Sustainability is central to Novelis’ business.

In FY15, we grew both our total shipments of aluminum FRP and the recycled content in our products to record levels.

As the world’s largest recycler of aluminum and producer of FRP, Novelis is leveraging aluminum’s unique properties to meet the needs of our customers, while also providing them with solutions to reduce the risks associated with growing global carbon constraints.

For example, as a result of our collaborative efforts with our automotive customers, the use of aluminum rolled products in the automotive sector continues to grow at an accelerating pace – and the result is more fuel-efficient vehicles. In the past few years, Novelis has significantly increased our automotive capacity to meet growing demand, while at the same time we have nearly doubled our capacity to recycle aluminum.

Why use recycled content?

95% of the energy use and GHG emissions associated with primary aluminum production are avoided.
Mainstreaming Recycling

Since embarking on the effort to transform our company in 2011, Novelis has made solid progress, firmly establishing our company as the leading recycler of aluminum in the world and increasing our recycled inputs to 49% in FY15, up from 33% in FY11. By the last quarter of FY15, we had achieved a run rate of 53% recycled content.

Achieving our strategy requires collaboration within our industry, as well as building the network needed to optimize the concept of the circular economy. A central tenet of this approach is a recognition that making products that are recyclable is not sufficient on its own; equally important is actively working to ensure that those products are actually recycled and then used in products that continue the cycle.

Figure 1: A Means to a Beginning
Playing a Key Role

As the leading low-carbon aluminum maker, we are advancing the efficiency of material usage on a scale and magnitude not seen to date, and within a sector that is central to global economic and industrial activity.

We estimate, in fact, that one in every four aluminum beverage cans sold globally is recycled by Novelis (excluding China).

In FY15, we shipped more than 3,000 metric kilotons of flat rolled aluminum, which was used in a broad range of products – from beverage cans to automobiles and electronics to buildings.

Clearly, aluminum is not a niche product – and Novelis is not a small player. That means that the actions we are taking on sustainability have a truly meaningful ripple effect, creating real and substantial value for our customers, our end consumers, the economy, the environment and society.

Novelis is both the single largest buyer – and the single biggest recycler – of aluminum in the world.

Our flat rolled aluminum is used by hundreds of millions of consumers around the world every day.
We are very proud of what we have achieved so far.

We recognize, however, that we cannot achieve our vision for a circular economy on our own. Rather, it will require collaboration among a broad range of stakeholders and partners – from our customers, brand holders and others in our industry, to nongovernmental organizations, policymakers and more. Truly closing the loop requires working to shape and shift policies, practices and behaviors that are outside our direct sphere of control – particularly related to post-consumer recycling, scrap collection infrastructure, consumer product design, and recycling and climate policies. That’s why we are partnering with a variety of external organizations and participating in a number of initiatives to advance these common objectives (see p. 18).

By making our products using nearly 50% recycled metal in FY15, Novelis has cut our absolute GHG emissions by 13% in five years, while increasing aluminum production by 5% over the same period.

Business Drivers

We believe the business case for the circular model is clear, led by significantly improved supply chain efficiency and continuity. The new model means we are less reliant on third-party primary aluminum producers and have reduced our reliance on carbon-intensive primary aluminum. By collecting aluminum scrap and recycling it into sheet ingot for use in our own operations, we are better able to manage and anticipate costs and make reliable projections about incoming metal shipments. In short, we are increasingly self-sufficient and in control of our supply agenda.

The sustainability benefits of the circular model are also abundantly clear. The vast majority of energy used and GHGs emitted that are associated with FRP are a consequence of the production of the primary metal, rather than the transformation of the metal into coils.

With our customers increasingly focused on sustainability, the low-carbon nature of Novelis aluminum is a valuable differentiator.
Our Operating Environment and Business Performance

Global demand for aluminum FRP continues to increase, driven by long-term economic growth in emerging markets, as well as by sustainability drivers such as climate change, rising energy demands and natural resource scarcity. The inherent properties of aluminum – strong, malleable, conductive, infinitely recyclable and lightweight – mean that substituting aluminum for other materials has the potential to meet demanding performance requirements, while also reducing energy use and GHG emissions.

Since 2011, Novelis has tripled its automotive sheet capacity.

The benefits are all the more pronounced when recycled aluminum is used, since recycling aluminum requires just 5% of the energy – and generates just 5% of the associated GHG emissions – compared to producing primary aluminum.

The largest growth is concentrated in the automotive sector, where car manufacturers are significantly increasing their use of aluminum as a means of lightweighting vehicles. Reducing vehicle weight is a key enabler for achieving the fuel-efficiency increases that consumers are demanding and governments around the world are mandating.

Economic growth and material substitution continue to drive increasing demand globally. In the beverage can market in North America, however, declining consumer demand for carbonated soft drinks has led to slowing demand for aluminum can sheet in that region.
Positioning Novelis to Meet Demand

Since 2011, Novelis has made approximately $2 billion in capital investments in strategic locations to position the company to meet the growing demand for premium aluminum FRP. Our investments have been focused on expanding our recycling operations and production capacity to serve the automotive, beverage can and high-end specialties markets.

Our expansion strategy has been focused, in particular, on increasing our capacity to serve the fast-growing automotive sector, to which Novelis is the world’s leading supplier of aluminum sheet.

Recently Completed and Ongoing Expansion Projects in FY15

1 North America: Oswego
Three automotive continuous annealing solution heat-treatment (CASH) lines
Automotive CASH line #3

The first two lines at our Oswego facility are producing at full capacity, with a third line currently being commissioned.

2 Europe: Nachterstedt
Recycling plant
CASH Line #2

We opened the world’s largest and most technologically advanced aluminum recycling center in Nachterstedt, Germany (see p. 28).

3 South America: Pinda
Can coating
Recycling

We concluded an expansion of our Pindamonhangaba (Pinda) recycling center in Brazil and installed a new can coating line.

4 Asia: Changzhou
Automotive CASH line

We opened a new plant in Changzhou, China – that country’s first manufacturing facility dedicated to producing heat-treated aluminum sheet for the automotive industry.
Refining Our Portfolio and Product Mix

Our capital investments are aimed at shifting our portfolio to be more focused on higher-value, lower-carbon products that offer the potential for greater recycled inputs and end-of-life recycling. To accelerate that shift, in parallel with our expansion projects, we are continuing to exit primary-aluminum-based product lines. In FY15, we completed the sale of our North American consumer foil products business. During the year, we also closed our Ouro Preto primary aluminum smelter and sold the majority of our associated hydroelectric generation operations in Brazil, ending our involvement in the production of primary aluminum.

We are also applying our industry-leading research and technology capabilities to evolve product design specifications to increase recycled content. In recent years, we have made innovative, sustainable products commercially available in product categories that have traditionally been primary-aluminum-based.

Market Factors

In FY15, Novelis achieved record total shipments and drove benefits from expanding low-cost recycling capabilities worldwide. Our profitability (as measured by adjusted EBITDA) grew 2% compared to the year prior. The increase was primarily driven by higher shipments, a favorable product mix due to a strategic shift to grow automotive shipments and cost benefits from using a higher percentage of recycled metal inputs.

Partially offsetting these gains were higher costs associated with the startup and support of new capacity, lower pricing in some Asian markets and unfavorable foreign exchange and metal price lag. In addition, the aluminum FRP industry in Asia is experiencing structural overcapacity, led by significant new capacity being added in China, which has put downward pressure on prices.

The long-term trends driving demand for aluminum FRP are firmly established, and the investments we’ve made are positioning Novelis to meet and capitalize on that demand. While these market factors and other economic headwinds have delayed our return on investment, we remain confident that our strategy is sound and serves as a valuable competitive advantage for our company.

We are already generating cost benefits from using increased recycled content. In addition, as new producers in Asia and elsewhere enter the FRP market with mainly commoditized products, Novelis’ leading-edge technology capabilities and low-carbon, premium aluminum products will be an increasingly important differentiator.
Sustainability Strategic Objectives and FY15 Performance

While our increased use of recycled aluminum is central to our shift toward a low-carbon, circular business model, it’s just one element of our broader sustainability strategy.

We are also committed to implementing sustainable manufacturing processes within our own operations, driven by targets to minimize energy and water use and send zero waste to landfill. In addition, we are focused on what we view as the foundation of being a sustainable enterprise: operating ethically and responsibly, protecting the health and safety of our people, ensuring we develop and maintain an adequate talent pipeline, and contributing to and being responsive to our local communities.

In FY15, Novelis continued to make steady progress toward many of our sustainability targets, including reaching a 53% recycled inputs run rate by the end of the year, for an average of 49% recycled inputs for the full year.

Despite the growth in recycled inputs, Novelis’ absolute GHG emissions increased 5% between FY14 and FY15. This increase was driven largely by increased sales, which were up 5% over the year prior. Another contributing factor was the atypical volume of internal scrap production associated with the ramp-up process of our recently completed and ongoing expansions. One of Novelis’ top priorities is ensuring our new facilities begin operating at peak efficiency levels, which will enable us to get maximum value from those assets.

In FY16, the midway point of our 10-year journey toward our 2020 targets, we will be stepping back to assess whether we need to adjust any of our existing targets, or add any new ones, based on our learning to date and any relevant changes to our company, our operating environment and stakeholder interests.
Materiality

Novelis regularly reviews and evaluates the set of issues that are most important to our business and our stakeholders.

In 2011, Novelis conducted a materiality assessment, which informed the development of our sustainability strategy and priorities and helped us establish our 2020 targets. Using the findings of this initial assessment as the basis, we regularly review our material issues as part of our ongoing engagement with external stakeholders, as well as our business planning, strategy development and risk management processes.

Since conducting the initial assessment, engagement with a range of internal and external stakeholders affirmed that the broad set of issues we identified as most material for Novelis and our stakeholders remains relevant and accurate.

**Figure 2. Novelis’ Material Issues and the Location of Their Impacts**
Stakeholder Engagement and Partnerships

Stakeholder engagement is a critical mechanism for Novelis to gain insight, perspectives and knowledge about the issues facing our company and the expectations of those we impact across our value chain.

Our stakeholders include employees and employee representatives, customers, suppliers, debt holders, our Board and investors, regulators and policymakers, the communities in which we operate, and other organizations concerned about the social, environmental and climate impacts of the production and use of aluminum products.

We engage with our stakeholders on an ongoing basis and through a variety of mechanisms. For example, we have formal community engagement, giving and volunteer programs in place at all of our sites. We engage with our customers and suppliers directly on many projects, as well as at industry and sustainability convenings. See the following pages for examples of how we are partnering with a range of organizations.

Public Policy Engagement

The majority of Novelis’ advocacy on global and national public policy issues is conducted through industry associations and by engagement with policy, research and advocacy organizations, rather than by directly engaging with policymakers.

Climate change is a key policy priority for Novelis, and we support dialogue and action to address climate change and facilitate the transition to a low-carbon economy. We support policies that take a holistic approach by factoring in overall life cycle impacts and benefits, including recycling. Novelis believes that the United States’ new Clean Power Plan, which will set a unique carbon dioxide emissions rate for the power sector in each state, is a critical step in the right direction in moving the United States toward a clean economy. As a signatory to the Climate Declaration, a statement from Ceres and the Business for Innovative Climate & Energy Policy (BICEP) coalition calling on federal policymakers in the United States to take action on climate change, Novelis publicly expressed support for adoption of the Clean Power Plan.

Another key focus of our policy advocacy in recent years has been reforming the warehousing practice of the London Metal Exchange (LME). As a result of speculative financial transactions and the systematic delaying of metal shipments from LME warehouses, the supply of aluminum into the market has been artificially constrained and, as a result, premiums have been artificially inflated. This situation has adversely affected our and our customers’ businesses. It has also hurt consumers, who have paid more than they should have as a result of the inflated aluminum premiums, which were passed on to them in the form of increased prices for goods.

Novelis has collaborated with other companies, mainly from the beverage and packaging markets, in the Aluminum User Group (AUG). Together with other members of the AUG, we have had discussions with government and regulatory bodies in the United States and Europe to seek their help to intervene and improve regulation in this area. In addition, in November 2014, Novelis testified before the U.S. Senate Committee on Homeland Security & Governmental Affairs Permanent Subcommittee on Investigations at a hearing on Wall Street banks’ involvement in physical commodities holdings to advocate for regulatory changes to address the market distortions.
Partnering to Achieve Our Goals

Stakeholder engagement is a central aspect of implementing our sustainability strategy because we recognize that advancing the circular economy requires partnership — it is not something any one business, government or nongovernmental organization can achieve on its own. As a result, we are developing relationships with a broad range of external organizations to advance our common objectives. The following are some key examples:

Ellen MacArthur Foundation

The Ellen MacArthur Foundation was launched in 2010 to accelerate the transition to a circular economy. In FY15, Novelis was inducted into the Foundation’s Circular Economy 100 (CE100), a global platform bringing together leading companies, emerging innovators, cities and regions working to advance that goal. As part of its membership in the CE100, Novelis will play an active role in advising and collaborating with members on circular economy initiatives and serve as a leader and representative of circular economy practices, in addition to supporting the CE100’s research and education-based initiatives.

“Since signing the Ceres Climate Declaration in 2013, Novelis has provided a thoughtful business voice in the climate and energy policy debate, standing up for action when it was needed most. This past year, Novelis partnered with BICEP and spoke out in favor of the Environmental Protection Agency’s Clean Power Plan, and I look forward to seeing how Novelis uses its voice and influence to push for active and innovative compliance with the Plan. Going forward, Novelis has the credibility and the track record to change the conversation about the speed and urgency of our necessary transition to a low-carbon economy and, during this crucial year, we hope to see Novelis standing up for strong U.S. ambition at the global talks in Paris.”

Anne Kelly, Director, Business for Innovative Climate & Energy Policy (BICEP)

Ceres

Ceres is a nonprofit organization whose mission is to mobilize investor and business leadership to build a thriving, sustainable global economy. Novelis has engaged with Ceres as a signatory to Ceres’ Climate Declaration since FY13. In FY15, we partnered to promote Ceres’ new Brewery Climate Declaration, which calls on other business leaders, policymakers and the public to take action on climate change (see p. 61).

“Since signing the Ceres Climate Declaration in 2013, Novelis has provided a thoughtful business voice in the climate and energy policy debate, standing up for action when it was needed most. This past year, Novelis partnered with BICEP and spoke out in favor of the Environmental Protection Agency’s Clean Power Plan, and I look forward to seeing how Novelis uses its voice and influence to push for active and innovative compliance with the Plan. Going forward, Novelis has the credibility and the track record to change the conversation about the speed and urgency of our necessary transition to a low-carbon economy and, during this crucial year, we hope to see Novelis standing up for strong U.S. ambition at the global talks in Paris.”

Andrew Morlet, CEO, Ellen MacArthur Foundation

“The circular economy presents new opportunities to develop circular business models through collaboration, at all levels of the value chain. Such collaboration is essential if we are to successfully scale up and achieve the system-level change needed for transition to the circular economy.”

Andrew Morlet, CEO, Ellen MacArthur Foundation
Forum for the Future
Forum for the Future is a nonprofit working globally with business, government and other organizations to solve complex sustainability challenges. Novelis has collaborated with Forum for the Future on a variety of efforts exploring how to take sustainability disruptive innovation to scale. In FY15, Forum for the Future and Novelis hosted a joint workshop in Nachterstedt, Germany, that brought together global experts from across the aluminum value chain to discuss how to advance the circular economy.

“Production and use of aluminum is heavily resource-intensive, yet aluminum plays a key role in the global economy. Finding ways to make the system as sustainable as possible is therefore essential, but this will require radical change across the industry – in business practice, development and application of new technology, shifts in consumer behavior, and regulatory frameworks. We need bold industry leadership, and this is what we believe we are seeing from Novelis. But Novelis can only do so much on its own. It is particularly important to make changes that address the whole system and lead to absolute reductions in resource use. Gains in one area can easily be offset by losses elsewhere, or cancelled out completely by overall growth in aluminum use.”

Jonathon Porritt, Founder, Forum for the Future

Enterprise for a Sustainable World
Enterprise for a Sustainable World (ESW) seeks to accelerate the transformational change required for companies to become truly sustainable enterprises – and to simultaneously create a sustainable world. Novelis has sponsored and hosted the ESW’s Base of the Pyramid (BoP) Global Summits and is working with the ESW to explore opportunities to develop post-consumer recycling-related BoP business models and microenterprises.

“We at ESW highly value working with Novelis because our interests are almost completely aligned: ESW is focused on facilitating the transformation to a sustainable world through business, and Novelis is focused on being an industry disrupter to become the world’s first closed-loop aluminum company. While the challenge of building and scaling take-back initiatives from the base of the economic pyramid is daunting, together we have an opportunity to create social and environmental value while simultaneously building a competitively superior business model.”

Stuart Hart, Steven Grossman Endowed Chair in Sustainable Business, University of Vermont Business School; S. C. Johnson Chair Emeritus in Sustainable Global Enterprise, Cornell University; Founder and President, Enterprise for a Sustainable World
Georgia Institute of Technology

Located in Atlanta, the Georgia Institute of Technology (Georgia Tech) is a leading research university committed to improving the human condition through advanced science and technology. Novelis has had a longstanding relationship with Georgia Tech through our recruiting efforts and, more recently, has partnered with the university to integrate sustainability content into its MBA curriculum, sponsored sustainability-related events held at the university and supported sustainability-focused student research projects.

“Novelis continues to be a valuable partner in helping the Ray C. Anderson Center for Sustainable Business achieve our mission to use the power of business, technology and innovation to build a sustainable future. This partnership exemplifies a great corporate–academic engagement for us, where students help solve current sustainability challenges and gain real-world experience; the faculty share expertise, while remaining on the cutting edge of, and building on, their research; and an ongoing dialogue provides fresh perspective and input for both organizations.”

Howard Connell, Managing Director, Ray C. Anderson Center for Sustainable Business, Georgia Institute of Technology, Scheller College of Business

World Wildlife Fund

The World Wildlife Fund (WWF) is one of the world’s leading conservation organizations and, in FY14, Novelis was accepted into WWF’s Climate Savers Programme, an exclusive initiative to encourage companies to reduce their operational carbon footprint and act as agents of change within their spheres of influence. Novelis is the first metals company accepted into the program and, as a Climate Savers member, Novelis will report its progress on key sustainability goals to WWF.

“Novelis is working to set a new standard of climate protection excellence for the industry. As a Climate Savers partner, we anticipate that Novelis will uncover more savings as it harvests efficiency opportunities, cutting more greenhouse gas emissions than anticipated. WWF is proud of the targets we developed with Novelis. Together we will affirm that climate protection and prosperity go hand in hand.”

Matthew Banks, Manager – Private Sector Engagement, World Wildlife Fund U.S.
Sustainability Management and Governance

At Novelis, we take an integrated and cohesive approach to managing sustainability issues alongside, and on par with, our other financial and operational objectives.

Corporate Governance and Policy Framework

Management of our company starts with our strict adherence to corporate governance principles. Novelis’ Board of Directors is composed of six directors, all of whom were appointed by our sole shareholder, Hindalco Industries Limited, which is a publicly held company whose shares are listed for trading on the Bombay Stock Exchange, the National Stock Exchange of India and the Luxembourg Stock Exchange. Our Board oversees and provides guidance on the overall direction of our company, while our executive officers are responsible for day-to-day management.

Novelis has a Code of Ethics for Senior Financial Officers, which reflects our commitment to financial integrity and to full and accurate financial disclosure in compliance with applicable accounting policies, laws and regulations.

Novelis’ Employee Code of Conduct provides guidelines for employees to ensure that they are acting within Novelis’ standard of ethics.

The Code covers

- Acting with integrity and in Novelis’ best interests
- Promoting a desirable work environment
- Safeguarding the company’s assets
- Engaging in ethical interactions with government
- Dealing fairly with third parties

Novelis also has a Supplier Code of Conduct, which provides guidelines for how we expect our suppliers to conduct business in an ethical and responsible manner.

Sustainability Management at Novelis

Because our sustainability strategy is integrated into our corporate strategy and cuts across all aspects of our business, implementation is by necessity cross-functional. All of Novelis’ senior executives have responsibility for delivering on some aspect of the plan, and sustainability aspects are integrated into a range of policies and systems we use to manage our company.

Our sustainability targets, alongside financial and operational ones, essentially form the company’s scorecard, which we use to monitor our performance against our strategic objectives. Novelis’ sustainability programs, initiatives and progress are reviewed at a minimum at the periodic Global Operating Committee meetings, and adjustments are made based on the results of these reviews.

Where relevant, the Board of Directors is briefed on sustainability issues as part of Novelis’ strategy review by our President and Chief Executive Officer.