



Big In Your Life

Our metals make the world

**GREENER  
STRONGER  
SMARTER**



**HINDALCO INDUSTRIES LIMITED**  
Annual Report 2018-19



---

**Mr. Aditya Vikram Birla**

**We live by his values**

Integrity, Commitment, Passion, Seamlessness and Speed

# CHAIRMAN'S LETTER TO SHAREHOLDERS

## GLOBAL ECONOMY

The global economy recorded a healthy growth of 3.6% in CY 2018. During the second half of the year, however, the global economy lost some momentum, mainly on account of the increased trade frictions between the US and China, and the tightening of financial conditions. The International Monetary Fund (IMF) expects growth to decelerate to 3.3% in CY 2019 and its projections suggest that all three major engines of the global economy, the US, China and the Eurozone are likely to decelerate in CY 2019. On the positive side, however, the IMF expects world economic output to recover and grow at 3.6% in CY 2020.

Of late, there have been a few growth-supportive factors such as the announcement of economic stimulus in China and halt to monetary policy tightening in developed countries. But the business sentiment has become somewhat clouded with the apparent setback in the US-China trade talks, the spread of trade frictions to technology sector and the increased intermingling of economic policies. These challenges signal that global commodity prices could be under pressure.

## INDIAN ECONOMY

Indian economy exhibited mixed record in the just concluded fiscal. Gross Domestic Product (GDP) growth slowed from 7.2% in FY 2017-18 to 6.8% in FY 2018-19. Below-normal rainfall in CY 2018, tight financial conditions faced by the non-banking financial sector and moderation of external demand were the key challenges faced by the economy. Consumption growth declined during the second half of the year, but there were some signs of revival in the investment cycle, as gross fixed capital formation improved from 31.4% of GDP in FY 2017-18 to 32.3% in FY 2018-19.

Macroeconomic indicators broadly remained stable. Low inflation has created the space for monetary policy easing, which will also help support growth revival. The fiscal deficit target





## CHAIRMAN'S LETTER TO SHAREHOLDERS (continued)

for FY 2018-19 was adhered to, despite a shortfall in tax revenues. While the current account deficit was high at 2.6% of GDP during the first three quarters of FY 2018-19, the softness in international oil prices portends its narrowing in the coming quarters. Following the resounding political mandate for the ruling Government, expectations of further economic reforms and impetus to large infrastructure investments have been reinforced. These are reflected in strong inflows in the capital market, taking equity indices to record levels in the weeks following the general elections.

India's medium-term growth prospects continue to be robust. Significant reforms undertaken in the recent years such as Goods and Services Tax and insolvency code would raise India's growth potential in the coming years, amplifying the long-term structural strengths of the India growth story. In the near term, however, uncertainty over the monsoon season and the heightened global risks present headwinds for FY 2019-20. Accordingly, the outlook for the Indian economy in FY 2019-20 is one of cautious optimism at this juncture.

### THE METALS SECTOR: IN BRIEF

It was a volatile year for aluminium and copper. The macroeconomic scenario emerging from the US-China trade dispute and the moderation of economic activities in Europe and China resulted in the lacklustre growth of the aluminium and copper sectors in CY 2018.

Production disruption at one of the world's largest alumina refineries in Brazil pushed alumina prices to an all-time high of \$700/tonne in CY 2018. The levying of 10% import tariff on all aluminium products and imposition of sanctions on UC Rusal by the US were the key highlights of the aluminium industry in the first half of CY 2018.

The amplification of the trade war and lifting of sanctions on UC Rusal by the US were the most significant events for the aluminium industry in the second half of CY 2018. These events led to a sharp fall in global aluminium prices to below \$1,900 tonne by end of the second half of CY 2018 from the peak of \$2,700 tonne in the first half of CY 2018.

The growth in consumption of aluminium in regions excluding China, was at ~2% in CY 2018, compared to a growth of around 3% in CY 2017, owing to subdued demand from the construction, electrical, machinery & equipment and transportation sectors. China too recorded a significant fall in demand – from the robust 8% growth in CY 2017 to 3% in CY 2018 on account of the trade war and economic slowdown.

In the copper market, there were fears of major supply disruptions owing to key labour negotiations due in CY 2018. However, the smooth conclusion of wage negotiations assuaged fears. In CY 2018, benchmark TC/RC recorded a moderation from 23.7 c/lb in CY 2017 to 21.1 c/lb due to supply constraints from major mines. The demand growth for refined copper in regions excluding China, continued to be modest at around 1% in CY 2018 as compared to 0.3% in CY 2017. Copper demand growth in China slipped marginally to 4.5% in CY 2018 from 5% in CY 2017. The ban on grade 7 scrap imports by China supported demand for refined copper in CY 2018.

In the domestic market, aluminium continued to grow at over 9% for the second year in a row. The 9.5% growth in FY 2018-19 was driven by the transportation, construction and consumer durables sectors. Copper demand was robust at 10% in FY 2018-19, as compared with a modest 2% growth in the year earlier. Going forward, demand for aluminium and copper in India is expected to surge driven by the growing needs of the power and renewables sectors, as well as the construction (including housing) and consumer durables segments. However, rising imports remain a key concern for domestic aluminium and copper producers.

In the domestic market,  
aluminium continued  
to grow at over 9% for  
the second year in a row.

## YOUR COMPANY'S PERFORMANCE

---

Your Company registered yet another record consolidated performance in FY 2018-19, despite a challenging business environment. This resilient show was driven by a record performance from Novelis, the Indian aluminium business and a sustained performance by the copper business.

Your Company registered its highest ever consolidated EBITDA of ₹16,627 Crore on a turnover of ₹1,30,542 Crore. Your Company's aluminium and copper business in India and Novelis continued to deliver exceptional operational and financial performance. The major enablers were stable operations, better efficiencies and realisations and supportive macros in the first half of FY 2018-19.

Your Company (including Utkal) continued to achieve record aluminium and alumina production levels at 1.295Mt and 2.893Mt, respectively. All the plants operated at their designed capacities. Production of aluminium value-added products (excluding wire rods) stood at 321 Kt in FY 2018-19 reflecting, a growth of 5% y-o-y.

In the copper business, cathode production was 347 Kt, lower compared to the year earlier due to the planned maintenance shutdown. Continuous Cast Rod production was at 245 Kt, up 47% on account of ramp-up of the new CCR#3 plant at Dahej which was commissioned a year before.

Novelis reported yet another remarkable performance this year with a record shipment of 3.274 Mt, up 3% over the previous year, and an adjusted EBITDA of \$1.368 Billion, up 13%. The adjusted EBITDA/tonne of \$418 was the highest ever. Novelis continues to improve its product mix with the share of the automotive sector at 20% and beverage can sheet at 63%. Your Company reported an increase in the share of recycled contents to 61% in FY 2018-19, from 57% a year earlier. During the year, your Company announced the acquisition of Aleris at an enterprise value of \$2.58 Billion including the assumption of debt. This will accelerate your Company's growth and put it on the path to become the leading aluminium value-added player in the world.

## DELEVERAGING

---

Your Company, with its continuous focus on strengthening the balance sheet, prepaid ₹1,575 Crore of long-term project loans in India in FY 2018-19. This led to a noteworthy improvement in consolidated net debt to EBITDA at 2.48x at the end of March 2019.

## THE ADITYA BIRLA GROUP: IN PERSPECTIVE

---

The Aditya Birla Group in many ways is a proxy for a rising India, given the diversified nature of our businesses.

The year 2018-19 was been one of strategic decisions and partnerships; with many transformational business transactions: Vodafone-Idea merger, purchase of Binani Cement, acquisition of Saktas in textiles and the pending acquisition of Aleris in metals. We demonstrated the courage to think mega scale, to act decisively and to be calm in a volatile and dynamic environment. We reaffirmed the commitment and trust that we can reinvent ourselves and be game changers in the industry. Consequently, we are globally the third largest cement Company (outside of China) and among the top 3 telecom players in the world. We closed the year with revenues of \$48.3 Billion and EBITDA of \$6.1 Billion.

We believe our people and people processes give us a definitive edge to manage scale and yet remain nimble to embrace change proactively.

I am delighted to share that our robust people processes, that have been the bedrock of our success over the years, continue to evolve and stay contemporary. Let me give you a flavour of what we have accomplished and how it is making a difference.

As a Group, we continue to be deeply invested in our talent pipeline across levels. At one level, we have on-boarded over 200 fresh recruits from top engineering and management institutes for premier trainee programmes, and at the other, we are actively building an internal talent pipeline. Our Employee Value Proposition of 'A World Of Opportunities' is truly coming

Highest-ever consolidated revenue

**₹1,30,542** Crore

## CHAIRMAN'S LETTER TO SHAREHOLDERS (continued)

alive with this eclectic mix of experienced and young leaders. We have developed a robust leadership pipeline with a healthy ratio of 1:1 identified successors for more than 300 leadership roles across the Group.

Gyanodaya, the Aditya Birla Group Centre for Leadership Development, continues to build curiosity for new learning, self-reflection and coaching in existing and future leaders. Broad-based leadership programmes like the Chairman Series brought 300 top leaders across the globe together on marketing, finance and strategy and built cohesion and cross-functional appreciation.

Functional Academies have been established in 5 distinct areas: Human Resources, Manufacturing, Sales/Marketing, Customer Centricity, Information Technology and Finance to develop cutting-edge functional capabilities in these areas. Over the past three years, over 5,000 employees have refreshed their skills, thereby enhancing the functional design and experience across the Group.

ABG Core Conclave, of middle managers across businesses, enabled 3,000 managers and business leaders to share nuances and have candid conversations on missed opportunities and challenges ahead. This unique platform reinforced the OneABG connect, brought new perspectives and gave me a first-hand feel of the excitement, passion and commitment of our vibrant next generation leaders.

Businesses have adopted new areas like Robotic Process Automation, Artificial Intelligence, Machine Learning, Analytics and Design Thinking. They are experimenting with the same in manufacturing processes, servicing customers and logistics, thus enhancing the agility of the business and turnaround times, dramatically.

I believe the real test of HR processes lies in advancing business outcomes, and we have demonstrated a track record of doing just that. Greenfield projects were

commissioned ahead of schedule, and at a lower cost, acquired units were rebranded and recommissioned in days instead of months. While saving precious capital and related resources, these initiatives inspire confidence within the organisation and in the ecosystem.

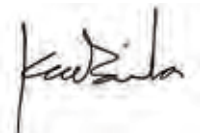
The Aditya Birla Group, over the years, has institutionalised best practices that have led to efficiency, safety, sustainability, and stronger businesses. We have systematically brought the customer to the centre of our business discussions. As we continue to strive on this front, we need to get closer to the end consumer and innovate continuously to ensure a faster growth trajectory. With this in mind, we have constituted the Central Innovation Team. This team will not only build the innovation framework and pipeline but also bring an outside-in perspective to our businesses. This team will work closely with business R&D and marketing teams, technology talent, and a strong team of data scientists. We are also in the process of evaluating partnerships with global universities and start-ups relevant to the sectors in which we operate. The intent is to shift the centre of gravity of the Company closer to the consumer.

We are determined to innovate. We are determined to grow.

I am excited with the speed and precision with which we are transforming ourselves to be future-focused while remaining steadfast to our time-tested values. We move into FY 2019-20 with the confidence that we have the right capabilities to seize every opportunity that comes our way.

The best is yet to come. Thank you for your continuing support.

Yours sincerely,



Kumar Mangalam Birla  
Chairman

Over the past three years,  
over 5,000 employees have  
refreshed their skills, enhancing  
the functional design and  
experience across the Group.

# INSIDE THE REPORT

## CORPORATE OVERVIEW

Hindalco at a glance	6
Our businesses	8
Our manufacturing facilities	10
Our innovations	12

## PERFORMANCE REVIEW

Our business model	16
Our investment case	18
Message from the Managing Director	20
Operational highlights	24
Key performance indicators	26
External growth drivers	32
Our strategic priorities	34

## STRATEGIC OVERVIEW

Upcoming expansion projects	36
Digital transformation at Hindalco	40
Customer engagement	42
Focus on recycling	44

## PEOPLE AND GOVERNANCE

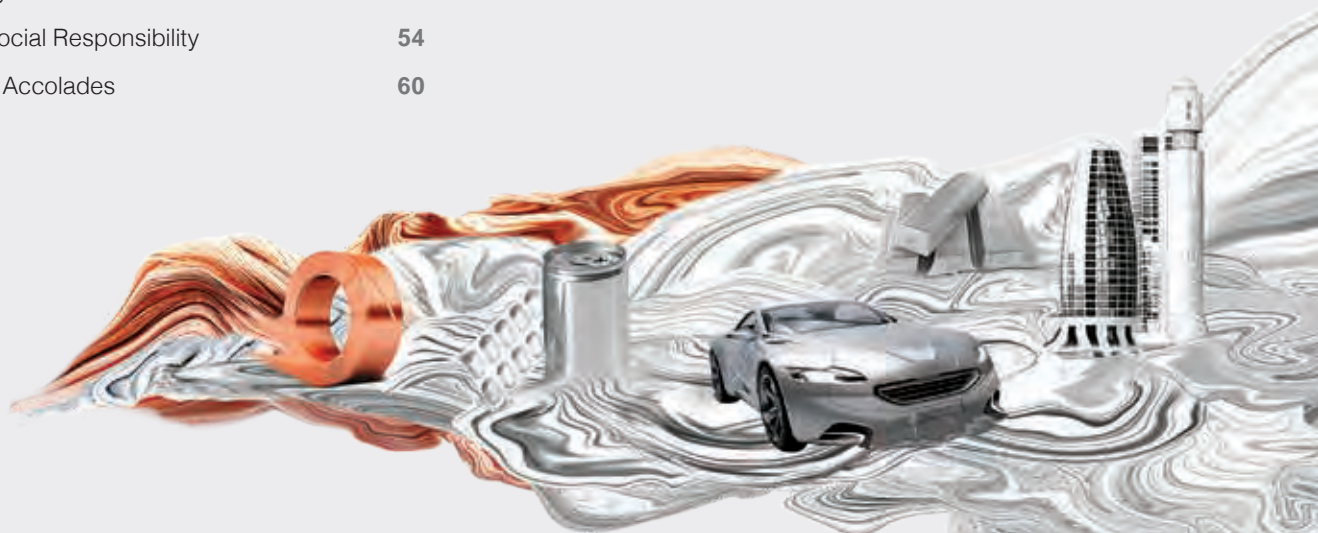
People at Hindalco	46
Corporate information	49
Safety	50
Sustainability	52
Corporate Social Responsibility	54
Awards and Accolades	60

## STATUTORY REPORTS

Management Discussion and Analysis	62
Financial highlights	80
Directors' Report	84
Sustainability & Business Responsibility Report	128
Corporate Governance Report	131
Shareholder information	145
Social Report	154

## FINANCIAL STATEMENTS

Independent Auditor's Report on the Standalone Financial Statements	158
Standalone Balance Sheet	167
Standalone Statement of Profit and Loss	169
Standalone Statement of changes in Equity	171
Standalone Statement of Cash Flows	173
Notes forming part of the Standalone Financial Statements	175
Consolidated Financial Statements	259
Glossary of terms	375





## HINDALCO AT A GLANCE

**A force to reckon with**

Hindalco Industries Limited is the metals flagship company of the Aditya Birla Group. We operate in three businesses namely primary aluminium, downstream aluminium and copper. We are among the world's largest integrated aluminium producers. We are also a global leader in copper comprising of a world-class smelter and fertiliser plant along with a captive jetty at Dahej, Gujarat. It is also one of the largest single-location custom copper smelters in the world. Our subsidiary, Novelis, is the world's largest aluminium Flat Rolled Products (FRP) producer and recycler.

We provide high-quality, environment-friendly products across our businesses through our robust manufacturing capabilities. Our domestic aluminium plants (production capacity of 1.3 Mtpa) are present across the manufacturing value chain from bauxite mining, alumina refining, coal mining, aluminium smelting to downstream rolling, extrusions and foils. By setting up captive power plants with long-term coal linkages and four captive mines as well as alumina refineries across multiple locations in India, we have secured the availability of key inputs at competitive costs. Utkal Alumina International Ltd., our fully-owned subsidiary, is among the world's most economical alumina producers. With a smelting capacity of 500 Kt per annum, our Dahej-based copper plant enjoys integrated port facilities and is India's largest privately owned gold producing plant. It has become India's largest producer of Value-added Products (VAP) namely Continuous Cast Copper Rods (CCR).

Novelis, with its 61% recycling capability, is the largest aluminum recycler and producer of rolled aluminum products in the world. It operates an integrated network of technically advanced rolling and recycling facilities across North America, South America, Europe and Asia. It produces best-in-class aluminium automotive body sheets, beverage can sheets and high-end specialities. Marquee brands in the automotive and beverage sectors such as Coca-Cola, AB Inbev, Ford, Jaguar Land Rover and Samsung to name a few are its customers.

The multiple accreditations accorded to us are a strong testimony to the high-end quality of our operations and products. Hindalco enjoys the Star Trading House status in India. Our aluminium is classified under the high-grade aluminium contract on the London Metal Exchange (LME). Our Copper too is registered on the LME with Grade A accreditation.

**OUR PURPOSE****Why we exist, what we do, why we do it?**

We manufacture materials that make the world



**Al**  
Aluminium  
26.982

- Hindalco Industries Limited
- Utkal Alumina International Limited
- Novelis Inc.



**Cu**  
Copper  
63.546



Hindalco Industries Limited



## OUR VALUES

### Integrity

*Honesty in every action*

Acting and taking decisions in a manner that these are fair, honest following the highest standards of professionalism and are also perceived to be so

### Commitment

*Deliver on the promise*

On the foundation of integrity, doing what it takes to deliver, as promised

### Passion

*Energised action*

Missionary zeal arising out of an emotional engagement with work

### Seamlessness

*Boundary less in letter and spirit*

Thinking and working together across functional silos, hierarchy levels, businesses and geographies

### Speed

*One step ahead always*

Responding to stakeholders with a sense of urgency

## FY 2018-19: PERFORMANCE HIGHLIGHTS

Consolidated Revenue

**₹1,30,542 Crore**

⬆ 12.7%\*

Consolidated EBITDA

**₹16,627 Crore**

⬆ 10.7%\*

Consolidated PAT

**₹5,495 Crore**

⬆ 21.6%#

Consolidated net debt to EBITDA

**2.48<sub>x</sub>**  
**versus 2.82x\***

### Hindalco India business – Highest-ever sales

Aluminium metal sales\*\*

**1.3 Mt**

Copper VAP

**243 Kt**

Employee satisfaction survey score

**87%**

CSR initiatives beneficiary numbers

**1.2 Million +**

### Number of trees planted in/near facilities

Aluminium and mines

**4,05,083**

Copper

**14,634**

### Novelis – Highest-ever overall shipments

**3.3 Mt**

\* As compared to FY 2017-18

# Adjusted for FY 2017-18 Tax effected Exceptional Items.

\*\* Including wire rods and other VAP

## OUR BUSINESSES

## Engines of growth



Aluminium FRP plant in Hirakud, Odisha



## Aluminium

Utkal Alumina is among the most economical alumina producers globally

Aditya and Mahan smelters are in the first quartile of the cost curve

Production volume in FY 2018-19

Alumina	Aluminium metal	Aluminium VAP
<b>2,893 Kt#</b>	<b>1,295 Kt</b>	<b>321 Kt*</b>

EBITDA (FY 2018-19)

**₹5,202 Crore#**

## Products

- Ingots
- Wire rods
- Billets
- Flat Rolled Products (FRP)
- Foils and packaging
- Extrusions

## Brands

- Eternia Windows
- Maxloader
- Hindalco Extrusions
- Everlast Roofings
- Freshwrapp

## Applications

**FRP:** Pressure cookers, Non-stick cookware, Refrigerators, Air Conditioners (ACs), Fans, Water purifiers, Artificial ornaments, Gas cylinders, Knitting needles among others

**Extrusions:** Automotive, Building and Construction

## Asset Highlights

- Implemented three large greenfield projects, Utkal Alumina, Aditya and Mahan smelters between FY 2009-10 and FY 2016-17
- The projects are operating at their rated capacities

## Capacities

Utkal Alumina	Mahan Aluminium	Aditya Aluminium
<b>1,500 Kt</b>	<b>360 Kt</b>	<b>360 Kt</b>

\* Excluding wire rods

# Including Utkal Alumina