) net sales, (b) Adjusted EBITDA (segment income), and (c) total assets of the Company, on a consolidated basis (including intercompany balances):

Item Description	Ratio
Consolidated net sales represented by net sales to third parties by non-guarantor subsidiaries (for the year ended March 31, 2018)	22%
Consolidated Adjusted EBITDA represented by the non-guarantor subsidiaries (for the year ended March 31, 2018)	15%
Consolidated assets are owned by non-guarantor subsidiaries (as of March 31, 2018)	18%

In addition, for the years ended March 31, 2018 and March 31, 2017, the Company's subsidiaries that are not guarantors had net sales of \$3 billion and \$2.2 billion, respectively, and, as of March 31, 2018, those subsidiaries had assets of \$2.3 billion and debt and other liabilities of \$1.5 billion (including inter-company balances).

Available Liquidity

Our available liquidity as of March 31, 2018 and 2017 is as follows (in millions):

	March 31,	
	2018	2017
Cash and cash equivalents	\$ 920	\$ 594
Availability under committed credit facilities	998	701
Total available liquidity	\$ 1,918	\$ 1,295

The increase in total available liquidity is primarily attributable to \$263 million in proceeds from the sale of shares in UAL, an increase in the ABL borrowing base of \$161 million, and positive free cash flow of \$406 million. These increases were partially offset by net payments on short-term and long-term borrowings of \$208 million, a reduction in availability of credit facilities of \$41 million, and other changes of \$42 million. See Note 10 — Debt for more details about our availability under committed under credit facilities.

The "Cash and cash equivalents" balance above includes cash held in foreign countries in which we operate. As of March 31, 2018, we held \$6 million of "Cash and cash equivalents" in Canada, in which we are incorporated, with the rest held in other countries in which we operate. As of March 31, 2018, we held \$299 million of cash in jurisdictions for which we have asserted that earnings are permanently reinvested and we plan to continue to fund operations and local expansions with cash held in those jurisdictions. Our significant future uses of cash include servicing our debt obligations domestically, which we plan to fund with cash flows from operating activities and, if necessary, by repatriating cash from jurisdictions for which we have not asserted that earnings are indefinitely reinvested. Cash held outside of Canada is free from significant restrictions that would prevent the cash from being accessed to meet the Company's liquidity needs including, if necessary, to fund operations

and service debt obligations in Canada. Upon the repatriation of any earnings to Canada, in the form of dividends or otherwise, we could be subject to Canadian income taxes (subject to adjustment for foreign taxes paid and the utilization of the large cumulative net operating losses we have in Canada) and withholding taxes payable to the various foreign jurisdictions. As of March 31, 2018, we do not believe adverse tax consequences exist that restrict our use of "Cash or cash equivalents" in a material manner,

Free Cash Flow

Refer to "Non-GAAP Financial Measures" for our definition of Free Cash Flow.

The following table shows the "Free cash flow" for the year ended March 31, 2018, 2017 and 2016, the change between periods, as well as the ending balances of cash and cash equivalents (in millions).

	Year Ended March 31,			Change	
	2018	2017	2016	2018 versus 2017	2017 versus 2016
	Net cash provided by operating activities	\$ 586	\$ 575	\$ 541	\$ 11
Net cash provided by (used in) investing activities	83	(212)	(378)	295	166
Less: Proceeds from sales of assets and business, net of transactions fees, cash income taxes and hedging (A)	(263)	(2)	(3)	(261)	1
Free cash flow	\$ 406	\$ 361	\$ 160	\$ 45	\$ 201
Ending cash and cash equivalents	\$ 920	\$ 594	\$ 556	\$ 326	\$ 38

(A) This line item includes the proceeds from the sale of shares in Ulsan Aluminum Ltd., to Kobe Steel Ltd. during the year ended March 31, 2018 in the amount of \$314 million, net of \$42 million and \$11 million, in cash taxes and transaction fees paid, respectively. This line item also includes "Outflows from the sale of a business, net of transaction fees" which is comprised of cash of \$13 million held by ALCOM, which was a consolidated entity sold during fiscal 2017.

Operating Activities

The increase in net cash provided by operating activities was primarily related to higher "Segment income", driven by favorable impacts from metal price lag and lower metal input costs. The following summarizes changes in working capital accounts (in millions).

	Year Ended March 31,			Change	
	2018	2017	2016	2018 versus 2017	2017 versus 2016
	Net cash (used in) provided by operating activities due to changes in working capital:				
Accounts receivable	\$ (402)	\$ (154)	\$ 336	\$ (248)	\$ (490)
Inventories	(151)	(193)	268	42	(461)
Accounts payable	336	253	(327)	83	580
Other current assets and liabilities	16	17	(5)	(1)	22
Net change in working capital	\$ (201)	\$ (77)	\$ 272	\$ (124)	\$ (349)

Year Ended March 31, 2018

"Accounts receivable, net" increased due to the timing of cash collections on certain customer and related party receivables balances coupled with a 20% increase in sales and increased average metal prices. As of March 31, 2018, we had factored, without recourse, certain trade receivable aggregating \$918 million, which had a favorable impact to net cash provided by operating activities of \$239 million for the year ended March 31, 2018. We determine the need to factor our receivables based on local cash needs including the need to fund our investments, as well as attempting to balance the timing of cash flows of trade payables and receivables and optimize our cost of financing. The higher quantities of inventory on hand at March 31, 2018 are the result of recent capacity expansions as well as longer supply chains to support the automotive sector. We experienced an increase in "Accounts payable" due to higher base aluminum prices and higher local market premiums.

Year Ended March 31, 2017

"Accounts receivable, net" increased due to the timing of cash collections on certain customer receivables balances offset by 3% lower sales and higher factoring balances. As of March 31, 2017 and 2016, we had factored, without recourse, certain trade receivable aggregating \$679 million and \$626 million, respectively, which had a favorable impact to net cash provided by operating activities of \$53 million for the year ended March 31, 2017. We determine the need to factor our receivables based on local cash needs including the need to fund our strategic investments, as well as attempting to balance the timing of cash flows of trade payables and receivables. "Inventories" were higher due to higher quantities on hand partially offset by lower average metal costs. The higher quantities of inventory on hand at March 31, 2017 is the result of recent capacity expansions as well as longer supply chains to support the automotive sector and expand our scrap procurement network. As of March 31, 2017, we had sold certain inventories to third parties and have agreed to repurchase the same or similar inventory back from the third parties subsequent to March 31, 2017. Our estimated repurchase obligation for this inventory as of March 31, 2017 is \$12 million, based on market prices as of this date. We sell and repurchase inventory with third parties in an attempt to better manage inventory levels and to better match the purchasing of inventory with the demand for our products. We experienced an increase in "Accounts payable" primarily due to the timing of payments to vendors. Included in cash flows from operating activities for the year ended March 31, 2017 were \$288 million of interest payments, \$128 million of cash paid for income taxes, \$13 million of payments on restructuring programs, and \$66 million of contributions to our pension plans. As of March 31, 2017, we had \$24 million of outstanding restructuring liabilities, of which \$16 million we estimate will result in cash outflows within the next twelve months.

Year Ended March 31, 2016

We experienced a decrease in "Accounts receivable, net" due to lower base aluminum prices and local market premiums compared to the end of the fourth quarter of prior year, and the timing of cash collections on certain customer receivables balances; partially offset by higher shipments and higher factoring of accounts receivable. As of March 31, 2016 and 2015, we had factored, without recourse, certain trade receivable aggregating \$626 million and \$591 million, respectively which had a favorable impact to net cash provided by operating activities of \$35 million for the year ended March 31, 2016. We determine the need to factor our receivables based on local cash needs including the need to fund our strategic investments, as well as attempting to balance the timing of cash flows of trade payables and receivables. "Inventories" were lower due to lower base aluminum prices and local market premiums when compared to the fourth quarter of fiscal 2015. As of March 31, 2016, we had sold certain inventories to third parties and have agreed to repurchase the same or similar inventory back from the third parties subsequent to March 31, 2016. Our estimated repurchase obligation for this inventory as of March 31, 2016 is \$22 million, based on market prices as of this date. We sell and repurchase inventory with third parties in an attempt to better manage inventory levels and to better match the purchasing of inventory with the demand for our products. We experienced a decrease in "Accounts payable" due to lower base aluminum prices and lower local market premiums when compared to the end of the fourth quarter of fiscal 2015, partially offset by the timing of payments on vendor payables outstanding as of March 31, 2016 and obtaining longer payment terms with certain vendors.

Included in cash flows from operating activities for the year ended March 31, 2016 were \$308 million of interest payments, \$123 million of cash paid for income taxes, \$22 million of payments on restructuring programs, and \$64 million of contributions to our pension plans. As of March 31, 2016, we had \$27 million of outstanding restructuring liabilities, of which \$23 million we estimate will result in cash outflows within the next twelve months.

Hedging Activities

We use derivative contracts to manage risk as well as liquidity. Under our terms of credit with counterparties to our derivative contracts, we do not have any material margin call exposure. No material amounts have been posted by Novelis nor do we hold any material amounts of margin posted by our counterparties. We settle derivative contracts in advance of billing on the underlying physical inventory and collecting payment from our customers, which temporarily impacts our liquidity position. The lag between derivative settlement and customer collection typically ranges from 30 to 90 days.

More details on our operating activities can be found above in "Results of operations for the year ended March 31, 2018 compared with the year ended March 31, 2017."

Investing Activities

The following table presents information regarding our “Net cash provided by (used in) investing activities” (in millions).

	Year Ended March 31,			Change	
	2018	2017	2016	2018	2017
				versus	2017 versus
Capital expenditures	\$ (226)	\$ (224)	\$ (370)	\$ (2)	\$ 146
(Outflows) proceeds from settlement of other undesignated derivative instruments, net	(23)	8	(9)	(31)	17
Proceeds from sales of assets, third party, net of transaction fees and hedging	2	4	3	(2)	1
Proceeds (outflows) from the sale of a business	314	(2)	—	316	(2)
Proceeds (outflows) from investment in and advances to non-consolidated affiliates, net	16	2	(2)	14	4
Net cash provided by (used in) investing activities	\$ 83	\$ (212)	\$ (378)	\$ 295	\$ 166

For the years ended March 31, 2018 and 2017, our "Capital expenditures" were primarily attributable to the non-routine maintenance of existing property, plant and equipment and strategic investments in automotive assets. For the year ended March 31, 2016, our "Capital expenditures" were primarily attributable to our automotive sheet finishing expansions in the U.S. and Germany.

"Proceeds (outflows) from the sale of a business, net of transaction fees" for the year ended March 31, 2018 was primarily due to the sale of shares in Ulsan Aluminum Ltd. and for the year ended March 31, 2017, was due to our sale of ALCOM.

Financing Activities

The following table presents information regarding our “Net cash used in financing activities” (in millions).

	Year Ended March 31,			Change	
	2018	2017	2016	2018	2017
				versus	2017 versus
Proceeds from issuance of long-term and short-term borrowings	\$ —	\$ 4,572	\$ 174	\$ (4,572)	\$ 4,398
Principal payments of long-term and short-term borrowings	(174)	(4,477)	(216)	4,303	(4,261)
Revolving credit facilities and other, net	(211)	(229)	(187)	18	(42)
Dividends, noncontrolling interest	—	—	(1)	—	1
Debt issuance costs	(5)	(191)	(15)	186	(176)
Net cash used in financing activities	\$ (390)	\$ (325)	\$ (245)	\$ (65)	\$ (80)

Year Ended March 31, 2018

During the year ended March 31, 2018, there were no issuances of long or short-term borrowings. We made principal repayments of \$50 million on short-term loans in Brazil, \$18 million on our Term Loan Facility, \$97 million in Korean long-term debt, \$8 million on capital leases and \$1 million in other principal repayments. The net cash repayments from our credit facilities balance is related to payments of \$185 million on our ABL Revolver and \$26 million on our China credit facility.

Year Ended March 31, 2017

During the year ended March 31, 2017, we received proceeds of \$4.5 billion related to the refinancing of the Term Loan, 2017 and 2020 Notes as well as issuances of new loans in Brazil and Vietnam, and other locations of \$81 million, \$40 million, and \$2 million, respectively. Additionally, we made principal repayments of \$1.8 billion on our Term Loan Facility related to the refinancing, \$1.1 billion and \$1.4 billion on our 2017 and 2020 Notes, respectively, \$108 million on short-term loans in Brazil, \$49 million on Vietnam principal repayments, \$17 million in Korean loan repayments, \$10 million on capital leases, and \$5 million in other principal repayments. The change in our credit facilities balance is related to net incremental repayments of \$196 million on our ABL Revolver partially offset by net proceeds of \$16 million in our China credit facilities. As of March 31, 2017, our short-term borrowings were \$294 million consisting of \$184 million of loans under our ABL Revolver, \$50 million in Novelis Brazil loans, \$59 million in Novelis China loans, and \$1 million in other short-term borrowings. The weighted average interest rate on our total short-term borrowings was 2.92% as of March 31, 2017. As of March 31, 2017, \$20 million of the ABL Revolver was utilized for letters of credit, reducing our availability under that facility.

During the year ended March 31, 2017, we incurred costs of \$191 million related to the refinancing of our Term Loan and Senior Notes facilities.

Year Ended March 31, 2016

During the year ended March 31, 2016, we received proceeds of \$60 million related to the refinancing of the Term Loan as well as issuances of new loans in Brazil, Korea, Vietnam, and other locations of \$45 million, \$39 million, \$28 million and \$2 million, respectively. We made principal repayments of \$134 million on short-term loans in Brazil, \$30 million on Vietnam principal repayments, \$14 million on our Term Loan Facility, \$9 million on capital leases, \$26 million on long-term loans in Korea and \$3 million in other principal repayments. The change in our credit facilities balance is related to net incremental repayments of \$227 million on our ABL Revolver partially offset by an increase in other borrowings of \$40 million.

OFF-BALANCE SHEET ARRANGEMENTS

In accordance with SEC rules, the following qualify as off-balance sheet arrangements:

- any obligation under certain derivative instruments;
- any obligation under certain guarantees or contracts;
- a retained or contingent interest in assets transferred to an unconsolidated entity or similar entity or similar arrangement that serves as credit, liquidity or market risk support to that entity for such assets; and
- any obligation under a material variable interest held by the registrant in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to the registrant, or engages in leasing, hedging or research and development services with the registrant.

The following discussion addresses the applicable off-balance sheet items for our Company.

Derivative Instruments

See Note 14 — Financial Instruments and Commodity Contracts to our accompanying audited consolidated financial statements for a full description of derivative instruments.

Guarantees of Indebtedness

We have issued guarantees on behalf of certain of our subsidiaries. The indebtedness guaranteed is for trade accounts payable to third parties. Some of the guarantees have annual terms while others have no expiration and have termination notice requirements. Neither we nor any of our subsidiaries holds any assets of any third parties as collateral to offset the potential settlement of these guarantees. Since we consolidate wholly-owned and majority-owned subsidiaries in our consolidated financial statements, all liabilities associated with trade payables and short-term debt facilities for these entities are already included in our consolidated balance sheets.

See Note 8 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for details on our guarantee of indebtedness to Alunorf, our non-consolidated affiliate.

Factoring of Trade Receivables

See Note 3 — Accounts Receivable for a summary of disclosures of factored financial amounts.

Other

As part of our ongoing business, we do not participate in transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as special purpose entities (SPEs), which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As of March 31, 2018 and 2017, we were not involved in any unconsolidated SPE transactions.

CONTRACTUAL OBLIGATIONS

We have future obligations under various contracts relating to debt and interest payments, capital and operating leases, long-term purchase obligations, and postretirement benefit plans. The following table presents our estimated future payments under contractual obligations that exist as of March 31, 2018, based on undiscounted amounts (in millions). The future cash flow commitments we may have related to derivative contracts are excluded from our contractual obligations table as these are fair value measurements determined at an interim date within the contractual term of the arrangement and, accordingly, do not represent the ultimate contractual obligation (which could ultimately become a receivable). As a result, the timing and amount of the ultimate future cash flows related to our derivative contracts, including the \$114 million of derivative liabilities recorded on our balance sheet as of March 31, 2018, are uncertain. In addition, stock compensation is excluded from the table below as these are fair value measurements determined at an interim date and is not considered a contractual obligation. Furthermore, due to the difficulty in determining the timing of settlements, the table excludes \$44 million of uncertain tax positions. See Note 18 — Income Taxes to our accompanying audited consolidated financial statements.

	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years	Total
Debt (A)	\$ 163	\$ 39	\$ 1,723	\$ 2,650	\$ 4,575
Interest on long-term debt (B)	206	411	369	469	1,455
Capital leases (C)	7	5	—	—	12
Operating leases (D)	31	42	25	25	123
Purchase obligations (E)	2,774	1,917	673	96	5,460
Unfunded pension plan benefits (F)	19	34	35	104	192
Other post-employment benefits (F)	6	16	19	59	100
Funded pension plans (F)	62	142	157	464	825
Total	\$ 3,268	\$ 2,606	\$ 3,001	\$ 3,867	\$ 12,742

- (A) Includes only principal payments on our Senior Notes, term loans, revolving credit facilities and notes payable to banks and others. These amounts exclude payments under capital lease obligations.
- (B) Interest on our fixed rate debt is estimated using the stated interest rate. Interest on our variable-rate debt is estimated using the rate in effect as of March 31, 2018. Actual future interest payments may differ from these amounts based on changes in floating interest rates or other factors or events. Excluded from these amounts are interest related to capital lease obligations, the amortization of debt issuance and other costs related to indebtedness.
- (C) Includes both principal and interest components of future minimum capital lease payments. Excluded from these amounts are insurance, taxes and maintenance associated with the property.
- (D) Includes the minimum lease payments for non-cancelable leases for property and equipment used in our operations. We do not have any operating leases with contingent rents. Excluded from these amounts are insurance, taxes and maintenance associated with the properties and equipment.
- (E) Includes agreements to purchase goods (including raw materials, inventory repurchase obligations, and capital expenditures) and services that are enforceable and legally binding on us, and that specify all significant terms. Some of our raw material purchase contracts have minimum annual volume requirements. In these cases, we estimate our future purchase obligations using annual minimum volumes and costs per unit that are in effect as of March 31, 2018. Due to volatility in the cost of our raw materials, actual amounts paid in the future may differ from these amounts. Excluded from these amounts are the impact of any derivative instruments and any early contract termination fees, such as those typically present in energy contracts.
- (F) Obligations for postretirement benefit plans are estimated based on actuarial estimates using benefit assumptions for, among other factors, discount rates, rates of compensation increases and health care cost trends. Payments for unfunded pension plan benefits and other post-employment benefits are estimated through 2026. For funded pension plans, estimating the requirements beyond fiscal 2018 is not practical, as it depends on the performance of the plans' investments, among other factors.

RETURN OF CAPITAL

Payments to our shareholder are at the discretion of the board of directors and will depend on, among other things, our financial resources, cash flows generated by our business, our cash requirements, restrictions under the instruments governing our indebtedness, being in compliance with the appropriate indentures and covenants under the instruments that govern our indebtedness and other relevant factors.

ENVIRONMENT, HEALTH AND SAFETY

We strive to be a leader in environment, health and safety (EHS) standards. Our EHS system is aligned with ISO 14001, an international environmental management standard, and OHSAS 18001, an international occupational health and safety management standard. As of March 31, 2018 and 2017, 23 of our facilities were OHSAS 18001 certified. An additional facility became ISO 14001 certified as of March 31, 2018, bringing our total to 24.

Our expenditures for environmental protection (including estimated and probable environmental remediation costs as well as general environmental protection costs at our facilities) and the betterment of working conditions in our facilities were \$16 million in fiscal 2018, of which \$11 million was expensed and \$5 million capitalized. We expect these expenditures will be approximately \$20 million in fiscal 2019, of which we estimate \$11 million will be expensed and \$9 million capitalized. Generally, expenses for environmental protection are recorded in "Cost of goods sold (exclusive of depreciation and

amortization).” However, significant remediation costs that are not associated with on-going operations are recorded in "Restructuring and impairment, net."

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our discussion and analysis of our results of operations, liquidity and capital resources are based on our consolidated financial statements which have been prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP). In connection with the preparation of our consolidated financial statements, we are required to make assumptions and estimates about future events, and apply judgments that affect the reported amounts of assets, liabilities, revenue, expenses, and the related disclosures. We base our assumptions, estimates and judgments on historical experience, current trends and other factors we believe to be relevant at the time we prepare our consolidated financial statements. On a regular basis, we review the accounting policies, assumptions, estimates and judgments to ensure that our consolidated financial statements are presented fairly and in accordance with U.S. GAAP. However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates, and such differences could be material.

Our significant accounting policies are discussed in Note 1 — Business and Summary of Significant Accounting Policies to our accompanying consolidated financial statements. We believe the following accounting policies are the most critical to aid in fully understanding and evaluating our reported financial results, as they require management to make difficult, subjective or complex judgments, and to make estimates about the effect of matters that are inherently uncertain. Although management believes that the estimates and judgments discussed herein are reasonable, actual results could differ, which could result in gains or losses that could be material. We have reviewed these critical accounting policies and related disclosures with the Audit Committee of our board of directors.

Derivative Financial Instruments

We hold derivatives for risk management purposes and not for trading. We use derivatives to mitigate uncertainty and volatility caused by underlying exposures to aluminum prices, foreign exchange rates, interest rates, and energy prices. The fair values of all derivative instruments are recognized as assets or liabilities at the balance sheet date and are reported gross.

The majority of our derivative contracts are valued using industry-standard models that use observable market inputs as their basis, such as time value, forward interest rates, volatility factors, and current (spot) and forward market prices for foreign exchange rates. See Note 14 — Financial Instruments and Commodity Contracts and Note 16 — Fair Value Measurements to our accompanying consolidated audited financial statements for discussion on fair value of derivative instruments.

We may be exposed to losses in the future if the counterparties to our derivative contracts fail to perform. We are satisfied that the risk of such non-performance is remote due to our monitoring of credit exposures. Additionally, we enter into master netting agreements with contractual provisions that allow for netting of counterparty positions in case of default, and we do not face credit contingent provisions that would result in the posting of collateral.

For derivatives designated as fair value hedges, we assess hedge effectiveness by formally evaluating the high correlation of changes in the fair value of the hedged item and the derivative hedging instrument. The changes in the fair values of the underlying hedged items are reported in other current and noncurrent assets and liabilities in the consolidated balance sheets. Changes in the fair values of these derivatives and underlying hedged items generally offset and the effective portion is recorded in "Net sales" consistent with the underlying hedged item and the net ineffectiveness is recorded in "Other (income) expense, net."

For derivatives designated as cash flow hedges or net investment hedges, we assess hedge effectiveness by formally evaluating the high correlation of the expected future cash flows of the hedged item and the derivative hedging instrument. The effective portion of gain or loss on the derivative is included in Other Comprehensive Income (Loss) and reclassified to earnings in the period in which earnings are impacted by the hedged items or in the period that the transaction becomes probable of not occurring. Gains or losses representing reclassifications of OCI to earnings are recognized in the line item most reflective of the underlying risk exposure. We exclude the time value component of foreign currency and aluminum price risk hedges when measuring and assessing ineffectiveness to align our accounting policy with risk management objectives when it is necessary. If at any time during the life of a cash flow hedge relationship we determine that the relationship is no longer effective, the derivative will no longer be designated as a cash flow hedge and future gains or losses on the derivative will be recognized in "Other (income) expense, net."

For all derivatives designated as hedging relationships, gains or losses representing hedge ineffectiveness or amounts excluded from effectiveness testing are recognized in "Other (income) expense, net" in our current period earnings. If no hedging relationship is designated, gains or losses are recognized in "Other (income) expense, net" in our current period earnings.

Consistent with the cash flows from the underlying risk exposure, we classify cash settlement amounts associated with designated derivatives as part of either operating or investing activities in the consolidated statements of cash flows. If no hedging relationship is designated, we classify cash settlement amounts as part of investing activities in the consolidated statement of cash flows.

Impairment of Goodwill

Goodwill represents the excess of the purchase price over the fair value of the identifiable net assets of acquired companies. As a result of Hindalco's indirect purchase of Novelis, we estimated fair value of the identifiable net assets using a number of factors, including the application of multiples and discounted cash flow estimates. The carrying value of goodwill for each of our reporting units, which is tested for impairment annually, is as follows (in millions):

	As of March 31, 2018	
North America	\$	285
Europe		181
South America		141
	\$	<u>607</u>

Goodwill is not amortized; instead, it is tested for impairment annually or more frequently if indicators of impairment exist. On an ongoing basis, absent any impairment indicators, we perform our goodwill impairment testing as of the last day of February of each fiscal year. We do not aggregate components of operating segments to arrive at our reporting units, and as such our reporting units are the same as our operating segments.

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

For our fiscal year 2018 test, we elected to perform the two-step quantitative impairment test, where step one compares the fair value of each reporting unit to its carrying amount, and if step one indicates that the carrying value of a reporting unit exceeds the fair value, step two is performed to measure the amount of impairment, if any. For purposes of our step one analysis, our estimate of fair value for each reporting unit as of the testing date, is based on a weighted average of the value indication from income and market approach. The approach to determining fair value for all reporting units is consistent given the similarity of our operations in each region.

Under the income approach, the fair value of each reporting unit is based on the present value of estimated future cash flows. The income approach is dependent on a number of significant management assumptions including markets and market share, sales volumes and prices, costs to produce, capital spending, working capital changes and the discount rate. We estimate future cash flows for each of our reporting units based on our projections for the respective reporting unit. These projected cash flows are discounted to the present value using a weighted average cost of capital (discount rate). The discount rate is commensurate with the risk inherent in the projected cash flows and reflects the rate of return required by an investor in the current economic conditions. For our annual impairment test, we used a discount rate of 9% for all reporting units. An increase or decrease of 0.5% in the discount rate would have impacted the estimated fair value of each reporting unit by approximately \$75-\$275 million, depending on the relative size of the reporting unit. Additionally, an increase or decrease of 0.5% in the terminal year growth rate assumption would have impacted the estimated fair value of each reporting unit by approximately \$50-\$200 million, depending on the relative size of the reporting unit. The projections are based on both past performance and the expectations of future performance and assumptions used in our current operating plan. We use specific revenue growth assumptions for each reporting unit based on history and economic conditions, and the terminal year revenue growth assumptions were approximately 2.0%.

Under the market approach, the fair value of each reporting unit is determined based upon comparisons to public companies engaged in similar businesses.

As a result of our annual goodwill impairment test for the year ended March 31, 2018, no goodwill impairment was identified. The fair values of the reporting units exceeded their respective carrying amounts as of the last day of February in fiscal 2018 by 159% for North America, by 50% for Europe and by 163% for South America.

Equity Investments

We invest in certain joint ventures and consortiums. We use the equity method to account for our investments in entities that we do not control, but where we have the ability to exercise significant influence over operating and financial policies. We exercise judgment to determine which investments should be accounted for using the equity method and which investments should be consolidated.

As a result of Hindalco's indirect purchase of Novelis, investments in and advances to equity method affiliates were adjusted to reflect fair value as of May 16, 2007. We review these investments for impairment whenever certain indicators are present suggesting that the carrying value of an investment is not recoverable. This analysis requires a significant amount of judgment to identify events or circumstances indicating that an investment may be impaired. Once an impairment indicator is identified, we must determine if an impairment exists, and if so, whether the impairment is other than temporary, in which case the investment would be written down to its estimated fair value.

Impairment of Long Lived Assets and Other Intangible Assets

We assess the recoverability of long-lived assets and finite-lived intangible assets whenever events or changes in circumstances indicate that we may not be able to recover the asset's carrying amount. Such events or circumstances include, but are not limited to, a significant decrease in the fair value of the underlying business or a change in utilization of property and equipment.

We group assets to test for impairment at the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. These levels are dependent upon an asset's usage, which may be on an individual asset level or aggregated at a higher level including a region-wide grouping. The metal flow and management of supply within our regions creates an interdependency of the plants within a region on one another to generate cash flows. Accordingly, under normal operating conditions, our assets are grouped on a region-wide basis for impairment testing. Any expected change in usage, retirement, disposal or sale of an individual asset or group of assets below the region level which would generate a separate cash flow stream outside of normal operations could result in grouping assets below the region level for impairment testing.

When evaluating long-lived assets and finite-lived intangible assets for potential impairment, we first compare the carrying value of the asset to the asset's estimated future net cash flows (undiscounted and without interest charges). If the estimated future net cash flows are less than the carrying value of the asset, we calculate and recognize an impairment loss. If we recognize an impairment loss, the carrying amount of the asset is adjusted to fair value based on the discounted estimated future net cash flows and will be its new cost basis. For a depreciable long-lived asset, the new cost basis will be depreciated over the remaining useful life of that asset. For an amortizable intangible asset, the new cost basis will be amortized over the remaining useful life of the asset.

Our impairment loss calculations require management to apply judgments in estimating future cash flows to determine asset fair values, including forecasting useful lives of the assets and selecting the discount rate that represents the risk inherent in future cash flows. Impairment charges are recorded in "Restructuring and impairment, net" in our consolidated statement of operations. See Note 2 — Restructuring and Impairment for details on asset impairments for the years ended March 31, 2018, 2017, and 2016.

If actual results are not consistent with our assumptions and judgments used in estimating future cash flows and asset fair values, we may be exposed to additional impairment losses that could be material to our results of operations.

Pension and Other Postretirement Plans

We account for our pensions and other postretirement benefits in accordance with ASC 715, *Compensation — Retirement Benefits* (ASC 715). Liabilities and expense for pension plans and other postretirement benefits are determined using actuarial methodologies and incorporate significant assumptions, including the rate used to discount the future estimated liability, the long-term rate of return on plan assets, and several assumptions related to the employee workforce (compensation increases, health care cost trend rates, expected service period, retirement age, and mortality). These assumptions bear the risk of change as they require significant judgment and they have inherent uncertainties that management may not be able to control.

The actuarial models use an attribution approach that generally spreads the financial impact of changes to the plan and actuarial assumptions over the average remaining service lives of the employees in the plan. The principle underlying the required attribution approach is that employees render service over their average remaining service lives on a relatively smooth basis and, therefore, the accounting for benefits earned under the pension or non-pension postretirement benefits plans should follow the same relatively smooth pattern. Changes in the liability due to changes in actuarial assumptions such as discount rate, rate of compensation increases and mortality, as well as annual deviations between what was assumed and what was experienced by the plan are treated as actuarial gains or losses. The gains and losses are initially recorded to "Other comprehensive income (loss)" and are subsequently amortized over periods of 15 years or less, which represent the group's average future service life of the employees or the group's average life expectancy.

The most significant assumption used to calculate pension and other postretirement obligations is the discount rate used to determine the present value of benefits. The discount rate is based on spot rate yield curves and individual bond matching models for pension and other postretirement plans in Canada, the United States, United Kingdom, and other Euro zone countries, and on published long-term high quality corporate bond indices in other countries with adjustments made to the index rates based on the duration of the plans' obligations for each country, at the end of each fiscal year. This bond matching approach matches the bond yields with the year-to-year cash flow projections from the actuarial valuation to determine a discount rate that more accurately reflects the timing of the expected payments. The weighted average discount rate used to determine the pension benefit obligation was 3.1%, 3.2%, and 3.3%, and other postretirement benefit obligation was 4.0%, 4.1% and 4.0% as of March 31, 2018, 2017, and 2016, respectively. The weighted average discount rate used to determine the net periodic benefit cost is the rate used to determine the benefit obligation at the end of the previous fiscal year.

As of March 31, 2018, an increase in the discount rate of 0.5%, assuming inflation remains unchanged, would result in a decrease of \$152 million in the pension and other postretirement obligations and in a pre-tax decrease of \$14 million in the net periodic benefit cost in the following year. A decrease in the discount rate of 0.5% as of March 31, 2018, assuming inflation remains unchanged, would result in an increase of \$172 million in the pension and other postretirement obligations and in a pre-tax increase of \$17 million in the net periodic benefit cost in the following year.

The long term expected return on plan assets is based upon historical experience, expected future performance as well as current and projected investment portfolio diversification. The weighted average expected return on plan assets was 5.2% for 2018, 5.4% for 2017, and 5.6% for 2016. The expected return on assets is a long-term assumption whose accuracy can only be measured over a long period based on past experience. A variation in the expected return on assets of 0.5% as of March 31, 2018 would result in a pre-tax variation of approximately \$6 million in the net periodic benefit cost in the following year.

Income Taxes

We account for income taxes using the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. In addition, deferred tax assets are also recorded with respect to net operating losses and other tax attribute carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. Valuation allowances are established when realization of the benefit of deferred tax assets is not deemed to be more likely than not. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

We considered all available evidence, both positive and negative, in determining the appropriate amount of the valuation allowance against our deferred tax assets as of March 31, 2018. In evaluating the need for a valuation allowance, we consider all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as any other available and relevant information. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period and potential income from prudent and feasible tax planning strategies. Negative evidence includes items such as cumulative losses, projections of future losses, and carryforward periods that are not long enough to allow for the utilization of the deferred tax asset based on existing projections of income. In certain jurisdictions, deferred tax assets related to loss carryforwards and other temporary differences exist without a valuation allowance where in our judgment the weight of the positive evidence more than offsets the negative evidence.

Upon changes in facts and circumstances, we may conclude that certain deferred tax assets for which no valuation allowance is currently recorded may not be realizable in future periods, resulting in a charge to income. Existing valuation allowances are re-examined under the same standards of positive and negative evidence. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released, in the period this determination is made.

As of March 31, 2018, the Company concluded that valuation allowances totaling \$727 million were required against its deferred tax assets comprised of the following:

- \$541 million of the valuation allowance relates to loss carryforwards in Canada and certain foreign jurisdictions, \$68 million relates to New York tax credit carryforwards, and \$51 million relates to tax credit carryforwards in Canada.
- \$67 million of the valuation allowance relates to other deferred tax assets originating from temporary differences in Canada and certain foreign jurisdictions.

In determining these amounts, the Company considered the reversal of existing temporary differences as a source of taxable income. The ultimate realization of the remaining deferred tax assets is contingent on the Company's ability to generate future taxable income within the carryforward period and within the period in which the temporary differences become deductible. Due to the history of negative earnings in these jurisdictions and future projections of losses, the Company believes it is more likely than not the deferred tax assets will not be realized prior to expiration.

Through March 31, 2018, the Company recognized deferred tax assets related to loss carryforwards and other temporary items of approximately \$415 million. The Company determined that existing taxable temporary differences will reverse within the same period and jurisdiction, and are of the same character as the deductible temporary items generating sufficient taxable income to support realization of \$261 million of these deferred tax assets. Realization of the remaining \$153 million of deferred tax assets is dependent on our ability to earn pretax income aggregating approximately \$574 million in those jurisdictions to realize those deferred tax assets. The realization of our deferred tax assets is not dependent on tax planning strategies.

By their nature, tax laws are often subject to interpretation. Further complicating matters is that in those cases where a tax position is open to interpretation, differences of opinion can result in differing conclusions as to the amount of tax benefits to be recognized under ASC 740, *Income Taxes*. We utilize a two-step approach for evaluating tax positions. Recognition (Step 1) occurs when we conclude that a tax position, based solely on its technical merits, is more likely than not to be sustained upon examination. Measurement (Step 2) is only addressed if Step 1 has been satisfied. Under Step 2, we measure the tax benefit as the largest amount of benefit, determined on a cumulative probability basis that is more likely than not to be realized upon ultimate settlement. Consequently, the level of evidence and documentation necessary to support a position prior to being given recognition and measurement within the financial statements is a matter of judgment that depends on all available evidence.

On December 22, 2017, U.S. tax legislation known as the U.S. Tax Cuts and Jobs Act of 2017 (the "Act") was enacted. For corporations, the Act amends existing U.S. Internal Revenue Code by reducing the corporate income tax rate and modifying several business deduction and international tax provisions. Specifically, the corporate income tax rate was reduced from 35% to 21%. Other significant changes potentially impacting Novelis include the following: (i) net interest expense deduction is limited to the sum of net business interest expense in excess of 30% of adjusted taxable income; (ii) repeal of the deduction for income attributable to domestic production activities; (iii) corporations exceeding certain thresholds will be subject to a Base Erosion Anti-Abuse Tax (BEAT), a minimum tax based on taxable income adjusted for certain payments made to foreign related parties; (iv) 100% expensing for investments made in qualified new and used property placed in service after September 27, 2017 and before January 1, 2023; and (v) net operating losses arising in taxable years after December 31, 2017 are limited to 80% of taxable income and have an indefinite carryforward period, but no carryback period.

Assessment of Loss Contingencies

We have legal and other contingencies, including environmental liabilities, which could result in significant losses upon the ultimate resolution of such contingencies. Environmental liabilities that are not legal asset retirement obligations are accrued on an undiscounted basis when it is probable that a liability exists for past events.

We have provided for losses in situations where we have concluded that it is probable that a loss has been or will be incurred and the amount of the loss is reasonably estimable. A significant amount of judgment is involved in determining whether a loss is probable and reasonably estimable due to the uncertainty involved in determining the likelihood of future events and estimating the financial statement impact of such events. If further developments or resolution of a contingent matter are not consistent with our assumptions and judgments, we may need to recognize a significant charge in a future period related to an existing contingency.

RECENTLY ISSUED ACCOUNTING STANDARDS

See Note 1 — Business and Summary of Significant Accounting Policies to our accompanying audited consolidated financial statements for a full description of recent accounting pronouncements including the respective expected dates of adoption and expected effects on results of operations and financial condition.

NON-GAAP FINANCIAL MEASURES

Total “Segment income” presents the sum of the results of our four operating segments on a consolidated basis. We believe that total “Segment income” is an operating performance measure that measures operating results unaffected by differences in capital structures, capital investment cycles and ages of related assets among otherwise comparable companies. In reviewing our corporate operating results, we also believe it is important to review the aggregate consolidated performance of all of our segments on the same basis we review the performance of each of our regions and to draw comparisons between periods based on the same measure of consolidated performance.

Management believes investors’ understanding of our performance is enhanced by including this non-GAAP financial measure as a reasonable basis for comparing our ongoing results of operations. Many investors are interested in understanding the performance of our business by comparing our results from ongoing operations from one period to the next and would ordinarily add back items that are not part of normal day-to-day operations of our business. By providing total “Segment income,” together with reconciliations, we believe we are enhancing investors’ understanding of our business and our results of operations, as well as assisting investors in evaluating how well we are executing strategic initiatives.

However, total “Segment income” is not a measurement of financial performance under U.S. GAAP, and our total “Segment income” may not be comparable to similarly titled measures of other companies. Total “Segment income” has important limitations as an analytical tool and should not be considered in isolation or as a substitute for analysis of our results as reported under U.S. GAAP. For example, total “Segment income”:

- does not reflect the company’s cash expenditures or requirements for capital expenditures or capital commitments;
- does not reflect changes in, or cash requirements for, the company’s working capital needs; and
- does not reflect any costs related to the current or future replacement of assets being depreciated and amortized.

We also use total “Segment income”:

- as a measure of operating performance to assist us in comparing our operating performance on a consistent basis because it removes the impact of items not directly resulting from our core operations;
- for planning purposes, including the preparation of our internal annual operating budgets and financial projections;
- to evaluate the performance and effectiveness of our operational strategies; and
- as a basis to calculate incentive compensation payments for our key employees.

Total “Segment income” is equivalent to our Adjusted EBITDA, which we refer to in our earnings announcements and other external presentations to analysts and investors.

“Free cash flow” consists of: (a) “net cash provided by (used in) operating activities,” (b) plus “net cash provided by (used in) investing activities” and (c) less “proceeds from sales of assets, net of transaction fees, cash income taxes and hedging.” Management believes “Free cash flow” is relevant to investors as it provides a measure of the cash generated internally that is available for debt service and other value creation opportunities. However, “Free cash flow” does not necessarily represent cash available for discretionary activities, as certain debt service obligations must be funded out of “Free cash flow.” Our method of calculating “Free cash flow” may not be consistent with that of other companies.

Effective in the second quarter of fiscal 2018, management clarified the definition of “Free cash flow” (a non-GAAP measure) to reduce “Proceeds on the sale of assets, net of transaction fees and hedging” by cash income taxes to further enable users of the financial statements to understand cash generated internally by the Company. This change does not impact the consolidated financial statements or significantly impact prior periods.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to certain market risks as part of our ongoing business operations, including risks from changes in commodity prices (primarily LME aluminum prices and natural gas), local market premiums, electricity rates, foreign currency exchange rates and interest rates that could impact our results of operations and financial condition. We manage our exposure to these and other market risks through regular operating and financing activities and derivative financial instruments. We use derivative financial instruments as risk management tools only, and not for speculative purposes.

By their nature, all derivative financial instruments involve risk, including the credit risk of non-performance by counterparties. All derivative contracts are executed with counterparties that, in our judgment, are creditworthy. Our maximum potential loss may exceed the amount recognized in the accompanying March 31, 2018 consolidated balance sheet.

The decision of whether and when to execute derivative instruments, along with the duration of the instrument, can vary from period to period depending on market conditions and the relative costs of the instruments. The duration is linked to the timing of the underlying exposure, with the connection between the two being regularly monitored.

The market risks we are exposed to as part of our ongoing business operations are materially consistent with our risk exposures in the prior year, as we have not entered into any new material hedging programs.

Commodity Price Risks

We have commodity price risk with respect to purchases of certain raw materials including aluminum, electricity, natural gas and transport fuel.

Aluminum

A significant amount of our business is conducted under a conversion model, which allows us to pass through increases or decreases in the price of aluminum to our customers. Nearly all of our flat-rolled products have a price structure with three components: (i) a base aluminum price quoted off the LME; (ii) a local market premium; and (iii) a "conversion premium" to produce the rolled product which reflects, among other factors, the competitive market conditions for that product. Base aluminum prices are typically driven by macroeconomic factors and global supply and demand for aluminum. The local market premiums tend to vary based on the supply and demand for metal in a particular region and associated transportation costs.

Increases or decreases in the average price of aluminum based on the LME directly impact "Net sales," "Cost of goods sold (exclusive of depreciation and amortization)" and working capital. The timing of these impacts varies based on contractual arrangements with customers and metal suppliers in each region. These timing impacts are referred to as metal price lag. Metal price lag exists due to: (i) certain customer contracts containing fixed forward price commitments which result in exposure to changes in metal prices for the period of time between when our sales price fixes and the sale actually occurs, and (ii) the period of time between the pricing of our purchases of metal, holding and processing the metal, and the pricing of the sale of finished inventory to our customers.

We use derivative instruments to preserve our conversion margins and manage the timing differences associated with metal price lag related to base aluminum price. We use over-the-counter derivatives indexed to the London Metals Exchange (LME) (referred to as our "aluminum derivative contracts") to reduce our exposure to fluctuating metal prices associated with the period of time between the pricing of our purchases of inventory and the pricing of the sale of that inventory to our customers. We also purchase forward LME aluminum contracts simultaneous with our sales contracts with customers that contain fixed metal prices. These LME aluminum forward contracts directly hedge the economic risk of future metal price fluctuations to better match the purchase price of metal with the sales price of metal.

Sensitivities

The following table presents the estimated potential effect on the fair values of these derivative instruments as of March 31, 2018, given a 10% increase in prices (\$ in millions).

	Change in Price	Change in Fair Value
LME aluminum	10%	\$ (91)

Energy

We use several sources of energy in the manufacturing and delivery of our aluminum rolled products. For the year ended March 31, 2018, natural gas and electricity represented approximately 98% of our energy consumption by cost. We also use fuel oil and transport fuel. The majority of energy usage occurs at our casting centers and during the hot rolling of aluminum.

We purchase our natural gas and diesel fuel on the open market, subjecting us to market price fluctuations. We seek to stabilize our future exposure to natural gas and diesel fuel prices through the use of forward purchase contracts.

A portion of our electricity requirements are purchased pursuant to long-term contracts in the local regions in which we operate. A number of our facilities are located in regions with regulated prices, which affords relatively stable costs. In North America, we have entered into an electricity swap to fix a portion of the cost of our electricity requirements.

Fluctuating energy costs worldwide, due to the changes in supply and demand, and international and geopolitical events, expose us to earnings volatility as changes in such costs cannot be immediately recovered under existing contracts and sales agreements, and may only be mitigated in future periods under future pricing arrangements.

Sensitivities

The following table presents the estimated potential effect on the fair values of these derivative instruments as of March 31, 2018, given a 10% decline in spot prices for energy contracts (\$ in millions).

	Change in Price	Change in Fair Value
Electricity	(10)%	\$ (4)
Natural Gas	(10)%	(5)
Diesel Fuel	(10)%	\$ (1)

Foreign Currency Exchange Risks

Exchange rate movements, particularly the Euro, the Swiss franc, the Brazilian real and the Korean won against the U.S. dollar, have an impact on our operating results. In Europe, where we have predominantly local currency selling prices and operating costs, we benefit as the Euro strengthens, but are adversely affected as the Euro weakens. For our Swiss operations, where operating costs are incurred primarily in the Swiss franc and a large portion of revenues are denominated in the Euro, we benefit as the Franc weakens but are adversely affected as the Franc strengthens. In South Korea, where we have local currency operating costs and U.S. dollar denominated selling prices for exports, we benefit as the Won weakens but are adversely affected as the Won strengthens. In Brazil, where we have predominately U.S. dollar selling prices and local currency manufacturing costs, we benefit as the Real weakens, but are adversely affected as the Real strengthens.

It is our policy to minimize exposures from non-functional currency denominated transactions within each of our operating segments. We use foreign exchange forward contracts, options and cross-currency swaps to manage exposure arising from recorded assets and liabilities, firm commitments, and forecasted cash flows denominated in currencies other than the functional currency of certain operations, which include forecasted net sales, forecasted purchase commitments, capital expenditures and net investment in foreign subsidiaries. Our most significant non-U.S. dollar functional currency operations have the Euro and the Korean won as their functional currencies, respectively. Our Brazilian operations are U.S. dollar functional.

We also face translation risks related to the changes in foreign currency exchange rates which are generally not hedged. Amounts invested in these foreign operations are translated into U.S. dollars at the exchange rates in effect at the balance sheet date. Any resulting translation adjustments are recorded as a component of "Accumulated other comprehensive income/loss" in the Shareholder's equity/deficit section of our consolidated balance sheets. Net sales and expenses at these non-U.S. dollar functional currency entities are translated into varying amounts of U.S. dollars depending upon whether the U.S. dollar weakens or strengthens against other currencies. Therefore, changes in exchange rates may either positively or negatively affect our net sales and expenses as expressed in U.S. dollars.

Any negative impact of currency movements on the currency contracts we have entered into to hedge foreign currency commitments to purchase or sell goods and services would be offset by an approximately equal and opposite favorable exchange impact on the commitments being hedged. For a discussion of accounting policies and other information relating to

currency contracts, see Note 1 — Business and Summary of Significant Accounting Policies and Note 14 — Financial Instruments and Commodity Contracts to our accompanying consolidated financial statements.

Sensitivities

The following table presents the estimated potential effect on the fair values of these derivative instruments as of March 31, 2018, given a 10% change in rates (\$ in millions).

	Change in Exchange Rate	Change in Fair Value
Currency measured against the U.S. dollar		
Brazilian real	(10)%	\$ (17)
Euro	10 %	(46)
Korean won	(10)%	(32)
Canadian dollar	(10)%	(4)
British pound	(10)%	(20)
Swiss franc	(10)%	(46)
Chinese yuan	10 %	(9)

Interest Rate Risks

We use interest rate swaps to manage our exposure to changes in benchmark interest rates which impact our variable-rate debt.

In September 2017, we amended our Term Loan Facility. Our interest rate paid is a spread of 1.85% plus LIBOR (2.31%). As of March 31, 2018, the effective interest rate was 4.16%. As of March 31, 2018, a 100 basis point increase or decrease in LIBOR interest rates would have had an \$18 million impact on our annual pre-tax income.

From time to time, we have used interest rate swaps to manage our debt cost. As of March 31, 2018, there were no USD LIBOR based interest rate swaps outstanding.

In Korea, we periodically enter into interest rate swaps to fix the interest rate on various floating rate debt in order to manage our exposure to changes in the 3M-CD interest rate. See Note 14 — Financial Instruments and Commodity Contracts for further information on the amounts outstanding as of March 31, 2018. As of March 31, 2018, the fair values of these derivatives are insensitive to moderate changes in the benchmark interest rate.

Item 8. Financial Statements and Supplementary Data

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Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act, as amended. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the Company's consolidated financial statements.

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

Management has assessed the effectiveness of the Company's internal control over financial reporting as of March 31, 2018. In making this assessment, management used the criteria established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in "*Internal Control — Integrated Framework (2013)*." Based on its assessment, management has concluded that, as of March 31, 2018, the Company's internal control over financial reporting was effective based on those criteria.

The effectiveness of the Company's internal control over financial reporting as of March 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

/s/ Steven Fisher

Steven Fisher
President and Chief Executive Officer
May 8, 2018

/s/ Devinder Ahuja

Devinder Ahuja
Senior Vice President and Chief Financial Officer
May 8, 2018

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholder of Novelis Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Novelis Inc. and its subsidiaries as of March 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income, shareholder's (deficit) equity, and cash flows, for each of the three years in the period ended March 31, 2018, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of March 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of March 31, 2018 and 2017, and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained in all material respects, effective internal control over financial reporting as of March 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/PricewaterhouseCoopers LLP

Atlanta, Georgia
May 8, 2018

We have served as the Company's auditor since 2006.

Novelis Inc.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In millions)

	Year Ended March 31,		
	2018	2017	2016
Net sales	\$ 11,462	\$ 9,591	\$ 9,872
Cost of goods sold (exclusive of depreciation and amortization)	9,719	8,016	8,727
Selling, general and administrative expenses	489	421	407
Depreciation and amortization	354	360	353
Interest expense and amortization of debt issuance costs	255	294	327
Research and development expenses	64	58	54
Gain on assets held for sale	—	(2)	—
(Gain) loss on sale of a business, net	(318)	27	—
Loss on extinguishment of debt	—	134	13
Restructuring and impairment, net	34	10	48
Equity in net loss of non-consolidated affiliates	1	8	3
Other expense (income), net	9	68	(68)
	<u>10,607</u>	<u>9,394</u>	<u>9,864</u>
Income before income taxes	855	197	8
Income tax provision	233	151	46
Net income (loss)	622	46	(38)
Net (loss) income attributable to noncontrolling interests	(13)	1	—
Net income (loss) attributable to our common shareholder	<u>\$ 635</u>	<u>\$ 45</u>	<u>\$ (38)</u>

See accompanying notes to the consolidated financial statements.

Novelis Inc.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In millions)

	Year Ended March 31,		
	2018	2017	2016
Net income (loss)	\$ 622	\$ 46	\$ (38)
Other comprehensive income (loss):			
Currency translation adjustment	191	(59)	17
Net change in fair value of effective portion of hedges, net	109	(57)	60
Net change in pension and other benefits, net	12	74	(33)
Other comprehensive income (loss) before income tax effect	312	(42)	44
Income tax provision (benefit) related to items of other comprehensive income	34	—	(6)
	278	(42)	50
Comprehensive income	\$ 900	\$ 4	\$ 12
Less: Comprehensive (loss) income attributable to noncontrolling interest, net of tax	(19)	4	(11)
Comprehensive income attributable to our common shareholder	\$ 919	\$ —	\$ 23

See accompanying notes to the consolidated financial statements.

Novelis Inc.
CONSOLIDATED BALANCE SHEETS
(In millions, except number of shares)

	March 31,	
	2018	2017
ASSETS		
Current assets		
Cash and cash equivalents	\$ 920	\$ 594
Accounts receivable, net		
— third parties (net of uncollectible accounts of \$7 as of March 31, 2018 and \$6 as of March 31, 2017)	1,353	1,067
— related parties	242	60
Inventories	1,560	1,333
Prepaid expenses and other current assets	125	137
Fair value of derivative instruments	159	113
Assets held for sale	5	3
Total current assets	4,364	3,307
Property, plant and equipment, net	3,110	3,357
Goodwill	607	607
Intangible assets, net	410	457
Investment in and advances to non-consolidated affiliate	849	451
Deferred income tax assets	63	85
Other long-term assets		
— third parties	97	94
— related parties	3	15
Total assets	\$ 9,503	\$ 8,373
LIABILITIES AND SHAREHOLDER'S EQUITY (DEFICIT)		
Current liabilities		
Current portion of long-term debt	\$ 121	\$ 121
Short-term borrowings	49	294
Accounts payable		
— third parties	2,051	1,722
— related parties	205	51
Fair value of derivative instruments	106	151
Accrued expenses and other current liabilities	591	578
Total current liabilities	3,123	2,917
Long-term debt, net of current portion	4,336	4,437
Deferred income tax liabilities	164	99
Accrued postretirement benefits	825	799
Other long-term liabilities	232	198
Total liabilities	8,680	8,450
Commitments and contingencies		
Shareholder's equity (deficit)		
Common stock, no par value; unlimited number of shares authorized; 1,000 shares issued and outstanding as of March 31, 2018 and 2017	—	—
Additional paid-in capital	1,404	1,404
Accumulated deficit	(283)	(918)
Accumulated other comprehensive loss	(261)	(545)
Total equity (deficit) of our common shareholder	860	(59)
Noncontrolling interests	(37)	(18)
Total equity (deficit)	823	(77)
Total liabilities and equity (deficit)	\$ 9,503	\$ 8,373

See accompanying notes to the consolidated financial statements.

Novelis Inc.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Year Ended March 31,		
	2018	2017	2016
OPERATING ACTIVITIES			
Net income (loss)	\$ 622	\$ 46	\$ (38)
Adjustments to determine net cash provided by operating activities:			
Depreciation and amortization	354	360	353
Loss (gain) on unrealized derivatives and other realized derivatives in investing activities, net	15	(15)	(27)
Gain on assets held for sale	—	(2)	—
(Gain) loss on sale of business	27,000,000 (318)	27	—
Loss on sale of assets	7	6	4
Impairment charges	15	2	25
Loss on extinguishment of debt	—	134	13
Deferred income taxes	53	6	(93)
Amortization of fair value adjustments, net	—	7	11
Equity in net loss of non-consolidated affiliates	1	8	3
(Gain) loss on foreign exchange remeasurement of debt	(2)	2	(2)
Amortization of debt issuance costs and carrying value adjustments	19	22	19
Other, net	1	3	—
Changes in assets and liabilities including assets and liabilities held for sale (net of effects from divestitures):			
Accounts receivable	(402)	(154)	336
Inventories	(151)	(193)	268
Accounts payable	336	253	(327)
Other current assets	21	(17)	(12)
Other current liabilities	(5)	34	7
Other noncurrent assets	(5)	(30)	20
Other noncurrent liabilities	25	76	(19)
Net cash provided by operating activities	586	575	541
INVESTING ACTIVITIES			
Capital expenditures	(226)	(224)	(370)
Proceeds from sales of assets, third party, net of transaction fees and hedging	2	4	3
Proceeds (outflows) from the sale of a business	314	(2)	—
Proceeds from investment in and advances to non-consolidated affiliates, net	16	2	(2)
(Outflows) proceeds from settlement of other undesignated derivative instruments, net	(23)	8	(9)
Net cash provided by (used in) investing activities	83	(212)	(378)
FINANCING ACTIVITIES			
Proceeds from issuance of long-term and short-term borrowings	—	4,572	174
Principal payments of long-term and short-term borrowings	(174)	(4,477)	(216)
Revolving credit facilities and other, net	(211)	(229)	(187)
Dividends, noncontrolling interest	—	—	(1)
Debt issuance costs	(5)	(191)	(15)
Net cash used in financing activities	(390)	(325)	(245)
Net increase (decrease) in cash and cash equivalents	279	38	(82)
Effect of exchange rate changes on cash	47	—	10
Cash and cash equivalents — beginning of period	594	556	628
Cash and cash equivalents — end of period	<u>\$ 920</u>	<u>\$ 594</u>	<u>\$ 556</u>

See accompanying notes to the consolidated financial statements.

Novelis Inc.
CONSOLIDATED STATEMENTS OF SHAREHOLDER'S (DEFICIT) EQUITY
(In millions, except number of shares)

(Deficit) Equity of our Common Shareholder								
	Common Stock		Additional Paid-in Capital	Retained Earnings/ (Accumulated Deficit)	Accumulated Other Comprehensive Loss (AOCI)	Non- Controlling Interests	Total (Deficit)/ Equity	
	Shares	Amount						
Balance as of March 31, 2015	1,000	\$ —	\$ 1,404	\$ (925)	\$ (561)	\$ 12	\$ (70)	
Net loss attributable to our common shareholder	—	—	—	(38)	—	—	(38)	
Currency translation adjustment, net of tax provision of \$— included in AOCI	—	—	—	—	17	—	17	
Change in fair value of effective portion of hedges, net of tax provision of \$8 included in AOCI	—	—	—	—	52	—	52	
Change in pension and other benefits, net of tax benefit of \$14 included in AOCI	—	—	—	—	(8)	(11)	(19)	
Noncontrolling interests cash dividends declared	—	—	—	—	—	(1)	(1)	
Balance as of March 31, 2016	1,000	—	1,404	(963)	(500)	—	(59)	
Net income attributable to our common shareholder	—	—	—	45	—	—	45	
Net income attributable to noncontrolling interests	—	—	—	—	—	1	1	
Currency translation adjustment, net of tax provision of \$— included in AOCI	—	—	—	—	(60)	1	(59)	
Change in fair value of effective portion of cash flow hedges, net of tax provision of \$22 million included in AOCI	—	—	—	—	(35)	—	(35)	
Change in pension and other benefits, net of tax benefit of \$22 million included in AOCI	—	—	—	—	50	2	52	
Noncontrolling interest related to the sale of a business	—	—	—	—	—	(22)	(22)	
Balance as of March 31, 2017	1,000	—	1,404	(918)	(545)	(18)	(77)	
Net income attributable to our common shareholder	—	—	—	635	—	—	635	
Net loss attributable to noncontrolling interests	—	—	—	—	—	(13)	(13)	
Currency translation adjustment, net of tax provision of \$— included in AOCI	—	—	—	—	191	—	191	
Change in fair value of effective portion of cash flow hedges, net of tax provision of \$32 million included in AOCI	—	—	—	—	77	—	77	
Change in pension and other benefits, net of tax provision of \$2 million included in AOCI	—	—	—	—	16	(6)	10	
Balance as of March 31, 2018	1,000	\$ —	\$ 1,404	\$ (283)	\$ (261)	\$ (37)	\$ 823	

See accompanying notes to the consolidated financial statements.

1. BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

References herein to “Novelis,” the “Company,” “we,” “our,” or “us” refer to Novelis Inc. and its subsidiaries unless the context specifically indicates otherwise. References herein to “Hindalco” refer to Hindalco Industries Limited. Hindalco acquired Novelis in May 2007. All of the common shares of Novelis are owned directly by AV Metals Inc. and indirectly by Hindalco Industries Limited.

Organization and Description of Business

We produce aluminum sheet and light gauge products for use in the packaging market, which includes beverage and food can and foil products, as well as for use in the automotive, transportation, electronics, architectural and industrial product markets. We have recycling operations in many of our plants to recycle post-consumer aluminum, such as used-beverage cans and post-industrial aluminum, such as class scrap. As of March 31, 2018, we had manufacturing operations in ten countries on four continents: North America, South America, Asia and Europe, through 24 operating facilities, including recycling operations in eleven of these plants.

Consolidation Policy

Our consolidated financial statements include the assets, liabilities, revenues and expenses of all wholly-owned subsidiaries, majority-owned subsidiaries over which we exercise control and entities in which we have a controlling financial interest or are deemed to be the primary beneficiary. We eliminate all significant intercompany accounts and transactions from our consolidated financial statements.

We use the equity method to account for our investments in entities that we do not control, but where we have the ability to exercise significant influence over operating and financial policies. Consolidated “Net income (loss) attributable to our common shareholder” includes our share of net income (loss) of these entities. The difference between consolidation and the equity method impacts certain of our financial ratios because of the presentation of the detailed line items reported in the consolidated financial statements for consolidated entities, compared to a two-line presentation of “Investment in and advances to non-consolidated affiliates” and “Equity in net income (loss) of non-consolidated affiliates.”

Use of Estimates and Assumptions

The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires us to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosures of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. The principal areas of judgment relate to (1) the fair value of derivative financial instruments; (2) impairment of goodwill; (3) impairment of long lived assets and other intangible assets; (4) impairment and assessment of consolidation of equity investments; (5) actuarial assumptions related to pension and other postretirement benefit plans; (6) tax uncertainties and valuation allowances; and (7) assessment of loss contingencies, including environmental and litigation liabilities. Future events and their effects cannot be predicted with certainty, and accordingly, our accounting estimates require the exercise of judgment. The accounting estimates used in the preparation of our consolidated financial statements may change as new events occur, as more experience is acquired, as additional information is obtained and as our operating environment changes. We evaluate and update our assumptions and estimates on an ongoing basis and may employ outside experts to assist in our evaluations. Actual results could differ from the estimates we have used.

Revision of Previously Issued Financial Statements

In connection with preparing the financial statements for fiscal year 2018, we identified a footnote only disclosure misstatement of the aggregated receivables factored within previously issued Form 10-Ks for the years ended March 31, 2017 and March 31, 2016. The previously disclosed amounts for the years ended March 31, 2017 and March 31, 2016 were \$5,149 million and \$3,314 million, respectively, and the corrected amounts are \$3,495 million and \$2,816 million, respectively.

We also identified a misclassification between “Accrued expenses and other current liabilities” and the deferred income tax balances of \$2 million as of March 31, 2017. As a result, there is a \$2 million misclassification between deferred income tax expense and current income tax expense within Note 18 — Income Taxes as of March 31, 2017. These items impacted the “Deferred income tax” and “Other current liabilities” line items within total “Operating Activities”. However, there is no impact to “Net cash provided by operating activities” within the Consolidated Statements of Cash Flows. Additionally, disclosure misclassifications between categories, decreasing “Provisions not currently deductible for tax

purposes" by \$41 million and increasing "Tax losses/benefits carryforward, net" by \$47 million and "Valuation allowance" by \$9 million, were identified within Note 18 — Income Taxes as of March 31, 2017.

As of June 30, 2017, we identified a misclassification between "Prepaid expenses and other current assets" and "Accrued expenses other current liabilities" accounts that understated these balances as of March 31, 2017 by \$26 million. In addition, we identified a misclassification between "Deferred income tax assets" and "Deferred income tax liabilities" of \$4 million that understated these balances as of March 31, 2017. These items impacted the "Other current assets" and "Other current liabilities" line items within total "Operating Activities". However, there is no impact to "Net cash provided by operating activities" within the Consolidated Statements of Cash Flows.

We assessed the materiality of the misstatements and concluded that these misstatements were not material to the Company's previously issued financial statements and that amendments of previously filed reports were therefore not required. However, we elected to revise the previously reported amounts in the March 31, 2017 consolidated balance sheet, the consolidated statement of cash flows for the year ended March 31, 2017, and we have also revised the footnotes for the disclosure misstatements described above, as applicable.

Reclassification

A reclassification of a prior period amount has been made to conform to the presentation adopted for the current period. For the year ended March 31, 2017, we reclassified \$27 million from "Other (income) expense, net" to "(Gain) loss on the sale of a business, net" in the consolidated statement of operations to conform with the current period presentation. This reclassification had no impact on "Income before income taxes," "Net income (loss) attributable to our common shareholder," the condensed consolidated balance sheets or consolidated statements of cash flows during the respective periods. Refer to Note 17 — Other (income) expense, net for further details.

Risks and Uncertainties

We are exposed to a number of risks in the normal course of our operations that could potentially affect our financial position, results of operations, and cash flows.

Laws and regulations

We operate in an industry that is subject to a broad range of environmental, health and safety laws and regulations in the jurisdictions in which we operate. These laws and regulations impose increasingly stringent environmental, health and safety protection standards and permitting requirements regarding, among other things, air emissions, wastewater storage, treatment and discharges, the use and handling of hazardous or toxic materials, waste disposal practices, the remediation of environmental contamination, post-mining reclamation and working conditions for our employees. Some environmental laws, such as the U.S. Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, and comparable state laws, impose joint and several liability for the cost of environmental remediation, natural resource damages, third party claims, and other expenses, without regard to the fault or the legality of the original conduct.

The costs of complying with these laws and regulations, including participation in assessments and remediation of contaminated sites and installation of pollution control facilities, have been, and in the future could be, significant. In addition, these laws and regulations may also result in substantial environmental liabilities associated with divested assets, third party locations and past activities. In certain instances, these costs and liabilities, as well as related action to be taken by us, could be accelerated or increased if we were to close, divest of or change the principal use of certain facilities with respect to which we may have environmental liabilities or remediation obligations. Currently, we are involved in a number of compliance efforts, remediation activities and legal proceedings concerning environmental matters, including certain activities and proceedings arising under U.S. Superfund and comparable laws in other jurisdictions where we have operations.

We have established liabilities for environmental remediation where appropriate. However, the cost of addressing environmental matters (including the timing of any charges related thereto) cannot be predicted with certainty, and these liabilities may not ultimately be adequate, especially in light of potential changes in environmental conditions, changing interpretations of laws and regulations by regulators and courts, the discovery of previously unknown environmental conditions, the risk of governmental orders to carry out additional compliance on certain sites not initially included in remediation in progress, our potential liability to remediate sites for which provisions have not been previously established and the adoption of more stringent environmental laws. Such future developments could result in increased environmental costs and liabilities and could require significant capital expenditures, any of which could have a material adverse effect on our financial position or results of operations or cash flows. Furthermore, the failure to comply with our obligations under the environmental laws and regulations could subject us to administrative, civil or criminal penalties, obligations to pay damages or other costs, and injunctions or other orders, including orders to cease operations. In addition, the presence of environmental

contamination at our properties could adversely affect our ability to sell a property, receive full value for a property or use a property as collateral for a loan.

Some of our current and potential operations are located or could be located in or near communities that may regard such operations as having a detrimental effect on their social and economic circumstances. Environmental laws typically provide for participation in permitting decisions, site remediation decisions and other matters. Concern about environmental justice issues may affect our operations. Should such community objections be presented to government officials, the consequences of such a development may have a material adverse impact upon the profitability or, in extreme cases, the viability of an operation. In addition, such developments may adversely affect our ability to expand or enter into new operations in such location or elsewhere and may also have an effect on the cost of our environmental remediation projects.

We use a variety of hazardous materials and chemicals in our rolling processes and in connection with maintenance work on our manufacturing facilities. Because of the nature of these substances or related residues, we may be liable for certain costs, including, among others, costs for health-related claims or removal or re-treatment of such substances. Certain of our current and former facilities incorporated asbestos-containing materials, a hazardous substance that has been the subject of health-related claims for occupation exposure. In addition, although we have developed environmental, health and safety programs for our employees, including measures to reduce employee exposure to hazardous substances, and conduct regular assessments at our facilities, we are currently, and in the future may be, involved in claims and litigation filed on behalf of persons alleging injury predominantly as a result of occupational exposure to substances at our current or former facilities. It is not possible to predict the ultimate outcome of these claims and lawsuits due to the unpredictable nature of personal injury litigation. If these claims and lawsuits, individually or in the aggregate, were finally resolved against us, our financial position, results of operations and cash flows could be adversely affected.

Materials and labor

In the aluminum rolled products industry, our raw materials are subject to continuous price volatility. We may not be able to pass on the entire cost of the increases to our customers or offset fully the effects of higher raw material costs through productivity improvements, which may cause our profitability to decline. In addition, there is a potential time lag between changes in prices under our purchase contracts and the point when we can implement a corresponding change under our sales contracts with our customers. As a result, we could be exposed to fluctuations in raw materials prices which could have a material adverse effect on our financial position, results of operations and cash flows. Significant price increases may result in our customers substituting other materials, such as plastic or glass, for aluminum or switching to another aluminum rolled products producer, which could have a material adverse effect on our financial position, results of operations and cash flows.

We consume substantial amounts of energy in our rolling operations and our cast house operations. The factors that affect our energy costs and supply reliability tend to be specific to each of our facilities. A number of factors could materially adversely affect our energy position including, but not limited to: (a) increases in the cost of natural gas; (b) increases in the cost of supplied electricity or fuel oil related to transportation; (c) interruptions in energy supply due to equipment failure or other causes and (d) the inability to extend energy supply contracts upon expiration on economical terms. A significant increase in energy costs or disruption of energy supplies or supply arrangements could have a material adverse effect on our financial position, results of operations and cash flows.

A substantial portion of our employees are represented by labor unions under a large number of collective bargaining agreements with varying durations and expiration dates. We may not be able to satisfactorily renegotiate our collective bargaining agreements when they expire. In addition, existing collective bargaining agreements may not prevent a strike or work stoppage at our facilities in the future, and any such work stoppage could have a material adverse effect on our financial position, results of operations and cash flows.

Geographic markets

We are, and will continue to be, subject to financial, political, economic and business risks in connection with our global operations. We have made investments and carry on production activities in various emerging markets, including China, Brazil and South Korea, and we market our products in these countries, as well as certain other countries in Asia, Africa, and the Middle East. While we anticipate higher growth or attractive production opportunities from these emerging markets, they also present a higher degree of risk than more developed markets. In addition to the business risks inherent in developing and servicing new markets, economic conditions may be more volatile, legal and regulatory systems may be less developed and predictable, and the possibility of various types of adverse governmental action may be more pronounced. In addition, inflation, fluctuations in currency and interest rates, competitive factors, civil unrest and labor problems could affect our revenues, expenses and results of operations. Our operations could also be adversely affected by acts of war, terrorism or the threat of any of these events as well as government actions such as controls on imports, exports and prices, tariffs, new forms of taxation, changes in fiscal regimes and increased government regulation in the countries in which we operate or service

customers. Unexpected or uncontrollable events or circumstances in any of these markets could have a material adverse effect on our financial position, results of operations and cash flows.

Other risks and uncertainties

In addition, refer to Note 14 — Financial Instruments and Commodity Contracts, Note 16 — Fair Value Measurements and Note 19 — Commitments and Contingencies for a discussion of financial instruments and commitments and contingencies.

Revenue Recognition

We recognize sales when the revenue is realized or realizable, and has been earned. We record sales when a firm sales agreement is in place, delivery has occurred and collectability of the fixed or determinable sales price is reasonably assured.

We recognize product revenue, net of trade discounts, allowances, and estimated billing adjustments, in the reporting period in which the products are shipped and the title and risk of ownership pass to the customer. We sell most of our products under contracts based on a “conversion premium,” which is subject to periodic adjustments based on market factors. As a result, the aluminum price risk is largely absorbed by the customer. In situations where we offer customers fixed prices for future delivery of our products, we enter into derivative instruments for all or a portion of the cost of metal inputs to protect our profit on the conversion of the product.

Shipping and handling amounts we bill to our customers are included in “Net sales” and the related shipping and handling costs we incur are included in “Cost of goods sold (exclusive of depreciation and amortization).”

Our customers can receive or earn certain incentives including, but not limited to, contract signing bonuses, cash discounts, volume based incentive programs, and support for infrastructure programs. The incentives are recorded as reductions to "Net sales" and are recognized over the minimum contractual period in which the customer is obligated to make purchases from Novelis. For incentives that must be earned, management must make estimates related to customer performance and sales volume to determine the total amounts earned and to be recorded as reductions to "Net sales." In making these estimates, management considers historical results and future estimates. The actual amounts may differ from these estimates.

On occasion, and in an attempt to better manage inventory levels, we sell inventory to third parties and have agreed to repurchase the same or similar inventory back from the third parties over a future period, based on market prices at the time of repurchase. For transactions in which the Company sells inventory and agrees to repurchase at a later date, we record the initial sale of the inventory on a net basis in our consolidated statement of operations through "Cost of goods sold (exclusive of depreciation and amortization)." Upon repurchase, the Company accounts for the inventory at the reacquisition price which becomes an input to our moving average inventory cost basis.

Cost of Goods Sold (Exclusive of Depreciation and Amortization)

“Cost of goods sold (exclusive of depreciation and amortization)” includes all costs associated with inventories, including the procurement of materials, the conversion of such materials into finished products, and the costs of warehousing and distributing finished goods to customers. Material procurement costs include inbound freight charges as well as purchasing, receiving, inspection and storage costs. Conversion costs include the costs of direct production inputs such as labor and energy, as well as allocated overheads from indirect production centers and plant administrative support areas. Warehousing and distribution costs include inside and outside storage costs, outbound freight charges and the costs of internal transfers.

Selling, General and Administrative Expenses

“Selling, general and administrative expenses” include selling, marketing and advertising expenses; salaries, travel and office expenses of administrative employees and contractors; legal and professional fees; software license fees; bad debt expenses; and factoring expenses.

Research and Development

We incur costs in connection with research and development programs that are expected to contribute to future earnings, and charge such costs against income as incurred. Research and development costs consist primarily of salaries and administrative costs.

Restructuring Activities

Restructuring charges, which are recorded within "Restructuring and impairment, net," include employee severance and benefit costs, impairments of assets, and other costs associated with exit activities. We apply the provisions of ASC 420, *Exit or Disposal Cost Obligations* and ASC 712, *Compensation — Nonretirement Postemployment Benefits*. Severance costs accounted for under ASC 420 and/or ASC 712 are recognized when management with the proper level of authority has committed to a restructuring plan and communicated those actions to employees. Impairment losses are based upon the estimated fair value less costs to sell, with fair value estimated based on existing market prices for similar assets. Other exit costs include environmental remediation costs and contract termination costs, primarily related to equipment and facility lease obligations. At each reporting date, we evaluate the accruals for restructuring costs to ensure the accruals are still appropriate. See Note 2 — Restructuring and Impairment for further discussion.

Cash and Cash Equivalents

"Cash and cash equivalents" includes investments that are highly liquid and have maturities of three months or less when purchased. The carrying values of cash and cash equivalents approximate their fair value due to the short-term nature of these instruments.

We maintain amounts on deposit with various financial institutions, which may, at times, exceed federally insured limits. However, management periodically evaluates the credit-worthiness of those institutions, and we have not experienced any losses on such deposits.

Accounts Receivable

Our accounts receivable are geographically dispersed. We do not obtain collateral relating to our accounts receivable. We do not believe there are any significant concentrations of revenues from any particular customer or group of customers that would subject us to any significant credit risks in the collection of our accounts receivable. We report accounts receivable at the estimated net realizable amount we expect to collect from our customers.

Additions to the allowance for doubtful accounts are made by means of the provision for doubtful accounts. We write-off uncollectible accounts receivable against the allowance for doubtful accounts after exhausting collection efforts. For each of the periods presented, we performed an analysis of our historical cash collection patterns and considered the impact of any known material events in determining the allowance for doubtful accounts. See Note 3 — Accounts Receivable for further discussion.

Derivative Instruments

We hold derivatives for risk management purposes and not for trading. We use derivatives to mitigate uncertainty and volatility caused by underlying exposures to aluminum prices, foreign exchange rates, interest rates, and energy prices. The fair values of all derivative instruments are recognized as assets or liabilities at the balance sheet date and are reported gross.

We may be exposed to losses in the future if the counterparties to our derivative contracts fail to perform. We are satisfied that the risk of such non-performance is remote due to our monitoring of credit exposures. Additionally, we enter into master netting agreements with contractual provisions that allow for netting of counterparty positions in case of default, and we do not face credit contingent provisions that would result in the posting of collateral.

Prior to the adoption of ASU 2017-12 *Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities*, we were required to separately measure and record ineffectiveness, which is the amount by which the hedging instrument did not offset the changes in the fair value or cash flows of hedged items. We recorded the gain or loss related to the ineffective portion of derivative instruments, if any, in "Other (income) expense, net. Pursuant to our adoption of the provisions of ASU 2017-12 in the fourth quarter of fiscal 2018, we are no longer required to separately measure and recognize hedge ineffectiveness in our current period earnings. Upon adoption of ASU 2017-12, for cash flow hedges we will recognize and defer the entire periodic change in the fair value of the hedging instrument in other comprehensive income (loss). The amounts recorded in other comprehensive income (loss) will subsequently be reclassified to earnings in the same line item impacted by the hedged item when the hedged item affects earnings.

Prior to the adoption of ASU 2017-12, we assessed and measured hedge effectiveness on our aluminum and natural gas programs based on all pricing components of the hedged item. Pursuant to the adoption of ASU 2017-12, we will apply hedge accounting to only a specific component of the hedged item for these programs simplifying the application of hedge accounting and better aligning our risk management objectives, activities and financial reporting.

For derivatives designated as cash flow hedges or net investment hedges, we assess hedge effectiveness by formally evaluating the high correlation of the expected future cash flows of the hedged item and the derivative hedging instrument. The

effective portion of gain or loss on the derivative is included in other comprehensive income (OCI) and reclassified to earnings in the period in which earnings are impacted by the hedged items or in the period that the transaction becomes probable of not occurring. Gains or losses representing reclassifications of OCI to earnings are recognized in the line item most reflective of the underlying risk exposure. We exclude the time value component of foreign currency and aluminum price risk hedges when measuring and assessing ineffectiveness to align our accounting policy with risk management objectives when it is necessary. If at any time during the life of a cash flow hedge relationship we determine that the relationship is no longer effective, the derivative will no longer be designated as a cash flow hedge and future gains or losses on the derivative will be recognized in "Other expense (income), net".

For derivatives designated as fair value hedges, we assess hedge effectiveness by formally evaluating the high correlation of changes in the fair value of the hedged item and the derivative hedging instrument. The changes in the fair values of the underlying hedged items are reported in "Prepaid expenses and other current assets," "Other long-term assets", "Accrued expenses and other current liabilities," and "Other long-term liabilities" in the consolidated balance sheets. Changes in the fair values of these derivatives and underlying hedged items generally offset and the effective portion is recorded in "Net sales" consistent with the underlying hedged item and the net ineffectiveness is recorded in "Other (income) expense, net."

If no hedging relationship is designated, gains or losses are recognized in "Other expense (income), net" in our current period earnings.

Consistent with the cash flows from the underlying risk exposure, we classify cash settlement amounts associated with designated derivatives as part of either operating or investing activities in the consolidated statements of cash flows. If no hedging relationship is designated, we classify cash settlement amounts as part of investing activities in the consolidated statement of cash flows.

The majority of our derivative contracts are valued using industry-standard models that use observable market inputs as their basis, such as time value, forward interest rates, volatility factors, and current (spot) and forward market prices for foreign exchange rates. See Note 14 — Financial Instruments and Commodity Contracts and Note 16 — Fair Value Measurements for additional discussion related to derivative instruments.

Inventories

We carry our inventories at the lower of their cost or net realizable value, reduced for obsolete and excess inventory. We use the average cost method to determine cost. Included in inventories are stores inventories, which are carried at average cost. See Note 4 — Inventories for further discussion.

Property, Plant and Equipment

We record land, buildings, leasehold improvements and machinery and equipment at cost. We record assets under capital lease obligations at the lower of their fair value or the present value of the aggregate future minimum lease payments as of the beginning of the lease term. We generally depreciate our assets using the straight-line method over the shorter of the estimated useful life of the assets or the lease term, excluding any lease renewals, unless the lease renewals are reasonably assured. See Note 5 — Property, Plant and Equipment for further discussion. We assign useful lives to and depreciate major components of our property, plant and equipment.

The ranges of estimated useful lives are as follows:

	Years
Buildings	30 to 40
Leasehold improvements	7 to 20
Machinery and equipment	2 to 25
Furniture, fixtures and equipment	3 to 10
Equipment under capital lease obligations	5 to 15

Most of our large scale machinery, including hot mills, cold mills, continuous casting mills, furnaces and finishing mills have useful lives of 15 to 25 years. Supporting machinery and equipment, including automation and work rolls, have useful lives of 2 to 15 years.

Maintenance and repairs of property and equipment are expensed as incurred. We capitalize replacements and improvements that increase the estimated useful life of an asset, and we capitalize interest on major construction and development projects while in progress.

We retain fully depreciated assets in property and accumulated depreciation accounts until we remove them from service. In the case of sale, retirement or disposal, the asset cost and related accumulated depreciation balances are removed from the respective accounts, and the resulting net amount, after consideration of any proceeds, is included as a gain or loss in "Other expense (income), net" or "(Gain) loss on assets held for sale" in our consolidated statements of operations.

We account for operating leases under the provisions of ASC 840, *Leases*. This pronouncement requires us to recognize escalating rents, including any rent holidays, on a straight-line basis over the term of the lease for those lease agreements where we receive the right to control the use of the entire leased property at the beginning of the lease term.

Goodwill

We test for impairment at least annually as of the last day of February of each fiscal year, unless a triggering event occurs that would require an interim impairment assessment. We do not aggregate components of operating segments to arrive at our reporting units and, as such, our reporting units are the same as our operating segments.

In performing our goodwill impairment test, we have the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If we perform a qualitative assessment and determine that an impairment is more likely than not, then we perform the two-step quantitative impairment test, otherwise no further analysis is required. We also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. The ultimate outcome of the goodwill impairment assessment will be the same whether we choose to perform the qualitative assessment or proceed directly to the two-step quantitative impairment test.

For the years ended March 31, 2018, 2017 and 2016 we elected to perform the two-step quantitative impairment test. No goodwill impairment was identified in any of the years. See Note 6 — Goodwill and Intangible Assets for further discussion.

We use the present value of estimated future cash flows to establish the estimated fair value of our reporting units as of the testing date. This approach includes many assumptions related to future growth rates, discount factors and tax rates, among other considerations. Changes in economic and operating conditions impacting these assumptions could result in goodwill impairment in future periods. When available and as appropriate, we use the market approach to corroborate the estimated fair value. If the carrying amount of a reporting unit's goodwill exceeds its estimated fair value, the second step of the impairment test is performed in order to determine the amount of impairment loss, if any. The second step compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, we would recognize an impairment charge in an amount equal to that excess in our consolidated statements of operations.

When a business within a reporting unit is disposed of, goodwill is allocated to the gain or loss on disposition using the relative fair value methodology.

Long-Lived Assets and Other Intangible Assets

We amortize the cost of intangible assets over their respective estimated useful lives to their estimated residual value. See Note 6 — Goodwill and Intangible Assets for further discussion.

We assess the recoverability of long-lived assets (excluding goodwill) and finite-lived intangible assets, whenever events or changes in circumstances indicate that we may not be able to recover the asset's carrying amount. We measure the recoverability of assets to be held and used by a comparison of the carrying amount of the asset (groups) to the expected, undiscounted future net cash flows to be generated by that asset (groups), or, for identifiable intangible assets, by determining whether the amortization of the intangible asset balance over its remaining life can be recovered through undiscounted future cash flows. The amount of impairment of identifiable intangible assets is based on the present value of estimated future cash flows. We measure the amount of impairment of other long-lived assets and intangible assets (excluding goodwill) as the amount by which the carrying value of the asset exceeds the fair value of the asset, which is generally determined as the present value of estimated future cash flows or as the appraised value. Impairments of long-lived assets and intangible assets are included in "Restructuring and impairment, net" in the consolidated statement of operations. See Note 2 — Restructuring and Impairment for further discussions.

Assets and Liabilities Held for Sale

We classify long-lived assets (disposal groups) to be sold as held for sale in the period in which all of the following criteria are met: management, having the authority to approve the action, commits to a plan to sell the asset (disposal group);

the asset (disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (disposal groups); an active program to locate a buyer and other actions required to complete the plan to sell the asset (disposal group) have been initiated; the sale of the asset (disposal group) is probable, and transfer of the asset (disposal group) is expected to qualify for recognition as a completed sale within one year, except if events or circumstances beyond our control extend the period of time required to sell the asset (disposal group) beyond one year; the asset (disposal group) is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

We initially measure a long-lived asset (disposal group) that is classified as held for sale at the lower of its carrying value or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a long-lived asset (disposal group) until the date of sale. We assess the fair value of a long-lived asset (disposal group) less any costs to sell each reporting period it remains classified as held for sale and report any reduction in fair value as an adjustment to the carrying value of the asset (disposal group). Upon being classified as held for sale we cease depreciation. We continue to depreciate long-lived assets to be disposed of other than by sale.

Upon determining that a long-lived asset (disposal group) meets the criteria to be classified as held for sale, we report the assets and liabilities of the disposal group in the line items "Assets held for sale" and "Liabilities held for sale," respectively in our consolidated balance sheets.

Investment in and Advances to Non-Consolidated Affiliates

We assess the potential for other-than-temporary impairment of our equity method investments when impairment indicators are identified. We consider all available information, including the recoverability of the investment, the earnings and near-term prospects of the affiliate, factors related to the industry, conditions of the affiliate, and our ability, if any, to influence the management of the affiliate. We assess fair value based on valuation methodologies, as appropriate, including the present value of estimated future cash flows, estimates of sales proceeds, and external appraisals. If an investment is considered to be impaired and the decline in value is other than temporary, we record an appropriate write-down. See Note 8 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further discussion.

Financing Costs

We amortize financing costs and premiums, and accrete discounts, over the remaining life of the related debt using the effective interest amortization method, unless the impact of utilizing the straight-line method results in an immaterial difference. The expense is included in "Interest expense and amortization of debt issuance costs" in our consolidated statements of operations. We record discounts and unamortized financing costs as a direct deduction from, or premiums as a direct addition to, the face amount of the financing.

Fair Value of Financial Instruments

ASC 820, *Fair Value Measurements and Disclosures* (ASC 820), defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. ASC 820 also applies to measurements under other accounting pronouncements, such as ASC 825, *Financial Instruments* (ASC 825) that require or permit fair value measurements. ASC 825 requires disclosures of the fair value of financial instruments. Our financial instruments include: cash and cash equivalents; certificates of deposit; accounts receivable; accounts payable; foreign currency, energy and interest rate derivative instruments; cross-currency swaps; metal option and forward contracts; share-based compensation; related party notes receivable and payable; letters of credit; short-term borrowings and long-term debt.

The carrying amounts of cash and cash equivalents, certificates of deposit, accounts receivable, accounts payable and current related party notes receivable and payable approximate their fair value because of the short-term maturity and highly liquid nature of these instruments. The fair value of our letters of credit is deemed to be the amount of payment guaranteed on our behalf by third party financial institutions. We determine the fair value of our short-term borrowings and long-term debt based on various factors including maturity schedules, call features and current market rates. We also use quoted market prices, when available, or the present value of estimated future cash flows to determine fair value of our share-based compensation liabilities, short-term borrowings and long-term debt. When quoted market prices are not available for various types of financial instruments (such as currency, energy and interest rate derivative instruments, swaps, options and forward contracts), we use standard pricing models with market-based inputs, which take into account the present value of estimated future cash flows. See Note 16 — Fair Value Measurements for further discussion.

Pensions and Postretirement Benefits

Our pension obligations relate to funded defined benefit pension plans in the U.S., Canada, Switzerland and the U.K., unfunded pension plans in the U.S., Canada, and Germany, and unfunded lump sum indemnities in France and Italy; and partially funded lump sum indemnities in South Korea. Our other postretirement obligations include unfunded health care and life insurance benefits provided to retired employees in Canada, the U.S. and Brazil.

We account for our pensions and other postretirement benefits in accordance with ASC 715, *Compensation — Retirement Benefits* (ASC 715). We recognize the funded status of our benefit plans as a net asset or liability, with an offsetting adjustment to accumulated other comprehensive income in shareholder's (deficit) equity. The funded status is calculated as the difference between the fair value of plan assets and the benefit obligation. For the years ended March 31, 2018 and 2017, we used March 31 as the measurement date.

We use standard actuarial methods and assumptions to account for our pension and other postretirement benefit plans. Pension and postretirement benefit obligations are actuarially calculated using management's best estimates of the rate used to discount the future estimated liability, the long-term rate of return on plan assets, and several assumptions related to the employee workforce (compensation increases, health care cost trend rates, expected service period, retirement age, and mortality). Pension and postretirement benefit expense includes the actuarially computed cost of benefits earned during the current service period, the interest cost on accrued obligations, the expected return on plan assets based on fair market value and the straight-line amortization of net actuarial gains and losses and adjustments due to plan amendments, curtailments, and settlements. Net actuarial gains and losses are amortized over periods of 15 years or less, which represent the group's average future service life of the employees or the group's average life expectancy. See Note 12 — Postretirement Benefit Plans for further discussion.

Noncontrolling Interests in Consolidated Affiliates

These financial statements reflect the application of ASC 810, *Consolidations* (ASC 810), which establishes accounting and reporting standards that require: (i) the ownership interest in subsidiaries held by parties other than the parent to be clearly identified and presented in the consolidated balance sheet within shareholder's (deficit) equity, but separate from the parent's (deficit) equity; (ii) the amount of consolidated net income attributable to the parent and the noncontrolling interest to be clearly identified and presented on the face of the consolidated statement of operations and (iii) changes in a parent's ownership interest while the parent retains its controlling financial interest in its subsidiary to be accounted for consistently.

Our consolidated financial statements include all assets, liabilities, revenues and expenses of less-than-100%-owned affiliates that we control or for which we are the primary beneficiary. We record a noncontrolling interest for the allocable portion of income or loss and comprehensive income or loss to which the noncontrolling interest holders are entitled based upon their ownership share of the affiliate. Distributions made to the holders of noncontrolling interests are charged to the respective noncontrolling interest balance.

Losses attributable to the noncontrolling interest in an affiliate may exceed our interest in the affiliate's equity. The excess, and any further losses attributable to the noncontrolling interest, shall be attributed to those interests. The noncontrolling interest shall continue to be attributed its share of losses even if that attribution results in a deficit noncontrolling interest balance.

Environmental Liabilities

We record accruals for environmental matters when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based on current law and existing technologies. We adjust these accruals periodically as assessment and remediation efforts progress or as additional technical or legal information becomes available. Accruals for environmental liabilities are stated at undiscounted amounts. Environmental liabilities are included in our consolidated balance sheets in "Accrued expenses and other current liabilities" and "Other long-term liabilities," depending on their short- or long-term nature. Any receivables for related insurance or other third party recoveries for environmental liabilities are recorded when it is probable that a recovery will be realized and are included in our consolidated balance sheets in "Prepaid expenses and other current assets."

Costs related to environmental matters are charged to expense. Estimated future incremental operations, maintenance and management costs directly related to remediation are accrued in the period in which such costs are determined to be probable and estimable. See Note 19 — Commitments and Contingencies for further discussion.

Litigation Contingencies

We accrue for loss contingencies associated with outstanding litigation, claims and assessments for which management has determined it is probable that a loss contingency exists and the amount of loss can be reasonably estimated. We expense professional fees associated with litigation claims and assessments as incurred. See Note 19 — Commitments and Contingencies for further discussion.

Income Taxes

We account for income taxes using the asset and liability method. This approach recognizes the amount of income taxes payable or refundable for the current year, as well as deferred tax assets and liabilities for the future tax consequence of events recognized in the consolidated financial statements and income tax returns. Deferred income tax assets and liabilities are adjusted to recognize the effects of changes in tax laws or enacted tax rates. Under ASC 740 *Income Taxes*, (ASC 740) a valuation allowance is required when it is more likely than not that some portion of the deferred tax assets will not be realized. Realization is dependent on generating sufficient taxable income through various sources.

We record tax benefits related to uncertain tax positions taken or expected to be taken on a tax return when such benefits meet a more than likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, the statute of limitation has expired or the appropriate taxing authority has completed their examination. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized. See Note 18 — Income Taxes for further discussion.

Share-Based Compensation

In accordance with ASC 718, *Compensation — Stock Compensation* (ASC 718), we recognize compensation expense for a share-based award over an employee's requisite service period based on the award's grant date fair value, subject to adjustment. Our share-based awards are settled in cash and are accounted for as liability based awards. As such, liabilities for awards under these plans are required to be measured at fair value at each reporting date until the date of settlement. See Note 11 — Share-Based Compensation for further discussion.

Foreign Currency Translation

The assets and liabilities of foreign operations, whose functional currency is other than the U.S. dollar (located in Europe and Asia), are translated to U.S. dollars at the period end exchange rates and revenues and expenses are translated at average exchange rates for the period. Differences arising from this translation are included in the currency translation adjustment (CTA) component of AOCI and Noncontrolling Interest, both of which are on the balance sheet. If there is a planned or completed sale or liquidation of our ownership in a foreign operation, the relevant CTA is recognized in our consolidated statement of operations.

For all operations, the monetary items denominated in currencies other than the functional currency are remeasured at period-end exchange rates and transaction gains and losses are included in "Other (income) expense, net" in our consolidated statements of operations. Non-monetary items are remeasured at historical rates.

Recently Adopted Accounting Standards

Effective for the fourth quarter of fiscal 2018, we early adopted ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*. The amendments in this update better align an entity's risk management objectives, activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The impact of the adoption will now allow us to (1) defer the entire change in fair value of the hedging instrument to OCI, (2) apply hedge accounting to a specific pricing component and no longer to all pricing components, for our aluminum and natural gas programs and (3) eliminate the separate measurement and reporting of hedge ineffectiveness. The updated guidance will simplify the application of hedge accounting and increase the transparency of the results of our hedging programs. We did not record a cumulative effect adjustment as we elected to de-designate and re-designate existing hedge accounting relationships at the adoption date. Please refer to Note 14 — Financial Instruments and Commodity Contracts for additional disclosures related to the adoption of this standard.

Effective for the first quarter of fiscal 2018, we early adopted FASB ASU 2016-05, *Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships*, which addresses a lack of guidance in existing US GAAP related to the impact of derivative contract novations on existing hedge accounting relationships under Accounting Standards Codification Topic 815, *Derivatives and Hedging* (ASC 815). The new guidance clarifies that a change in one of the parties (a novation) to a derivative contract that is part of an existing hedge accounting relationship under ASC 815 does not, in and of itself, require a de-designation of that hedge accounting relationship. The impact of the adoption will prospectively allow hedge accounting treatment to continue on existing hedges when a novation event occurs. There was no impact upon adoption.

Recently Issued Accounting Standards

In February 2018, the FASB issued ASU 2018-02, *Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. This standard provides an option to reclassify stranded tax effects within accumulated other comprehensive income/(loss) to retained earnings due to the U.S. federal corporate income tax rate change in the U.S. Tax Cuts and Jobs Act of 2017 (the "Act"). This standard is effective for interim and annual reporting periods beginning after December 15, 2018, and early adopting is permitted. Additionally, the ASU requires new disclosures by all companies, whether they opt to do the reclassification or not. Management is currently evaluating the potential impact of this guidance on the consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting*. This update was issued to provide clarity and reduce both (1) diversity in practice and (2) cost and complexity when applying the guidance in Topic 718, Compensation-Stock Compensation, to a change to the terms or conditions of a share-based payment award. An entity may change the terms or conditions of a share-based payment award for many different reasons, and the nature and effect of the change can vary significantly. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. These changes became effective for Novelis on April 1, 2018. Management has determined that the adoption of this standard is not expected to have a material impact on the Consolidated Financial Statements. This guidance will need to be considered if Novelis initiates a modification that is determined to be a substantive change to an outstanding stock-based award.

In March 2017, the FASB issued ASU 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. This update was issued primarily to improve the presentation of net periodic pension cost and net periodic postretirement benefit cost. The new guidance requires entities to (1) disaggregate the current service cost component from the other components of net benefit cost (the "other components") and present the other components with other current compensation costs for related employees within non-operating income and (2) present the other components elsewhere in the results of operations and outside of income from operations if that subtotal is presented. In addition, the new guidance requires entities to disclose the results of operations line items that contain the other components if they are not presented on appropriately described separate lines. These changes became effective for Novelis on April 1, 2018 and will be applied retrospectively. Currently, all post retirement costs fall within the line item "Selling, general and administrative expenses" and "Cost of goods sold (exclusive of depreciation and amortization)" within the consolidated results of operations. These changes will result in a change in the presentation of non-service cost components of net periodic benefit cost on the statement of operations and providing additional disclosure. We are currently evaluating the impact of this standard.

In February 2017, the FASB issued ASU 2017-05, *Other Income-Gains and Losses from the Derecognition of Non-financial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Non-financial Assets*. The amendments in this update include (i) clarification that non-financial assets within the scope of ASC 610-20 may include non-financial assets transferred within a legal entity to a counterparty; (ii) clarification that an entity should allocate consideration to each distinct asset by applying the guidance in ASC 606 on allocating the transaction price to performance obligations; and (iii) a requirement for entities to derecognize a distinct non-financial asset or distinct in substance non-financial asset in a partial sale transaction when it does not have (or ceases to have) a controlling financial interest in the legal entity that holds the asset in accordance with ASC 810, and transfers control of the asset in accordance with ASC 606. These changes became effective for Novelis on April 1, 2018, and interim periods within those annual periods. Early adoption is permitted. Management has determined that the adoption of these changes will not have a material impact on the Consolidated Financial Statements.

In January 2017, the FASB issued ASU 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, accounting guidance*, which removes Step 2 from the goodwill impairment test. As amended, the goodwill impairment test will consist of one step comparing the fair value of a reporting unit with its carrying amount. Under the simplified model, a goodwill impairment is calculated as the difference between the carrying amount of the reporting unit and its fair value, but not to exceed the carrying amount of goodwill allocated to that reporting unit. Early adoption is

permitted. These changes become effective for Novelis on April 1, 2020. This guidance will need to be considered each time Novelis performs an assessment of goodwill for impairment under the quantitative test. We are currently evaluating the impact of this standard and we do not expect the adoption of this standard will have an impact on the Consolidated Financial Statements.

In January 2017, the FASB issued ASU 2017-01, *Clarifying the Definition of a Business (Topic 805)*, which provides guidance on evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The definition of a business affects many areas of accounting including acquisitions, disposals, goodwill, and consolidation. The new guidance amends ASC 805 to provide a more robust framework to use in determining when a set of assets and activities is a business. In addition, the amendments provide more consistency in applying the guidance, reduce the costs of application, and make the definition of a business more operable. These changes became effective for Novelis on April 1, 2018. Management has determined that the adoption of this guidance will not have an impact on our Consolidated Financial Statements.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230) - Statement of Cash Flows (Topic 230): Restricted Cash*. The amendments in this update apply to all entities that have restricted cash or restricted cash equivalents and are required to present a statement of cash flows under Topic 230. The amendments in this Update require that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Transfers between restricted cash and restricted cash equivalents and cash and cash equivalents will no longer be presented as cash flow activities in the statement of cash flows and for material balances of restricted cash and restricted cash equivalents an entity must disclose information regarding the nature of the restrictions. Restricted Cash be disclosed as a separate line item as a change of cash on the face of the Balance Sheet and Cash Flow Statement. These changes became effective for Novelis on April 1, 2018. Management has determined that the adoption of this guidance will not have a material impact and will result in presentational change to the face of the Consolidated Balance Sheet and Consolidated Statement of Cash Flows.

In October 2016, the FASB issued ASU 2016-16, *Accounting for Income Taxes: Intra-Entity Asset Transfers of Assets Other than Inventory*. The new guidance eliminates the exception for all intra-entity sales of assets other than inventory. The guidance will require the tax effects of intercompany transactions to be recognized currently and will likely impact reporting entities' effective tax rates. The changes require the current and deferred income tax consequences of the intra-entity transfer to be recorded when the transaction occurs. The exception to defer the tax consequences of inventory transactions is maintained. Early adoption is permitted. These changes became effective for Novelis on April 1, 2018. The Company is currently evaluating the impact of the new standard.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230) - Classification of Certain Cash Receipts and Cash Payments*. The new guidance applies to all entities that are required to present a statement of cash flows under Topic 230 and addresses eight specific cash flow items to provide clarification and reduce the diversity in presentation of these items. These changes became effective for Novelis on April 1, 2018. As of result of the adoption, Novelis will reclassify cash received related to beneficial interest in certain factored accounts receivables from operating activities to investing activities in the Statement of Consolidated Cash Flows. This reclassification is not expected to have a material impact on operating and investing cash flows.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which when effective, will require organizations that lease assets to recognize assets and liabilities for the rights and obligations created by the leases on balance sheet. A lessee will be required to recognize assets and liabilities for leases with terms that exceed twelve months. The standard will also require disclosures to help investors and financial statement users better understand the amount, timing and uncertainty of cash flows arising from leases. The disclosures include qualitative and quantitative requirements, providing additional information about the amounts recorded in the financial statements. These changes become effective for Novelis April 1, 2019 for the annual reporting period (including interim periods therein). Novelis has established a cross-functional project team to lead the implementation effort. The Company is currently evaluating the impact of the new standard.

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which, when effective, will supersede the guidance in former ASC 605, Revenue Recognition. Additional technical improvements, practical expedients, and clarifications have since been issued. The new guidance requires entities to recognize revenue based on the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for these goods or services. ASU 2014-09 defines a five-step approach for recognizing revenue, which may require a company to use more judgment and make more estimates than under the current guidance. In August 2015, the FASB deferred the effective date by one year, making these changes effective for Novelis on April 1, 2018.

Novelis will adopt the new guidance using the modified retrospective transition approach, reflecting the cumulative effect of initially applying the new standard to revenue recognition in the first quarter of fiscal year 2019. Through previously established project implementation and adoption teams, Novelis completed a detailed review of the terms and provisions of our customer contracts and concluded that Novelis' current revenue recognition practices are in compliance with this new guidance. Novelis is in the process of preparing the additional required disclosures.

2. RESTRUCTURING AND IMPAIRMENT

“Restructuring and impairment, net” for the year ended March 31, 2018, 2017 and 2016 was \$34 million, \$10 million, and \$48 million, respectively.

The following table summarizes our restructuring liability activity and other impairment charges (in millions).

	Total restructuring liabilities	Other restructuring charges (A)	Total restructuring charges	Other impairments (B)	Total restructuring and impairments, net
Balance as of March 31, 2015	\$ 32				
Fiscal 2016 Activity:					
-Provisions	23				
-Reversal of expense	(2)				
Expenses	21	\$ 24	\$ 45	\$ 3	\$ 48
Cash payments	(22)				
Foreign currency translation and other (C)	(4)				
Balance as of March 31, 2016	27				
Fiscal 2017 Activity:					
Expenses	8	\$ —	\$ 8	\$ 2	\$ 10
Cash payments	(13)				
Foreign currency translation and other (C)	2				
Balance as of March 31, 2017	24				
Fiscal 2018 Activity:					
Expenses	19	\$ 9	\$ 28	\$ 6	\$ 34
Cash payments	(7)				
Balance as of March 31, 2018	\$ 36				

(A) Other restructuring charges include period expenses that were not recorded through the restructuring liability and impairments related to a restructuring activity.

(B) Other impairment charges not related to a restructuring activity.

(C) This primarily relates to the remeasurement of Brazilian real denominated restructuring liabilities.

As of March 31, 2018, \$31 million of restructuring liabilities was classified in "Accrued expenses and other current liabilities" and \$5 million was classified in "Other long-term liabilities". The restructuring liabilities by region are as follows: \$1 million for the North America segment related to environmental charges; \$17 million for the Europe segment related primarily to severance charges; \$1 million for the Asia segment related primarily to staff rationalization activities; \$16 million for the South America segment related to \$9 million of environmental charges and \$7 million of contract termination and other exit related costs, and \$1 million for the Corporate office related to severance charges.

Restructuring and impairment activities by segment are detailed below for the years ended March 31, 2018, 2017 and 2016:

North America

North America recognized \$1 million in restructuring expenses for the years ended March 31, 2017 and 2016. Restructuring actions prior to April 1, 2015 totaled \$39 million and was attributed to impairments of \$32 million and severance and other exit related expenses of \$7 million.

The North America segment recognized less than \$4 million in impairment charges on intangible software assets unrelated to restructuring for the year ended March 31, 2018; \$2 million in impairment charges on fixed assets unrelated to restructuring for the year ended March 31, 2017; and \$1 million in impairment charges on assets unrelated to restructuring for the year ended March 31, 2016.

Europe

The Europe segment recognized \$25 million in restructuring expenses for the year ended March 31, 2018 related to the closure of certain non-core operations. Severance and associated legal costs were \$16 million for which cash settlement is primarily expected to incur in the next twelve months and \$9 million is related to asset impairments. For the year ended March 31, 2017, Europe recognized \$2 million in restructuring expenses related to corporate restructuring. For the year ended, March 31, 2016, Europe recognized \$4 million of restructuring expenses. Prior to April 1, 2015, \$46 million of restructuring expenses was incurred related to business optimization efforts.

Europe recognized less than \$2 million in asset impairments unrelated to restructuring during the year ended March 31, 2018.

Asia

For the year ended March 31, 2016, Asia recognized \$2 million of restructuring expenses related to staff rationalization activities to optimize our business.

The Asia segment recognized \$1 million and less than \$1 million in impairment charges on long-lived assets unrelated to restructuring for the years ended March 31, 2018 and March 31, 2016, respectively.

South America

The South America segment recognized \$3 million in restructuring expenses for the year ended March 31, 2018 related to staff rationalization activities to optimize our business. For the years ended March 31, 2017 and 2016, South America recognized \$5 million and \$3 million, respectively, related to the closure of a smelter facility. Restructuring actions prior to April 1, 2015 totaled \$79 million and was related largely to the closure of a smelter facility along with prior restructuring programs.

South America recognized less than \$2 million in impairment charges on long-lived assets unrelated to restructuring for the year ended March 31, 2016.

Corporate

For the year ended March 31, 2016, Corporate recognized \$35 million in restructuring expenses related to a series of restructuring actions at the global headquarters office and the Europe region to better align the organizational structure and corporate staffing levels with strategic priorities.

3. ACCOUNTS RECEIVABLE

“Accounts receivable, net” consists of the following (in millions).

	March 31,	
	2018	2017
Trade accounts receivable	\$ 1,260	\$ 971
Other accounts receivable	100	102
Accounts receivable — third parties	1,360	1,073
Allowance for doubtful accounts — third parties	(7)	(6)
Accounts receivable, net — third parties	<u>\$ 1,353</u>	<u>\$ 1,067</u>
Accounts receivable, net — related parties	<u>\$ 242</u>	<u>\$ 60</u>

Allowance for Doubtful Accounts

As of March 31, 2018 and 2017, our allowance for doubtful accounts represented approximately 0.5% and 0.6%, respectively, of gross accounts receivable, net - third parties (exclusive of accounts receivable - related parties).

Activity in the allowance for doubtful accounts is as follows (in millions).

	Balance at Beginning of Period	Additions Charged to Expense	Accounts Recovered/ (Written- Off)	Foreign Exchange and Other	Balance at End of Period
Year Ended March 31, 2018	\$ 6	\$ 1	\$ —	\$ —	\$ 7
Year Ended March 31, 2017	\$ 3	\$ 3	\$ —	\$ —	\$ 6
Year Ended March 31, 2016	\$ 3	\$ —	\$ —	\$ —	\$ 3

Factoring of Trade Receivables

We factor and forfeit trade receivables (collectively, we refer to these as "factoring" programs) based on local cash needs, as well as attempting to balance the timing of cash flows of trade payables and receivables. Factored invoices are not included in our consolidated balance sheets when we do not retain a financial or legal interest. If a financial or legal interest is retained, we classify these factorings as secured borrowings.

The following tables summarize amounts relating to our factoring activities (in millions).

	Year Ended March 31,		
	2018	2017	2016
Factoring expense	\$ 39	\$ 16	\$ 19

	March 31,	
	2018	2017
Factored receivables outstanding	\$ 547	\$ 679

4. INVENTORIES

“Inventories” consists of the following (in millions).

	March 31,	
	2018	2017
Finished goods	\$ 416	\$ 389
Work in process	730	576
Raw materials	248	213
Supplies	166	155
Inventories	<u>\$ 1,560</u>	<u>\$ 1,333</u>

5. PROPERTY, PLANT AND EQUIPMENT

“Property, plant and equipment, net” consists of the following (in millions).

	March 31,	
	2018	2017
Land and property rights	\$ 148	\$ 173
Buildings	1,259	1,309
Machinery and equipment	4,179	4,312
	5,586	5,794
Accumulated depreciation and amortization	(2,644)	(2,575)
	2,942	3,219
Construction in progress	168	138
Property, plant and equipment, net	<u>\$ 3,110</u>	<u>\$ 3,357</u>

For the years ended March 31, 2018, 2017 and 2016, we capitalized \$1 million, \$2 million and \$14 million of interest related to construction of property, plant and equipment and intangibles under development, respectively.

Depreciation expense related to property, plant, and equipment, net is shown in the table below (in millions).

	Year Ended March 31,		
	2018	2017	2016
Depreciation expense related to property, plant and equipment, net	<u>\$ 290</u>	<u>\$ 299</u>	<u>\$ 294</u>

Asset impairments

Impairment charges are recorded in "Restructuring and impairment, net." See Note 2 — Restructuring and Impairment for additional information.

Leases

We lease certain land, buildings and equipment under non-cancelable operating leases expiring at various dates. Operating leases generally have terms that are less than ten years, with one or more renewal options and terms to be negotiated at the time of renewal. Various facility leases include provisions for rent escalation to recognize increased operating costs or require us to pay certain maintenance and utility costs.

The following table summarizes rent expense included in our consolidated statements of operations (in millions):

	Year Ended March 31,		
	2018	2017	2016
Rent expense	<u>\$ 27</u>	<u>\$ 24</u>	<u>\$ 22</u>

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Future minimum lease payments as of March 31, 2018, for our operating and capital leases having an initial or remaining non-cancelable lease term in excess of one year are as follows (in millions).

Year Ending March 31,	Operating leases	Capital lease obligations
2019	\$ 31	\$ 7
2020	24	5
2021	18	—
2022	14	—
2023	12	—
Thereafter	24	—
Total minimum lease payments	<u>\$ 123</u>	<u>\$ 12</u>
Less: interest portion on capital lease		1
Principal obligation on capital leases		<u>\$ 11</u>

Assets and related accumulated amortization under capital lease obligations as of March 31, 2018 and 2017 are as follows (in millions).

	March 31,	
	2018	2017
Assets under capital lease obligations:		
Buildings	\$ 12	\$ 11
Machinery and equipment	76	73
CWIP	2	2
	<u>90</u>	<u>86</u>
Accumulated amortization	(77)	(70)
	<u>\$ 13</u>	<u>\$ 16</u>

6. GOODWILL AND INTANGIBLE ASSETS

There were no changes to the gross carrying amount or accumulated impairment of goodwill during the years ended March 31, 2018 and 2017. The following table summarizes “Goodwill” (in millions).

	March 31, 2018			March 31, 2017		
	Gross Carrying Amount	Accumulated Impairment	Net Carrying Value	Gross Carrying Amount	Accumulated Impairment	Net Carrying Value
North America	\$ 1,145	\$ (860)	\$ 285	\$ 1,145	\$ (860)	\$ 285
Europe	511	(330)	181	511	(330)	181
South America	291	(150)	141	291	(150)	141
	<u>\$ 1,947</u>	<u>\$ (1,340)</u>	<u>\$ 607</u>	<u>\$ 1,947</u>	<u>\$ (1,340)</u>	<u>\$ 607</u>

The components of “Intangible assets, net” are as follows (in millions).

	March 31, 2018			March 31, 2017			
	Weighted Average Life	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Tradenames	20 years	\$ 142	\$ (77)	\$ 65	\$ 142	\$ (70)	\$ 72
Technology and software	9.2 years	382	(246)	136	369	(209)	160
Customer-related intangible assets	20 years	456	(247)	209	443	(218)	225
	15.8 years	<u>\$ 980</u>	<u>\$ (570)</u>	<u>\$ 410</u>	<u>\$ 954</u>	<u>\$ (497)</u>	<u>\$ 457</u>

In the year ended March 31, 2018, we recorded impairment charges related to certain intangible software assets. In the year of March 31, 2017, there were no such impairments recorded. For additional information refer to Note 2 — Restructuring and Impairment.

All other intangible assets are amortized using the straight-line method.

Amortization expense related to “Intangible assets, net” is as follows (in millions).

	Year Ended March 31,		
	2018	2017	2016
Total amortization expense related to intangible assets	\$ 64	\$ 69	\$ 71
Less: Amortization expense related to intangible assets included in “Cost of goods sold (exclusive of depreciation and amortization)” (A)	—	(8)	(12)
Amortization expense related to intangible assets included in “Depreciation and amortization”	<u>\$ 64</u>	<u>\$ 61</u>	<u>\$ 59</u>

(A) Relates to amortization of favorable energy supply contract, which is fully amortized as of March 31, 2018.

Estimated total amortization expense related to “Intangible assets, net” for each of the five succeeding fiscal years is as follows (in millions). Actual amounts may differ from these estimates due to such factors as customer turnover, raw material consumption patterns, impairments, additional intangible asset acquisitions and other events.

Fiscal Year Ending March 31,	
2019	\$ 71
2020	71
2021	71
2022	71
2023	71

7. CONSOLIDATION

Variable Interest Entities (VIE)

The entity that has a controlling financial interest in a VIE is referred to as the primary beneficiary and consolidates the VIE. An entity is deemed to have a controlling financial interest and is the primary beneficiary of a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE.

We have a joint interest in Logan Aluminum Inc. (Logan) with Tri-Arrows Aluminum Inc. (Tri-Arrows). Logan processes metal received from Novelis and Tri-Arrows and charges the respective partner a fee to cover expenses. Logan is thinly capitalized and relies on the regular reimbursement of costs and expenses by Novelis and Tri-Arrows to fund its operations. This reimbursement is considered a variable interest as it constitutes a form of financing the activities of Logan. As Logan is dependent upon the investors for ongoing capital to support the operations of the entity, Logan is a variable interest entity ("VIE"). The entity that has a controlling financial interest in a VIE is referred to as the primary beneficiary and consolidates the VIE. An entity is deemed to have a controlling financial interest and is the primary beneficiary of a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. We have the ability to make decisions regarding Logan's production operations. We also have the ability to take the majority share of production and associated costs. These facts qualify us as Logan's primary beneficiary and this entity is consolidated for all periods presented.

Other than the contractually required reimbursements, we do not provide other material support to Logan. Logan's creditors do not have recourse to our general credit. There are significant other assets used in the operations of Logan that are not part of the joint venture, as they are directly owned and consolidated by Novelis or Tri-Arrows. The following table summarizes the carrying value and classification of assets and liabilities owned by the Logan joint venture and consolidated in our consolidated balance sheets (in millions).

	March 31,	
	2018	2017
Assets		
Current assets		
Cash and cash equivalents	\$ —	\$ 2
Accounts receivable	39	29
Inventories	67	62
Prepaid expenses and other current assets	1	2
Total current assets	107	95
Property, plant and equipment, net	27	25
Goodwill	12	12
Deferred income taxes	67	89
Other long-term assets	26	30
Total assets	\$ 239	\$ 251
Liabilities		
Current liabilities		
Accounts payable	\$ 43	\$ 32
Accrued expenses and other current liabilities	22	21
Total current liabilities	65	53
Accrued postretirement benefits	245	224
Other long-term liabilities	1	3
Total liabilities	\$ 311	\$ 280

8. INVESTMENT IN AND ADVANCES TO NON-CONSOLIDATED AFFILIATES AND RELATED PARTY TRANSACTIONS

Investments in and Advances to Non-Consolidated Affiliates

We have two non-consolidated affiliates, Aluminum Norf GmbH (Alunorf) and Ulsan Aluminum, Ltd. (UAL). Included in the accompanying consolidated financial statements are transactions and balances arising from business we conducted with these non-consolidated affiliates, which we classify as related party transactions and balances.

In May 2017, Novelis Korea Ltd. (Novelis Korea), a subsidiary of Novelis Inc., entered into definitive agreements with Kobe Steel Ltd. (Kobe), an unrelated party, under which Novelis Korea and Kobe will jointly own and operate the Ulsan manufacturing plant owned by Novelis Korea. In April 2017, Novelis Korea formed a new wholly owned subsidiary, UAL. In September 2017, the transaction closed and Novelis Korea sold 49.9% of its shares in UAL to Kobe for the purchase price of \$314 million. We recognized a net gain of \$318 million on the transaction, pre-tax, consisting of: (1) \$168 million gain related to the difference between the fair value of the consideration received and the carrying amount of the former subsidiary's assets and liabilities; (2) \$163 million net gain related to the remeasurement of the retained investment by Novelis Korea; (3) \$11 million in transaction fees and (4) \$2 million in pension settlement losses. The net gain is recognized in "Gain (loss) on sale of a business" within the consolidated statement of operations. The fair value of the retained investment was derived from cash consideration paid by a market participant, Kobe, for its 49.9% interest.

As a result of this transaction, we have shared power in UAL with Kobe. Novelis Korea and Kobe will supply input metal to UAL and UAL will produce flat rolled aluminum products exclusively for Novelis Korea and Kobe. In addition, we hold several variable interests in UAL through the regular funding of costs and expenses by Novelis Korea and Kobe. As UAL is dependent upon the investors for ongoing capital to support the operations of the entity, UAL is a variable interest entity ("VIE"). The entity that has a controlling financial interest in a VIE is referred to as the primary beneficiary and consolidates the VIE. An entity is deemed to have a controlling financial interest and is the primary beneficiary of a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. The entity will be controlled by the Board of Directors. We do not have the sole decision-making ability regarding UAL's production operations and other significant decisions as the Board of Directors have ultimate control over these decisions. In addition, we do not have the ability to take the majority share of production and associated costs over the life of the joint venture. As we share power jointly with Kobe, we determined Novelis is not the primary beneficiary. Our risk of loss with respect to this VIE is limited to the carrying value of our investment in and inventory-related receivables from UAL. UAL's creditors do not have recourse to our general credit. We have no obligation to provide additional funding to this VIE outside of the contractually required reimbursements.

The following table summarizes the ownership structure and our ownership percentage of the non-consolidated affiliates in which we have investments in as of March 31, 2018 and 2017, and which we account for using the equity method.

Affiliate Name	Ownership Structure	Ownership Percentage
Aluminium Norf GmbH (Alunorf)	Corporation	50%
Ulsan Aluminum, Ltd. (UAL)	Corporation	50.1%

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table summarizes the assets, liabilities and equity of our equity method affiliates in the aggregate as of March 31, 2018 and 2017 (in millions).

	March 31,	
	2018	2017
Assets:		
Current assets	\$ 396	\$ 143
Non-current assets	944	355
Total assets	<u>\$ 1,340</u>	<u>\$ 498</u>
Liabilities:		
Current liabilities	\$ 281	\$ 53
Non-current liabilities	342	283
Total liabilities	623	336
Equity:		
Total equity	717	162
Total liabilities and equity	<u>\$ 1,340</u>	<u>\$ 498</u>

As of March 31, 2018, the investment in Alunorf exceeded our proportionate share of the net assets by \$441 million. The difference is primarily related to the unamortized fair value adjustments that are included in our investment balance as a result of the acquisition of Novelis by Hindalco in 2007.

As of March 31, 2018, the investment in UAL exceeded our proportionate share of the net assets by \$47 million. The difference primarily relates to goodwill.

The following table summarizes the results of operations of our equity method affiliates in the aggregate for the years ending March 31, 2018, 2017 and 2016; and the nature and amounts of significant transactions that we had with our non-consolidated affiliates (in millions). The amounts in the table below are disclosed at 100% of the operating results of these affiliates.

	Year Ended March 31,		
	2018	2017	2016
Net sales	\$ 866	\$ 447	\$ 464
Costs and expenses related to net sales	836	463	463
Provision (benefit) for taxes on income	4	(5)	2
Net income (loss)	<u>\$ 26</u>	<u>\$ (11)</u>	<u>\$ (1)</u>
Purchase of tolling services from Alunorf	<u>\$ 245</u>	<u>\$ 224</u>	<u>\$ 232</u>

Included in the accompanying consolidated financial statements are transactions and balances arising from business we conduct with Alunorf and UAL. The following table describes the period-end account balances that we had with Alunorf and UAL, shown as related party balances in the accompanying consolidated balance sheets (in millions). We had no other material related party balances with non-consolidated affiliates.

	March 31,	
	2018	2017
Accounts receivable-related parties	\$ 242	\$ 60
Other long-term assets-related parties	\$ 3	\$ 15
Accounts payable-related parties	\$ 205	\$ 51

We earned less than \$1 million of interest income on a loan due from Alunorf during each of the years presented in "Other long-term assets-related parties" in the table above. We believe collection of the full receivable from Alunorf is probable; thus no allowance for loan loss was provided for this loan as of March 31, 2018 and 2017.

We have guaranteed the indebtedness for a credit facility and loan on behalf of Alunorf. The guarantee is limited to 50% of the outstanding debt, not to exceed 6 million euros. As of March 31, 2018, there were no amounts outstanding under

our guarantee with Alunorf. We have also guaranteed the payment of early retirement benefits on behalf of Alunorf. As of March 31, 2018, this guarantee totaled \$2 million.

Transactions with Hindalco

We occasionally have related party transactions with our indirect parent company, Hindalco. During the years ended March 31, 2018, 2017 and 2016 we recorded "Net sales" of less than \$1 million between Novelis and our indirect parent related primarily to sales of equipment and other services. As of March 31, 2018 and 2017 there were less than \$1 million of "Accounts receivable, net - related parties" outstanding related to transactions with Hindalco.

During the year ended March 31, 2018, Novelis purchased less than \$1 million in raw materials from Hindalco that were fully paid for during the quarter ended March 31, 2018. During the year ended March 31, 2017, Novelis purchased \$3 million in raw materials from Hindalco that were fully paid for during the quarter ended December 31, 2016.

9. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

“Accrued expenses and other current liabilities” consists of the following (in millions).

	March 31,	
	2018	2017
Accrued compensation and benefits	\$ 193	\$ 191
Accrued interest payable	44	60
Accrued income taxes	29	26
Other current liabilities	325	301
Accrued expenses and other current liabilities — third parties	<u>\$ 591</u>	<u>\$ 578</u>

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

10. DEBT

Debt consists of the following (in millions).

	March 31, 2018				March 31, 2017		
	Interest Rates (A)	Principal	Unamortized Carrying Value Adjustments (B)	Carrying Value	Principal	Unamortized Carrying Value Adjustments (B)	Carrying Value
Third party debt:							
Short term borrowings	3.49%	\$ 49	\$ —	\$ 49	\$ 294	\$ —	\$ 294
Novelis Inc.							
Floating rate Term Loan Facility, due June 2022	4.15%	1,778	(43)	1,735	1,796	(53)	1,743
Novelis Corporation							
5.875% Senior Notes, due September 2026	5.875%	1,500	(21)	1,479	1,500	(23)	1,477
6.25% Senior Notes, due August 2024	6.25%	1,150	(17)	1,133	1,150	(19)	1,131
Novelis Korea Limited							
Bank loans, due through September 2020 (KRW 102 billion)	2.88%	95	—	95	184	—	184
Novelis Switzerland S.A.							
Capital lease obligation, due through December 2019 (Swiss francs (CHF) 11 million)	7.50%	12	—	12	17	(1)	16
Novelis do Brasil Ltda.							
BNDES loans, due through April 2021 (BRL 6 million)	6.06%	2	—	2	4	—	4
Other							
Capital Lease Obligations and Other debt, due through December 2020	5.56%	1	—	1	3	—	3
Total debt		4,587	(81)	4,506	4,948	(96)	4,852
Less: Short term borrowings		(49)	—	(49)	(294)	—	(294)
Current portion of long-term debt		(121)	—	(121)	(121)	—	(121)
Long-term debt, net of current portion		\$ 4,417	\$ (81)	\$ 4,336	\$ 4,533	\$ (96)	\$ 4,437

(A) Interest rates are the stated rates of interest on the debt instrument (not the effective interest rate) as of March 31, 2018, and therefore, exclude the effects of related interest rate swaps and accretion/amortization of fair value adjustments as a result of purchase accounting in connection with Hindalco's purchase of Novelis and accretion/amortization of debt issuance costs related to refinancing transactions and additional borrowings. We present stated rates of interest because they reflect the rate at which cash will be paid for future debt service.

(B) Amounts include unamortized debt issuance costs, fair value adjustments and debt discounts.

Principal repayment requirements for our total debt over the next five years and thereafter using exchange rates as of March 31, 2018 for our debt denominated in foreign currencies are as follows (in millions).

As of March 31, 2018	Amount
Short-term borrowings and current portion of long term debt due within one year	\$ 170
2 years	24
3 years	20
4 years	18
5 years	1,705
Thereafter	2,650
Total	\$ 4,587

Senior Secured Credit Facilities

As of March 31, 2018, the senior secured credit facilities consisted of (i) a \$1.8 billion five-year secured term loan credit facility (Term Loan Facility) and (ii) a \$1 billion asset based loan facility (ABL Revolver). As of March 31, 2018, \$18 million of the Term Loan Facility is due within one year.

The senior secured credit facilities contain various affirmative covenants, including covenants with respect to our financial statements, litigation and other reporting requirements, insurance, payment of taxes, employee benefits and (subject to certain limitations) causing new subsidiaries to pledge collateral and guaranty our obligations. The senior secured credit facilities also include various customary negative covenants and events of default, including limitations on our ability to (1) make certain restricted payments, (2) incur additional indebtedness, (3) sell certain assets, (4) enter into sale and leaseback transactions, (5) make investments, loans and advances, (6) pay dividends or returns of capital and distributions beyond certain amounts, (7) engage in mergers, amalgamations or consolidations, (8) engage in certain transactions with affiliates, and (9) prepay certain indebtedness. The Term Loan Credit Agreement also contains a financial maintenance covenant, prohibiting the Company's senior secured net leverage ratio as of the last day of each fiscal quarter period and measured on a rolling four quarter basis from exceeding 3.50 to 1.00, subject to customary equity cure rights. The senior secured credit facilities include a cross-default provision under which lenders could accelerate repayment of the loans if a payment or non-payment default arises under any other indebtedness with an aggregate principal amount of more than \$100 million (or, in the case of the Term Loan Facility, under the ABL Revolver regardless of the amount outstanding). Substantially all of our assets are pledged as collateral under the senior secured credit facilities.

Term Loan Facility

In September 2017, we amended our Term Loan Credit Agreement (the "Term Loan Amendment") to our \$1.8 billion Credit Agreement (the "Term Loan Facility") dated as of January 10, 2017.

The Term Loan Facility matures on June 2, 2022, and is subject to 0.25% quarterly amortization payments. The loans under the Term Loan Facility accrue interest at LIBOR plus 1.85%. The Term Loan Facility also requires customary mandatory prepayments with excess cash flow, asset sale and casualty event proceeds and proceeds of prohibited indebtedness, all subject to customary exceptions. The Term Loan may be prepaid, in full or in part, at any time at the Company's election without penalty or premium. The Term Loan Facility allows for additional term loans to be issued in an amount not to exceed \$300 million (or its equivalent in other currencies) plus an unlimited amount if, after giving effect to such incurrences on a pro forma basis, the senior secured net leverage ratio does not exceed 3.00 to 1.00. The lenders under the Term Loan Facility have not committed to provide any such additional term loans.

ABL Revolver

In September 2017, we amended and extended the ABL Revolver. The facility is a senior secured revolver bearing an interest rate of LIBOR plus a spread of 1.25% to 1.75% or a prime rate plus a prime spread of 0.25% to 0.75% based on excess availability. The ABL Revolver has a provision that allows the facility to be increased by an additional \$500 million. The ABL Revolver has various customary covenants including maintaining a specified minimum fixed charge coverage ratio of 1.25 to 1 if excess availability is less than the greater of (1) \$90 million and (2) 10% of the lesser of (a) the maximum size of the ABL Revolver and (b) the borrowing base. The ABL Revolver matures on September 14, 2022; provided that, in the event that the Term Loan Facility, or certain other indebtedness matures on or prior to March 14, 2023 and is outstanding 90 days prior to its maturity (and not refinanced with a maturity date later than March 14, 2023), then the ABL Revolver will mature 90 days prior to the maturity date for such other indebtedness, as applicable; unless excess availability under the ABL Revolver is at least (i)

20% of the lesser of (x) the total ABL Revolver commitment and (y) the then applicable borrowing base and (ii) 15% of the lesser of (x) the total ABL Revolver commitment and (y) the then applicable borrowing base, and a minimum fixed charge ratio test of at least 1.25 to 1 is met.

Short-Term Borrowings

As of March 31, 2018, our short-term borrowings were \$49 million consisting of \$12 million of short-term loans under our ABL Revolver, \$36 million in Novelis China loans (CNY 234 million) and \$1 million of other short term borrowings.

As of March 31, 2018, \$12 million of the ABL Revolver was utilized for letters of credit, and we had \$789 million in remaining availability under the ABL Revolver.

As of March 31, 2018, we had availability under our Novelis Korea, Novelis Middle East and Africa, and Novelis China revolving credit facilities and credit lines of \$184 million (KRW 196 billion), \$20 million, and \$5 million (CNY 35 million), respectively.

Senior Notes

On August 29, 2016, Novelis Corporation, an indirect wholly owned subsidiary of Novelis Inc., issued \$1.15 billion in aggregate principal amount of 6.25% Senior Notes Due 2024 (the 2024 Notes). The 2024 Notes are guaranteed, jointly and severally, on a senior unsecured basis, by Novelis Inc. and certain of its subsidiaries.

Additionally, on September 14, 2016, Novelis Corporation issued \$1.5 billion in aggregate principal amount of 5.875% Senior Notes Due 2026 (the 2026 Notes, and together with the 2024 Notes, the Notes). The 2026 Notes are guaranteed, jointly and severally, on a senior unsecured basis, by Novelis Inc. and certain of its subsidiaries.

The proceeds from the issuance of the 2024 Notes and the 2026 Notes were used to extinguish our 8.375% 2017 Senior Notes and our 8.75% 2020 Senior Notes, respectively. In addition, we paid combined tender offer premiums and issuance costs of \$139 million associated with the refinancing transactions, including fees paid to lenders, arrangers, and outside professionals such as attorneys and rating agencies. We recorded a "Loss on extinguishment of debt" of \$112 million in the second quarter of fiscal 2017 related to refinancing transactions. We incurred debt issuance costs of \$45 million on the Notes which were capitalized and will be amortized as an increase to "Interest expense and amortization of debt issuance costs" over the term of these instruments.

The Notes contain customary covenants and events of default that will limit our ability and, in certain instances, the ability of certain of our subsidiaries to (1) incur additional debt and provide additional guarantees, (2) pay dividends or return capital beyond certain amounts and make other restricted payments, (3) create or permit certain liens, (4) make certain asset sales, (5) use the proceeds from the sales of assets and subsidiary stock, (6) create or permit restrictions on the ability of certain of the Company's subsidiaries to pay dividends or make other distributions to the Company, (7) engage in certain transactions with affiliates, (8) enter into sale and leaseback transactions, (9) designate subsidiaries as unrestricted subsidiaries and (10) consolidate, merge or transfer all or substantially all of our assets and the assets of certain of our subsidiaries. During any future period in which either Standard & Poor's Ratings Group, Inc. or Moody's Investors Service, Inc. have assigned an investment grade credit rating to the Notes and no default or event of default under the indenture has occurred and is continuing, most of the covenants will be suspended. The Notes include a cross-acceleration event of default triggered if (1) any other indebtedness with an aggregate principal amount of more than \$100 million is (1) accelerated prior to its maturity or (2) not repaid at its maturity. The Notes also contain customary call protection provisions for our bond holders that extend through August 2022 for the 2024 Notes and through September 2024 for the 2026 Notes. As of March 31, 2018, we were in compliance with the covenants for our Senior Notes.

Korean Bank Loans

As of March 31, 2018, Novelis Korea had \$94 million (KRW 100 billion) of outstanding long-term loans with various banks due within one year. All loans have variable interest rates with base rates tied to Korea's 91-day CD rate plus an applicable spread ranging from 0.80% to 1.58%.

Brazil BNDES Loans

Novelis Brazil entered into loan agreements with Brazil's National Bank for Economic and Social Development (the BNDES loans) related to the plant expansion in Pindamonhangaba, Brazil (Pinda). As of March 31, 2018, there are \$2 million of BNDES loans due within one year.

Interest Rate Swaps

We use interest rate swaps to manage our exposure to changes in benchmark interest rates which impact our variable-rate debt. See Note 14 — Financial Instruments and Commodity Contracts for further information about these interest rate swaps.

11. SHARE-BASED COMPENSATION

The Company's board of directors has authorized long term incentive plans (LTIPs), under which Hindalco stock appreciation rights (Hindalco SARs), Novelis stock appreciation rights (Novelis SARs), phantom restricted stock units (RSUs), and Novelis Performance Units (Novelis PUs) are granted to certain executive officers and key employees.

The Hindalco SARs vest at the rate of 25% or 33% per year, subject to the achievement of an annual performance target. Fiscal 2012 through fiscal 2016 SARs expire in May of the seventh year from the original grant date, while Fiscal 2017 and onwards SARs expire seven years from their original grant date. The performance criterion for vesting of the Hindalco SARs is based on the actual overall Novelis operating EBITDA compared to the target established and approved each fiscal year. The minimum threshold for vesting each year is 75% of each annual target operating EBITDA. Given that the performance criterion is based on an earnings target in a future period for each fiscal year, the grant date of the awards for accounting purposes is generally not established until the performance criterion has been defined.

Each Hindalco SAR is to be settled in cash based on the difference between the market value of one Hindalco share on the date of grant and the market value on the date of exercise. Each Novelis SAR is to be settled in cash based on the difference between the fair value of one Novelis phantom share on the original date of grant and the fair value of a phantom share on the date of the exercise. The amount of cash paid to settle Hindalco SARs and Novelis SARs is limited to two and a half or three times the target payout, depending on the plan year. The Hindalco SARs and Novelis SARs do not transfer any shareholder rights in Hindalco or Novelis to a participant. The Hindalco SARs and Novelis SARs are classified as liability awards and are remeasured at fair value each reporting period until the SARs are settled.

In May 2016, the Company's board of directors approved the issuance of Novelis PUs which have a fixed \$100 value per unit and will vest in full three years from the grant date, subject to specific performance criteria compared to the established target. The Company made a voluntary offer to the participants with outstanding Novelis SARs granted for fiscal years 2012 through 2016 to exchange their Novelis SARs for an equivalently valued number of Novelis PUs. The voluntary exchange resulted in 1,054,662 Novelis SARs being modified into PUs which are not based on Novelis' nor Hindalco's fair values and are accounted for outside the scope of ASC 718, *Compensation - Stock Compensation*. This exchange was accounted for as a modification. There were 92,223 of Novelis SARs that remain outstanding as of March 31, 2018.

The RSUs are based on Hindalco's stock price. The RSUs vest either in full three years from the grant date or 33% per year over three years, subject to continued employment with the Company, but are not subject to performance criteria. Each RSU is to be settled in cash equal to the market value of one Hindalco share. The payout on the RSUs is limited to three times the market value of one Hindalco share measured on the original date of grant. The RSUs are classified as liability awards and expensed over the requisite service period (three years) based on the Hindalco stock price as of each balance sheet date.

Total compensation expense related to Hindalco SARs, Novelis SARs, and RSUs under the plans for the respective periods is presented in the table below (in millions). These amounts are included in "Selling, general and administrative expenses" in our consolidated statements of operations. As the performance criteria for fiscal years 2019, 2020, and 2021 have not yet been established, measurement periods for Hindalco SARs and Novelis SARs relating to those periods have not yet commenced. As a result, only compensation expense for vested and current year Hindalco SARs and Novelis SARs has been recorded.

	Year Ended March 31,		
	2018	2017	2016
Total compensation expense (income)	\$ 21	\$ 21	\$ (2)

The table below shows the RSUs activity for the year ended March 31, 2018.

	Number of RSUs	Grant Date Fair Value (in Indian Rupees)	Aggregate Intrinsic Value (USD in millions)
RSUs outstanding as of March 31, 2017	7,712,984	105.68	\$ 23
Granted	2,594,805	186.96	—
Exercised	(2,826,252)	112.52	8
Forfeited/Cancelled	(367,480)	126.06	—
RSUs outstanding as of March 31, 2018	7,114,057	131.74	\$ 23

The table below shows Hindalco SARs activity for the year ended March 31, 2018.

	Number of Hindalco SARs	Weighted Average Exercise Price (in Indian Rupees)	Weighted Average Remaining Contractual Term (In years)	Aggregate Intrinsic Value (USD in millions)
SARs outstanding as of March 31, 2017	15,161,233	122.16	4.4	\$ 18
Granted	2,324,230	186.11	6.1	—
Exercised	(5,928,524)	123.54	0.0	10
Forfeited/Cancelled	(358,965)	131.94	0.0	—
SARs outstanding as of March 31, 2018	<u>11,197,974</u>	134.32	4.3	14
SARs exercisable as of March 31, 2018	<u>2,923,178</u>	134.62	2.8	\$ 4

The table below shows the Novelis SARs activity for the year ended March 31, 2018.

	Number of Novelis SARs	Weighted Average Exercise Price (in USD)	Weighted Average Remaining Contractual Term (In years)	Aggregate Intrinsic Value (USD in millions)
SARs outstanding as of March 31, 2017	108,549	\$ 83.57	3.5	\$ —
Exercised	(8,808)	63.54	0.0	—
Forfeited/Cancelled	(7,518)	87.25	0.0	—
SARs outstanding as of March 31, 2018	<u>92,223</u>	85.18	2.8	—
SARs exercisable as of March 31, 2018	<u>71,153</u>	\$ 88.22	2.5	\$ —

The fair value of each unvested Hindalco SAR was estimated using the following assumptions:

	Year ended March 31,		
	2018	2017	2016
Risk-free interest rate	6.14% - 7.67%	5.82% - 6.99%	7.23% - 7.68%
Dividend yield	0.53%	0.51%	1.14%
Volatility	29% - 42%	35% - 44%	43% - 44%

The fair value of each unvested Novelis SAR was estimated using the following assumptions:

	Year ended March 31,		
	2018	2017	2016
Risk-free interest rate	1.71% - 2.55%	0.78% - 1.95%	0.89% - 1.39%
Dividend yield	—%	—%	—%
Volatility	20% - 25%	25% - 28%	38% - 41%

The fair value of each unvested Hindalco SAR was based on the difference between the fair value of a long call and a short call option. The fair value of each of these call options was determined using the Monte Carlo Simulation model. We used historical stock price volatility data of Hindalco on the National Stock Exchange of India to determine expected volatility assumptions. The risk-free interest rate is based on Indian treasury yields interpolated for a time period corresponding to the remaining contractual life. The forfeiture rate is estimated based on actual historical forfeitures. The dividend yield is estimated to be the annual dividend of the Hindalco stock over the remaining contractual lives of the Hindalco SARs. The value of each vested Hindalco SAR is remeasured at fair value each reporting period based on the excess of the current stock price over the exercise price, not to exceed the maximum payout as defined by the plans. The fair value of the Hindalco SARs is being recognized over the requisite performance and service period of each tranche, subject to the achievement of any performance criteria.

The fair value of each unvested Novelis SAR was based on the difference between the fair value of a long call and a short call option. The fair value of each of these call options was determined using the Monte Carlo Simulation model. We used the historical volatility of comparable companies to determine expected volatility assumptions. The risk-free interest rate is based on U.S. treasury yields for a time period corresponding to the remaining contractual life. The forfeiture rate is estimated based on actual historical forfeitures of Hindalco SARs. The value of each vested Novelis SAR is remeasured at fair value each reporting period based on the percentage increase in the current Novelis phantom stock price over the exercise price, not to exceed the maximum payout as defined by the plans. The fair value of the Novelis SARs is being recognized over the requisite performance and service period of each tranche, subject to the achievement of any performance criteria.

The cash payments made to settle SAR liabilities were \$10 million, \$7 million, and \$2 million, in the years ended March 31, 2018, 2017, and 2016, respectively. Total cash payments made to settle Hindalco RSUs were \$8 million, \$2 million, and \$5 million in the years ended March 31, 2018, 2017 and 2016, respectively. Unrecognized compensation expense related to the non-vested Hindalco SARs (assuming all future performance criteria are met) was \$5 million which is expected to be recognized over a weighted average period of 1.2 years. Unrecognized compensation expense related to the non-vested Novelis SARs (assuming all future performance criteria are met) was less than \$1 million, which is expected to be recognized over a weighted average period of 1 year. Unrecognized compensation expense related to the RSUs was \$6 million, which will be recognized over the remaining weighted average vesting period of 1.3 years.

12. POSTRETIREMENT BENEFIT PLANS

Our pension obligations relate to: (1) funded defined benefit pension plans in the U.S., Canada, Switzerland, and the U.K.; (2) unfunded defined benefit pension plans in Germany; (2) unfunded lump sum indemnities payable upon retirement to employees in France and Italy; and (4) partially funded lump sum indemnities in South Korea. Our other postretirement obligations (Other Benefits, as shown in certain tables below) include unfunded health care and life insurance benefits provided to retired employees in the U.S., Canada, and Brazil. We have combined our domestic (i.e. Canadian Plans) and foreign (i.e. All other Plans other than Canadian Plans) postretirement benefit plan disclosures because our domestic benefit obligation is not significant as compared to our total benefit obligation, as our foreign benefit obligation is 95% of the total benefit obligation, and the assumptions used to value domestic and foreign plans were not significantly different. Fiscal year ended March 31, 2018 settlement activity primarily relates to the formation of Ulsan Aluminum Ltd., (UAL).

Employer Contributions to Plans

For pension plans, our policy is to fund an amount required to provide for contractual benefits attributed to service to-date, and amortize unfunded actuarial liabilities typically over periods of 15 years or less. We also participate in savings plans in Canada and the U.S., as well as defined contribution pension plans in the U.S., U.K., Canada, Germany, Italy, Switzerland and Brazil. We contributed the following amounts (in millions) to all plans.

	Year Ended March 31,		
	2018	2017	2016
Funded pension plans	\$ 57	\$ 26	\$ 28
Unfunded pension plans	12	15	12
Savings and defined contribution pension plans	27	25	24
Total contributions	\$ 96	\$ 66	\$ 64

During fiscal year 2019, we expect to contribute \$26 million to our funded pension plans, \$14 million to our unfunded pension plans and \$28 million to our savings and defined contribution pension plans.

Benefit Obligations, Fair Value of Plan Assets, Funded Status and Amounts Recognized in Financial Statements

The following tables present the change in benefit obligation, change in fair value of plan assets and the funded status for pension and other benefits (in millions).

	Pension Benefits		Other Benefits	
	Year Ended March 31,		Year Ended March 31,	
	2018	2017	2018	2017
Benefit obligation at beginning of period	\$ 1,865	\$ 1,868	\$ 153	\$ 151
Service cost	44	45	7	6
Interest cost	60	59	7	6
Members' contributions	5	4	—	—
Benefits paid	(60)	(74)	(8)	(8)
Amendments	(8)	2	3	—
Curtailments, settlements and special termination benefits	(25)	(4)	—	—
Actuarial losses (gains)	17	35	14	(3)
Other	(3)	(4)	—	—
Currency losses (gains)	88	(66)	—	1
Benefit obligation at end of period	\$ 1,983	\$ 1,865	\$ 176	\$ 153
Benefit obligation of funded plans	\$ 1,677	\$ 1,594	\$ —	\$ —
Benefit obligation of unfunded plans	306	271	176	153
Benefit obligation at end of period	\$ 1,983	\$ 1,865	\$ 176	\$ 153

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

	Pension Benefits	
	Year Ended March 31,	
	2018	2017
Change in fair value of plan assets		
Fair value of plan assets at beginning of period	\$ 1,200	\$ 1,177
Actual return on plan assets	85	106
Members' contributions	5	4
Benefits paid	(60)	(74)
Company contributions	69	37
Settlements (A)	(24)	(4)
Other	(3)	(3)
Currency	45	(43)
Fair value of plan assets at end of period	\$ 1,317	\$ 1,200

	March 31,			
	2018		2017	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
Funded status				
Funded status at end of period:				
Assets less the benefit obligation of funded plans	\$ (360)	\$ —	\$ (394)	\$ —
Benefit obligation of unfunded plans	(306)	(176)	(271)	(153)
	<u>\$ (666)</u>	<u>\$ (176)</u>	<u>\$ (665)</u>	<u>\$ (153)</u>
As included in our consolidated balance sheets within Total assets / (Total liabilities)				
Other non- current assets	\$ 3	\$ —	\$ 2	\$ —
Accrued expenses and other current liabilities	(13)	(6)	(12)	(10)
Accrued postretirement benefits	(656)	(169)	(655)	(143)
	<u>\$ (666)</u>	<u>\$ (175)</u>	<u>\$ (665)</u>	<u>\$ (153)</u>

The postretirement amounts recognized in "Accumulated other comprehensive loss," before tax effects, are presented in the table below (in millions), and includes the impact related to our equity method investments. Amounts are amortized to net periodic benefit cost over the group's average future service life of the employees or the group's average life expectancy.

	March 31,			
	2018		2017	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
Net actuarial losses	\$ (355)	\$ (29)	\$ (375)	\$ (16)
Prior service credit	13	5	4	7
Total postretirement amounts recognized in Accumulated other comprehensive income	<u>\$ (342)</u>	<u>\$ (24)</u>	<u>\$ (371)</u>	<u>\$ (9)</u>

The estimated amounts that will be amortized from "Accumulated other comprehensive loss" into net periodic benefit costs in fiscal year 2019 (exclusive of equity method investments) are \$32 million for pension benefit costs related to net actuarial losses of \$33 million partially offset by prior service credits of \$1 million, and \$2 million for other postretirement benefits, primarily related to amortization of prior service costs of \$2 million.

The postretirement changes recognized in "Accumulated other comprehensive loss," before tax effects, are presented in the table below (in millions), and include the impact related to our equity method investments.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

	March 31,			
	2018		2017	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
Beginning balance in Accumulated other comprehensive loss	\$ (371)	\$ (9)	\$ (435)	\$ (16)
Curtailments, settlements, and special termination benefits	1	—	1	—
Plan amendment	—	(3)	—	—
Net actuarial gain (loss)	7	(15)	11	2
Prior service cost	8	—	(2)	—
Amortization of:				
Prior service credits	(1)	1	(2)	1
Actuarial losses	40	2	43	4
Effect of currency exchange	(26)	—	13	—
Total postretirement amounts recognized in Accumulated other comprehensive income	<u>\$ (342)</u>	<u>\$ (24)</u>	<u>\$ (371)</u>	<u>\$ (9)</u>

Pension Plan Obligations

The projected benefit obligation, accumulated benefit obligation and fair value of plan assets are presented in the table below (in millions).

	March 31,	
	2018	2017
The projected benefit obligation and accumulated benefit obligation for all defined benefit pension plans:		
Projected benefit obligation	\$ 1,983	\$ 1,865
Accumulated benefit obligation	\$ 1,830	\$ 1,711
Pension plans with projected benefit obligations in excess of plan assets:		
Projected benefit obligation	\$ 1,880	\$ 1,769
Fair value of plan assets	\$ 1,211	\$ 1,103
Pension plans with accumulated benefit obligations in excess of plan assets:		
Accumulated benefit obligation	\$ 1,733	\$ 1,581
Fair value of plan assets	\$ 1,171	\$ 1,049
Pension plans with projected benefit obligations less than plan assets:		
Projected benefit obligation	\$ 103	\$ 96
Fair value of plan assets	\$ 106	\$ 97

Future Benefit Payments

Expected benefit payments to be made during the next ten fiscal years are listed in the table below (in millions).

	Pension Benefits	Other Benefits
2019	\$ 74	\$ 6
2020	79	8
2021	82	9
2022	86	9
2023	89	10
2024 through 2028	509	59
Total	<u>\$ 919</u>	<u>\$ 101</u>

Components of Net Periodic Benefit Cost

The components of net periodic benefit cost for the respective periods are listed in the table below (in millions).

	Pension Benefits			Other Benefits		
	Year Ended March 31,			Year Ended March 31,		
	2018	2017	2016	2018	2017	2016
Net periodic benefit costs						
Service cost	\$ 44	\$ 45	\$ 47	\$ 7	\$ 6	\$ 5
Interest cost	60	59	59	7	6	5
Expected return on assets	(63)	(61)	(67)	—	—	—
Amortization — losses	36	40	37	1	4	4
Amortization — prior service credit	(1)	(2)	(2)	—	2	(27)
Curtailement, settlement, and special termination losses	2	1	—	—	—	—
Net periodic benefit cost (income)	\$ 78	\$ 82	\$ 74	\$ 15	\$ 18	\$ (13)
Proportionate share of non-consolidated affiliates' pension costs	9	8	9	—	—	—
Total net periodic benefit costs (income) recognized	\$ 87	\$ 90	\$ 83	\$ 15	\$ 18	\$ (13)

Actuarial Assumptions and Sensitivity Analysis

The weighted average assumptions used to determine benefit obligations and net periodic benefit costs for the respective periods are listed in the table below.

	Pension Benefits			Other Benefits		
	Year Ended March 31,			Year Ended March 31,		
	2018	2017	2016	2018	2017	2016
Weighted average assumptions used to determine benefit obligations						
Discount rate	3.1%	3.2%	3.3%	4.0%	4.1%	4.0%
Average compensation growth	3.1%	3.1%	3.1%	3.5%	3.5%	3.5%
Weighted average assumptions used to determine net periodic benefit cost						
Discount rate	3.2%	3.3%	3.1%	4.1%	4.0%	3.6%
Average compensation growth	3.1%	3.1%	3.1%	3.5%	3.5%	3.5%
Expected return on plan assets	5.2%	5.4%	5.6%	—%	—%	—%

In selecting the appropriate discount rate for each plan, for pension and other postretirement plans in Canada, the U.S., U.K., and other Euro zone countries, we used spot rate yield curves and individual bond matching models. For other countries we used published long-term high quality corporate bond indices with adjustments made to the index rates based on the duration of the plans' obligation.

In estimating the expected return on assets of a pension plan, consideration is given primarily to its target allocation, the current yield on long-term bonds in the country where the plan is established, and the historical risk premium of equity or real estate over long-term bond yields in each relevant country. The approach is consistent with the principle that assets with higher risk provide a greater return over the long-term. The expected long-term rate of return on plan assets is 5.2% in fiscal 2019.

We provide unfunded health care and life insurance benefits to our retired employees in Canada, the U.S. and Brazil, for which we paid \$8 million, \$8 million, and \$10 million in fiscal 2018, 2017 and 2016, respectively. The assumed health care cost trend used for measurement purposes is 7.5% for fiscal 2019, decreasing gradually to 5% in 2028 and remaining at that level thereafter.

A change of one percentage point in the assumed health care cost trend rates would have the following effects on our other benefits (in millions).

Sensitivity Analysis	1% Increase	1% Decrease
Effect on service and interest costs	\$ 2	\$ (2)
Effect on benefit obligation	\$ 17	\$ (15)

In addition, we provide post-employment benefits, including disability, early retirement and continuation of benefits (medical, dental, and life insurance) to our former or inactive employees, which are accounted for on the accrual basis in accordance with ASC No. 712, *Compensation — Retirement Benefits*. “Other long-term liabilities” and “Accrued expenses and other current liabilities” on our consolidated balance sheets include \$10 million and \$4 million, respectively, as of March 31, 2018, for these benefits. Comparatively, “Other long-term liabilities” and “Accrued expenses and other current liabilities” on our consolidated balance sheets include \$9 million and \$4 million, respectively, as of March 31, 2017.

Investment Policy and Asset Allocation

The Company’s overall investment strategy is to achieve a mix of approximately 50% of investments for long-term growth (equities, real estate) and 50% for near-term benefit payments (debt securities, other) with a wide diversification of asset categories, investment styles, fund strategies and fund managers. Since most of the defined benefit plans are closed to new entrants, we expect this strategy to gradually shift more investments toward near-term benefit payments.

Each of our funded pension plans is governed by an Investment Fiduciary, who establishes an investment policy appropriate for the pension plan. The Investment Fiduciary is responsible for selecting the asset allocation for each plan, monitoring investment managers, monitoring returns versus benchmarks and monitoring compliance with the investment policy. The targeted allocation ranges by asset class, and the actual allocation percentages for each class are listed in the table below.

Asset Category	Target Allocation Ranges	Allocation in Aggregate as of March 31,	
		2018	2017
Equity	14-54%	33%	32%
Fixed income	46-78%	55%	49%
Real estate	0-15%	3%	3%
Other	0-18%	9%	17%

Fair Value of Plan Assets

The following pension plan assets are measured and recognized at fair value on a recurring basis (in millions). Please see Note 16 — Fair Value Measurements for a description of the fair value hierarchy. The U.S. and Canadian pension plan assets are invested exclusively in commingled funds and classified in Level 2, and the U.K., Switzerland, and South Korea pension plan assets are invested in both direct investments (Levels 1 and 2) and commingled funds (Level 2).

Pension Plan Assets

	March 31, 2018				March 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Equity	—	—	—	—	—	—	—	—
Fixed income	163	41	—	204	136	54	—	190
Real estate	—	—	—	—	—	—	—	—
Cash and cash equivalents	7	—	—	7	8	—	—	8
Other	—	—	—	—	—	—	—	—
Investments measured at net asset value (A)	—	—	—	1,106	—	—	—	1,002
Total	\$ 170	\$ 41	\$ —	\$ 1,317	\$ 144	\$ 54	\$ —	\$ 1,200

(A) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the statement of financial position.

13. CURRENCY LOSSES (GAINS)

The following currency losses (gains) are included in "Other expense (income), net" in the accompanying consolidated statements of operations (in millions).

	Year Ended March 31,		
	2018	2017	2016
(Gain) loss on remeasurement of monetary assets and liabilities, net	\$ (46)	\$ 30	\$ (55)
Loss released from accumulated other comprehensive loss	—	—	1
Loss (gain) recognized on balance sheet remeasurement currency exchange contracts, net	47	(35)	52
Currency losses (gains), net	<u>\$ 1</u>	<u>\$ (5)</u>	<u>\$ (2)</u>

The following currency losses are included in "Accumulated other comprehensive loss, net of tax" and "Noncontrolling interests" in the accompanying consolidated balance sheets (in millions).

	Year Ended March 31,		
	2018	2017	2016
Cumulative currency translation adjustment — beginning of period	\$ (256)	\$ (197)	\$ (214)
Effect of changes in exchange rates	191	(75)	17
Sale of investment in foreign entities (A)	—	16	—
Cumulative currency translation adjustment — end of period	<u>\$ (65)</u>	<u>\$ (256)</u>	<u>\$ (197)</u>

(A) We reclassified \$16 million of cumulative currency losses from AOCI to "(Gain) loss on sale of a business, net" during the year-ended March 31, 2017 due to the sale of our equity interest in Aluminium Company of Malaysia Berhad (ALCOM).

14. FINANCIAL INSTRUMENTS AND COMMODITY CONTRACTS

The following tables summarize the gross fair values of our financial instruments and commodity contracts as of March 31, 2018 and 2017 (in millions):

	March 31, 2018					
	Assets		Liabilities		Net Fair Value	
	Current	Noncurrent(A)	Current	Noncurrent(A)	Assets/(Liabilities)	
Derivatives designated as hedging instruments:						
<i>Cash flow hedges</i>						
Aluminum contracts	\$ 63	\$ 1	\$ (1)	\$ —	\$ 63	
Currency exchange contracts	5	—	(7)	—	(2)	
Energy contracts	—	1	(2)	(7)	(8)	
Total derivatives designated as hedging instruments	68	2	(10)	(7)	53	
Derivatives not designated as hedging instruments						
Aluminum contracts	75	—	(64)	—	11	
Currency exchange contracts	15	—	(32)	(1)	(18)	
Energy contracts	1	—	—	—	1	
Total derivatives not designated as hedging instruments	91	—	(96)	(1)	(6)	
Total derivative fair value	\$ 159	\$ 2	\$ (106)	\$ (8)	\$ 47	

	March 31, 2017					
	Assets		Liabilities		Net Fair Value	
	Current	Noncurrent(A)	Current	Noncurrent(A)	Assets/(Liabilities)	
Derivatives designated as hedging instruments:						
<i>Cash flow hedges</i>						
Aluminum contracts	\$ —	\$ —	\$ (69)	\$ —	\$ (69)	
Currency exchange contracts	26	1	(1)	(3)	23	
Energy contracts	1	—	—	(9)	(8)	
Total derivatives designated as hedging instruments	27	1	(70)	(12)	(54)	
Derivatives not designated as hedging instruments						
Aluminum contracts	57	1	(68)	(1)	(11)	
Currency exchange contracts	29	—	(13)	—	16	
Total derivatives not designated as hedging instruments	86	1	(81)	(1)	5	
Total derivative fair value	\$ 113	\$ 2	\$ (151)	\$ (13)	\$ (49)	

(A) The noncurrent portions of derivative assets and liabilities are included in "Other long-term assets-third parties" and in "Other long-term liabilities", respectively, in the accompanying consolidated balance sheets.

Aluminum

We use derivative instruments to preserve our conversion margins and manage the timing differences associated with metal price lag. We use over-the-counter derivatives indexed to the London Metals Exchange (LME) (referred to as our "aluminum derivative forward contracts") to reduce our exposure to fluctuating metal prices associated with the period of time between the pricing of our purchases of inventory and the pricing of the sale of that inventory to our customers, which is known as "metal price lag." We also purchase forward LME aluminum contracts simultaneously with our sales contracts with customers that contain fixed metal prices. These LME aluminum forward contracts directly hedge the economic risk of future metal price fluctuations to better match the selling price of the metal with the purchase price of the metal. The volatility in local market premiums also results in metal price lag.

Price risk exposure arises from commitments to sell aluminum in future periods at fixed prices. We identify and designate certain LME aluminum forward contracts as fair value hedges of the metal price risk associated with fixed price sales commitments that qualify as firm commitments. We did not have any outstanding aluminum forward purchase contracts designated as fair value hedges as of March 31, 2018 and March 31, 2017.

Price risk arises due to fluctuating aluminum prices between the time the sales order is committed and the time the order is shipped. We identify and designate certain LME aluminum forward purchase contracts as cash flow hedges of the metal price risk associated with our future metal purchases that vary based on changes in the price of aluminum. We did not have any outstanding aluminum forward purchase contracts designated as cash flow hedges as of March 31, 2018 and March 31, 2017.

Price risk exposure arises due to the timing lag between the LME based pricing of raw material aluminum purchases and the LME based pricing of finished product sales. We identify and designate certain LME aluminum forward sales contracts as cash flow hedges of the metal price risk associated with our future metal sales that vary based on changes in the price of aluminum. Generally, such exposures do not extend beyond two years in length. The average duration of undesignated contracts is less than one year.

The following table summarizes our notional amount (in kt).

Hedge type	March 31,	
	2018	2017
<i>Purchase (sale)</i>		
Cash flow sales	(423)	(391)
Not designated	(74)	(89)
Total, net	<u>(497)</u>	<u>(480)</u>

Foreign Currency

We use foreign exchange forward contracts, cross-currency swaps and options to manage our exposure to changes in exchange rates. These exposures arise from recorded assets and liabilities, firm commitments and forecasted cash flows denominated in currencies other than the functional currency of certain operations.

We use foreign currency contracts to hedge expected future foreign currency transactions, which include capital expenditures. These contracts cover the same periods as known or expected exposures. We had total notional amounts of \$499 million and \$465 million in outstanding foreign currency forwards designated as cash flow hedges as of March 31, 2018 and 2017, respectively.

We use foreign currency contracts to hedge our foreign currency exposure to our net investment in foreign subsidiaries. We did not have any outstanding foreign currency forwards designated as net investment hedges as of March 31, 2018 and March 31, 2017.

As of March 31, 2018 and 2017, we had outstanding foreign currency exchange contracts with a total notional amount of \$1,024 million and \$683 million, respectively, to primarily hedge balance sheet remeasurement risk, which were not designated as hedges. Contracts representing the majority of this notional amount will mature during the first quarter of fiscal 2019 and offset the remeasurement impact.

Energy

We owned an interest in an electricity swap that matured January 5, 2017 which we formerly designated as a cash flow hedge of our exposure to fluctuating electricity prices. As of March 31, 2011, due to significant credit deterioration of our counterparty, we discontinued hedge accounting for this electricity swap. We did not have any outstanding notional megawatt hours remaining as of March 31, 2017 or March 31, 2018.

On December 31, 2015, we entered into an agreement to extend the electricity swap contract for an additional five years, effective January 6, 2017 and maturing on January 5, 2022. As of March 31, 2018 and 2017, 1 million of notional megawatt hours was outstanding and the fair value of this swap was a liability of \$7 million and \$9 million, respectively. The electricity swap was designated as a cash flow hedge in the first quarter of fiscal year 2017.

We use natural gas forward purchase contracts to manage our exposure to fluctuating energy prices in North America. We had a notional of 20 million MMBTU designated as cash flow hedges as of March 31, 2018, and the fair value was a liability of \$1 million. There was a notional of 6 million MMBTU of natural gas forward purchase contracts designated as cash flow hedges as of March 31, 2017 and the fair value was an asset of \$1 million. As of March 31, 2018 and 2017, we had notionals of less than 1 million MMBTU of forward contracts that were not designated as hedges. The fair value of forward contracts not designated as hedges as of March 31, 2018 and 2017 were both a liability of less than \$1 million. The average duration of undesignated contracts is less than two years in length. One MMBTU is the equivalent of one decatherm, or one million British Thermal Units.

We use diesel fuel forward purchase contracts to manage our exposure to fluctuating fuel prices in North America, which were not designated as hedges as of March 31, 2018. As of March 31, 2018 and 2017, we had 5 million gallons and 8 million gallons, respectively, of diesel fuel forward purchase contracts outstanding. The fair value as of March 31, 2018 was an asset of \$2 million, and as of March 31, 2017 was a liability of less than \$1 million. The average duration of undesignated contracts is less than two years in length.

Interest Rate

As of March 31, 2018, we swapped \$28 million (KRW 30 billion) floating rate loans to a weighted average fixed rate of 3.35%. All swaps expire concurrent with the maturity of the related loans. As of March 31, 2018 and 2017, \$28 million (KRW 30 billion) and \$119 million (KRW 133 billion), respectively, were designated as cash flow hedges.

Gain (Loss) Recognition

The following table summarizes the gains (losses) associated with the change in fair value of derivative instruments not designated as hedges and the ineffectiveness of designated derivatives recognized in "Other expense (income), net" (in millions). Gains (losses) recognized in other line items in the consolidated statement of operations are separately disclosed within this footnote.

	Year Ended March 31,		
	2018	2017	2016
Derivative instruments not designated as hedges			
Aluminum contracts	\$ 10	\$ (44)	\$ 47
Currency exchange contracts	(57)	40	(60)
Energy contracts (A)	7	8	3
(Loss) gain recognized in "Other expense (income), net"	(40)	4	(10)
Derivative instruments designated as hedges			
(Loss) gain recognized in "Other expense (income), net" (B)	(7)	(25)	17
Total (loss) gain recognized in "Other expense (income), net"	\$ (47)	\$ (21)	\$ 7
Balance sheet remeasurement currency exchange contract (losses) gains	\$ (47)	\$ 35	\$ (53)
Realized (losses) gains, net	(20)	(61)	64
Unrealized gains (losses) on other derivative instruments, net	20	5	(4)
Total (loss) gain recognized in "Other expense (income), net"	\$ (47)	\$ (21)	\$ 7

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

- (A) Includes amounts related to de-designated electricity swap and natural gas and diesel swaps not designated as hedges.
 (B) Amount includes: forward market premium/discount excluded from hedging relationship and ineffectiveness on designated aluminum contracts; releases to income from AOCI on balance sheet remeasurement contracts; and ineffectiveness of fair value hedges involving aluminum derivatives.

The following table summarizes the impact on AOCI and earnings of derivative instruments designated as cash flow and net investment hedges (in millions). Within the next twelve months, we expect to reclassify \$64 million of gains from AOCI to earnings, before taxes.

	Amount of Gain (Loss) Recognized in OCI (Effective Portion)			Amount of Gain (Loss) Recognized in "Other (Income) Expense, net" (Ineffective and Excluded Portion)		
	Year Ended March 31,			Year Ended March 31,		
	2018	2017	2016	2018	2017	2016
Cash flow hedging derivatives						
Aluminum contracts	\$ 35	\$ (137)	\$ 84	\$ (9)	\$ (27)	\$ 17
Currency exchange contracts	(5)	48	(7)	1	2	1
Energy contracts	(4)	(7)	(5)	1	(1)	(1)
Interest rate swaps	—	—	(1)	—	—	—
Total cash flow hedging derivatives	26	(96)	71	(7)	(26)	17
Net investment derivatives						
Currency exchange contracts	(17)	—	(2)	—	—	—
Total	\$ 9	\$ (96)	\$ 69	\$ (7)	\$ (26)	\$ 17

Gain (Loss) Reclassification

	Amount of Gain (Loss) Reclassified from AOCI into Income/(Expense) (Effective Portion) Year Ended March 31,			Location of Gain (Loss) Reclassified from AOCI into Earnings
	2018	2017	2016	
Cash flow hedging derivatives				
Energy contracts (A)	\$ —	\$ (4)	\$ (5)	Other expense (income), net
Energy contracts (C)	(3)	(4)	(10)	Cost of goods sold (B)
Aluminum contracts	(78)	(55)	83	Cost of goods sold (B)
Aluminum contracts	(22)	(3)	—	Net sales
Currency exchange contracts	14	18	(44)	Cost of goods sold (B)
Currency exchange contracts	1	2	(4)	Selling, general and administrative expenses
Currency exchange contracts	7	7	(9)	Net sales
Currency exchange contracts	—	—	(1)	Other expense (income), net
Currency exchange contracts	(1)	(1)	(1)	Depreciation and amortization
Interest rate swaps	—	—	(1)	Interest expense
Total	(82)	(40)	8	(Loss) income before income taxes
	24	12	(19)	Income tax benefit (provision)
	\$ (58)	\$ (28)	\$ (11)	Net loss

- (A) Includes amounts related to de-designated electricity swap. AOCI related to this swap was amortized to income over the remaining term of the hedged item.
 (B) "Cost of goods sold" is exclusive of depreciation and amortization.
 (C) Includes amounts related to electricity, natural gas, and diesel swaps.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table summarizes the location and amount of gain (loss) that was reclassified from accumulated other comprehensive income into earnings and the amount excluded from the assessment of effectiveness for the three months ended March 31, 2018.

	<u>Net Sales</u>	<u>Cost of Goods Sold</u>	<u>Selling, General and Administrative Expenses</u>	<u>Depreciation and Amortization</u>	<u>Interest Expense</u>	<u>Other Expense (Income), Net</u>
Gain (loss) on cash flow hedging relationships:						
Aluminum commodity contracts:						
Amount of loss reclassified from AOCI into income	(22)	—	—	—	—	—
Energy commodity contracts:						
Amount of loss reclassified from AOCI into income	—	(1)	—	—	—	—
Foreign exchange contracts:						
Amount of gain reclassified from AOCI into income	4	3	—	—	—	—

15. ACCUMULATED OTHER COMPREHENSIVE LOSS

The following table summarizes the change in the components of "Accumulated other comprehensive loss, net of tax" and excluding "Noncontrolling interests", for the periods presented (in millions).

	Currency Translation	(B) Cash Flow Hedges	(C) Postretirement Benefit Plans	Total
Balance as of March 31, 2015	\$ (213)	\$ (63)	\$ (285)	\$ (561)
Other comprehensive income (loss) before reclassifications	17	41	(15)	43
Amounts reclassified from AOCI, net	—	11	7	18
Net current-period other comprehensive income (loss)	17	52	(8)	61
Balance as of March 31, 2016	(196)	(11)	(293)	(500)
Other comprehensive (loss) income before reclassifications	(76)	(63)	22	(117)
Amounts reclassified from AOCI, net (A)	16	28	28	72
Net current-period other comprehensive (loss) income	(60)	(35)	50	(45)
Balance as of March 31, 2017	(256)	(46)	(243)	(545)
Other comprehensive income before reclassifications	191	19	29	239
Amounts reclassified from AOCI, net	—	58	(13)	45
Net current-period other comprehensive income	191	77	16	284
Balance as of March 31, 2018	\$ (65)	\$ 31	\$ (227)	\$ (261)

(A) The \$16 million in currency translation reclassified from AOCI relates to CTA that was written off as part of our sale of the Aluminium Company of Malaysia Berhad (ALCOM) business. Refer to Note 17 — Other Expense (Income) for additional information.

(B) For additional information on our cash flow hedges see Note 14 — Financial Instruments and Commodity Contracts.

(C) For additional information on our postretirement benefit plans see Note 12 — Postretirement Benefit Plans.

16. FAIR VALUE MEASUREMENTS

We record certain assets and liabilities, primarily derivative instruments, on our consolidated balance sheets at fair value. We also disclose the fair values of certain financial instruments, including debt and loans receivable, which are not recorded at fair value. Our objective in measuring fair value is to estimate an exit price in an orderly transaction between market participants on the measurement date. We consider factors such as liquidity, bid/offer spreads and nonperformance risk, including our own nonperformance risk, in measuring fair value. We use observable market inputs wherever possible. To the extent observable market inputs are not available, our fair value measurements will reflect the assumptions we used. We grade the level of the inputs and assumptions used according to a three-tier hierarchy:

Level 1 — Unadjusted quoted prices in active markets for identical, unrestricted assets or liabilities we have the ability to access at the measurement date.

Level 2 — Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 — Unobservable inputs for which there is little or no market data, which require us to develop our own assumptions based on the best information available as what market participants would use in pricing the asset or liability.

The following section describes the valuation methodologies we used to measure our various financial instruments at fair value, including an indication of the level in the fair value hierarchy in which each instrument is generally classified.

Derivative Contracts

For certain derivative contracts with fair values based upon trades in liquid markets, such as aluminum, foreign exchange, natural gas and diesel fuel forward contracts and options, valuation model inputs can generally be verified and valuation techniques do not involve significant judgment. The fair values of such financial instruments are generally classified within Level 2 of the fair value hierarchy.

The majority of our derivative contracts are valued using industry-standard models with observable market inputs as their basis, such as time value, forward interest rates, volatility factors, and current (spot) and forward market prices. We generally classify these instruments within Level 2 of the valuation hierarchy. Such derivatives include interest rate swaps, cross-currency swaps, foreign currency contracts, aluminum derivative contracts, natural gas and diesel fuel forward contracts.

We classify derivative contracts that are valued based on models with significant unobservable market inputs as Level 3 of the valuation hierarchy. Our two electricity swaps, which are our only Level 3 derivative contracts, represent agreements to buy electricity at a fixed price at our Oswego, New York facility. Forward prices are not observable for this market, so we must make certain assumptions based on available information we believe to be relevant to market participants. We use observable forward prices for a geographically nearby market and adjust for 1) historical spreads between the cash prices of the two markets, and 2) historical spreads between retail and wholesale prices.

For the electricity swap that matured January 5, 2017, we did not have any outstanding notional megawatt hours remaining as of March 31, 2017.

For the electricity swap maturing January 5, 2022, the average forward price at March 31, 2018, estimated using the method described above, was \$40 per megawatt hour, which represented an approximately \$3 premium over forward prices in the nearby observable market. The actual rate from the most recent swap settlement was approximately \$35 per megawatt hour. Each \$1 per megawatt hour decline in price decreases the valuation of the electricity swap by \$1 million.

For Level 2 and 3 of the fair value hierarchy, where appropriate, valuations are adjusted for various factors such as liquidity, bid/offer spreads and credit considerations (nonperformance risk). We regularly monitor these factors along with significant market inputs and assumptions used in our fair value measurements and evaluate the level of the valuation input according to the fair value hierarchy. This may result in a transfer between levels in the hierarchy from period to period. As of March 31, 2018 and March 31, 2017, we did not have any Level 1 derivative contracts. No amounts were transferred between levels in the fair value hierarchy.

All of the Company's derivative instruments are carried at fair value in the statements of financial position prior to considering master netting agreements.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table presents our derivative assets and liabilities which were measured and recognized at fair value on a recurring basis classified under the appropriate level of the fair value hierarchy as of March 31, 2018 and March 31, 2017 (in millions). The table below also discloses the net fair value of the derivative instruments after considering the impact of master netting agreements.

	March 31,			
	2018		2017	
	Assets	Liabilities	Assets	Liabilities
Level 2 instruments				
Aluminum contracts	\$ 139	\$ (65)	\$ 58	\$ (138)
Currency exchange contracts	20	(40)	56	(17)
Energy contracts	2	(2)	1	—
Total level 2 instruments	<u>161</u>	<u>(107)</u>	<u>115</u>	<u>(155)</u>
Level 3 instruments				
Energy contracts	—	(7)	—	(9)
Total level 3 instruments	<u>—</u>	<u>(7)</u>	<u>—</u>	<u>(9)</u>
Total gross	<u>\$ 161</u>	<u>\$ (114)</u>	<u>\$ 115</u>	<u>\$ (164)</u>
Netting adjustment (A)	<u>\$ (57)</u>	<u>\$ 57</u>	<u>\$ (46)</u>	<u>\$ 46</u>
Total net	<u>\$ 104</u>	<u>\$ (57)</u>	<u>\$ 69</u>	<u>\$ (118)</u>

(A) Amounts represent the impact of legally enforceable master netting agreements that allow the Company to settle positive and negative positions with the same counterparties.

We recognized unrealized gains of \$2 million for the year ended March 31, 2018 related to Level 3 financial instrument that was still held as of March 31, 2018. These gains were included in "Other expense (income), net."

The following table presents a reconciliation of fair value activity for Level 3 derivative contracts (in millions).

	Level 3 – Derivative Instruments (A)
Balance as of March 31, 2016	\$ (8)
Unrealized/realized gain included in earnings (B)	11
Unrealized/realized (loss) included in AOCI (C)	(9)
Settlements	(3)
Balance as of March 31, 2017	<u>\$ (9)</u>
Unrealized/realized gain included in earnings (B)	5
Settlements (B)	(3)
Balance as of March 31, 2018	<u>\$ (7)</u>

(A) Represents net derivative liabilities.

(B) Included in "Other expense (income), net"

(C) Included in "Change in fair value of effective portion of cash flow hedges, net"

Financial Instruments Not Recorded at Fair Value

The table below presents the estimated fair value of certain financial instruments not recorded at fair value on a recurring basis (in millions). The table excludes short-term financial assets and liabilities for which we believe carrying value approximates fair value. We value long-term receivables and long-term debt using Level 2 inputs. Valuations are based on either market and/or broker ask prices when available or on a standard credit adjusted discounted cash flow model using market observable inputs.

	March 31,			
	2018		2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets				
Long-term receivables from related parties	\$ 3	\$ 3	\$ 15	\$ 14
Liabilities				
Total debt — third parties (excluding short term borrowings)	\$ 4,457	\$ 4,569	\$ 4,558	\$ 4,797

17. OTHER EXPENSE (INCOME)

“Other expense (income), net” is comprised of the following (in millions).

	Year Ended March 31,		
	2018	2017	2016
Currency losses (gains), net (A)	\$ 1	\$ (5)	\$ (2)
Unrealized (gains) losses on change in fair value of derivative instruments, net (B)	(20)	(5)	4
Realized losses (gains) on change in fair value of derivative instruments, net (B)	20	61	(64)
Loss on sale of assets, net	7	6	4
Loss on Brazilian tax litigation, net (C)	3	5	5
Interest income	(9)	(11)	(13)
Gain on business interruption insurance recovery (D)	—	—	(10)
Other, net	7	17	8
Other expense (income), net (E)	<u>\$ 9</u>	<u>\$ 68</u>	<u>\$ (68)</u>

(A) Includes “(Gain) loss recognized on balance sheet remeasurement currency exchange contracts, net.”

(B) See Note 14 — Financial Instruments and Commodity Contracts for further details.

(C) See Note 19 — Commitments and Contingencies – Brazil Tax and Legal Matters for further details.

(D) We experienced an outage at a facility in North America in fiscal 2015. As a result, we recognized gains of \$(10) million during the year ended March 31, 2016.

(E) We have reclassified the "Loss on sale of a business" for the year ended March 31, 2017 of \$27 million from "Other expense (income), net" to "(Gain) loss on sale of a business, net" in the consolidated statement of operations for presentation purposes. In fiscal 2017, we sold our equity interest in Aluminium Company of Malaysia Berhad (ALCOM), a previously consolidated subsidiary. The sale resulted in a loss of \$27 million during the year ended March 31, 2017.

18. INCOME TAXES

We are subject to Canadian and United States federal, state, and local income taxes as well as other foreign income taxes. The domestic (Canada) and foreign components of our "Income before income taxes" (and after removing our "Equity in net loss of non-consolidated affiliates") are as follows (in millions).

	Year Ended March 31,		
	2018	2017	2016
Domestic (Canada)	\$ (50)	\$ (286)	\$ (313)
Foreign (all other countries)	906	491	324
Pre-tax income before equity in net loss of non-consolidated affiliates	<u>\$ 856</u>	<u>\$ 205</u>	<u>\$ 11</u>

The components of the "Income tax provision" are as follows (in millions).

	Year Ended March 31,		
	2018	2017	2016
Current provision:			
Domestic (Canada)	\$ 4	\$ 8	\$ 5
Foreign (all other countries)	176	137	134
Total current	<u>180</u>	<u>145</u>	<u>139</u>
Deferred provision (benefit):			
Domestic (Canada)	—	—	—
Foreign (all other countries)	53	6	(93)
Total deferred	<u>53</u>	<u>6</u>	<u>(93)</u>
Income tax provision	<u>\$ 233</u>	<u>\$ 151</u>	<u>\$ 46</u>

The reconciliation of the Canadian statutory tax rates to our effective tax rates are shown below (in millions, except percentages).

	Year Ended March 31,		
	2018	2017	2016
Pre-tax income before equity in net loss on non-consolidated affiliates	\$ 856	\$ 205	\$ 11
Canadian statutory tax rate	25%	25%	25%
Provision at the Canadian statutory rate	<u>\$ 214</u>	<u>\$ 51</u>	<u>\$ 3</u>
Increase (decrease) for taxes on income (loss) resulting from:			
Exchange translation items	10	9	16
Exchange remeasurement of deferred income taxes	(3)	8	(8)
Change in valuation allowances	22	67	104
Tax credits	(22)	(14)	(22)
Income items not subject to tax	(5)	(3)	—
State tax expense, net	4	1	(10)
Dividends not subject to tax	—	(23)	(52)
Enacted tax rate changes	(19)	1	5
Tax rate differences on foreign earnings	23	36	4
Uncertain tax positions	7	6	7
Prior year adjustments	1	4	(2)
Income tax settlements	1	6	—
Other — net	—	2	1
Income tax provision	<u>\$ 233</u>	<u>\$ 151</u>	<u>\$ 46</u>
Effective tax rate	<u>27%</u>	<u>73%</u>	<u>411%</u>

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the U.S. Tax Cuts and Jobs Act of 2017 (the "Act"). The Act makes broad and complex changes to the U.S. tax code that affects our fiscal year ended March 31, 2018, including, but not limited to, (1) reducing the U.S. federal corporate tax rate from 35% to 21% effective January 1, 2018 and (2) bonus depreciation that allows for full expensing of qualified property. Section 15 of the Internal Revenue Code stipulates that our fiscal year ending March 31, 2018 has a blended corporate tax rate of 31.55%, which is based on the applicable tax rates before and after the Tax Act and the number of days in the year. Also recorded in the fiscal year is a provisional income tax benefit of \$19 million for the remeasurement of deferred tax asset and liabilities to reflect the anticipated rate at which the deferred items will be realized. The amounts are subject to change as the Company obtains information necessary to complete the calculations. The Company will continue to review the technical interpretations of the Tax Act and other applicable laws, monitor legislative changes, and review U.S. state guidance as it is issued. The Company expects to complete the analysis of the provisional items within the one-year measurement period during fiscal year ending March 31, 2019. The following information is needed to complete the accounting for the remeasurement of deferred tax assets and liabilities:

- Determination of state conformity
- Actual reversals of temporary differences based on tax return filing positions

Based on an initial assessment of the Act, the Company believes that most significant impact on the Company's consolidated fiscal year 2018 financial statements is the remeasurement of deferred tax assets and liabilities. Other provisions of the Act did not have a material impact on the fiscal year 2018 consolidated financial statements.

Our effective tax rate differs from the Canadian statutory rate primarily due to the following factors: (1) pre-tax foreign currency gains or losses with no tax effect and the tax effect of U.S. dollar denominated currency gains or losses with no pre-tax effect, which is shown above as exchange translation items; (2) the remeasurement of deferred income taxes due to foreign currency changes, which is shown above as exchange remeasurement of deferred income taxes; (3) changes in valuation allowances; (4) remeasurement of deferred taxes for recently enacted tax reform; and (5) differences between the Canadian statutory and foreign statutory tax rates applied to entities in different jurisdictions shown above as tax rate differences on foreign earnings.

We continue to maintain valuation allowances in Canada and certain foreign jurisdictions primarily related to tax losses where we believe it is more likely than not that we will be unable to utilize those losses. The impact on our income tax provision of the change in these valuation allowances during the year ended March 31, 2018 was an increase of \$22 million.

We earn tax credits in a number of the jurisdictions in which we operate. Primarily comprised of foreign tax credits in the U.K. of \$8 million in the current year and empire zone credits in New York of \$6 million. The impact on our income tax provision of credits during the year ended March 31, 2018 was a benefit of \$22 million. However, legislation enacted in New York state on March 31, 2014 established a zero percent statutory income tax rate for manufacturers. As a result, the current year empire zone credits in New York are offset with a corresponding valuation allowance of \$6 million.

We receive the benefits of favorable tax holidays in various jurisdictions, which resulted in a \$4 million reduction to tax expense for the year ended March 31, 2018, and phase out as of December 31, 2020.

Deferred Income Taxes

Deferred income taxes recognize the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the carrying amounts used for income tax purposes, and the impact of available net operating loss (NOL) and tax credit carryforwards. These items are stated at the enacted tax rates that are expected to be in effect when taxes are actually paid or recovered.

Our deferred income tax assets and deferred income tax liabilities are as follows (in millions).

	March 31,	
	2018	2017
Deferred income tax assets:		
Provisions not currently deductible for tax purposes	\$ 323	\$ 418
Tax losses/benefit carryforwards, net	767	771
Depreciation and amortization	46	45
Other assets	6	4
Total deferred income tax assets	1,142	1,238
Less: valuation allowance	(727)	(688)
Net deferred income tax assets	\$ 415	\$ 550
Deferred income tax liabilities:		
Depreciation and amortization	\$ 384	\$ 442
Inventory valuation reserves	83	84
Monetary exchange gains, net	12	14
Other liabilities	37	24
Total deferred income tax liabilities	\$ 516	\$ 564
Net deferred income tax liabilities	\$ 101	\$ 14

ASC 740 requires that we reduce our deferred income tax assets by a valuation allowance if, based on the weight of the available evidence, it is more likely than not that all or a portion of a deferred tax asset will not be realized. After consideration of all evidence, both positive and negative, management concluded that it is more likely than not that we will be unable to realize a portion of our deferred tax assets and that valuation allowances of \$727 million and \$688 million were necessary as of March 31, 2018 and 2017, respectively.

It is reasonably possible that our estimates of future taxable income may change within the next 12 months, resulting in a change to the valuation allowance in one or more jurisdictions.

As of March 31, 2018, we had net operating loss carryforwards of approximately \$627 million (tax effected) and tax credit carryforwards of \$140 million, which will be available to offset future taxable income and tax liabilities, respectively. The carryforwards will begin expiring in fiscal year 2019. As of March 31, 2018, valuation allowances of \$541 million, \$119 million and \$67 million had been recorded against net operating loss carryforwards, tax credit carryforwards and other deferred tax assets, respectively, where it appeared more likely than not that such benefits will not be realized. The net operating loss carryforwards are predominantly in Canada, the U.S., Italy, Germany, Switzerland and the U.K.

As of March 31, 2017, we had net operating loss carryforwards of approximately \$655 million (tax effected) and tax credit carryforwards of \$116 million, which will be available to offset future taxable income and tax liabilities, respectively. The carryforwards will begin expiring in fiscal 2017 with some amounts being carried forward indefinitely. As of March 31, 2017, valuation allowances of \$531 million, \$98 million and \$59 million had been recorded against net operating loss carryforwards, tax credit carryforwards and other deferred tax assets, respectively, where it appeared more likely than not that such benefits will not be realized. The net operating loss carryforwards are predominantly in Canada, the U.S., Italy, Germany, Switzerland, China and the U.K.

Although realization is not assured, management believes it is more likely than not that all the remaining net deferred tax assets will be realized. In the near term, the amount of deferred tax assets considered realizable could be reduced if we do not generate sufficient taxable income in certain jurisdictions.

As of March 31, 2018, we had cumulative earnings of approximately \$3 billion for which we had not provided Canadian income tax or withholding taxes because we consider them to be indefinitely reinvested. We acknowledge that we would need to accrue and pay taxes should we decide to repatriate cash and short term investments generated from earnings of our foreign subsidiaries that are considered indefinitely reinvested. Except for those jurisdictions where we have already distributed and paid taxes on the earnings, we have reinvested and expect to continue to reinvest undistributed earnings of foreign subsidiaries indefinitely. Cash and cash equivalents held by foreign subsidiaries that are indefinitely reinvested are used to cover expansion and short-term cash flow needs of such subsidiaries. The amounts considered indefinitely reinvested would be subject to possible Canadian taxation only if remitted as dividends. However, due to our full valuation allowance position of \$618 million in Canada, in excess of \$500 million of net operating loss carryforwards, exempt surpluses for Canadian tax purposes, \$51 million of tax credits and other deferred tax assets of \$67 million, a portion of the cumulative

earnings would not be taxed if distributed. Due to the complex structure of our international holdings, and the various methods available for repatriation, quantification of the deferred tax liability, if any, associated with these undistributed earnings is not practicable.

Tax Uncertainties

As of March 31, 2018 and 2017, the total amount of unrecognized benefits that, if recognized, would affect the effective income tax rate in future periods based on anticipated settlement dates is \$44 million and \$36 million, respectively.

Tax authorities continue to examine certain other of our tax filings for fiscal years 2005 through 2017. As a result of further settlement of audits, judicial decisions, the filing of amended tax returns or the expiration of statutes of limitations, our reserves for unrecognized tax benefits, as well as reserves for interest and penalties, may decrease in the next 12 months by an amount up to approximately \$26 million. With few exceptions, tax returns for all jurisdictions for all tax years before 2005 are no longer subject to examination by taxing authorities.

Our policy is to record interest and penalties related to unrecognized tax benefits in the income tax provision (benefit). As of March 31, 2018, 2017 and 2016, we had \$9 million, \$5 million and \$4 million accrued, respectively, for interest and penalties. For the year ended March 31, 2018, we recognized \$3 million expense related to accrued interest and penalties. For the years ended March 31, 2017 and 2016 we recognized a tax expense and benefit of \$1 million and \$2 million, respectively, related to changes in accrued interest and penalties.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in millions):

	Year Ended March 31,		
	2018	2017	2016
Beginning balance	\$ 36	\$ 34	\$ 37
Additions based on tax positions related to the current period	4	5	6
Additions based on tax positions of prior years	6	—	3
Reductions based on tax positions of prior years	(7)	—	(6)
Settlements	—	(1)	(10)
Foreign exchange	5	(2)	4
Ending Balance	\$ 44	\$ 36	\$ 34

Income Taxes Payable

Our consolidated balance sheets include income taxes payable (net) of \$38 million and \$44 million as of March 31, 2018 and 2017, respectively. Of these amounts, \$29 million and \$26 million are reflected in “Accrued expenses and other current liabilities” as of March 31, 2018 and 2017, respectively.

19. COMMITMENTS AND CONTINGENCIES

We are party to, and may in the future be involved in, or subject to, disputes, claims and proceedings arising in the ordinary course of our business, including some we assert against others, such as environmental, health and safety, product liability, employee, tax, personal injury and other matters. We have established a liability with respect to contingencies for which a loss is probable and estimable. While the ultimate resolution of and liability and costs related to these matters cannot be determined with certainty, we do not believe any of these pending actions, individually or in the aggregate, will materially impact our operations or materially affect our financial condition or liquidity.

For certain matters in which the Company is involved for which a loss is reasonably possible, we are unable to estimate a loss. For certain other matters for which a loss is reasonably possible and the loss is estimable, we have estimated the aggregated range of loss as \$0 to \$110 million. This estimated aggregate range of reasonably possible losses is based upon currently available information. The Company's estimates involve significant judgment, and therefore, the estimate will change from time to time and actual losses may differ from the current estimate. We review the status of, and estimated liability related to, pending claims and civil actions on a quarterly basis. The evaluation model includes all asserted and unasserted claims that can be reasonably identified including claims relating to our responsibility for compliance with environmental, health and safety laws and regulations in the jurisdictions in which we operate or formerly operated. The estimated costs in respect of such reported liabilities are not offset by amounts related to insurance or indemnification arrangements unless otherwise noted.

The following describes certain contingencies relating to our business, including those for which we assumed liability as a result of our spin-off from Alcan Inc.

Environmental Matters

We own and operate numerous manufacturing and other facilities in various countries around the world. Our operations are subject to environmental laws and regulations from various jurisdictions, which govern, among other things, air emissions, wastewater discharges, the handling, storage and disposal of hazardous substances and wastes, the remediation of contaminated sites, post-mining reclamation and restoration of natural resources, and employee health and safety. Future environmental regulations may impose stricter compliance requirements on the industries in which we operate. Additional equipment or process changes at some of our facilities may be needed to meet future requirements. The cost of meeting these requirements may be significant. Failure to comply with such laws and regulations could subject us to administrative, civil or criminal penalties, obligations to pay damages or other costs, and injunctions and other orders, including orders to cease operations.

We are involved in proceedings under the U.S. Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, or analogous state provisions regarding liability arising from the usage, storage, treatment or disposal of hazardous substances and wastes at a number of sites in the United States, as well as similar proceedings under the laws and regulations of the other jurisdictions in which we have operations, including Brazil and certain countries in the European Union. Many of these jurisdictions have laws that impose joint and several liability, without regard to fault or the legality of the original conduct, for the costs of environmental remediation, natural resource damages, third party claims, and other expenses. In addition, we are, from time to time, subject to environmental reviews and investigations by relevant governmental authorities. We are also involved in claims and litigation filed on behalf of persons alleging exposure to substances and other hazards at our current and former facilities.

We have established liabilities based on our estimates for the currently anticipated costs associated with these environmental matters. We estimated that the remaining undiscounted clean-up costs related to our environmental liabilities as of March 31, 2018 were approximately \$14 million, of which \$10 million was associated with restructuring actions and the remaining undiscounted clean-up costs were approximately \$4 million. Additionally, \$7 million of the environmental liability was included in "Other long-term liabilities," with the remaining \$7 million included in "Accrued expenses and other current liabilities" in our consolidated balance sheet as of March 31, 2018. As of March 31, 2017, \$10 million of the environmental liability was included in "Other long-term liabilities," with the remaining \$5 million included in "Accrued expenses and other current liabilities" in our consolidated balance sheet. Management has reviewed the environmental matters, including those for which we assumed liability as a result of our spin-off from Alcan Inc. As a result of management's review of these items, management has determined that the currently anticipated costs associated with these environmental matters will not, individually or in the aggregate, materially impact our operations or materially adversely affect our financial condition, results of operations or liquidity.

Brazil Tax and Legal Matters

Under a federal tax dispute settlement program established by the Brazilian government, we have settled several disputes with Brazil's tax authorities regarding various forms of manufacturing taxes and social security contributions. In most cases, we are paying the settlement amounts over a period of 180 months, although in some cases we are paying the settlement amounts over a shorter period. The assets and liabilities related to these settlements are presented in the table below (in millions).

	March 31,	
	2018	2017
Cash deposits (A)	\$ 7	\$ 7
Short-term settlement liability (B)	\$ 9	\$ 9
Long-term settlement liability (B)	49	59
Total settlement liability	<u>\$ 58</u>	<u>\$ 68</u>
Liability for other disputes and claims (C)	\$ 29	\$ 22

- (A) Effective in the third quarter of fiscal 2018, management defines "Cash deposits" to include cash deposits related to tax, labor, and civil disputes. To conform with current year presentation, we have updated prior period amounts to also include cash deposits related to labor and civil disputes. We have maintained these cash deposits as a result of legal proceedings with Brazil's tax authorities, labor courts, or designated civil courts. These deposits, which are included in "Other long-term assets - third parties" in our accompanying consolidated balance sheets, will be expended toward these legal proceedings.
- (B) The short-term and long-term settlement liabilities are included in "Accrued expenses and other current liabilities" and "Other long-term liabilities", respectively, in our accompanying consolidated balance sheets.
- (C) In addition to the disputes we have settled under the federal tax dispute settlement program, we are involved in several other unresolved tax and other legal claims in Brazil. The related liabilities are included in "Other long-term liabilities" in our accompanying consolidated balance sheets.

The interest cost recorded on these settlement liabilities, partially offset by interest earned on the cash deposits is included in the table below (in millions).

	Year Ended March 31,		
	2018	2017	2016
Loss on Brazilian tax litigation, net	\$ 3	\$ 5	\$ 5

Additionally, we have included in the range of reasonably possible losses disclosed above, any unresolved tax disputes or other contingencies for which a loss is reasonably possible and estimable.

20. SEGMENT, GEOGRAPHICAL AREA, MAJOR CUSTOMER AND MAJOR SUPPLIER INFORMATION

Segment Information

Due in part to the regional nature of supply and demand of aluminum rolled products and to best serve our customers, we manage our activities based on geographical areas and are organized under four operating segments: North America, Europe, Asia and South America. All of our segments manufacture aluminum sheet and light gauge products.

The following is a description of our operating segments:

North America. Headquartered in Atlanta, Georgia, this segment operates eight plants, including two fully dedicated recycling facilities and one facility with recycling operations, in two countries.

Europe. Headquartered in Küssnacht, Switzerland, this segment operates ten plants, including two fully dedicated recycling facilities and two facilities with recycling operations, in four countries.

Asia. Headquartered in Seoul, South Korea, this segment operates four plants, including three facilities with recycling operations, in three countries.

South America. Headquartered in Sao Paulo, Brazil, this segment comprises power generation operations, and operates two plants, including a facility with recycling operations, in Brazil.

Net sales and expenses are measured in accordance with the policies and procedures described in Note 1 — Business and Summary of Significant Accounting Policies.

We measure the profitability and financial performance of our operating segments based on “Segment income.” “Segment income” provides a measure of our underlying segment results that is in line with our approach to risk management. We define “Segment income” as earnings before (a) “depreciation and amortization”; (b) “interest expense and amortization of debt issuance costs”; (c) “interest income”; (d) unrealized gains (losses) on change in fair value of derivative instruments, net, except for foreign currency remeasurement hedging activities, which are included in segment income; (e) impairment of goodwill; (f) gain or loss on extinguishment of debt; (g) noncontrolling interests’ share; (h) adjustments to reconcile our proportional share of “Segment income” from non-consolidated affiliates to income as determined on the equity method of accounting; (i) “restructuring and impairment, net”; (j) gains or losses on disposals of property, plant and equipment and businesses, net; (k) other costs, net; (l) litigation settlement, net of insurance recoveries; (m) sale transaction fees; (n) provision or benefit for taxes on income (loss); (o) cumulative effect of accounting change, net of tax; and (p) metal price lag.

The tables below show selected segment financial information (in millions). The “Eliminations and Other” column in the table below includes eliminations and functions that are managed directly from our corporate office that have not been allocated to our operating segments, as well as the adjustments for proportional consolidation, and eliminations of intersegment “Net sales.” The financial information for our segments includes the results of our affiliates on a proportionately consolidated basis, which is consistent with the way we manage our business segments. In order to reconcile the financial information for the segments shown in the tables below to the relevant U.S. GAAP based measures, we must adjust proportional consolidation of each line item. The “Eliminations and Other” in “Net sales – third party” includes the net sales attributable to our joint venture party, Tri-Arrows, for our Logan affiliate because we consolidate 100% of the Logan joint venture for U.S. GAAP, but we manage our Logan affiliate on a proportionately consolidated basis. See Note 7 — Consolidation and Note 8 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further information about these affiliates. Additionally, we eliminate intersegment sales and intersegment income for reporting on a consolidated basis.

Selected Segment Financial Information

Selected Operating Results Year Ended March 31, 2018	North America	Europe	Asia	South America	Eliminations and Other	Total
Net sales - third party	\$ 3,933	\$ 3,390	\$ 2,066	\$ 1,851	\$ 222	\$ 11,462
Net sales - intersegment	18	57	44	80	(199)	—
Net sales	<u>\$ 3,951</u>	<u>\$ 3,447</u>	<u>\$ 2,110</u>	<u>\$ 1,931</u>	<u>\$ 23</u>	<u>\$ 11,462</u>

Depreciation and amortization	\$ 149	\$ 112	\$ 65	\$ 65	\$ (37)	\$ 354
Income tax provision	\$ 13	\$ 19	\$ 108	\$ 77	\$ 16	\$ 233
Capital expenditures	\$ 78	\$ 71	\$ 36	\$ 38	\$ 3	\$ 226

March 31, 2018						
Investment in and advances to non-consolidated affiliates	\$ —	\$ 522	\$ 327	\$ —	\$ —	\$ 849
Total assets	\$ 2,569	\$ 3,151	\$ 1,796	\$ 1,781	\$ 206	\$ 9,503

Selected Operating Results Year Ended March 31, 2017	North America	Europe	Asia	South America	Eliminations and Other	Total
Net sales - third party	\$ 3,226	\$ 2,930	\$ 1,771	\$ 1,448	\$ 216	\$ 9,591
Net sales - intersegment	2	38	20	62	(122)	—
Net sales	<u>\$ 3,228</u>	<u>\$ 2,968</u>	<u>\$ 1,791</u>	<u>\$ 1,510</u>	<u>\$ 94</u>	<u>\$ 9,591</u>

Depreciation and amortization	\$ 149	\$ 106	\$ 59	\$ 63	\$ (17)	\$ 360
Income tax provision	\$ 18	\$ 12	\$ 20	\$ 88	\$ 13	\$ 151
Capital expenditures	\$ 80	\$ 65	\$ 38	\$ 39	\$ 2	\$ 224

March 31, 2017						
Investment in and advances to non-consolidated affiliates	\$ —	\$ 451	\$ —	\$ —	\$ —	\$ 451
Total assets	\$ 2,358	\$ 2,683	\$ 1,602	\$ 1,637	\$ 93	\$ 8,373

Selected Operating Results Year Ended March 31, 2016	North America	Europe	Asia	South America	Eliminations and Other	Total
Net sales - third party	\$ 3,262	\$ 3,055	\$ 1,879	\$ 1,482	\$ 194	\$ 9,872
Net sales - intersegment	4	168	113	93	(378)	—
Net sales	<u>\$ 3,266</u>	<u>\$ 3,223</u>	<u>\$ 1,992</u>	<u>\$ 1,575</u>	<u>\$ (184)</u>	<u>\$ 9,872</u>

Depreciation and amortization	\$ 143	\$ 106	\$ 61	\$ 61	\$ (18)	\$ 353
Income tax (benefit) provision	\$ (53)	\$ (11)	\$ 12	\$ 81	\$ 17	\$ 46
Capital expenditures	\$ 143	\$ 146	\$ 35	\$ 39	\$ 7	\$ 370

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table displays the reconciliation from “Net income attributable to our common shareholder” to “Segment income” from reportable segments (in millions).

	Year Ended March 31,		
	2018	2017	2016
Net income (loss) attributable to our common shareholder	\$ 635	\$ 45	\$ (38)
Noncontrolling interests	(13)	1	—
Income tax provision	233	151	46
Depreciation and amortization	354	360	353
Interest expense and amortization of debt issuance costs	255	294	327
Adjustment to reconcile proportional consolidation	51	28	30
Unrealized (gains) losses on change in fair value of derivative instruments, net	(20)	(5)	4
Realized (gains) losses on derivative instruments not included in segment income	—	(5)	1
Gain on assets held for sale	—	(2)	—
Loss on extinguishment of debt	—	134	13
Restructuring and impairment, net	34	10	48
Loss on sale of fixed assets	7	6	4
(Gain) loss on sale of a business (A)	(318)	27	—
Metal price lag (B)	(4)	31	172
Other, net	1	10	3
Total of reportable segments	\$ 1,215	\$ 1,085	\$ 963

(A) In September 2017, Novelis Korea Ltd., a subsidiary of Novelis Inc., sold a portion of its shares in Ulsan Aluminum, Ltd. (UAL) for \$314 million, which resulted in a gain on sale of investments. For additional information related to the transaction, see Note 8 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions.

(B) Effective in the first quarter of fiscal 2018, management removed the impact of metal price lag from Segment Income in order to enhance the visibility of the underlying operating performance of the Company. The impact of metal price lag is now reported as a separate line item in this reconciliation. This change does not impact our consolidated financial statements. Segment Income for prior periods presented has been updated to reflect this change. For additional information related to metal price lag, see Note 14 — Financial Instruments and Commodity Contracts.

The following table displays "Segment income" from reportable segments by region.

	Year Ended March 31,		
	2018	2017	2016
North America	\$ 474	\$ 380	\$ 338
Europe	219	208	203
Asia	167	163	142
South America	363	337	280
Intersegment eliminations	(8)	(3)	—
Total of reportable segments	\$ 1,215	\$ 1,085	\$ 963

Geographical Area Information

We had 24 operating facilities in ten countries as of March 31, 2018. The tables below present "Net sales" and "Long-lived assets and other intangible assets" by geographical area (in millions). "Net sales" are attributed to geographical areas based on the origin of the sale. "Long-lived assets and other intangible assets" are attributed to geographical areas based on asset location and exclude investments in and advances to our non-consolidated affiliates and goodwill.

	Year Ended March 31,		
	2018	2017	2016
Net sales:			
United States	\$ 4,041	\$ 3,336	\$ 3,334
Asia and Other Pacific	2,068	1,771	1,879
Brazil	1,851	1,448	1,482
Canada	113	106	121
Germany	2,853	2,428	2,506
Other Europe	536	502	550
Total Net sales	\$ 11,462	\$ 9,591	\$ 9,872

	March 31,	
	2018	2017
Long-lived assets and other intangibles:		
United States	\$ 1,338	\$ 1,400
Asia and Other Pacific	490	756
Brazil	796	823
Canada	60	64
Germany	287	260
United Kingdom	43	39
Other Europe	506	472
Total long-lived assets	\$ 3,520	\$ 3,814

Information about Product Sales, Major Customers and Primary Supplier

Product Sales

The percentage of "Net sales" generated from beverage and food can products were 52%, 52%, and 55% for the years ended March 31, 2018, 2017, and 2016, respectively. The percentage of "Net sales" generated from automotive products increased to 24% in the year ended March 31, 2018, compared to 23% and 20% in the years ended March 31, 2017 and 2016, respectively.

Major Customers

The following table displays our net sales to the Affiliates of Ball Corporation (Ball) and Ford Motor Company (Ford), our two largest customers, as a percentage of total "Net sales."

	Year Ended March 31,		
	2018	2017	2016
Ball (A)	21%	27%	30%
Ford	10%	10%	4%

(A) In fiscal 2017, Ball completed the acquisition of Rexam and the divestiture of certain assets to the Ardagh Group (Ardagh). We combined the sales of Ball and Rexam for presentation purposes. For the year ended March 31, 2018 combined sales to Ball and Rexam totaled 29%. For the years ended March 31, 2017 and March 31, 2016, combined sales to Ball, Rexam, and Ardagh totaled 30%.

Primary Supplier

Rio Tinto (RT) is our primary supplier of metal inputs, including prime and sheet ingot. The table below shows our purchases from RT as a percentage of our total combined metal purchases.

	Year Ended March 31,		
	2018	2017	2016
Purchases from RT as a percentage of total combined metal purchases	10%	10%	12%

21. SUPPLEMENTAL INFORMATION

Supplemental cash flow information is as follows (in millions).

	Year Ended March 31,		
	2018	2017	2016
Supplemental disclosures of cash flow information:			
Interest paid	\$ 254	\$ 288	\$ 308
Income taxes paid	\$ 191	\$ 128	\$ 123

As of March 31, 2018, we recorded \$53 million of outstanding accounts payable and accrued liabilities related to capital expenditures in which the cash outflows will occur subsequent to March 31, 2018. During the years ended March 31, 2018 and 2016, we did not incur any new capital lease obligations. We incurred capital lease obligations of \$2 million during the year ended March 31, 2017.

22. QUARTERLY RESULTS (UNAUDITED)

The tables below present select operating results (in millions) by period:

	(Unaudited) Quarter Ended			
	June 30, 2017	September 30, 2017	December 31, 2017	March 31, 2018
Net sales (A)	\$ 2,669	\$ 2,794	\$ 2,933	\$ 3,066
Cost of goods sold (exclusive of depreciation and amortization) (A)	2,261	2,361	2,494	2,603
Selling, general and administrative expenses	106	124	128	131
Depreciation and amortization	90	91	86	87
Interest expense and amortization of debt issuance costs	64	64	64	63
Research and development expenses	15	16	17	16
Gain on sale of a business, net	—	(318)	—	—
Restructuring and impairment, net	1	7	25	1
Equity in net loss of non-consolidated affiliates	—	1	—	—
Other (income) expense, net	(12)	25	(6)	2
Income tax provision	43	116	20	54
Net income	101	307	105	109
Net loss (income) attributable to noncontrolling interests	—	—	(16)	3
Net income attributable to our common shareholder	\$ 101	\$ 307	\$ 121	\$ 106

(A) "Net Sales" and "Cost of goods sold (exclusive of depreciation and amortization)" for the quarter ended December 31, 2017 have each been reduced from amounts previously reported by \$152 million to correct a misstatement in the presentation of certain transactions. We have determined this misstatement to be immaterial to our previously issued financial statements.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

	(Unaudited) Quarter Ended			
	June 30, 2016	September 30, 2016	December 31, 2016	March 31, 2017
Net sales	\$ 2,296	\$ 2,361	\$ 2,313	\$ 2,621
Cost of goods sold (exclusive of depreciation and amortization)	1,930	1,980	1,924	2,182
Selling, general and administrative expenses	92	108	103	118
Depreciation and amortization	89	90	88	93
Interest expense and amortization of debt issuance costs	83	81	67	63
Research and development expenses	13	14	14	17
Loss on sale of a business, net	—	27	—	—
Gain on assets held for sale, net	(1)	(1)	—	—
Loss on extinguishment of debt	—	112	—	22
Restructuring and impairment, net	2	1	1	6
Equity in net loss of non-consolidated affiliates	—	—	8	—
Other expense (income), net	28	11	(3)	32
Income tax provision	36	27	47	41
Net income (loss)	24	(89)	64	47
Net income attributable to noncontrolling interests	—	—	1	—
Net income (loss) attributable to our common shareholder	\$ 24	\$ (89)	\$ 63	\$ 47

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures**Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, as amended (the Exchange Act) is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, include controls and procedures designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including the Principal Executive Officer and the Principal Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met.

As required by Securities and Exchange Commission rules, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K. This evaluation was carried out under the supervision and with the participation of our management, including our Principal Executive Officer and Principal Financial Officer. Based on this evaluation, our management, including our Principal Executive Officer and Principal Financial Officer, has concluded that our disclosure controls and procedures were effective as of March 31, 2018.

Management's Report on Internal Control over Financial Reporting

The report of management on our internal control over financial reporting as of March 31, 2018 is set forth in Part II, "Item 8. Financial Statements and Supplementary Data" in this report.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) during the most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

On May 2, 2018, our Board of Directors approved a fiscal year 2019 executive annual incentive plan (2019 Executive AIP) and an executive long term incentive plan covering fiscal years 2019 through 2021 (2019 Executive LTIP). For additional information regarding the 2019 Executive AIP and the 2019 Executive LTIP, see Item 11 - Executive Compensation, Fiscal Year 2019 Incentive Compensation Plans, which is incorporated by reference into this item.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Our Directors

Our Board of Directors is currently comprised of six directors. All of our directors were appointed by our sole shareholder, Hindalco. Our directors' terms will expire at each annual shareholder meeting, provided that if an election of directors is not held at an annual shareholder meeting, the directors then in office shall continue in office or until their successors shall be elected. Biographical details for each of our directors are set forth below.

Name	Director Since	Age	Position
Kumar Mangalam Birla	May 15, 2007	50	Chairman of the Board
Askaran Agarwala (B)	May 15, 2007	84	Director
D. Bhattacharya (A)(B)	May 15, 2007	69	Director and Vice Chairman of the Board
Clarence J. Chandran (A)(B)	January 6, 2005	69	Director
Donald A. Stewart (A)	May 15, 2007	71	Director
Satish Pai (B)	August 6, 2013	56	Director

(A) Member of our Audit Committee

(B) Member of our Compensation Committee

Mr. Kumar Mangalam Birla was elected as the Chairman of the Board of Directors of Novelis on May 15, 2007. Mr. Birla is the Chairman of Hindalco Industries Limited which is an industry leader in aluminum and copper. He is also the Chairman of Aditya Birla Group's leading blue-chip companies including Grasim, UltraTech Cement and Idea Cellular; and globally, Novelis, Aditya Birla Chemicals (Thailand) Limited and Indo Phil Textile Mills Inc. Philippines. Mr. Birla also serves as director on the board of the Group's international companies spanning Thailand, Indonesia, Philippines, Egypt, and Canada. Additionally, Mr. Birla is the Chancellor of the Birla Institute of Technology & Science, Pilani and the Chairman of the Board of Governors Indian Institute of Management, Ahmedabad and Indian Institute of Technology. He is a member of the London Business School's Asia Pacific Advisory Board. Mr. Birla's past affiliations include service on the boards of Maruti Udyog Limited and Tata Iron and Steel Co. Limited. He was a part time non-official director on the Central Board of Reserve Bank of India. Mr. Birla brings to the board significant global leadership experience acquired through his service as a director of numerous corporate, professional and regulatory entities in various regions of the world.

Mr. Askaran Agarwala has served as a Director of Hindalco since September 1998. He was Chairman of the Business Review Council of the Aditya Birla Group from October 2003 to March 2010. From 1982 to October 2003, he was President of Hindalco. Mr. Agarwala serves on the Compensation Committee of the Novelis Board of Directors. Mr. Agarwala also serves as a director of several other companies, including Hindalco, Udyog Services Ltd., Tanfac Industries Ltd., Aditya Birla Insurance Brokers Limited and Aditya Birla Health Services Limited. He is a trustee of Sarla Basant Birla Param Bhakti Trust, Aditya Vikram Birla Memorial Trust and the Aditya Birla Foundation and the Hellen Keller Institute of the Deaf and Blind, among many other organizations. Mr. Agarwala's past and current service as a director of several companies and industry associations in the metals and manufacturing industries adds valuable perspective to the board. Having served as president of our parent company, Hindalco, Mr. Agarwala also brings a depth of understanding of our business and operations.

Mr. Debnarayan Bhattacharya is Vice Chairman of Novelis and serves on the Audit and Compensation Committees of the Novelis Board of Directors. He retired from his position as Managing Director of Hindalco in July 2016. Mr. Bhattacharya continues to serve as Non Executive Director and is appointed as the Vice Chairman of Hindalco. Mr. Bhattacharya's extensive knowledge of the aluminum and metals industries provides a valuable resource to the company in the setting and implementation of its operating business plans as the Company considers various strategic alternatives. Mr. Bhattacharya brings to the board a high degree of financial literacy.

Clarence J. Chandran has been a director of the Company since 2005. Mr. Chandran serves on the Compensation and Audit Committees of the Novelis Board of Directors, and acts as the Chairman of the Compensation Committee. Mr. Chandran is senior advisor of 4Front Capital Partners Inc. He is a past director of Alcan Inc. and MDS Inc. He retired as Chief Operating Officer of Nortel Networks Corporation (communications) in 2001. Mr. Chandran is a past member of the Board of Visitors of the Pratt School of Engineering at Duke University. He has acquired years of significant experience through his leadership and management of companies with international business operations. Mr. Chandran brings to the board his deep knowledge in the areas of technology, sales and global operations.

Donald A. Stewart serves as Chairman of the Audit Committee of the Novelis Board of Directors. He retired as Chief Executive Officer and Director of Sun Life Financial Inc. and Sun Life Assurance Company of Canada. Mr. Stewart continues to serve as a director of Sun Life Everbright Life Insurance Company Limited. He is the Chairman of AV Group NB Inc., AV Terrace Bay Inc. and of the federal-provincial Nominating Committee for the Canada Pension Plan Investment Board. Mr. Stewart brings extensive financial management and operating experience to the board.

Mr. Satish Pai has served as the Managing Director of Hindalco Industries Limited since August 2016. Mr. Pai previously served as Deputy Managing Director of Hindalco Industries Limited from February 2014 to May 2016, and as Chief Executive Officer - Aluminum Business of Hindalco Industries Limited from August 2013 to January 2014. Prior to that, Mr. Pai served as Executive Vice President, Worldwide Operations of Schlumberger Ltd. Mr. Pai joined Schlumberger Ltd. in 1985 as a field engineer and held various positions of increased responsibility over the course of his 28 year tenure with the company. He serves on the Compensation Committee of the Novelis Board of Directors and also serves as a director of Hindalco. Mr. Pai also serves as a Director of ABB Limited, Switzerland. Mr. Pai brings extensive industry and global operating experience to the board.

Our Executive Officers

The following table sets forth information for persons serving as executive officers of our Company as of April 30, 2018. Biographical details for each of our executive officers are also set forth below.

Name	Age	Position
Steven Fisher	47	President and Chief Executive Officer
Devinder Ahuja	52	Senior Vice President and Chief Financial Officer
Steven E. Pohl	58	Senior Vice President, Business Performance and Execution
Marco Palmieri	61	Senior Vice President and President, Novelis North America
Emilio Braghi	50	Senior Vice President and President, Novelis Europe
Antonio Tadeu Coelho Nardocci	60	Senior Vice President and President, Novelis South America
Sachin Satpute	52	Senior Vice President and President, Novelis Asia
Leslie J. Parrette, Jr.	56	Senior Vice President, General Counsel, Compliance Officer and Corporate Secretary
Nicholas Madden	61	Senior Vice President, Manufacturing Excellence and Procurement
H.R. Shashikant	55	Senior Vice President and Chief Human Resources Officer
Randal Miller	55	Vice President, Treasurer
Stephanie Rauls	49	Vice President, Controller and Chief Accounting Officer

Steven Fisher is our President and Chief Executive Officer. Since joining the company in 2006, Mr. Fisher has served in a number of executive positions, most recently as Chief Financial Officer from May 2007 to November 2015. Mr. Fisher joined Novelis in February 2006 as Vice President, Strategic Planning and Corporate Development. Prior to joining Novelis, Mr. Fisher served as Vice President and Controller for TXU Energy, the non-regulated subsidiary of TXU Corp., at its headquarters in Dallas, Texas. Mr. Fisher is a member of the Business Roundtable, an association of leading U.S. companies working to promote sound public policy. In addition, he is a member of the Board of Directors for the Metro Atlanta Chamber of Commerce. Mr. Fisher received a Bachelor's Degree in Finance and Accounting from the University of Iowa.

Devinder Ahuja is our Senior Vice President and Chief Financial Officer, and has served in this role since August 2016. Before joining Novelis, Mr. Ahuja spent 15 years at Novartis Group, where he served most recently as Chief Financial Officer of the Alcon Division's North America business. Prior to that, Mr. Ahuja held positions of increasing responsibility at Novartis covering the areas of finance, strategic planning, supply chain and purchasing. During his career, Mr. Ahuja has held various finance leadership roles including posts in Switzerland, South Korea, Japan and India. Mr. Ahuja holds a Bachelor of Commerce degree from the RA Podar College of Commerce and Economics in Mumbai, India and is a Chartered Accountant.

Steven Pohl is our Senior Vice President, Business Performance and Execution and has served in this role since June 2016. Mr. Pohl joined Novelis in 2009 as Vice President Finance, Chief Financial Officer North America, and served as Vice President, Financial Planning & Analysis from 2012 to July 2015, and as Interim Chief Financial Officer from October 2015 to August 2016. Mr. Pohl came to Novelis from PPG Industries, Inc., the world's leading coatings and specialty products company, where he served as General Auditor from 2008 to 2009. Before that, he held key finance and management positions of increasing responsibility at PPG Industries, Inc. from 1981 to 2008. He is also a board member and trustee of La Roche College in Pittsburgh, Pennsylvania. Mr. Pohl earned his B.S. in Accounting from La Roche College.

Marco Palmieri has served as our Senior Vice President and President, Novelis North America since June 2013. He previously served as Senior Vice President and President, Novelis South America from August 2011 to May 2013. Prior to joining Novelis, Mr. Palmieri spent more than 30 years in the metals and engineering industries, including more than 25 years with Rio Tinto Alcan, where he held a succession of international leadership positions in various areas, including business development, primary metal and energy production. Before joining Novelis, Mr. Palmieri was most recently Aluminum Business Director for Votorantim Metais Ltd.

Emilio Braghi has served as our Senior Vice President and President, Novelis Europe since September 2016. Previously, he served as Vice President, Operations, Novelis North America, since February 2015. Mr. Braghi joined Novelis in 1999 as Sales Manager, Europe. During his tenure, he has taken on many leadership roles of increasing responsibility and moved into his first general management role in 2006, when he was named head of Novelis' business in Italy. Mr. Braghi went on to hold multiple general management leadership positions with Novelis' Litho and Painted Products value streams in Europe, directing both commercial and operational activities and he joined the Asia leadership team in March 2012 as Vice President of Operations. Mr. Braghi holds a degree in Engineering and Industrial Production Technologies from Politecnico di Milano in Milan, Italy.

Antonio Tadeu Coelho Nardocci has served as our Senior Vice President and President, Novelis South America since May 2013. He previously served as our Senior Vice President and President, Novelis Europe from June 2009 to April 2013. Prior to that, he served as our Strategy, Innovation and Technology from August 2008 to June 2009, and as Senior Vice President and President of our South American operations from February 2005 to August 2008. Before our spin-off from Alcan, Mr. Nardocci held a number of leadership positions with Alcan, most recently serving as President of Rolled Products South America from March 2002 until January 2005. Mr. Nardocci graduated from the University of São Paulo in Brazil with a degree in metallurgy. Mr. Nardocci is Chairman of the Brazilian Aluminum Association Board.

Sachin Satpute is Senior Vice President and President, Novelis Asia and has served in this role since June 2016. He previously served as Chief Marketing Officer for Hindalco Industries since 2012, and was Managing Director of Aluminum Company of Malaysia (ALCOM) from April 2011 until June 2012. Prior to his most recent role with Hindalco, Mr. Satpute spent five years with Novelis in various roles of increasing responsibility. Mr. Satpute began his career at a Hindalco aluminum plant in 1987 as a development engineer. In addition to a degree in mechanical engineering from Pune University, Mr. Satpute also holds an MBA in marketing from Mumbai University, India.

Leslie J. Parrette, Jr. rejoined our company in October 2009 to serve as our Senior Vice President, General Counsel and Compliance Officer, and he was appointed Corporate Secretary in February 2010. Before rejoining Novelis, Mr. Parrette served as Senior Vice President, Legal Affairs and General Counsel for WESCO International, Inc. (formerly Westinghouse Electric Supply Co.) (electrical product distribution) from March 2009 until October 2009. From March 2005 until March 2009, he served as our Senior Vice President, General Counsel, Secretary and Compliance Officer. Prior to that, Mr. Parrette served as Senior Vice President, General Counsel and Secretary for Aquila, Inc. (gas and electric utility; energy trading) from July 2000 until February 2005. Mr. Parrette holds an A.B. in Sociology from Harvard College and received his J.D. from Harvard Law School.

Nicholas Madden is our Senior Vice President, Manufacturing Excellence and Procurement. Prior to this role, he served as Senior Vice President, Chief Supply Chain Officer, which he assumed in January 2012 and served as Senior Vice President and Chief Procurement Officer from October 2006 until December 2011 and President of Novelis Europe's Can, Litho and Recycling business unit beginning in October 2004. He was Vice President of Metal Management and Procurement for Alcan's Rolled Products division in Europe from December 2000 until September 2004 and was also responsible for the secondary recycling business. Mr. Madden holds a B.Sc. (Hons) degree in Economics and Social Studies from University College in Cardiff, Wales.

H.R. Shashikant has served as our Senior Vice President and Chief Human Resources Officer since August 2015. In this role, Mr. Shashikant is responsible for the formulation and implementation of the company's worldwide human resources objectives, policies and practices. As the head of the global Human Resources function, he has responsibility for Talent Acquisition and Development, Compensation, Benefits, HRIS and Global Security. Before joining Novelis, Mr. Shashikant was Group Executive President, Group Human Resources, for the Aditya Birla Group, the Mumbai-based conglomerate of which Novelis is a part. He joined the Aditya Birla Group as a Vice President in 1999 and was instrumental in setting up HR systems, processes, and Centers of Excellence across the Group. An Economics graduate from Karnataka University in Dharwad, India, Mr. Shashikant holds a post graduate degree in Personnel Management from the Tata Institute of Social Sciences, Mumbai.

Randal P. Miller is our Vice President, Treasurer. Prior to joining Novelis in July 2008, Mr. Miller served as Vice President and Treasurer of Transocean Offshore Deepwater Drilling from May 2006 to November 2007 where he was

responsible for all treasury, banking, and capital markets activities for Transocean and its subsidiaries. From 2001 to 2006, Mr. Miller served as Vice President Finance, Treasurer of Aquila, Inc. Mr. Miller earned his B.S.B.A. from Iowa State University and M.B.A from the University of Missouri — Kansas City.

Stephanie Rauls has served as our Vice President, Controller and Chief Accounting Officer since February 2016. Ms. Rauls previously served as Vice President of Global Tax since December 2013. Prior to joining Novelis, Ms. Rauls served as Vice President, Tax of Wal-Mart Stores, Inc. from 2011 to 2013, and prior to that, she was employed by GE Healthcare as a tax director from 2002 to 2011. Before joining GE Healthcare, Ms. Rauls was employed by KPMG LLP from 1994 to 2002. She earned a Bachelor of Business Administration in Accounting from the University of Wisconsin-Madison and a Juris Doctor from Valparaiso University School of Law. Ms. Rauls is a Certified Public Accountant.

Board of Directors and Corporate Governance Matters

We are committed to our corporate governance practices, which we believe are essential to our success and to the enhancement of shareholder value. We are subject to a variety of corporate governance and disclosure requirements. Our corporate governance practices meet applicable regulatory requirements to ensure transparency and effective governance of the company.

Our Board of Directors reviews corporate governance practices in light of developing requirements in this field. As new provisions come into effect, our Board of Directors will reassess our corporate governance practices and implement changes as and when appropriate. The following is an overview of our corporate governance practices.

Novelis Board of Directors

Our Board of Directors currently has six members, all of whom are appointed by our sole shareholder. Our Board of Directors has the responsibility for stewardship of Novelis Inc., including the responsibility to ensure that we are managed in the interest of our sole shareholder, while taking into account the interests of other stakeholders. Our Board of Directors supervises the management of our business and affairs and discharges its duties and obligations in accordance with the provisions of: (1) our articles of incorporation and bylaws; (2) the charters of its committees and (3) other applicable legislation and company policies.

Our corporate governance practices require that, in addition to certain statutory duties, the following matters be subject to our Board of Directors' approval: (1) capital expenditure budgets and significant investments and divestments; (2) our strategic and value-maximizing plans; (3) the number of directors within the limits provided by our by-laws and (4) any matter which may have the potential for substantial impact on Novelis. Our Board of Directors reviews its composition and size once a year. Senior management makes regular presentations to our Board of Directors on the main areas of our business.

Corporate Governance

Interested parties may communicate with the Board of Directors, a committee or an individual director by writing to Novelis Inc., Two Alliance Center, 3560 Lenox Road N.E., Suite 2000, Atlanta, GA 30326, Attention: Corporate Secretary — Board Communication. All such communications will be compiled by the Corporate Secretary and submitted to the appropriate director or board committee. The Corporate Secretary will reply or take other actions in accordance with instructions from the applicable board contact.

Committees of Our Board of Directors

Our Board of Directors has established two standing committees: the Audit Committee and the Compensation Committee. Each committee is governed by its own charter. According to their authority as set out in their charters, our Board of Directors and each of its committees may engage outside advisors at the expense of Novelis.

Audit Committee and Financial Experts

Our Board of Directors has established an Audit Committee. Messrs. Stewart, Bhattacharya and Chandran are the members of the Audit Committee. Mr. Stewart, an independent director, has been identified as an "audit committee financial expert" as that term is defined in the rules and regulations of the SEC.

Our Audit Committee's main objective is to assist our Board of Directors in fulfilling its oversight responsibilities for the integrity of our financial statements, our compliance with legal and regulatory requirements, the qualifications and independence of our independent registered public accounting firm and the performance of both our internal audit function and our independent registered public accounting firm. Under the Audit Committee charter, the Audit Committee is responsible for, among other matters:

- evaluating and compensating our independent registered public accounting firm;
- making recommendations to the Board of Directors and shareholder relating to the appointment, retention and termination of our independent registered public accounting firm;
- discussing with our independent registered public accounting firm its qualifications and independence from management;
- reviewing with our independent registered public accounting firm the scope and results of its audit;
- pre-approving all audit and permissible non-audit services to be performed by our independent registered public accounting firm;
- reviewing areas of potential significant financial risk and the steps taken to monitor and manage such exposures;
- overseeing the financial reporting process and discussing with management and our independent registered public accounting firm the interim and annual financial statements that we file with the SEC; and
- reviewing and monitoring our accounting principles, accounting policies and disclosure, internal control over financial reporting and disclosure controls and procedures.

Compensation Committee

Our Compensation Committee establishes our general compensation philosophy and oversees the development and implementation of compensation policies and programs. It also reviews and approves the level of and/or changes in the compensation of individual executive officers taking into consideration individual performance and competitive compensation practices. The committee's specific roles and responsibilities are set out in its charter. Our Compensation Committee periodically reviews the effectiveness of our overall management organization structure and succession planning for senior management, reviews recommendations for the appointment of executive officers, and reviews annually the development process for high potential employees.

Code of Conduct and Guidelines for Ethical Behavior

Novelis has adopted a Code of Conduct and maintains a Code of Ethics for Senior Financial Officers that applies to our senior financial officers including our principal executive officer, principal financial officer, principal accounting officer, or persons performing similar functions. Copies of the Code of Conduct and the Code of Ethics for Senior Financial Officers are available on our website at www.novelis.com. We will promptly disclose any future amendments to these codes on our website as well as any waivers from these codes for executive officers and directors. Copies of these codes are also available in print from our Corporate Secretary upon request.

Item 11. *Executive Compensation*

This section provides a discussion of the background and objectives of our compensation programs for our named executive officers and other senior management employees. Our named executive officers are determined in accordance with rules of the Securities and Exchange Commission and include persons serving in the role of principal executive officer, persons serving in the role of principal financial officer and the three other highest paid executive officers who were employed by the Company on March 31, 2018.

Named Executive Officer	Title
Steven Fisher	President and Chief Executive Officer
Devinder Ahuja	Senior Vice President, Chief Financial Officer
Leslie Parrette	Senior Vice President, General Counsel, Compliance Officer and Corporate Secretary
Marco Palmieri	Senior Vice President and President, Novelis North America
Emilio Braghi	Senior Vice President and President Novelis Europe

Compensation Committee and Role of Management

The Compensation Committee of our board of directors (the Committee) is responsible for approving the compensation programs for our named executive officers and making decisions regarding specific compensation to be paid or awarded to them. The Committee acts pursuant to a charter approved by our board. Our Chief Human Resources Officer serves as the primary management liaison officer for the Committee. Our human resources and legal departments provide assistance to the Committee in the administration of the Committee's responsibilities.

Our named executive officers have no direct role in setting their own compensation. The Committee, however, meets with members of our management team to evaluate performance against pre-established goals, and management makes recommendations to the board regarding budgets, production and sales forecasts and other information, which affect certain goals. The Committee may seek input from our senior management concerning individual performance, expected future contributions and compensation matters generally.

Management assists the Committee by providing information needed or requested by the Committee (such as our performance against budget and objectives, historical compensation, compensation expense, current Company policies and programs, country-specific compensation practices, peer group metrics and peer group target pay levels) and by providing input and advice regarding potential changes to compensation programs and policies and their impact on the Company and its executives.

In the first quarter of each fiscal year, the Committee (1) reviews prior year performance and approves the distribution of short-term incentive and long term incentive earned payouts, if any, for the prior year, (2) reviews and approves base pay and short term incentive targets for executives for the current year, and (3) recommends to the board of directors the form of long term- incentive award vehicles and vesting performance criteria for the current cycle of the program. The Committee may employ alternative practices when appropriate under the circumstances.

The Committee did not independently engage a third party compensation consultant fiscal 2018. However, management worked with Mercer LLC (a global human resource consulting firm) to evaluate and benchmark our executive compensation program, and management shared Mercer's analysis with the Committee. Management also routinely reviews compensation surveys published by other leading global human resources consulting firms. Hay Group (a global human resource consulting firm) periodically assists management with the internal leveling of executive roles to ensure internal equity and external competitiveness of pay opportunities based on the scope and complexity of executive roles.

For executive compensation benchmarking purposes, we focus on large global companies headquartered in the southeastern United States with whom Novelis may compete for executive talent, as well as other major companies in the manufacturing and materials sectors having revenues in excess of \$2 billion. The companies that comprise our peer group may change from year to year as a result of merger and acquisition activity or revenue growth of relevant companies that moves such companies into consideration. The peer group considered in management's most recent compensation competitive analysis consisted of the following companies:

AGCO Corp	Ashland Global Holdings Inc	Kennametal Inc
Air Products & Chemicals Inc	Berry Plastics Group Inc	Newell Brands Inc
Alcoa Corp	Eastman Chemical Co	PPG Industries Inc
Altria Group Inc	Genuine Parts Co	Praxair Inc
Arconic Corp	Ingersoll-Rand PLC	Southern Co

While both the Committee and management review compensation data (in surveys and public filings) to confirm that our executive compensation program is competitive, the Committee retains discretion to set an individual executive's compensation. As a result, compensation for an executive may differ significantly from the survey or peer group data and may be influenced by factors including past performance, experience and potential, retention needs, job position and/or tenure.

Objectives and Design of Our Compensation Program

Our executive compensation program is designed to attract, retain, and reward talented executives who will contribute to our long-term financial and operational success and thereby build value for our shareholder. The program is organized around three fundamental principles:

- *Provide Total Cash and Total Direct Compensation Opportunities that are Competitive with Similar Positions at Comparable Companies:* To enable us to attract, motivate and retain qualified executives to build long-term shareholder value, total cash compensation (base pay plus annual short-term incentives) and total direct compensation (total cash compensation plus the value of long-term incentives) opportunities for each executive are targeted at levels to be market competitive and reflect the value paid to executives in similar positions at comparable companies and also be appropriately positioned within the Company to ensure internal equity based on the scope and complexity of the role as it is designed at Novelis.
- *A Substantial Portion of Total Direct Compensation Should be at Risk Because it is Performance-Based:* We believe an executive's actual compensation should be linked directly to the Company's short-term and long-term financial performance and each individual's annual contribution. Consequently, a substantial portion of an executive's total direct compensation should be at risk, with amounts that are paid dependent on actual performance against pre-established objectives for both the individual and financial goals of the Company. The portion of an individual's total direct compensation that is based upon these performance objectives and financial goals should increase as the individual's business responsibilities and job scope increase. Additionally, we believe performance that exceeds target goals should be appropriately rewarded and aligned with prevalent market practices.
- *A Substantial Portion of Total Direct Compensation Should be Delivered in the Form of Long-Term Performance Based Awards:* We believe a long-term stake in the sustained financial performance of Novelis effectively aligns executive and shareholder interests and provides motivation for enhancing shareholder value.

The Committee recognizes that the engagement of top talent in critical functions may require the recruitment of new executives and involve negotiations with individual candidates. As a result, the Committee may determine in a particular situation that it is in our best interests to negotiate a compensation package that varies from the principles set forth above.

Key Elements of Our Compensation Program

Our compensation program consists of four key elements: base pay, short-term (annual) incentives, long-term incentives, and employee benefits, which includes certain executive perquisites. The Committee reviews these compensation elements, generally during the first quarter of the fiscal year. The Committee also compares the competitiveness of these key elements to that of companies in our peer group and/or to available compensation survey market data. Our objective for named executive officer compensation is to be at or near the market median (50th percentile) for both target total cash compensation and total direct compensation. Unless otherwise indicated, all amounts paid in currencies other than U.S. dollars are reflected in the Compensation Discussion and Analysis in U.S. dollars as adjusted by the applicable exchange rates on March 31, 2018.

Base Pay. Based on market practices, we believe it is appropriate that a minimum portion of total direct compensation be provided in a form that is fixed and recognizes individual performance in the prior fiscal year. Any changes in base salaries are generally effective July 1 of the current year (i.e., the start of the Company's second quarter of the fiscal year), unless an executive is promoted or assumes a new role during the fiscal year. The Committee's objective is to position base salaries for the named executive officers at or near the median of comparable positions at companies in our peer group.

Short-Term (Annual) Cash Incentives. We believe that an annual incentive opportunity is necessary to attract, retain and reward our executives. Our philosophy concerning annual incentive program design for executives is based on the guiding values below:

- Annual incentives should be directly linked with and clearly communicate the strategic priorities approved by our board of directors.
- Annual incentives should be primarily weighted on the achievement of Company-wide financial goals.
- Annual incentives should be 100% at-risk, and there should be a minimum financial performance threshold that must be attained to receive any payout.
- Performance goals should be sufficiently ambitious to drive enterprise value creation, but also be based on metrics that executives can meaningfully influence over the annual time frame, and payouts should not be concentrated on a single metric.
- Threshold, target and maximum opportunity payouts (as a percent of salary) should be comparable with opportunity payouts of executives in similar roles in other benchmark companies or industries.
- The Committee retains the discretion to adjust, up or down, annual incentives earned based on the Committee's subjective assessment of individual performance.

Our Committee and board of directors, after input from management, approved our fiscal 2018 annual incentive plan (2018 AIP) during the first quarter of fiscal 2018. The performance benchmarks for the year were tied to four key metrics: (1) the Company's earnings before interest, taxes, depreciation and amortization (EBITDA) performance; (2) the Company's free cash flow performance; (3) the executive's individual performance in recognition of each individual's unique job responsibilities and annual objectives; and (4) the company's performance against safety goals of reduction in serious injuries and reduction in total recordable incidents.

No 2018 AIP bonuses are payable with respect to any of the three incentive metrics unless overall Novelis EBITDA performance for fiscal 2018 achieves at least 75% of the financial target. If the EBITDA threshold is achieved, the actual payout will range from 60% to 200% of target payout opportunity for EBITDA and 50% to 200% of target payout opportunity for Cash Flow depending upon the actual performance results, and the actual payout under the metric for individual performance can range from 0% to 200% of target payout opportunity. Actual performance below the threshold for a particular metric results in no payout for that metric.

The table below shows the 2018 AIP target and actual performance for each goal and the amount earned based on actual performance rounded to the nearest whole dollar.

Name	Target Bonus as Percentage of Salary (A)	Performance Objective (B)	Performance Weighting	Targeted Performance (\$)	Actual Performance (\$)
Steven Fisher	111%	EBITDA	40%	398,702	621,657
		Cash Flow	35%	348,865	631,829
		Personal	15%	149,513	179,416
		Safety	10%	99,676	39,870
		100%		996,756	1,472,772
Devinder Ahuja	79%	EBITDA	40%	164,326	256,217
		Cash Flow	35%	143,785	260,409
		Personal	15%	61,622	73,946
		Safety	10%	41,081	16,433
		100%		410,814	607,005
Leslie Parrette	70%	EBITDA	40%	159,936	249,372
		Cash Flow	35%	139,944	253,453
		Personal	15%	59,976	119,952
		Safety	10%	39,984	15,993
		100%		399,840	638,770
Marco Palmieri	65%	EBITDA	40%	130,000	202,696
		Cash Flow	35%	113,750	206,013
		Personal	15%	48,750	58,500
		Safety	10%	32,500	13,000
		100%		325,000	480,209
Emilio Braghi	60%	EBITDA	40%	94,619	147,530
		Cash Flow	35%	82,792	149,944
		Personal	15%	35,482	35,482
		Safety	10%	23,655	9,462
		100%		236,548	342,418

(A) Target bonus percentages are adjusted for any mid-year changes.

(B) Fiscal 2018 AIP performance metric definitions are set forth in the 2018 AIP

Long-Term Incentives. We believe a long-term incentive program that comprises a substantial portion of each executive's total direct compensation opportunity is necessary to reward our executives. Our philosophy concerning long-term incentive design for executives is based on the guiding values below:

- Long-term incentives should motivate achievement of long-term strategic and financial goals and incentivize actions that are intended to create sustainable value for our shareholder.
- Long-term incentives should be designed to effectively retain valuable executive talent.
- Long-term incentives should create a clear and understandable platform for wealth creation that is tied closely with the long-term performance of Novelis.
- A majority of the long-term incentive award value should be at risk and tied to financial performance.
- Vesting schedules generally should span several years to reward long-term service.
- The value of long-term incentives as a percent of salary should be competitive with opportunity payouts of executives in similar roles in other benchmark companies or industries.

During the first quarter of fiscal 2018, the Committee authorized a long-term incentive plan covering fiscal years 2018 through 2020 (2018 LTIP). Under the 2018 LTIP, participants were awarded three types of long-term incentive vehicles. Twenty percent of a participant's total long-term incentive opportunity consists of performance-based Hindalco stock appreciation rights (Hindalco SARs), 30% of the long-term incentive opportunity consists of Hindalco restricted stock units (Hindalco RSUs) and the remaining 50% consists of Novelis Performance Units ("Novelis PUs"). The Committee provided Steve Fisher with an additional award of \$500,000 Hindalco SARs. For additional information, see the table below setting forth grants of plan-based

awards in fiscal 2018. The actual number of Hindalco SARs awarded are determined using a Black Scholes methodology. The Committee approved the fiscal 2018 long-term incentive awards for our named executive officers.

Hindalco SARs awarded in fiscal 2018 have seven-year terms and vest at a rate of 33.33% per year measured from the initial grant date; provided the Company achieves the 75% EBITDA threshold for the year. If the EBITDA threshold is not achieved, then the portion of the SARs that would otherwise vest for that year will be forfeited. Each SAR is to be settled in cash at the time of exercise based on the appreciation in value of one Hindalco share from the date of award through the date of exercise. Payout of Hindalco SARs is limited to three times the award value. SARs do not transfer any shareholder rights to a participant, and dividend equivalents are neither accumulated nor paid at any time.

Hindalco RSUs awarded in fiscal 2018 vest at a rate of 33.33% per year over three years and are not subject to performance criteria. Payout of Hindalco RSUs is also limited to three times the award value. RSUs do not transfer any shareholder rights to a participant, and dividend equivalents are neither accumulated nor paid at any time.

Novelis PUs are at risk and are measured over a three year performance period. At the end of the performance period, the number of units earned will be calculated based on the Company's average return on capital employed (ROCE) over the performance period. Actual payout will range from 50% (threshold) to 200% (maximum) of target award value, based on actual results, and will be paid in cash. Performance results between threshold level and target level or between target level and maximum level are determined by means of interpolation. To receive payment of Novelis PUs, a participant must remain employed by Novelis through the end of the performance period, subject to certain exceptions, including death, disability and retirement.

The table below shows the aggregate target long-term incentive of our named executive officers under the 2018 LTIP.

Named Executive Officer	2018 LTIP Target Award (\$)
Steven Fisher	\$3,740,000
Devinder Ahuja	\$500,000
Leslie Parrette	\$700,000
Marco Palmieri	\$760,000
Emilio Braghi	\$480,000

The Indian Rupee exchange rate is fixed on the date of the LTIP award so that the awards are not subject to fluctuating currency exchange rates.

Employee Benefits. Our named executive officers are eligible to participate in our broad-based retirement, health and welfare, and other employee benefit plans on the same basis as other Company employees. In addition to these broad-based plans, some of our named executive officers may be eligible for certain non-qualified retirement benefits, which are designed to provide levels of retirement benefits that are limited under broad-based retirement plan caps mandated by certain regulatory restrictions on highly-compensated employees. Our named executive officers are also eligible for certain perquisites consistent with market practice. We do not view our executive perquisites as a significant element of our overall compensation structure. See the All Other Compensation column and related footnotes to the Summary Compensation Table for further information about perquisites.

Employment-Related Agreements

Retention Agreements. We enter into retention agreements from time to time with certain key employees, including our named executive officers. These retention agreements are intended to supplement our long-term incentive program and sometimes are entered into to reflect changes in responsibilities or other special circumstances. Retention amounts are paid in cash provided the employee remains employed with the Company through the applicable vesting date. In most cases, the retention awards vest ratably over a three-year retention period. If the employee voluntarily terminates employment or is terminated by the Company for cause prior to the expiration date of the retention award, the employee will be required to repay any payments made under the agreement in the previous 12 months and will not be entitled to any other payments under the retention agreement. If an employee is terminated involuntarily without cause, any unpaid cash installments under the retention agreement will be forfeited. Any amounts paid to our named executive officers under a retention award during fiscal 2018 are shown in the Summary Compensation Table. The following chart summarizes the retention payments made during fiscal 2018 and scheduled future payments.

Name	Agreement Date	-----Payment Dates-----							
		Jun-'17	Jul-'17	Dec-'17	Jun-'18	Jul-'18	Dec-'18	Jun-'19	Jul-'19
Steven Fisher	Jun-'16		180,000			240,000			
Devinder Ahuja	Jun-'16	67,000			67,000			67,000	
Leslie Parrette	Jun-'15			30,000					
	Jul-'16			22,500				30,000	
Marco Palmieri	Jun-'15			40,000					
	Jul-'16			30,000				40,000	
	Jun-'17		150,000			150,000			150,000
Emilio Braghi	Jun-'15			20,000					
	Jul-'16			15,000				20,000	

Change in Control Agreements. Each of our named executive officers were party to a Change in Control Agreement during fiscal 2018, which provides that the executive will be entitled to certain payments and benefits if the executive's employment is terminated by the Company without cause, or by the executive for good reason, within 24 months following a change in control of the Company. The change in control severance payment is equal to 2.0 times the sum of the executive's annual base salary plus target short-term incentive for the year and is payable in a lump sum. The executive may also receive (i) a special one-time payment to assist with post-employment medical coverage; (ii) continuation of coverage under the Company's group life insurance plan for a period of 12 months; (iii) 12 months of additional credit for benefit accrual or contribution purposes under our retirement plans; and (iv) accelerated vesting, if applicable, under our retirement plans.

Severance Compensation Agreements. We also have severance arrangements with our named executive officers (except for Mr. Braghi, whose severance arrangements are subject to local law and practice), which provide that the executive will be entitled to certain payments and benefits if their employment is terminated by the Company without cause. Severance amounts are payable in a lump sum. Each agreement also contains a noncompetition and non-solicitation provision, which prohibits the executive from competing with us or soliciting our customers, suppliers or employees for a period of 18 months following termination (or 24 months in the case of Mr. Fisher). An executive may be required to sign a general release of claims against the Company as a condition to receiving the payments and benefits described above. See the Potential Payments Upon Termination or Change in Control table below for further information.

Compensation Risk Assessment

In fiscal 2018, the Committee reviewed the Company's executive compensation policies and practices, and determined that the Company's executive compensation programs are not reasonably likely to have a material adverse effect on the Company. Our compensation programs contain design features that mitigate the incentive for our employees, including named executive officers, to take unreasonable risks in managing the business, which include:

- An appropriate balance between short-term and long-term incentive compensation with multiple time horizons;
- Short-term incentives that provide for lower payouts for lower performance and higher payouts for higher performance;
- Short-term incentives that require minimum financial performance to achieve any payouts and also set capped maximum payouts at 200% of target;
- Short-term incentive payouts that are tied to multiple performance factors with no one performance factor having excessive weighting;
- Long-term incentives with multi-year vesting schedules, which reward employees for long-term performance;
- Goals that are not unreasonable and that are approved by the Committee on an annual basis and goals with no excessive payout opportunities at certain performance levels that may encourage short-term decisions and actions to meet payout thresholds;
- Oversight of the compensation programs by the Committee and multiple functions within the Company and at various levels within the functions to gain different viewpoints and prevent a small number of people to be exclusively involved in compensation decisions; and
- Advice from expert outside advisors regarding the design of the compensation program.

Based on its review, the Committee determined that the Company's compensation programs do not encourage excessive risk and instead encourage behaviors that support sustainable value creation.

Compensation Committee Report

The Committee has reviewed and discussed the foregoing Compensation Discussion and Analysis with management. Based on the Committee's review and discussions with management, the Committee recommended to the board of directors that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K for fiscal 2018.

The foregoing report is provided by the following directors, who constitute the Committee:

Mr. Clarence J. Chandran, Chairman
 Mr. Debnarayan Bhattacharya
 Mr. Askaran Agarwala
 Mr. Satish Pai

Summary Compensation Table

The table below sets forth information regarding compensation for our named executive officers for fiscal 2018 and the two prior fiscal years, as applicable. Any amounts paid to our named executive officers in a foreign currency are reflected in the table below and elsewhere in U.S. dollars as adjusted by the March 31, 2018 exchange rate.

Name	Fiscal Year	Salary (\$)	Bonus (\$)	Stock Awards (\$ (B))	Options Awards (\$ (B))	Non-Equity Incentive Plan Compensation (\$ (C))	All Other Compensation (\$ (D))	Total Compensation (\$)
Steven Fisher, President and Chief Executive Officer	2018	865,385	—	972,000	1,148,000	1,472,772	408,462	4,866,619
	2017	771,462	—	840,000	560,000	1,144,916	412,118	3,728,496
	2016	676,128	350,000	500,000	2,000,000	1,007,822	204,512	4,738,462
Devinder Ahuja, Senior Vice President, Chief Financial Officer	2018	514,231	429,292 (A)	150,000	100,000	607,005	191,393	1,991,921
	2017	334,615	350,000	121,500	81,000	390,978	279,047	1,557,140
Leslie Parrette, Senior Vice President, General Counsel, Compliance Officer and Corporate Secretary	2018	567,176	—	210,000	140,000	638,770	194,629	1,750,575
	2017	551,888	—	210,000	140,000	563,426	202,678	1,667,992
	2016	534,185	—	140,000	560,000	505,026	171,325	1,910,536
Marco Palmieri, Senior Vice President and President, Novelis North America	2018	536,784	—	228,000	152,000	480,209	1,729,248	3,126,241
	2017	624,017	—	210,000	140,000	413,053	734,738	2,121,808
	2016	602,945	—	140,000	560,000	303,027	886,389	2,492,361
Emilio Braghi, Senior Vice President and President, Novelis Europe	2018	394,247	—	144,000	96,000	342,418	611,687	1,588,352
	2017	336,546	—	108,000	72,000	261,100	1,112,597	1,890,243

(A) This amount reflects payments related to a sign on bonus.

(B) These awards were granted under the 2018 LTIP.

(C) This amount reflects the cash award earned under the 2018 AIP.

(D) The amounts shown in this column reflect the values from the table below.

All Other Compensation Table

Name	Company Contribution to Defined Contribution Plans and Nonqualified Plans (\$ (A))	Group Life Insurance (\$ (B))	Retention Payments (\$ (C))	Relocation, Assignee and Housing Related Payments (\$)	Other Perquisites and Personal Benefits (\$)	Total (\$)
Steven Fisher	161,034	4,607	180,000	—	62,821 (F)	408,462
Devinder Ahuja	74,232	2,161	67,000	—	48,000 (G)	191,393
Leslie Parrette	90,939	3,190	52,500	—	48,000 (G)	194,629
Marco Palmieri	99,874	2,232	220,000	1,356,644 (D)	50,498 (H)	1,729,248
Emilio Braghi	7,381	1,530	35,000	469,513 (E)	98,263 (I)	611,687

(A) All company contributions made to government social security systems are excluded.

(B) This amount represents additional Company-paid life insurance for named executive officers beyond the regular employee coverage.

- (C) These amounts represent payments pursuant to retention agreements as detailed above under Employee Related Agreements.
- (D) This amount includes \$477,192 for relocation, \$15,832 for goods and services adjustment, \$21,912 for home leave, and \$841,708 related to tax payments for foreign assignment.
- (E) This amount includes \$122,612 for housing allowance and related costs, \$11,329 for home leave, \$123,233 for goods and services adjustment, \$212,339 related to tax payments for foreign assignment.
- (F) This amount includes \$60,000 flex allowance and \$2,821 executive physical.
- (G) This amount represents flex allowance
- (H) This amount includes \$35,577 flex allowance, \$8,750 auto lease, \$500 individual tax planning, \$1,530 global assignment services fees, \$30 other compensation related to assignment and \$4,111 for an executive physical.
- (I) This amount includes \$87,286 child tuition and reimbursement, \$8,249 auto lease, \$500 individual tax planning, \$1,530 global assignment services fees and \$698 other compensation related to assignment.

Grants of Plan-Based Awards in Fiscal 2018

The table below sets forth information regarding grants of plan-based awards made to our named executive officers during fiscal 2018 pursuant to our 2018 AIP and 2018 LTIP.

Name	Grant Date	Estimated Future Payout Under Non-Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares or Stock Units	All Other Option Awards: Number of Securities Underlying Options	Award Type	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Stock and Option Awards
		Threshold (\$)	Target	Maximum					
	5/5/2017	553,200	996,756	1,993,512	—	—	AIP	—	—
Steven Fisher	5/5/2017	—	—	—	333,054	—	Hindalco RSU	—	972,000
	5/5/2017	—	—	—	—	831,980	Hindalco SAR	1.38	1,148,000
	5/5/2017	810,000	1,620,000	3,240,000	—	—	Novelis PU	—	—
Devinder Ahuja	5/5/2017	228,002	410,814	821,628	—	—	AIP	—	—
	5/5/2017	—	—	—	51,398	—	Hindalco RSU	—	150,000
	5/5/2017	—	—	—	—	72,473	Hindalco SAR	1.38	100,000
	5/5/2017	125,000	250,000	500,000	—	—	Novelis PU	—	—
Leslie Parrette	5/5/2017	221,911	399,840	799,680	—	—	AIP	—	—
	5/5/2017	—	—	—	71,957	—	Hindalco RSU	—	210,000
	5/5/2017	—	—	—	—	101,461	Hindalco SAR	1.38	140,000
	5/5/2017	175,000	350,000	700,000	—	—	Novelis PU	—	—
Marco Palmieri	5/5/2017	180,375	325,000	650,000	—	—	AIP	—	—
	5/5/2017	—	—	—	78,124	—	Hindalco RSU	—	228,000
	5/5/2017	—	—	—	—	110,158	Hindalco SAR	1.38	152,000
	5/5/2017	190,000	380,000	760,000	—	—	Novelis PU	—	—
Emilio Braghi	5/5/2017	131,284	236,567	473,135	—	—	AIP	—	—
	5/5/2017	—	—	—	49,342	—	Hindalco RSU	—	144,000
	5/5/2017	—	—	—	—	69,574	Hindalco SAR	1.38	96,000
	5/5/2017	120,000	240,000	480,000	—	—	Novelis PU	—	—

Outstanding Equity Awards as of March 31, 2018

Name	LTIP Year	Hindalco Options				Hindalco RSUs	
		Number of Securities Underlying Unexercised Options # Exercisable	Number of Securities Underlying Unexercised Options # Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested
Steven Fisher	2018	—	831,980	2.92	May 5, 2024	333,054	1,111,043
	2017	—	563,974	1.37	May 5, 2023	409,361	1,319,583
	2016	157,598	157,598	1.09	May 7, 2022	90,462	302,916
	2016	—	497,135	2.10	May 7, 2022	285,356	934,466
	2015	175,563	58,521	2.43	May 13, 2021	—	—
	2014	—	—	1.91	May 13, 2020	—	—
	2013	—	—	1.98	May 22, 2019	—	—
	2012	—	—	4.28	May 20, 2018	—	—
Devinder Ahuja	2018	—	72,473	2.92	May 5, 2024	51,398	171,460
	2017	—	49,326	2.26	Oct 1, 2023	35,803	115,415
Leslie Parrette	2018	—	101,461	2.92	May 5, 2024	71,957	240,043
	2017	—	140,994	1.37	May 5, 2023	102,340	329,895
	2016	—	116,125	2.10	May 7, 2022	66,656	223,200
	2015	—	41,309	2.43	May 13, 2021	—	—
	2014	—	—	1.91	May 13, 2020	—	—
	2013	—	—	1.98	May 22, 2019	—	—
	2012	—	—	4.28	May 20, 2018	—	—
Marco Palmieri	2018	—	110,158	2.92	May 5, 2024	78,124	260,616
	2017	—	140,994	1.37	May 5, 2023	102,340	329,895
	2016	—	116,125	2.10	May 7, 2022	66,656	223,200
	2015	—	44,751	2.43	May 13, 2021	—	—
	2014	—	—	1.91	May 13, 2020	—	—
	2013	—	—	1.98	May 22, 2019	—	—
	2012	—	—	2.57	May 20, 2018	—	—
Emilio Braghi	2018	—	69,574	2.92	May 5, 2024	49,342	164,601
	2017	22,157	44,312	1.37	May 5, 2023	32,165	103,685
	2017	8,526	17,051	2.26	Oct 1, 2023	12,376	39,895
	2016	—	33,178	2.10	May 7, 2022	19,045	63,773
	2015	—	10,327	2.43	May 13, 2021	—	—
	2014	—	—	1.91	May 13, 2020	—	—
	2013	—	—	1.98	May 22, 2019	—	—
	2012	—	—	4.28	May 20, 2018	—	—

Option Exercises and Stock Vested in Fiscal Year 2018

The table below sets forth the information regarding stock options that were exercised during fiscal 2018 and stock awards that vested and were paid out during fiscal 2018.

Name	Options Awards		Stock Awards	
	Number of Shares Acquired on Exercise, but Settled in Cash	Value Realized on Exercise (\$ USD)	Number of Shares Acquired on Vesting, but Settled in Cash	Value Realized on Vesting (\$ USD)
Steven Fisher	917,085	1,638,069	274,641	806,110
Devinder Ahuja	24,663	41,535	17,902	64,945
Leslie Parrette	223,319	353,831	100,555	305,877
Marco Palmieri	228,365	309,708	104,670	319,340
Emilio Braghi	112,944	204,150	34,617	108,198

Non-Qualified Deferred Compensation

This table summarizes contributions and earnings under our Defined Contribution Supplemental Executive Retirement Plan for fiscal year 2018. The plan is an unfunded, non-qualified defined contribution plan for U.S. based executives. The plan provides eligible executives with the opportunity to voluntarily defer, on a pretax basis, a portion of their base salary and annual incentive pay that otherwise may not be deferred under the Company's tax-qualified savings plan due to limitations under the U.S. Internal Revenue Code. The plan also provides eligible executives with Company non-elective and matching contribution credits which they are restricted from receiving under the tax-qualified savings plan due to those same limitations.

Name	Elective Contributions in Last Fiscal Year (\$)	Employer Contributions in Last Fiscal Year (\$)	Aggregate Earnings in Last Fiscal Year (\$)	Aggregate Withdrawals/ Distributions (\$)	Aggregate Balance at Last Fiscal Year End (\$)
Steven Fisher	—	133,593	26,022	—	1,376,824
Devinder Ahuja	—	48,479	—	—	48,479
Leslie Parette	—	64,983	9,947	—	519,190
Marco Palmieri	—	52,751	—	—	52,751

Potential Payments Upon Termination or Change in Control

This section provides an estimate of the payments and benefits that would be paid to certain of our named executive officers, on March 31, 2018, upon voluntary termination or involuntary termination of employment without cause and were adjusted by the March 31, 2018 Euro exchange rate for Mr. Braghi. This section, however, does not reflect any payments or benefits that would be paid to our salaried employees generally, including for example accrued salary and vacation pay; regular retirement plan benefits under our defined contribution plans; or normal retirement, death or disability benefits. See Employment Related Agreements above for a discussion of the change in control, severance compensation and retention agreements for our named executive officers and any restrictive covenants contained therein.

Name	Type of Payment	Voluntary Termination by Executive (\$)	Termination by us without Cause (\$)	Termination in Connection with CIC by us without Cause or by Executive for Good Reason(\$)	Death or Disability (\$)
Steven Fisher	Short-Term Incentive Pay (A)	1,472,772	1,472,772	1,472,772	1,472,772
	Long-Term Incentive Plan (B)	399,170	7,307,301	8,808,189	8,739,693
	Severance (C)	—	3,000,000	3,793,512	—
	Retirement plans (D)	—	161,034	161,034	—
	Lump sum cash payment for continuation of health coverage (E)	—	36,611	36,611	—
	Continued group life insurance coverage (F)	—	4,607	4,607	—
	Total		1,871,942	11,982,325	14,276,725
Devinder Ahuja	Short-Term Incentive Pay (A)	607,005	607,005	607,005	607,005
	Long-Term Incentive Plan (B)	—	363,910	529,613	529,613
	Severance (C)	—	1,320,000	1,861,628	—
	Retirement plans (D)	—	74,232	74,232	—
	Lump sum cash payment for continuation of health coverage (E)	—	36,611	36,611	—
	Continued group life insurance coverage (F)	—	2,161	2,161	—
	Total		607,005	2,403,919	3,111,250
Leslie Parrette	Short-Term Incentive Pay (A)	638,770	638,770	638,770	638,770
	Long-Term Incentive Plan (B)	—	1,664,836	1,982,632	1,970,232
	Severance (C)	—	856,800	1,942,080	—
	Retirement plans (D)	—	90,939	90,939	—
	Lump sum cash payment for continuation of health coverage (E)	—	9,222	9,222	—
	Continued group life insurance coverage (F)	—	3,190	3,190	—
	Total		638,770	3,263,757	4,666,833
Marco Palmieri	Short-Term Incentive Pay (A)	480,209	480,209	480,209	480,209
	Long-Term Incentive Plan (B)	—	1,673,411	2,003,249	1,990,849
	Severance (C)	—	1,237,500	1,650,000	—
	Retirement plans (D)	—	108,412	108,412	—
	Lump sum cash payment for continuation of health coverage (E)	—	36,611	36,611	—
	Continued group life insurance coverage (F)	—	2,212	2,212	—
	Total		480,209	3,538,355	4,280,693
Emilio Braghi	Short-Term Incentive Pay (A)	342,418	342,418	342,418	342,418
	Long-Term Incentive Plan (B)	49,308	697,417	870,631	867,088
	Severance (C)	—	583,067	1,261,591	—
	Retirement plans (D)	—	7,381	7,381	7,381
	Lump sum cash payment for continuation of health coverage (E)	—	—	—	—
	Continued group life insurance coverage (F)	—	—	—	—
	Total		391,726	1,630,283	2,482,021

(A) These amounts represent the executive's AIP for the fiscal year.

(B) These amounts reflect the estimated value of the vested SARs, RSUs and PUs granted pursuant to our long term incentive plans.

- (C) These amounts would be paid pursuant to the executive's severance agreement. Except for the retirement and life insurance benefits, these amounts would be paid in a single lump sum following termination of employment. The retirement benefit represents one additional year of benefit accrual or contribution credit, as applicable. The life insurance benefit represents the estimate value of coverage for one additional year.
- (D) Under the executive's change in control agreement, these amounts would be paid to the executive if his employment is terminated without cause, or he resigns for good reason, within 24 months of a change of control. Except for the retirement and life insurance benefits, these amounts would be paid in a single lump sum following termination of employment. The retirement benefit represents one additional year of benefit accrual or contribution credit, as applicable. The life insurance benefit represents the estimate value of coverage for one additional year.
- (E) This amount is intended to assist the executive in paying post-employment health coverage for 12 months. This amount would be paid in a single lump sum following termination of employment.
- (F) This amount represents the estimated value of one additional year of coverage under our group and executive life insurance plans.

Director Compensation for Fiscal 2018

The Chairman of our board of directors is entitled to receive cash compensation equal to \$250,000 per year, and the Chair of our Audit Committee is entitled to receive \$175,000 per year. Each of our other directors is entitled to receive compensation equal to \$150,000 per year, plus an additional \$5,000 if he is a member of our Audit Committee. Directors' fees are ordinarily paid in quarterly installments.

Since July 2008, our Chairman, Mr. Birla has declined to receive the director compensation to which he is entitled. All directors continue to receive reimbursement for out of pocket expenses associated with attending board and Committee meetings. The table below sets forth the total compensation received by our directors for fiscal 2018.

Name	Fees Earned or Paid in Cash (\$)
Kumar Mangalam Birla	—
D. Bhattacharya	155,000
Askaran K. Agarwala	150,000
Clarence J. Chandran	155,000
Donald A. Stewart	175,000
Satish Pai	150,000

Compensation Committee Interlocks and Insider Participation

In fiscal 2018, Clarence J. Chandran was the Chairman of the Committee. The other Committee members during all or part of the year were Mr. D. Bhattacharya, Mr. Askaran Agarwala and Mr. Satish Pai. During fiscal 2018, none of our executive officers served as:

- a member of the Committee (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of another entity, one of whose executive officers served on our Committee;
- a director of another entity, one of whose executive officers served on our Committee; or
- a member of the Committee (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of another entity, one of whose executive officers served as one of our directors.

Fiscal Year 2019 Incentive Compensation Plans

On May 2, 2018, our board of directors approved our fiscal 2019 Annual Incentive Plan (2019 Executive AIP) and a long term incentive plan covering fiscal years 2019 through 2021 (2019 Executive LTIP). The target amounts for each plan for our named executive officers are as follows:

Name	2019 Executive AIP Target (as % of base salary)	2019 Executive LTIP Target Awarded May 2, 2018 (\$)
Steven Fisher	120%	4,000,000
Devinder Ahuja	85%	680,000
Leslie Parrette	70%	750,000
Marco Palmieri	65%	760,000
Emilio Braghi	65%	700,000

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

On May 15, 2007, the Company was acquired by Hindalco through its indirect wholly-owned subsidiary AV Metals Inc. pursuant to a plan of arrangement entered into on February 10, 2007 and approved by the Ontario Superior Court of Justice on May 14, 2007.

Subsequent to completion of the Arrangement on May 15, 2007, all of our common shares were indirectly held by Hindalco.

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

We maintain various policies and procedures that govern related party transactions. Pursuant to our Code of Conduct and our Code of Ethics for Senior Financial Officers, senior managers and directors of the company (a) must avoid any action that creates or appears to create, a conflict of interest between their own interest and the interest of the company, (b) cannot usurp corporate opportunities, and (c) must deal fairly with third parties. This policy is available on our website at www.novelis.com. In addition, we have enacted procedures to monitor related party transactions by (x) identifying possible related parties through questions in our director and officer questionnaires, (y) determining whether we receive payments from or make payments to any of the identified related parties, and (z) if we determine payments are made or received, researching the nature of the interactions between the company and the related parties and ensuring that the related person does not have an interest in the transaction with the company. The Audit Committee is responsible for reviewing material related party transactions that involve the company, one of our directors or executive officers or any of their immediate family members.

See Note 8 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for more details related to various transactions with our parent company, Hindalco, and its affiliates. These transactions are not material to Novelis individually or in the aggregate. Because of the relationship four of our directors have with Hindalco, we consider these transactions to be related party.

Item 14. Principal Accountant Fees and Services

The following table shows fees and expenses billed to the Company by PricewaterhouseCoopers LLP for services rendered for the years ended March 31, 2018 and 2017:

	March 31,	
	2018	2017
Audit fees (1)	\$ 6,688,850	\$ 7,124,817
Audit-Related Fees (2)	1,881,500	—
Tax Fees (3)	88,545	56,373
All Other Fees (4)	143,978	597,356
Total	\$ 8,802,873	\$ 7,778,546

- (1) Represent fees for professional services rendered and expenses incurred for the audit of the Company's annual financial statements, review of financial statements included in the Company's Form 10-Qs and services that are normally provided by PricewaterhouseCoopers LLP in connection with statutory and regulatory filings or engagements for those fiscal periods.
- (2) Represent fees for assurance related services that are reasonably related to the performance of the audit or review of our consolidated financial statements and are not reported under "Audit Fees." In the fiscal year ended March 31, 2018, this fee includes consultations on accounting and disclosure matters and due diligence procedures performed. Note that the nature of such advice did not result in the principal auditor firm acting in a management function or providing services that were considered book-keeping in nature.
- (3) In the fiscal year ended March 31, 2018, this fee includes procedures performed related to transfer pricing studies. In the fiscal year ended March 31, 2017, this fees includes procedures performed related to transfer pricing studies and customs valuations audits.
- (4) In the fiscal year ended March 31, 2018, this fee includes attest services performed over the Company's application for energy credits and certain agreed upon procedures work. In the fiscal year ended March 31, 2017, this fee includes services performed for Novelis Inc. in connection with an Offering Document of its' parent company, Hindalco Industries Limited, as well as for services not included in the Audit, Audit Related, and Tax.

Pre-Approval of Audit and Permissible Non-Audit Services

The charter of the Audit Committee provides that the Committee is responsible for the pre-approval of all audit and permissible non-audit services to be performed by the independent auditors. The Audit Committee has adopted a policy for the pre-approval of services provided by the independent auditors. The policy gives detailed guidance to management as to the specific services that are eligible for general pre-approval and provides specific cost limits for certain services on an annual basis. Pursuant to the policy and the Audit Committee charter, the Audit Committee has granted to its chairman the authority to address any requests for pre-approval of individual services.

PART IV

Item 15. Exhibits and Financial Statement Schedules

1. Financial Statement Schedules

None.

2. Exhibits

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* Indicates a management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NOVELIS INC.

By: /s/ Steven Fisher

Name: Steven Fisher

Title: President and Chief Executive Officer

Date: May 8, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>/s/ Steven Fisher</u> Steven Fisher	(Principal Executive Officer)	Date 5/8/2018
<u>/s/ Devinder Ahuja</u> Devinder Ahuja	(Principal Financial Officer)	Date 5/8/2018
<u>/s/ Stephanie Rauls</u> Stephanie Rauls	(Principal Accounting Officer)	Date 5/8/2018
<u>/s/ Kumar Mangalam Birla</u> Kumar Mangalam Birla	(Chairman of the Board of Directors)	Date 5/8/2018
<u>/s/ Askaran Agarwala</u> Askaran Agarwala	(Director)	Date 5/8/2018
<u>/s/ Debnarayan Bhattacharya</u> Debnarayan Bhattacharya	(Director)	Date 5/8/2018
<u>/s/ Clarence J. Chandran</u> Clarence J. Chandran	(Director)	Date 5/8/2018
<u>/s/ Donald A. Stewart</u> Donald A. Stewart	(Director)	Date 5/8/2018
<u>/s/ Satish Pai</u> Satish Pai	(Director)	Date 5/8/2018

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* Indicates a management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary

None.

Novelis 2019 Executive Annual Incentive Plan

1. **Title and Administration.** This annual incentive plan (the “2019 Executive AIP” or the “Plan”) will be administered by the Human Resources department of Novelis Inc. (together with its subsidiaries, the “Company”).
2. **Performance Period and Payments.** The performance period will commence on April 1, 2018 and end on March 31, 2019. Payments under the Plan will be made in a lump sum, minus required withholdings, during the first fiscal quarter following the end of the performance year.
3. **Eligibility.** Employees in job bands 3 and higher are eligible to participate in the Plan. An individual must be either employed in an eligible job band or transferred or hired into an eligible job band during the performance year to receive a payout under the Plan. Eligibility and payments for employees who begin employment with Novelis after the start of the performance period will be determined by the “Plan Rules Administration” document then in effect as maintained by the Company’s Human Resources department.
4. **Target Opportunity.** Each participant’s target opportunity will be determined by the Company’s Human Resources department or the Compensation Committee of the Company’s Board of Directors, as applicable.
5. **Plan Design.**

(a) **Performance Measures.** The following measures will determine payouts under the Plan.

Measure	Weighting	Threshold	Target	Maximum
Operating EBITDA	40%	60%	100%	200%
Free Cash Flow Before Metal Price Lag	35%	50%	100%	200%
Individual Performance per Novelis Performance Management System	15%	60%	100%	200%
Global Safety	10%			

a. **Performance Threshold.** No payout will be made under the Plan unless Operating EBITDA for the performance year is at least 75% of the target level Operating EBITDA established by the Company. Performance results between threshold level and maximum level are determined by means of interpolation.

6. **Separation from Employment.** Participants whose employment terminates during the performance year will be subject to the applicable terms set forth below. Any payments to former employees will be made at or near the same date payment is made to active employees under the Plan.

Termination Event	Treatment
Death, Disability or Retirement	Payout will be prorated based on length of employment during the performance period.
Change in Control	Payout will be prorated based on length of employment during the performance period.
Intercompany Transfers	Payout will be prorated based on length of employment during the performance period.
Voluntary Termination	The participant will forfeit the entire payout, and no payout will be made.
Involuntary Termination – For Cause	The participant will forfeit the entire payout, and no payout will be made.
Involuntary Termination – Without Cause (e.g., plant closure, sale of assets, position elimination)	Payout will be prorated based on length of employment during the performance period.

7. **Definitions.** The following terms will have the meaning ascribed to them below.

(a) **Operating EBITDA** means “Segment Income” as reported in the Company’s Annual Report on Form 10-K filed with the United States Securities and Exchange Commission (the “Form 10-K”) *reduced by* (1) the impact from re-measuring to current exchange rates any monetary assets and liabilities which are denominated in a currency other than the functional currency of the reporting unit, net of realized and unrealized derivative instruments; and *adjusted by* (2) the impact on cost of working capital management activities to the extent caused by any excess or shortfall of Free Cash Flow described in paragraph 7(b) (iii) below.

(b) **Free Cash Flow Before Metal Price Lag** means the Company’s operating free cash flow calculated by removing the following items from “free cash flow” (as defined in the “Liquidity and Capital Resources” section of Item 7 of the Company’s Annual Report on Form 10-K): (1) the impact from timing differences in the pass-through of metal price changes to the Company’s customers, net of realized derivative instruments; and (2) 100% of the impact on inventory of fourth quarter variations in metal prices (including LME and local market premiums); provided, however, that:

- (i) In the event fourth quarter base metal cost (“BMC”) exceeds the budgeted BMC, the adjustment will be calculated as: (i) budgeted ending physical book inventory kilotonnes times (ii) actual fourth quarter BMC, reduced by budgeted fourth quarter BMC. The result will be added to the Company’s operating free cash flow for purposes of calculating achievement under this Plan; and

- (ii) In the event fourth quarter BMC is lower than the budgeted BMC price, the adjustment will be calculated as: (i) actual ending physical book inventory kilotonnes times (ii) budgeted fourth quarter BMC, reduced by actual fourth quarter BMC. The result will be deducted from the Company's operating free cash flow for purposes of calculating achievement under this Plan.
- (iii) Free Cash Flow Before Metal Price Lag may also include cash flows from working capital management activities and programs (including, without limitation, factoring of accounts receivable). For purposes of calculating achievement of Free Cash Flow Before Metal Price Lag under this Plan, any excess or shortfall of cash flow resulting from such working capital management activities or programs against plan will be disregarded.

(c) **Global Safety** is comprised of two components, as follows:

- (i) Global Serious Injuries and Fatalities (SIF), which refers to the total number of work-related deaths, life-threatening injuries/illnesses and life-altering injuries/illnesses occurring during fiscal year 2019; and
- (ii) Total Recordable Incident Rate (TRIR), which refers to (i) the number of Injury/Illness Record Keeping System cases multiplied by 200,000; divided by (ii) the number of hours worked by all employees, in each case during fiscal year 2019.

SIF will be weighted 60% and TRIR will be weighted 40% of the Global Safety metric. Notwithstanding the foregoing, in the case of a fatality at a Company location during fiscal 2019, select participants will receive no payout for the Global Safety measure.

(d) **Retirement** means as separation from the Company at 65 years of age or a combination of age and service greater than or equal to 65 with a minimum age of 55.

(e) **Change in Control** means the first to occur of any of the following events: (i) any person or entity (excluding any person or entity affiliated with the Aditya Birla Group) is or becomes the beneficial owner, directly or indirectly through any parent entity of the Company or otherwise, of securities of the Company representing 35% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities (the "Value or Vote of the Company"); provided, however, that a Change in Control will not be deemed to have occurred in the event that (A) any person or entity becomes the beneficial owner of securities representing 50% or less of the Value or Vote of the Company through (i) an initial public offering, (ii) a secondary offering, (iii) a private placement of securities, (iv) a share exchange transaction, or (v) any similar share purchase transaction in which the Company or any of its affiliates issues securities (any such transaction, a "Share Issuance Transaction"); and (B) a person or entity's beneficial ownership interest in the Value or Vote of the Company is diluted solely as a result of any Share Issuance Transaction; or (ii) the majority of the members of the Board of Directors of the Company is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election; or (iii) the consummation of a merger or consolidation of the Company with any other entity not affiliated with the Aditya Birla Group, other than (a) a merger or consolidation which would result in the voting securities of the Company

outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, 50% or more of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (b) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no person or entity is or becomes the beneficial owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such person or entity any securities acquired directly from the Company or its affiliates, other than in connection with the acquisition by the Company or its affiliates of a business) representing 50% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities; or (iv) the sale or disposition of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of its assets to a member of the Aditya Birla Group.

Notwithstanding the foregoing, no "Change in Control" will be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions. For purposes of this Section, "beneficial ownership" will be determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

8. **Interpretation.** Novelis will interpret and construe the terms and conditions of the plan in its sole discretion, including but not limited to all decisions regarding eligibility for, and the amount of benefits payable under, the Plan.
9. **No Right to Continued Service.** Nothing in the Plan confers upon any participant the right to continued employment or service with the Company or otherwise interfere with or restrict the right of Novelis or any affiliate to terminate the participant's employment or service for any reason.

Novelis 2019 Executive Long-Term Incentive Plan

1. **Title and Administration.** This long-term incentive plan (the “2019 Executive LTIP” or the “Plan”) will be administered by the Human Resources department of Novelis Inc. (the “Company”).
2. **Performance Period and Award Date.** The performance period will commence on April 1, 2018 and end on March 31, 2021. The award date will be May 2, 2018, or such later date as may be determined for a participant as provided herein.
3. **Target Opportunity.** Each participant’s target opportunity will be determined by the Company’s Human Resources department or the Compensation Committee of the Company’s Board of Directors (the “Board”), as applicable. Indian Rupee exchange rates will be fixed on the award date.
4. **Plan Design.** A participant’s target opportunity under the Plan will be comprised of Novelis Performance Units, Hindalco Stock Appreciation Rights, and Hindalco Restricted Stock Units.
 - (a) **Novelis Performance Units.** Novelis Performance Units will comprise 50% of each participant’s award under the Plan.

- (i) **Value.** Each Novelis Performance Unit (“PU”) will have a fixed value of US\$100.

Vesting. The PUs are at-risk, and the number of PUs that vest will be determined by the Company’s achievement of ROCE targets established for the performance period. Vesting will range from 50% (threshold) to 200% (maximum) of target award value. Performance results between threshold level and target level or between target level and maximum level will be determined by means of interpolation.

Definitions.

- *ROCE* means NOPAT divided by fiscal year average CE. ROCE will be calculated for each fiscal year of the performance period. The sum for all fiscal years in the performance period will be divided by the number of fiscal years in the performance period to obtain a simple average.

NOPAT means (i) Net Income *plus* (ii) Interest Expense and Amortization of Debt Issuance Costs *less* (iii) Loss (Gain) on Extinguishment of Debt.

CE means (i) book debt *plus* (ii) book equity *plus* (iii) goodwill impairment (fixed at \$1.5 billion) *less* (iv) cash in excess of \$400 million, *plus* (v) any new impairment impacting equity, provided that this total amount will be normalized for dividend and/or capital payments, if any. Average CE for a fiscal year will be based on the beginning and ending balances for the fiscal year.

Net Income means "Net Income (Loss) Attributable to Our Common Shareholder".

Target Modifications. In the event the Company completes a significant strategic transaction during the performance period, the Board may, in its sole discretion, modify the ROCE targets established for the performance period.

- (ii) *Payments.* Payments will be made in cash in the first quarter following the end of the performance period.

Hindalco Stock Appreciation Rights. Hindalco Stock Appreciation Rights will comprise 20% of each participant's award under the Plan.

- (i) *Value.* The Black Scholes method of valuation will be used to arrive at the number of SARs to be awarded to participant. Each Hindalco Stock Appreciation Right ("Hindalco SAR") will track the appreciation value of one Hindalco share. Total cash payouts over the term each award will be capped at a maximum of 3.0 times the value on the award date.

Vesting and Expiration. Hindalco SARs will vest ratably in one-third tranches on each anniversary of the award date, provided the Company achieves at least 75% of the Operating EBITDA before Metal Price Lag target established for the performance year. Hindalco SARs must be exercised no later than the seventh anniversary of the award date.

Exercise. The exercise price of a Hindalco SAR will be determined by using the closing price of a Hindalco share as published by the Bombay Stock Exchange on the award date. Upon exercise, the participant will receive a cash payment equal to the product of (i) the number of Hindalco SARs exercised, times (ii) the increase in value of one Hindalco share from the award date through the date of exercise. If an employee exercises on a date the Bombay Stock Exchange is closed, the exercise price will be the closing price of Hindalco shares on the immediately previous date the Bombay Stock Exchange was open. A participant may exercise vested Hindalco SARs at any time prior to the expiration date.

Hindalco Restricted Stock Units. Hindalco Restricted Stock Units will comprise 30% of each participant's award under the Plan.

- (i) *Value.* The value of each RSU will be equivalent to the value of one Hindalco share. The initial value of each RSU will be determined by using the average of the high and low prices of a Hindalco share as published by the Bombay Stock Exchange on the award date. Total cash payouts over the term each award will be capped at a maximum of 3.0 times the value on the award date. If the vesting date falls on a date when the exchange is closed, then the average of the next day's high and low prices will be used.

Vesting. The RSUs will vest ratably in one- third tranches on each anniversary of the award date and will be paid in cash within 30 days of the applicable vesting date.

5. **Eligibility.** Employees in job bands 3 and higher are eligible to participate in the Plan. An individual must be either employed in an eligible job band or transferred or hired into an eligible job band during the performance year to receive a payout under the Plan. Eligibility and payments for employees who begin employment with the Company after the start of the performance period will be determined by the "Plan Rules Administration" document then in effect as maintained by the Company's Human Resources department.

- (a) Employment after Award Date. Eligibility for employees who begin employment with Novelis after the award date will be determined as follows.

- (i) *First or Second Quarter.* An eligible employee who begins employment after the award date but before the end of the second quarter of the fiscal year will be granted an award at 90% of the target amount for the employee's job band. The award date will be the following October 1.

(ii) *Third Quarter.* An eligible employee who begins employment during the third quarter of the fiscal year will be granted an award at 75% of the target amount for the employee's job band. The award date will be the following January 1.

(iii) *Fourth Quarter.* An eligible employee who begins employment after the start of the fourth quarter of the fiscal year will not be eligible for an award under the Plan.

(b) Promotion after Award Date. Awards for employees promoted into an eligible job band during the fiscal year will be determined as follows.

(i) *First Quarter.* An employee who is promoted into an eligible job band during the first quarter of the fiscal year will be eligible for a full award under the Plan.

(ii) *Second Quarter.* An employee who is promoted into an eligible band during the second quarter of the fiscal year will be granted an award at 90% of the target amount for the employee's job band. The award date will be the following October 1.

(iii) *Third Quarter.* An employee who is promoted into an eligible job band during the third quarter of the fiscal year will be granted an award at 75% of the target amount for the employee's job band. The award date will be the following January 1.

(iv) *Fourth Quarter.* An employee who is promoted into an eligible job band after the start of the fourth quarter of the fiscal year will not be eligible for an award under the Plan in that fiscal year.

6. Separation from Employment. Participants whose employment terminates during the performance year will be subject to the applicable terms set forth below.

Event	Awards	Vesting and Exercise Treatment
Death, Disability	SARs	<ul style="list-style-type: none"> All unvested SARs will vest immediately. Vested SARs must be exercised within one year, and in no event later than the seventh anniversary of the award date.
	RSUs	<ul style="list-style-type: none"> All unvested RSUs will vest immediately and will be cashed out 30 days following the date of death or disability.
	PUs	<ul style="list-style-type: none"> Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. Vested PUs will be cashed out after the end of the performance period.
Retirement	SARs	<ul style="list-style-type: none"> If Retirement occurs more than one year after the award date, unvested SARs will continue on the vesting schedule and must be exercised no later than the third anniversary of the Retirement date. Vested SARs must be exercised prior to the expiration date. If Retirement occurs before the first anniversary of the award date, all unvested SARs will be forfeited.
	RSUs	<ul style="list-style-type: none"> Vesting will be prorated based on months of service during the performance period, subject to the RSU vesting rules set forth above. Vested RSUs will be cashed out 30 days following the date of termination.
	PUs	<ul style="list-style-type: none"> Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. Vested PUs will be cashed out after the end of the performance period.
Change in Control	SARs	<ul style="list-style-type: none"> All unvested SARs will vest immediately and the vested portion will be cashed out within 30 days following a change in control.
	RSUs	<ul style="list-style-type: none"> All unvested RSUs will vest immediately and will be cashed out within 30 days following a change in control.
	PUs	<ul style="list-style-type: none"> Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. Vested PUs will be cashed out after the end of the performance period.
Intercompany Transfers	SARs	<ul style="list-style-type: none"> Any unvested SARs scheduled to vest within six months after the date of transfer will continue to vest according to the vesting schedule. All other unvested SARs will be forfeited.
	RSUs	<ul style="list-style-type: none"> Any unvested RSUs scheduled to vest within six months after the date of transfer will continue to vest according to the vesting schedule. All other unvested RSUs will be forfeited.
	PUs	<ul style="list-style-type: none"> Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. Vested PUs will be cashed out after the end of the performance period.
Voluntary Termination	SARs	<ul style="list-style-type: none"> Participant must exercise unvested SARs within 90 days, and in no event later than the seventh anniversary of the award date. All unvested SARs will be forfeited.
	RSUs	<ul style="list-style-type: none"> All RSUs will be forfeited.
	PUs	<ul style="list-style-type: none"> All PUs will be forfeited.
Involuntary Termination – Without Cause (e.g., plant closure, sale of assets, position elimination)	SARs	<ul style="list-style-type: none"> Vesting will be prorated based on months of service during the performance period, subject to the SAR vesting rules set forth above. Vested SARs must be exercised within 90 days, and in no event later than the seventh anniversary of the award date.
	RSUs	<ul style="list-style-type: none"> Vesting will be prorated based on months of service during the performance period, subject to the RSU vesting rules set forth above. Vested RSUs will be cashed out 30 days following the date of termination.
	PUs	<ul style="list-style-type: none"> Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. Vested PUs will be cashed out after the end of the performance period.
Involuntary Termination – For Cause	SARs	All SARs will be forfeited.
	RSUs	All RSUs will be forfeited.
	PUs	All PUs will be forfeited.

7. Definitions. The following terms will have the meaning ascribed to them below.

(a) **Retirement** means separation from service with the Company and its subsidiaries and affiliates on or after (i) reaching 65 years of age or (ii) having a combination of age and service greater than or equal to 65 with a minimum age of 55.

(b) **Change in Control** means the first to occur of any of the following events: (i) any person or entity (excluding any person or entity affiliated with the Aditya Birla Group) is or becomes the beneficial owner, directly or indirectly through any parent entity of the Company or otherwise, of securities of the Company representing 35% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities (the "Value or Vote of the Company"); provided, however, that a Change in Control shall not be deemed to have occurred in the event that (A) any person or entity becomes the beneficial owner of securities representing 50% or less of the Value or Vote of the Company through (i) an initial public offering, (ii) a secondary offering, (iii) a private placement of securities, (iv) a share exchange transaction, or (v) any similar share purchase transaction in which the Company or any of its affiliates issues securities (any such transaction, a "Share Issuance Transaction"); and (B) a person or entity's beneficial ownership interest in the Value or Vote of the Company is diluted solely as a result of any Share Issuance Transaction; or (ii) the majority of the members of the Board of Directors of the Company is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election; or (iii) the consummation of a merger or consolidation of the Company with any other entity not affiliated with the Aditya Birla Group, other than (a) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, 50% or more of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (b) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no person or entity is or becomes the beneficial owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such person or entity any securities acquired directly from the Company or its affiliates, other than in connection with the acquisition by the Company or its affiliates of a business) representing 50% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities; or (iv) the sale or disposition of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of its assets to a member of the Aditya Birla Group.

Notwithstanding the foregoing, no "Change in Control" shall be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such

transaction or series of transactions. For purposes of this Section, “beneficial ownership” shall be determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

8. Taxes.

(a) **Taxes and Other Withholdings.** All payments under this plan shall be subject to applicable tax and other withholdings.

(b) **Compliance with §409A of the U.S. Internal Revenue Code.** To the extent applicable, this plan shall be interpreted and administered in a manner so that any amount or benefit payable hereunder shall be paid or provided in a manner that is either exempt from or compliant with the requirements Section 409A of the Internal Revenue Code of 1986, as amended (“Section 409A”), and applicable Internal Revenue Service guidance and Treasury Regulations issued thereunder. Notwithstanding anything in this plan to the contrary, all payments and benefits under this plan that would constitute non-exempt “deferred compensation” for purposes of Section 409A and that would otherwise be payable or distributable hereunder by reason of an individual’s termination of employment, will not be payable or distributable to individual unless the circumstances giving rise to such termination of employment meet any description or definition of “separation from service” in Section 409A and applicable regulations (without giving effect to any elective provisions that may be available under such definition). If this provision prevents the payment or distribution of any amount or benefit, such payment or distribution shall be made on the date, if any, on which an event occurs that constitutes a Section 409A-compliant “separation from service.” Further, to the extent the individual is a “specified employee” within the meaning of Section 409A and notwithstanding paragraph 7 or any other provision herein to the contrary, then payment may not be made before the date which is six (6) months after the date of separation from service (or, if earlier, the date of death of individual).

9. Interpretation and Amendment. The Company will interpret and construe the terms and conditions of the plan in its sole discretion, including but not limited to all decisions regarding eligibility for, and the amount of benefits payable under, the Plan. The Company also reserves the right to amend or modify this Plan at any time.

10. No Right to Continued Service. Nothing in the Plan confers upon any participant the right to continued employment or service with the Company or any subsidiary or affiliate or to otherwise interfere with or restrict the right of the Company or any subsidiary or affiliate to terminate the participant’s employment or service for any reason.



June 16, 2017

Re: Offer Letter

Dear Marco,

Novelis Inc. is pleased to offer you the role of Senior Vice President and President, Novelis North America. This position will initially be based in Atlanta, Georgia (US) but may be relocated to any other location based on business needs. You will report to Mr. Steven Fisher, President and Chief Executive Officer of Novelis Inc. The terms and conditions applicable to your appointment to this position are as follows:

1. Position Title

Senior Vice President and President, Novelis North America of Novelis Inc.

2. Base Salary

The Position will be administered at an exempt job band Exec A. Effective July 1, 2017, your base salary will be **\$500,000** annually. Your next salary review will be in July 2018.

3. Annual Incentives

You are entitled to participate in the Novelis Annual Incentive Plan (AIP). The target opportunity for your position will be 65% of your annual base salary. The annual incentive performance measures for Fiscal Year 2018 are set forth in the Novelis 2018 Executive Annual Incentive Plan.

4. Long Term Incentive Plan (LTIP)

You are eligible to participate in the Novelis Long Term Incentive Plan (LTIP). Your target opportunity for Fiscal 2018 is **\$760,000**. The LTIP grant is in the form of 50% Novelis Performance Units, 20% Hindalco Stock Appreciation Rights (SARs) and 30% Hindalco Restricted Stock Units (RSUs) as more fully described in the Novelis 2018 Executive LTIP Plan.

5. Benefits

Novelis provides a wide range of benefits as well as an annual Company paid executive physical examination. Benefits include:

- Savings and Retirement
- Life insurance
- Medical and prescription drug plan for you and your eligible dependents

- Dental coverage for you and your eligible dependents
- Short-Term Disability
- Long-Term Disability
- Business Travel and Accident Insurance
- Flex Perks – You will receive an annual stipend of \$50,000 minus required deductions, paid to you over 12 months. This amount is intended for your personal use for club memberships, tax preparation services, car allowance, professional financial services or as you may choose. The company does not otherwise pay club dues and/or other services.

6. Vacation Entitlement

Your vacation entitlement is governed by Novelis' vacation policy but will be no less than 30 days annually. You are also entitled to the paid holidays in Novelis' published holiday schedule for the Atlanta office.

7. Change in Control

Novelis has provided you with a separate agreement that provides protection in the event of a Change in Control.

8. Retention Award

Novelis will provide you with a separate award letter that details the terms of your retention award of \$450,000, which will be payable in equal installments over a three year period.

9. Severance and Other Termination Benefits

You are entitled to severance and other benefits if the Company shall terminate your employment other than for Cause, or you terminate your employment for Good Reason defined as follows:

“Cause” means only (i) your conviction of any crime (whether or not involving the company) constituting a felony in the applicable jurisdiction; (ii) willful and material violation of the companies policies including, but not limited to, those relating to sexual harassment and confidential information; (iii) willful misconduct in the performance of your duties for the Company; or (iv) willful failure or refusal to perform your material duties and responsibilities which is not remedied within ten (10) days after written demand from the Board of Directors to remedy such failure or refusal.

“Good Reason” means any of the following if it shall occur without your express written consent: (i) a material reduction in your position, duties, reporting relationships, responsibilities, authority, or status within the Company except as contained in this contract; (ii) a reduction in your base salary and target short term and long term incentive opportunities in effect on date hereof or as the same may be increased from time to time during the term of this

Agreement; or (iii) any failure of the Company to comply with its obligations under this Agreement, in each case which is not remedied within ten (10) day after written demand by you to remedy such reduction or failure.

Your right to receive severance and benefits shall be subject to the terms and conditions of the Company's release from and waiver by you of claims, non-compete agreement and non-solicitation agreement for executive employees. No payments or benefits shall be paid unless you execute such release and waiver of claims, non-compete agreement and non-solicitation agreement. The Release shall not release your right to receive indemnification and defense from the Company for any claims arising out of the performance of your duties on behalf of the Company. Termination of employment due to Cause, Death, Disability or Retirement at any time shall not give rise to any rights to compensation.

(a) Severance Pay. The Company shall pay a lump sum cash amount equal to:

$[A \times (B + C)] - D$, where

"A" equals a multiplier of 1.5;

"B" equals your annual base salary (including all amounts of such base salary that are voluntarily deferred under any qualified and non-qualified plans of the Company) determined at the rate in effect as of the date of this appointment, which stands at \$500,000;

"C" equals your target short term incentive opportunity as set forth in this agreement, which is \$325,000; and

"D" equals the amount of retention and severance payments, if any, paid or payable to you by the Company other than pursuant to this Agreement; it being expressly understood that the purpose of this deduction is to avoid any duplication of payments to you.

(b) Other Benefits

(i) If you are not eligible for retiree medical benefits and are covered under the Company's group health plan at the time of your termination of employment, the Company shall pay an additional lump sum cash amount for the purpose of assisting you with the cost of post-employment medical continuation coverage equal to: $(C \times M) / (1 - T)$, where

"C" equals the full monthly COBRA premium charged for coverage under the Company's group medical plan at your then current level of coverage;

"M" equals twelve (12) months; and

"T" equals an assumed tax rate of 40%

(ii) To the extent applicable, you shall be entitled to continue coverage under the Company's group life plan for a period of twelve (12) months at your pre-termination level of coverage.

(iii) You shall be entitled to twelve (12) months of additional credit for benefit accrual and contribution allocation purposes including credit for age, service and earnings pro rated over twelve (12) months under the Company's tax-qualified and non-qualified pension, savings or other retirement plans; provided that if applicable provisions of the Code prevent payment in respect of such credit under the Company's tax-qualified plans, such payments shall be made under the Company's non-qualified plans.

(iv) To the extent you are not already fully vested under the Company's tax-qualified and non-qualified retirement pension, savings and other retirement plans, you shall become 100% vested under such plans; provided that if applicable provisions of the Code prevent accelerated vesting under the Company's tax-qualified plans, an equivalent benefit shall be payable under the Company's non-qualified plans.

Notwithstanding the foregoing provisions of this paragraph 9 or any other provision in this Agreement, if you are a "specified employee" within the meaning of Code Section 409A, then all payments under this Agreement shall be delayed for a period of six (6) months to the extent required by Section 409A.

Should you decide to voluntarily separate from the company you will have to give the company a 3 month notice and will not be entitled to any of the payments in this paragraph 9.

10. Internal Revenue Code Section 409A

To the extent applicable, this Agreement shall be interpreted in accordance with Section 409A of the Code and the applicable U.S. Treasury regulations and other interpretative guidance issued thereunder, including without limitation any regulations or other guidance that may be issued after the effective date of this Agreement. Notwithstanding any provision of the Agreement to the contrary, the Company may adopt such amendments to the Agreement or adopt other policies and procedures, or take any other actions, that the Company determines is necessary or appropriate to exempt the Agreement from Section 409A and/or preserve the intended tax treatment of the benefits provided hereunder, or to comply with the requirements of Section 409A and related U.S. Treasury guidance, as long as such changes do not reduce the overall compensation.

. Non-Competition

11.1 Competing Entities: In this Agreement, "Competing Entities" includes any entity whose major business consists of manufacturing or recycling of aluminium, alumina, or downstream rolled aluminium products.

- 11.2 Competitive Activities: You covenant and agree that, while employed with the Company and for 24 months thereafter, you shall not, directly or indirectly, in any manner whatsoever including, without limitation, either individually, or in partnership, jointly or in conjunction with any other person, or as employee, principal, agent, consultant, director, shareholder, lender or otherwise:
- (a) be engaged actively in or by any Competing Entities in order to provide products or services similar to the products and services provided by the Company;
 - (b) have any financial or other interest including, without limitation, an interest by way of royalty or other compensation arrangements, in or in respect of any Competing Entities, excluding the ownership of not more than 5% of the issued shares of any such Competing Entities, the shares of which are listed on a recognized stock exchange or traded in the over-the-counter market; or
 - (c) advise, lend money to or guarantee the debts or obligations of any Competing Entities.

12. Non-Solicitation

- 12.1 Customers and Suppliers: You covenant and agree that, while employed with the Company and for 24 months thereafter, you will not, in any manner, directly or indirectly, by any means, in any capacity, in order to direct away from the Company, approach, solicit, or contact any customers or suppliers of the Company who has actively done business with the Company in the preceding twenty four months, or any prospective customer or supplier that the Company approached, solicited or contacted in the preceding twenty four months, or attempt to do any of the foregoing, in order to offer or obtain services or products that compete with the business of the Company (or any material part thereof) as conducted at the time of the cessation of the your employment or during the twenty four month period prior to such date or contemplated to be carried on in its most recent annual business plan.
- 12.2 Employees: You covenant and agree that, while employed with the Company and for 24 months thereafter, you will not induce or solicit, or attempt to induce or solicit, or assist any person to induce or solicit, any management or higher employee, contractor or advisor of the Company, or assist or encourage any management or higher employee, contractor or advisor of the Company, to accept employment or engagement elsewhere that competes with the business of the Company (or any material part thereof) as conducted at the time of the cessation of your employment or any other business conducted by the Company during the twenty four month period prior to such date or contemplated to be carried on in its most recent annual business plan.

13. Governing Law

This letter agreement shall be governed by, and shall be construed in accordance with, the internal laws (and not the laws of conflicts) of the State of Georgia.

14. Obligation to Mitigate Damages: No Effect on other Contractual Rights

14.1 You shall not be required to mitigate damages or the amount of any payment provided for under this Agreement by seeking other employment or otherwise nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by you as a result of employment by another employer after your termination of employment, or otherwise.

14.2 The provision of this Agreement, and any payments provided for hereunder, shall not reduce any amounts otherwise payable, or in any way diminish your existing rights, or rights which would accrue solely as a result of the passage of time, under any employee benefit plan or arrangement providing retirement benefits or health, life, disability, or similar welfare benefits.

15. Successor to the Company

The Company will require any successor or assign (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to absolutely and unconditionally assume and agree to perform this Agreement in the same manner and to the extent that the Company would be required to perform it if no such succession or assignment had taken place.

Any failure of the Company to obtain such assumption and agreement prior to the effectiveness of any such succession or assignment shall entitle you to terminate your employment for Good Reason.

16. Indemnification

The Company will provide full indemnification to the maximum extent permitted under the Company's by-laws and applicable law. The Company shall maintain Directors and Officers liability insurance coverage in an amount reasonably anticipated to satisfy such indemnification during your employment and at all times thereafter for the duration of any period of limitations during which any action may be brought against you.

17. General

17.1 All the information in this letter including eligibility for participation in compensation and benefits plan is subject to the terms of applicable plan documents and policies, which are subject to change during the normal course of Novelis business, but shall not result in an overall reduction of your compensation or terms and conditions of your employment. Your

employment at Novelis is “at – will” and either you or Novelis may decide to terminate the employment relationship at any time for any reason, except as provided by law. The terms of this letter, therefore, do not and are not intended to create either an express or implied contract of employment with Novelis for any particular duration.

- 17.2 In carrying out the Company’s business, employees often learn confidential or proprietary information about the Company, its customers, suppliers, or joint venture parties. Employees must maintain the confidentiality of all information so entrusted to them, except when disclosure is authorized or legally mandated. Confidential or proprietary information of the Company, and of other companies, includes any non-public information that would be harmful to the relevant company or useful or helpful to competitors if disclosed. You will find more information about this in the Code of Conduct. By signing below, you acknowledge you have received a copy of the Novelis/Aditya Birla Group Code of Conduct.

If you agree with the foregoing terms, please sign and return a copy of this letter to me. If you have any questions, please feel free to contact me.

Sincerely,

/s/ HR Shashikant
HR Shashikant
Senior Vice President and Chief Human Resources Officer

Accepted:

/s/ Marco Palmieri
Marco Palmieri



16 June 2017

Marco Palmieri

Dear Marco,

In recognition of your critical contributions to the future of Novelis, the Company is awarding you a cash incentive in addition to your other compensation, subject to the terms and conditions set forth herein.

You will receive three payments in the total amount of \$450,000, as follows:

First Payment in July 2017:

Second Payment in July 2018:

Third Payment in July 2019:

\$150,000

\$150,000

\$150,000

Because this award is designed to be a retention incentive, in the event that you voluntarily terminate your employment or are terminated for cause, in either case within 12 months of receiving a payment hereunder, you will be required to repay any such amounts paid in the last 12 months (less applicable taxes), and any unpaid installments will not be paid. If you are terminated without cause, any unpaid cash installments will be immediately cancelled, but you will not be required to repay any cash payments you have received.

Your acceptance of any payments under this award shall constitute your acceptance of the terms and conditions set forth above.

I am very pleased that we are able to offer you this opportunity and I look forward to your continuing to be a key member of the team as we focus on building an even more successful Novelis.

Sincerely,

/s/ HR Shashikant

HR Shashikant

Senior Vice President and Chief Human Resources Officer

List of Subsidiaries of Novelis Inc.

Name of Entity	Jurisdiction of Organization
Novelis Corporation	Texas, United States
Novelis de Mexico, S.A. de C.V.	Mexico
Novelis Global Employment Organization, Inc.	Delaware, United States
Logan Aluminum Inc.	Delaware, United States
Novelis South America Holdings LLC	Delaware, United States
Novelis Acquisitions LLC	Delaware, United States
Novelis Holdings Inc.	Delaware, United States
Novelis Services (North America) Inc.	Delaware, United States
Novelis Services (Europe) Inc.	Delaware, United States
Novelis AG	Switzerland
Novelis Switzerland S.A.	Switzerland
Novelis Italia SpA	Italy
Novelis Europe Holdings Limited	United Kingdom
Novelis UK Ltd	United Kingdom
Novelis Services Limited	United Kingdom
Novelis Aluminium Holding Unlimited Company	Ireland
Novelis Deutschland GmbH	Germany
Aluminium Norf GmbH	Germany
Novelis Aluminium Beteiligungs GmbH	Germany
Deutsche Aluminium Verpackung Recycling GmbH	Germany
Novelis Sheet Ingot GmbH	Germany
France Aluminium Recyclage S.A.	France
Novelis Laminés France S.A.S.	France
Novelis PAE S.A.S.	France
4260848 Canada Inc.	Canada
4260856 Canada Inc.	Canada
8018227 Canada Inc.	Canada
Novelis Korea Limited	South Korea
Ulsan Aluminum Ltd.	South Korea
Novelis (China) Aluminum Products Co., Ltd.	China
Novelis (Shanghai) Aluminum Trading Co., Ltd.	China
Novelis Vietnam Company Limited	Vietnam
Novelis MEA Ltd.	Dubai, UAE
Novelis do Brasil Ltda.	Brazil
Brecha Energetica Ltda	Brazil
Novelis (India) Infotech Ltd.	India

Certification

I, Steven Fisher, certify that:

1. I have reviewed this Annual Report on Form 10-K of Novelis Inc. (Novelis);

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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the 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(s) and I have disclosed, based on my 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.

/s/ Steven Fisher

Steven Fisher

President and Chief Executive Officer

(Principal Executive Officer)

Date: May 8, 2018

Certification

I, Devinder Ahuja, certify that:

1. I have reviewed this Annual Report on Form 10-K of Novelis Inc. (Novelis);

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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the 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(s) 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.

/s/ Devinder Ahuja

Devinder Ahuja

Chief Financial Officer

(Principal Financial Officer)

Date: May 8, 2018

**Certification Pursuant to 18 U.S.C. Section 1350 as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of Novelis Inc. (Novelis), hereby certifies that Novelis' Annual Report on Form 10-K for the period ended March 31, 2018 (Report) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Novelis.

/s/ Steven Fisher

Steven Fisher

President and Chief Executive Officer

(Principal Executive Officer)

Date: May 8, 2018

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of this Report.

**Certification Pursuant to 18 U.S.C. Section 1350 as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of Novelis Inc. (Novelis), hereby certifies that Novelis' Annual Report on Form 10-K for the period ended March 31, 2018 (Report) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Novelis.

/s/ Devinder Ahuja

Devinder Ahuja

Chief Financial Officer

(Principal Financial Officer)

Date: May 8, 2018

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of this Report.