



Big In Your Life



Our metals make the world

**GREENER  
STRONGER  
SMARTER**

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



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**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.

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

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.

## 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.

Highest-ever consolidated revenue

**₹1,30,542** Crore

## 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 Suktas 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

## 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.

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## 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

**2.48x**  
**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



## Copper

One of the largest single location custom copper smelters in the world



## Novelis

Global leader in rolled aluminium products

Cathode	CC Rod	Di-ammonium Phosphate (DAP)	Overall shipments	FY 2018-19: Shipment mix (%)
<b>347 Kt</b>	<b>245 Kt</b>	<b>303 Kt</b>	<b>3,274 Kt</b>	<ul style="list-style-type: none"> <li>Can: 63</li> <li>Automotive: 20</li> <li>Specialities: 17</li> </ul>

EBITDA (FY 2018-19)

**₹1,469 Crore**

- Copper cathodes
- Continuous cast copper rods
- Sulphuric acid

- Birla Copper
- Birla Balwan

- Agrochemicals
- Automotive
- Consumer durables
- Electrical equipment
- Railways
- Wire and cable

- Captive all-season jetty
- Captive 135 MW power plant
- Captive oxygen plant
- ~70% cathodes converted to value-added copper rods
- ~42% share in domestic refined copper production

Copper cathode

**500 Kt**

Copper rod (including CCR#3)

**365 Kt**

Adjusted EBITDA (FY 2018-19)

**₹9,194 Crore**

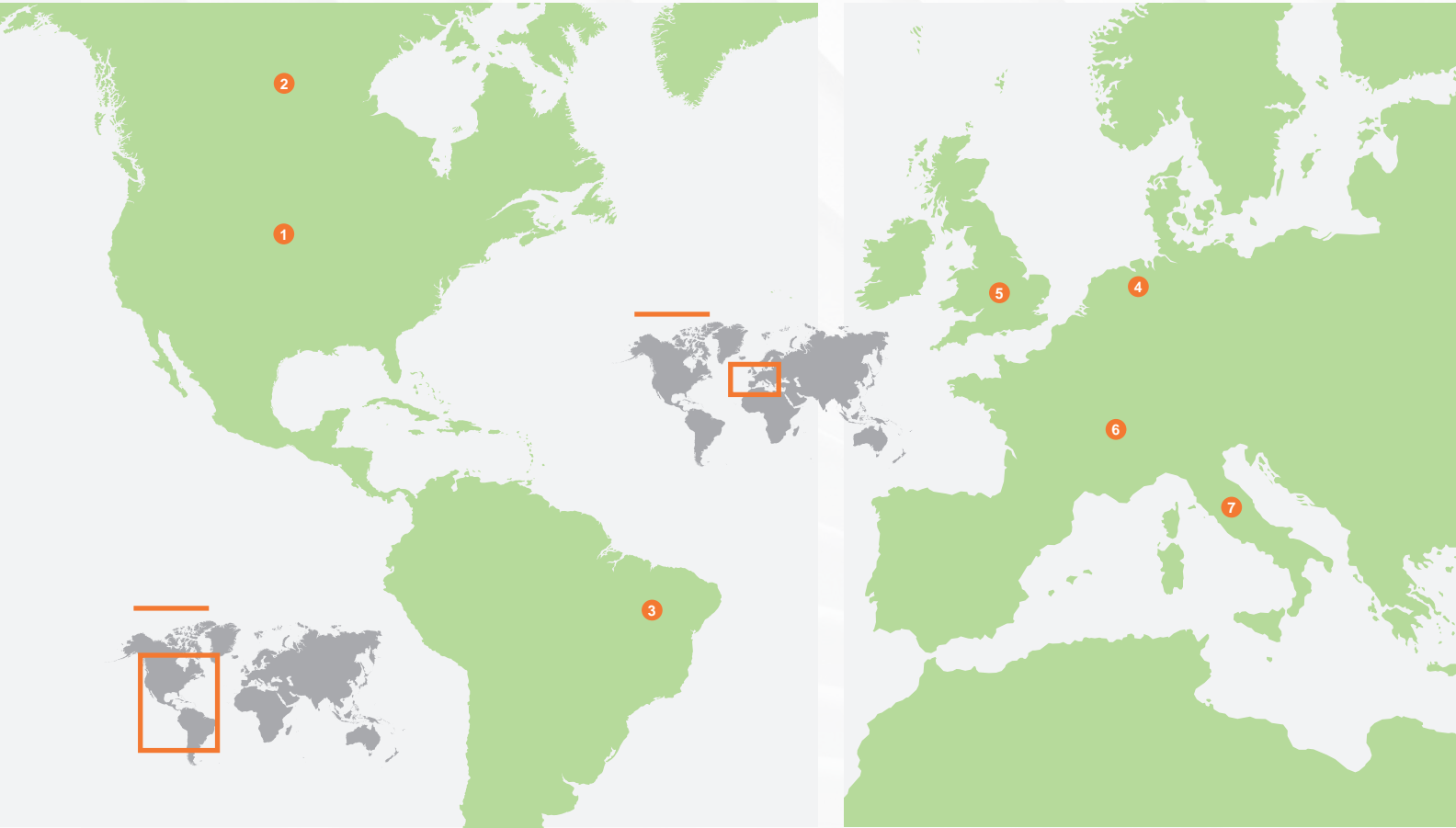
- Light and thick gauge flat rolled aluminum sheet

- Novelis Advanz
- Novelis Fusion

- Automotive; beverage packaging; industrial; electronics; transportation; architecture

- Generated an estimated 12% of the world's supply of aluminium rolled products

# OUR MANUFACTURING FACILITIES Designed for excellence



## Novelis Inc.

### North America

1 US       
    

**Kentucky, West Virginia, Georgia,  
New York, Indiana and Ohio**


2 Canada     
**Ontario**

### South America

3 Brazil       

### Europe and the UK



4 Germany        
     

5 UK  

6 Switzerland      

7 Italy     


















### Asia

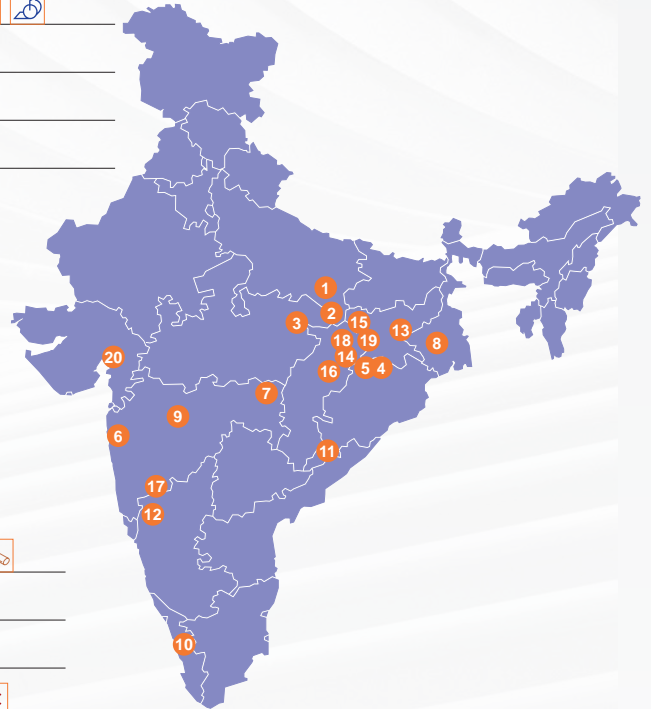
8 China  






9 South Korea      





Note: Maps not to scale



















- 1 Renukoot    
- 2 Renusagar 
- 3 Mahan  
- 4 Aditya  
- 5 Hirakud   
- 6 Taloja  
- 7 Mouda  
- 8 Belur 










- 9 Hindalco Almex Aerospace Limited (HAAL) 
- 10 Alupuram 
- 11 Utkal 
- 12 Belagavi  
- 13 Muri 
- 14 Gare Palma 
- 15 Kathautia 
- 16 Dumri 

- 17 Durgmanwadi/Chandgad 
- 18 Lohardaga 
- 19 Samri Region 
- 20 Dahej 

-  Power Plant
-  Aluminum Smelter
-  Aluminium Rolled Products
-  Aluminium Foil Plant
-  Aluminium Extrusion Plant
-  Innovation Centre
-  Recycling Facility
-  Heat Treatment – Automotive Finishing Lines

-  Alumina Refinery
-  Bauxite Mines
-  Coal Mines
-  R&D/Technology Centre
-  Heat Treatment
-  Sheet Ingot Casting
-  Cold Rolling
-  Integrated Copper Complex

-  Hot Rolling
-  Coating Facility
-  Brazing And Finishing
-  Converting Facility
-  Finishing Facility
-  Painting Facility
-  Aluminium Hard Alloys

## OUR INNOVATIONS

# Providing a competitive edge

Innovation is in our DNA, which enables us to lead in the market. We manufacture high-quality products that create sustainable value for our customers.

We leverage the strength of our two accredited innovation centres in Belagavi and Talaja to meet the evolving needs and preferences of our customers. Both these innovation centres are associated with Aditya Birla Science & Technology Company as well as with external research institutions.

We have also partnered with select industry organisations and experts to drive continuous quality enhancements in our products and to ensure that our products meet the changing industry specifications.

### Our partners include:

- Indian Institute of Technology
- NITI Aayog
- Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC)
- Institute of Minerals and Materials Technology (IMMT)



Hindalco has two innovation centres in India at Belagavi and Talaja



## Aluminium business

### Aluminium dry bulker

- We developed India's first indigenous aluminium dry bulker
- It can be used to carry dry commodities such as cement, alumina, fly ash, flour and so on
- These bulkers replaced steel which is the conventionally input for bulkers
- These bulkers are 50% lighter than steel bulker
- Each bulker saves up to 13,000 litres of fuel
- The bulkers help in achieving BS-VI emission targets
- The aluminium metal is 100% recyclable
- Non-corrosive with a lifespan three times higher than a steel bulker
- Can carry 2 tonne of additional material vis-à-vis a steel bulker
- Leads to annual savings of ~₹50,000
- Scrap value at 70% versus 10% for steel
- While we have already got some orders, our first customer was Aditya Birla Group company – Ultratech



## Copper business

### Aluminium-Jute packaging material

We combined the properties of aluminium foil and jute to develop a superior packaging material. Aluminium foils are impervious to moisture, bacteria and gases and jute is an environment-friendly natural material with elastic properties. We have partnered with the National Jute Board to explore applications of this product.

### Aluminium foil for Li-ion batteries

To address the Electric Vehicles (EV) market, we have developed aluminium foils, which can be used for the packaging of Lithium-ion (Li-ion) batteries. These foils are approved by the Indian Space Research Organisation (ISRO) and the Automobile Research Association of India (ARAI). These foils are expected to reduce the use of plastic in the manufacturing of Li-ion batteries and increase battery life.

### Aluminium bus

Modern buses with aluminium body are several hundred kilograms lighter than those built using steel. We are working closely with ARAI to develop buses with aluminium bodies, which will help increase the carrying capacity and reduce operating costs due to improved fuel efficiency.

In 2018, Birla Copper successfully produced 21 mm and 26 mm copper rods using the Contirod technology supplied by SMS Group, Germany. Being a major supplier to the Indian Railways, we believe these innovative and unique products will help the Company to capitalise on the opportunities in building metro/bullet trains and high-speed lines.

#### We are the first to produce

- 21 mm copper rod in India
- 26 mm copper rod in the world
- 26 mm copper rod via Contirod technology

#### Other innovation in copper products include:

- Higher number of variants in our value-added products category for downstream niche markets
- Production of 99.9% pure copper as per LME specifications
- Developed oxy-free copper products for various applications, including strip-manufacturing



Birla Copper is registered on LME as Grade-A copper brand

# Greener

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# Hindalco manufactures materials that make the world greener

Aluminium is more environment-friendly than steel, plastic and other materials. We are also one of the largest aluminium recyclers across the world. Our green journey starts right from sourcing our inputs where we are promoting sustainable mining and adopting some of the best practices to protecting the environment around our plants, mines and processing units. We are committed to operating in a responsible manner and deploying our finite resources optimally. By actively engaging and partnering across all the communities that we operate in, we are playing a pivotal role in their wellbeing and all-round development. Our efforts to make the world a greener place have been recognised by prominent authorities and organisations. We believe our sustainability journey has only begun.

## Novelis: Recycled content

<b>61%</b>	<b>57%</b>	<b>55%</b>
FY 2018-19	FY 2017-18	FY 2016-17

## OUR BUSINESS MODEL

# Value creation paradigm

### Inputs



#### Financial capital

- Equity: ₹57,502 Crore\*\*
- Consolidated net debt: ₹38,445 Crore\*\*
- Stake of institutional investors in Hindalco: 46.05%\*\*



#### Manufactured capital

- Fixed assets: ₹89,956 Crore\*\*
- Capital expenditure
  - India business: ₹1,571 Crore\*
  - Novelis: \$351 Million\*
- Number of manufacturing locations
  - In India: 13\*\*
  - Outside India: 23\*\*



#### Human capital

- Number of direct employees
  - India: ~25,000\*\*
  - Outside India: 11,000+\*\*
- Total training man-days (India)
  - Aluminium and mines: 48,383\*
  - Copper: 2,544\*



#### Intellectual capital

- Number of innovation centres
  - India: 2\*\*
  - Overseas (Novelis): 5\*\*
- Innovation spends:
  - India: ₹12 Crore\*



#### Natural capital

- Investment on energy conservation equipment & projects: ₹174 Crore\*\*
- Energy consumption
  - Aluminium: 262.08 Mn GJ\*
  - Copper: 13.56 Mn GJ\*



#### Social and relationship capital

- CSR spends: ₹34 Crore\*
- Number of suppliers
  - Aluminium: 11,550\*
  - Copper: 2,450\*
- Spends towards customer engagement activities: ₹34 Crore\*

### Our values and purpose

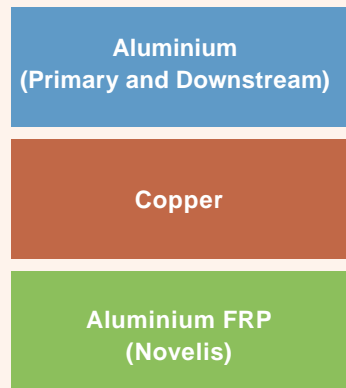
#### Values

- Integrity
- Commitment
- Passion
- Seamlessness
- Speed

#### Purpose

We manufacture materials that make the world Greener, Stronger, Smarter

### Our businesses



### Our external environment and opportunities

- Rising domestic consumption of non-ferrous metals
- Reforms-oriented approach of the government
- Focus on import substitution
- Strong prospects of EVs
- Favourable substitution trends

### Our strategies

#### Aluminium (Primary and Downstream)

- Focus on growing downstream aluminium
- Expand into fast-growing industries

#### Copper

- Growing in downstream VAP (Grooved Tubes)
- Ramp-up share of VAP (mainly CCR)
- Source copper concentrate efficiently

#### Aluminium FRP (Novelis)

- Defend the core
- Diversify product portfolio
- Invest in growth opportunities

## Outputs

### Financial capital (Consolidated)

- Revenues: ₹1,30,542 Crore\*
- EPS: ₹24.7\*
- Dividend payout: ₹1.20 on face value of ₹1.0 per share\*

### Manufactured capital

#### Capacity utilisation

- Alumina: 100%\*
- Aluminium metal: 99%\*
- Novelis: 99%\*
- Copper metal: 69%\*
- CC rods (including CCR#3): 67%\*

#### Sales volumes

- Aluminium metal: 1,274 Kt\*
- Aluminium VAP (excluding wire rods): 301 Kt\*
- Novelis: 3,274 Kt\*
- Copper metal: 359 Kt\*
- CC rods: 243 Kt\*

### Human capital

- Employee attrition (India-management and trainees): 5.00%\*
- Women employees in management roles: 5.44%\*\*

### Intellectual capital

- Reduction in power consumption though IoT in one of the FRP Plants: 12%\*
- Digital assets created/established at Hindalco: 6 (IoT platform, Block Chain solution, Digital twin, AR, Image analytics, Predictive Analytics Platform)\*\*
- Enabled more than 2,000 employees through various digital technologies

### Natural capital

- Zero Liquid Discharge (ZLD) implementation: 11 of 15 sites\*\*
- Reduction in specific water consumption: 50%+\*
- Commissioned 30 MW captive solar power plant at Aditya aluminium in November 2018\*
- Natural gas and electricity forms 97% of Novelis' total energy consumption cost\*

### Social and relationship capital

- Number of beneficiaries from CSR activities: 1.2 Million+ people in 731 villages across 11 states in India\*
- Increased Net Promoter System (NPS) score of primary aluminium wired rods from 49 to 64 between FY 2015-16 to FY 2018-19\*

## Outcomes

- Robust financial performance
- Healthy returns to shareholders
- Consistent track record on dividend payout

- Our aluminium is accepted under the 'High-Grade Aluminium Contract' on the LME
- Our copper is registered as quality grade 'A' accreditation on the LME
- Improving share of VAP across all the businesses

- Professional, merit-based and safe-working environment
- Long tenures of employees with Hindalco

- Recognitions for our innovation centres by Department of Scientific & Industrial Research (DSIR), Government of India
- Reduced turnaround time, energy consumption and improved plant efficiency by adopting digitalisation

- Developed green belt land across 3,983.55 acres i.e. 26.86% of the total land from our manufacturing units and mines
- Operational excellence for resource conservation

- Regular engagement with all stakeholders
- Rewarding and long-standing relationships with all our stakeholders

\* In FY 2018-19

\*\* As on March 31, 2019

## OUR INVESTMENT CASE

# Strong value proposition

### INTEGRATED, DE-RISKED BUSINESS MODEL

At Hindalco, our operations are integrated and seamless for aluminium and copper businesses. In aluminium, we source the two primary inputs bauxite and coal – bauxite from our captive mines and coal via Coal India Limited (CIL) with linkages & e-Auctions and our captive mines. This lends stability to our operations by securing raw materials supply. Our smelters are located close to our mines, which helps keep logistics costs low. Our upstream aluminium business is supported and de-risked via our sustainable copper business and Novelis, which are the streams of steady cash flow for us.

### PRESENCE OF MULTIPLE MARGIN DRIVERS

It is our constant endeavour to achieve sustainable and high-quality earnings. To this end, we have undertaken multiple initiatives. Expansion of capacities in alumina and aluminium downstream, increased focus on high-margin segments such as automotive body sheets in Novelis and pending Aleris acquisition are some of these initiatives. As our businesses grow, we will reap benefits from economies of scale.

### LOW RAW MATERIAL COSTS - A KEY COMPETITIVE ADVANTAGE

Our captive bauxite mines, alumina integration and coal linkages with captive coal mines have largely insulated us from input cost volatility. During FY 2018-19, we have secured supplies of ~75% (with overall security of up to 96%) of our coal requirements from CIL and via linkages and through captive coal mines. Our relatively low dependence on the open market and e-auctions conducted by Coal India is a key competitive advantage with a reasonable visibility of our overall input costs in terms of resources.

### Diversified operations to provide a stable margin profile



Upstream expansion

**500 Kt**  
at Utkal Alumina

Downstream expansion

**300-350 Kt**  
in FRP and extrusions

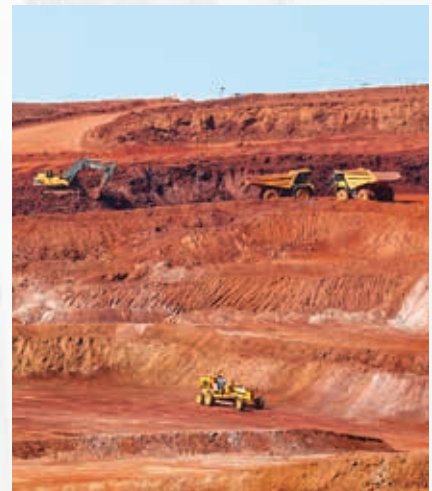
Novelis

**Automotive finishing line expansion in the US and China**

**Rolling and recycling expansion in Brazil**

Raw material security

**3.0 Mtpa** Alumina     **16.2 Mtpa** Coal

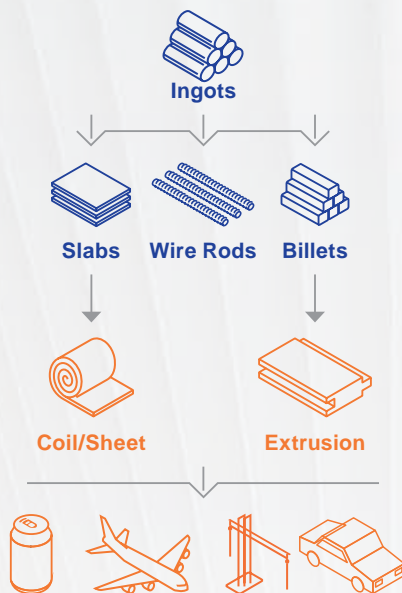


Hindalco's captive bauxite mines provides the basic raw material to its alumina refinery

## RAMP UP IN DOWNSTREAM SEGMENT IN INDIA

We have earmarked capital expenditure of \$1.0-1.2 Billion over the next five to six years to double the value-added production capacities in our aluminium downstream business. As this expansion starts coming on stream, the share of high-margin VAP is likely to surge to about half of our total aluminium metal capacity. Besides improving margins, this move will help us cater to more premium customers in future. In our copper business, we will focus on growing the downstream VAP such as copper rods and grooved tubes.

### Aluminium/Focus on growing downstream



To sell 60-70% of downstream products to the end customers.

## POTENTIAL TO DELIVER STRONG GROWTH

We have carved out well-defined strategies to grow all our business segments in a sustainable and responsible manner. Our focus on driving capacity expansions, maximising the potential of our existing capabilities and growing through strategic acquisitions will enable us to create higher value for all our stakeholders in future. Macro trends such as rising per capita consumption in India, increasing substitution of steel with aluminium across multiple industries present ample growth opportunities.

Global FRP market to grow at a steady pace of

**4-5%**

Automotive body sheet demand to grow at

**12-15% CAGR**

(FY 2018-25)

Beverage can sheet demand to grow at

**3-4%**

Domestic FRP demand to grow at a CAGR of

**7% CAGR**

(CY 2018-22)

Source: Company estimates

## STRONG CASH FLOW GENERATION

Our ability to generate healthy cash flows, consistently, is one of our primary strengths. Most of our incremental capex is directed towards ramping up the high-margin businesses. We are also making steady progress towards deleveraging our balance sheet and have been repaying our debt over the past few years. These efforts will free up significant cash for us, besides aiding the cash flow generation.

### Net Debt

**Consolidated** (₹ Crore)

**38,445**

FY 2018-19

**39,311**

FY 2017-18

**Novelis** (\$ Million)

**3,436**

FY 2018-19

**3,587**

FY 2017-18

**Hindalco standalone including Utkal Alumina** (₹ Crore)

**14,683**

FY 2018-19

**16,893**

FY 2017-18

## MESSAGE FROM THE MANAGING DIRECTOR



Dear Stakeholders,

Fiscal 2019 was a landmark year for Hindalco. We delivered peak performance despite volatile market conditions and global economic headwinds. It was a clear demonstration of how Hindalco's core attribute of resilience has served to keep us strong and steady.

We delivered our best-ever financial results with record levels of profitability and EBITDA. Our performance was based on the highest ever production and shipments in aluminium (upstream and downstream), copper rods, and Flat Rolled Products (FRP) in Novelis. Guided by our purpose of 'manufacturing materials that make the world greener stronger smarter', we made solid progress towards expanding our portfolio of value-added products, focused obsessively on quality, improved efficiencies at all our plants and vigorously drove innovation and sustainability across locations. Additionally, we continued to further strengthen our balance sheet by bringing down our consolidated net debt to EBITDA to 2.48 times in FY 2018-19 from 2.82 times in FY 2017-18.

We are proud of this performance, as it shows the extent of Hindalco's resilience. We remained steady when under pressure from volatile conditions generated by global uncertainties such as the US-China trade war and global aluminium price movements.

Our performance not only validated our strategies and objectives, but also testified to the merits of our de-risked, integrated business model, our operational excellence and our commitment to creating long-term value for all our stakeholders.

**We made solid progress towards expanding our portfolio of value-added products, focused obsessively on quality, improved efficiencies at all our plants and vigorously drove innovation and sustainability across locations.**

## CREATING VALUE, SUSTAINABLY

FY 2018-19 was a noteworthy year for all our businesses. Novelis and domestic aluminium business achieved record-breaking results, and the copper business put up a sustained performance.

### We registered our highest ever:

- Consolidated PBT (before exceptional item) of ₹8,083 Crore
- Consolidated PAT of ₹5,495 Crore
- Consolidated EBITDA of ₹16,627 Crore
- Adjusted EBITDA/tonne of \$418 at Novelis

The past year can be summed up as one of 'value creation'. Our downstream strategy of increasing the share of value-added products across businesses to insulate us from global aluminium price fluctuations is playing out. As a result, in FY 2018-19, ~70% of Hindalco's consolidated EBITDA was non-LME linked, reflecting a sustainable business model.

The domestic aluminium business recorded a 13% y-o-y growth in revenues to ₹23,775 Crore. EBITDA grew 9% to ₹5,202 Crore as rising input costs were partially offset by our focus on higher efficiencies and seamless plant operations. We have steadily scaled up production of downstream products to achieve robust sales volumes for value-added products.

In the copper business, the shift towards value-added products like copper rods bolstered overall profitability, helping achieve stable revenues of ₹22,155 Crore. The production of copper rods was at an all-time high with the continuous ramp-up of the Continuous Cast Copper Rod-3 (CCR-3) facility. However, production of copper cathodes fell 15% due to a planned maintenance shutdown. Production of Di-Ammonium Phosphate (DAP) fertiliser soared 48% due to resolution of its operational issues in the previous year.

Novelis delivered its best performance to date, driven by its focus on providing best-in-class products that cater to the evolving needs of customers for sustainable materials. Beverage can sheet shipments increased from 60% of its total shipments in FY 2017-18 to 63% in FY 2018-19.

The rising contribution of value-added products to overall volumes, record shipments and higher aluminium prices, pushed revenue up by 8% to \$12.3 Billion. Adjusted EBITDA grew 13% to \$1.368 Billion. Novelis continued to grow the share of recycled contents from 57% in FY 2017-18 to 61% in FY 2018-19, in alignment with its focus on sustainability and recyclability. Novelis' expansion projects - in the US, China, and Brazil - are on track; these will help meet the fast growing demand for strong, lightweight automotive body sheets, and for sustainable packaging.

## BIG STRIDES TOWARDS A BRIGHTER TOMORROW

We want to further fortify our leadership position across existing businesses by focusing on innovation and enriching our product mix. We aim to double the share of value-added products in the domestic aluminium business over the next 5-6 years. We plan to invest around \$1.0-1.2 Billion in India to grow our downstream business. In upstream business, the Company will expand its capacity at Utkal Alumina by 500 Kt. In copper, we will continue to focus on value-added products to meet the growing demand from the domestic industry, particularly the power, consumer durables and households segments. Over time, we aim to achieve a balanced sustainable growth across our upstream and downstream businesses.

Hindalco has a proven track record of successful strategic M&As. This year we announced a deal through Novelis to acquire Aleris. This buyout will mark our entry into the high-value, high-potential aerospace and building & construction segments and enable us to further diversify Novelis' product mix. It will also allow us to ramp up capacity in value-added products. This acquisition is subject to customary closing conditions and regulatory approvals.

**Novelis delivered its best performance to date, driven by its focus on providing best-in-class products that cater to the evolving needs of customers for sustainable materials.**

## MESSAGE FROM THE MANAGING DIRECTOR (continued)

### A GREENER, STRONGER, SMARTER WORLD

Hindalco is guided by its purpose and many of our products are already working to support a greener planet. One example of this is the manufacture and sale this year of India's first indigenously designed, lightweight, eco-friendly aluminium bulker. This bulker saves up to 13,000 litres of fuel, generates 20 tonnes lower GHGs and is BS-VI compliant. Going forward, we aspire to make aluminium the 'smart metal of choice' for our customers by showcasing it as a supermaterial, with innate properties of strength, light weight, anti-corrosion and 100% recyclability.

Sustainability is integral to our business and we continue to empower our communities and nurture our environment. We have made steady progress in our targets of promoting sustainable mining practices, driving energy and water conservation, using more renewable energy and recycling, among others.

Ensuring safety of our employees, associates, communities and other stakeholders is at the core of our business and integrated into everything we do. It was, therefore, distressing that there were four fatalities in the year. Safety is a top priority for us. To continuously drive our safety performance, the onus of safe operations has been shifted to line managers from safety professionals. With massive work underway, we are confident of strengthening our safety performance and culture.

### OUR PEOPLE, OUR PRIDE

Hindalco is nothing without the people who steer us and I am proud of the steps we are taking to promote diversity in our workforce. As a measure of our commitment, we hired 27% women engineers at the entry level. Our 'dual career' option for both spouses at our plants, apart from other family friendly policies, bear testimony to our intentions. We are always keen to hear from our women colleagues and a significant step in this direction was the hosting of the first Women's Conclave for Hindalco (WAH) in March 2019.

**We hired 27% women engineers at the entry level and are offering 'dual career' for both spouses at our plants, apart from other family friendly policies.**

Our commitment to enhancing the functional competencies of our people was demonstrated through the launch of Hindalco Technical University (HTU) in CY 2017. Today, HTU has introduced VR, AR, AI, Animation, 3D and Robotics to equip our people for the future.

The culture of recognition is growing stronger every year. The PRIDE scheme, PRAISE platform and other processes continue to motivate and encourage teams and individuals. Our holistic employee wellness initiatives are tailored to build awareness and create supportive environments to improve the lifestyle of our people.

We have great opportunities in front of us and I am confident that remaining committed to our purpose will help us to build a greener, stronger, smarter future for all. I would like to express my gratitude to our stakeholders for their belief in us and I seek your continued support.

Yours sincerely,



Satish Pai  
Managing Director





In January 2019, at the International Conference on Aluminium and Exhibition (INCAL), Hindalco launched India's first indigenous dry bulker, especially for cement. This eco-friendly bulker can also be used to carry fly ash, food grains, PTA powder, and alumina.

## OPERATIONAL HIGHLIGHTS

# Achieving all-round growth



**Q1**

April to June 2018

### Expansions

- We announced expansion of Utkal Alumina by 500 Kt for a project cost of ₹1,300 Crore
- Novelis announced doubling of automotive body sheet capacity in Changzhou, China for an investment of \$180 Million
- Novelis initiated 200 Kt expansion of automotive finishing facility in Guthrie, Kentucky, US for an investment of \$300 Million



Utkal Alumina is a leader in technology, cost and quality



**Q2**

July to September 2018

### New initiatives

- Novelis signed agreement to acquire Aleris Corp. for an Enterprise Value (EV) of \$2.58 Billion in July 2018
- Hindalco won back the Krishnashila coal linkage of 3.1 Mtpa in auction conducted in September 2018

### Expansions

- Novelis secured commitment from banks for financing the pending Aleris acquisition
- Novelis initiated expansion of automotive finishing line in Changzhou, China



Novelis finishing line at Changzhou, China

**Q3***October to December 2018***Expansions**

- Novelis announced an expansion plan in Pinda, Brazil for an investment of \$175 Million for 100 Kt of additional rolling capacity and 60 Kt of recycling capacity
- We announced plans to set up an extrusion and recycling plant at Mundra, Gujarat and signed an MoU with the Government of Gujarat for the same
- We signed an MoU with the Government of Odisha to set up an FRP unit at Sambalpur for an investment of ₹3,500 Crore

**Others**

- Our India business prepaid long-term loans of ₹1,575 Crore in October 2018
- Novelis announced supply of its premium Novelis Advanz Aluminium to all Electric Jaguar I –Pace model



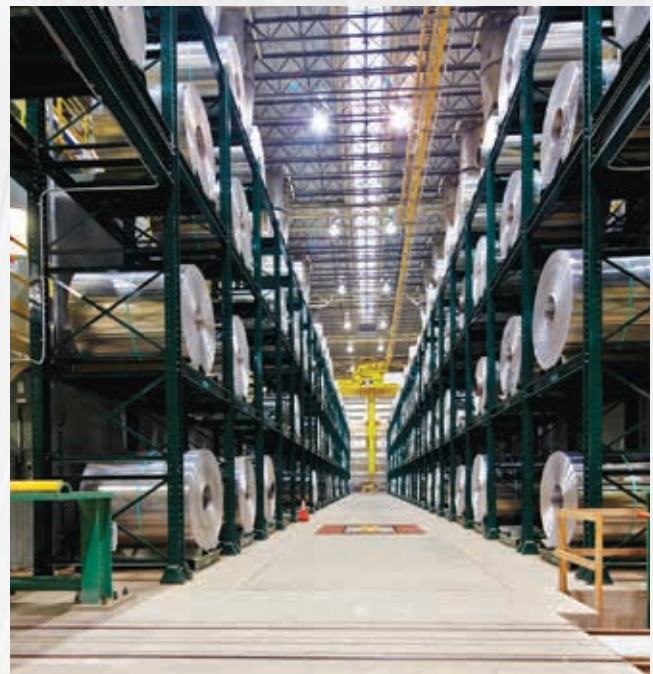
The FRP plant at Hirakud is a world-class facility

**Q4***January to March 2019***New product initiatives**

- Novelis partnered with Impression Technologies for the innovative HFQ hot stamping technology for automotive aluminium sheets
- Hindalco launched India's first indigenous lightweight and eco-friendly aluminium bulker in India
- Novelis signed an agreement with Toyota Motor Corp to supply premium automotive body sheets for the new 2019 Toyota RAV4 models

**Approvals and accreditations**

- Hindalco's aluminium foil for lithium-ion batteries complied with ISRO standards
- ARCI—International Advanced Research Centre for Powder Metallurgy and New Materials—approved Hindalco's aluminium foil for EV batteries
- Novelis introduced the 1<sup>st</sup> aluminium sheet battery enclosure for next generation vehicles for EVs



Novelis plant at Oswego, New York

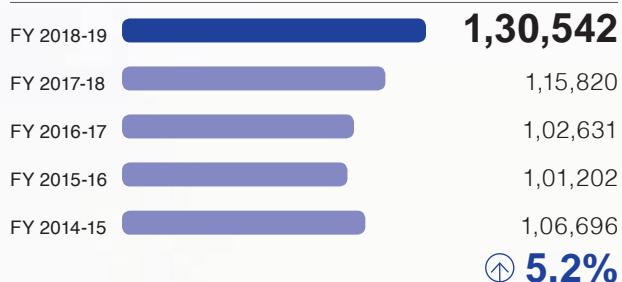
## KEY PERFORMANCE INDICATORS

# A steady progress

### Consolidated entity

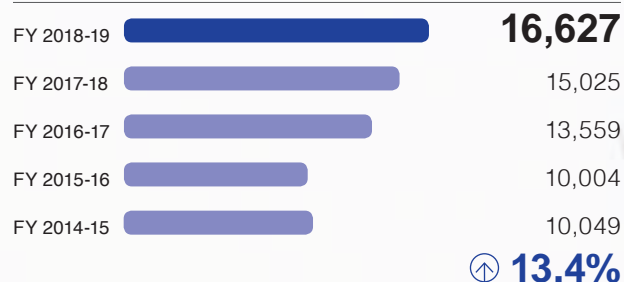
#### Revenues

(₹ Crore)



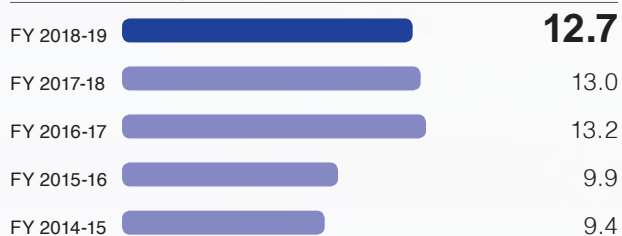
#### EBITDA

(₹ Crore)



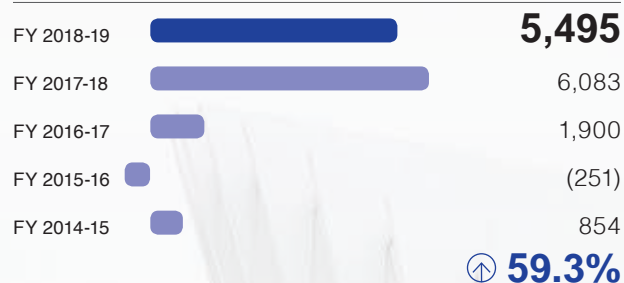
#### EBITDA margin

(%)



#### Profit after tax

(₹ Crore)



#### Earnings per share

(₹)



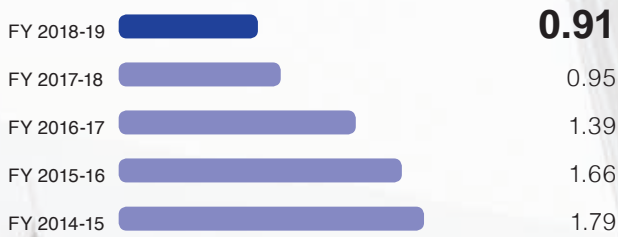
#### Net worth

(₹ Crore)



**Gross debt/equity**

(X)

**Net debt/EBITDA**

(X)

**RoCE**

(%)

**Market capitalisation\***

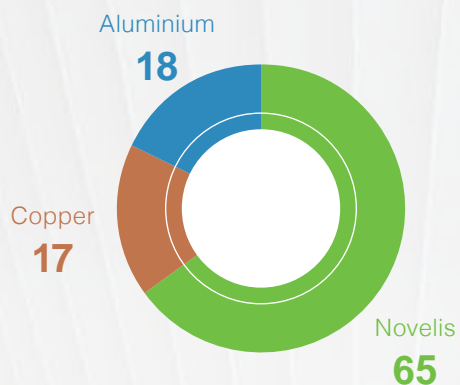
(₹ Crore)



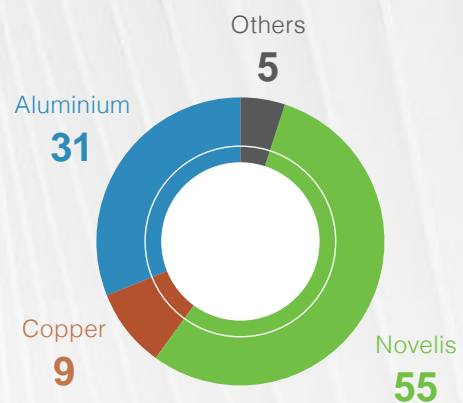
\* As on March 31 of every year

⬆️ **14.7%****FY 2018-19 consolidated revenue mix**

(%)

**FY 2018-19 consolidated EBITDA mix**

(%)



## KEY PERFORMANCE INDICATORS (continued)

## Hindalco standalone

## Revenues

	(₹ Crore)
FY 2018-19	<b>45,749</b>
FY 2017-18	43,446
FY 2016-17	39,383
FY 2015-16	36,713
FY 2014-15	36,869
	⬆️ <b>5.5%</b>

## EBITDA

	(₹ Crore)
FY 2018-19	<b>5,187</b>
FY 2017-18	6,072
FY 2016-17	5,819
FY 2015-16	4,325
FY 2014-15	4,299
	⬆️ <b>4.8%</b>

## EBITDA margin

	(%)
FY 2018-19	<b>11.3</b>
FY 2017-18	14.0
FY 2016-17	14.8
FY 2015-16	11.8
FY 2014-15	11.7

## Profit after tax

	(₹ Crore)
FY 2018-19	<b>1,205</b>
FY 2017-18	1,436
FY 2016-17	1,557
FY 2015-16	552
FY 2014-15	925
	⬆️ <b>6.8%</b>

## Hindalco standalone including Utkal

## Revenues

	(₹ Crore)
FY 2018-19	<b>45,908</b>
FY 2017-18	43,462
FY 2016-17	39,724
FY 2015-16	36,978
FY 2014-15	37,460
	⬆️ <b>5.2%</b>

## EBITDA

	(₹ Crore)
FY 2018-19	<b>7,532</b>
FY 2017-18	7,154
FY 2016-17	6,441
FY 2015-16	5,008
FY 2014-15	4,559
	⬆️ <b>13.4%</b>

## Profit after tax

	(₹ Crore)
FY 2018-19	<b>2,678</b>
FY 2017-18	1,934
FY 2016-17	1,419
FY 2015-16	442
FY 2014-15	429
	⬆️ <b>58.1%</b>

⬆️ 5-year CAGR

⬆️ 5-year CAGR

## Novelis Inc.

### Revenues

	(\$ Million)
FY 2018-19	<b>12,326</b>
FY 2017-18	11,462
FY 2016-17	9,591
FY 2015-16	9,872
FY 2014-15	11,147
	⬆️ <b>2.5%</b>

### Adjusted EBITDA

	(\$ Million)
FY 2018-19	<b>1,368</b>
FY 2017-18	1,215
FY 2016-17	1,085
FY 2015-16	963
FY 2014-15	896
	⬆️ <b>11.2%</b>

### Adjusted EBITDA per tonne

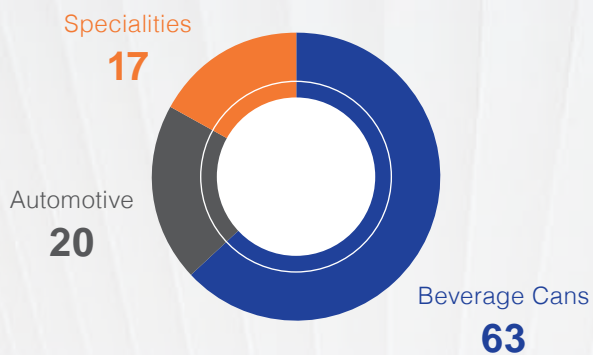
	(\$)
FY 2018-19	<b>418</b>
FY 2017-18	381
FY 2016-17	354
FY 2015-16	308
FY 2014-15	294

### Profit after tax

	(\$ Million)
FY 2018-19	<b>434</b>
FY 2017-18	635
FY 2016-17	45
FY 2015-16	(38)
FY 2014-15	148
	⬆️ <b>30.9%</b>

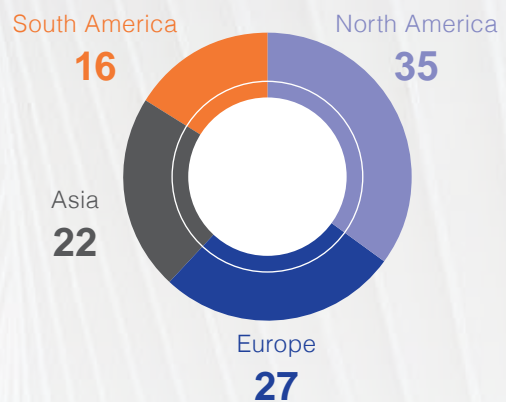
### FY 2018-19 Novelis shipment mix

(%)



### FY 2018-19 Novelis region-wise revenue mix

(%)



⬆️ 5-year CAGR

# Stronger





# Stronger is a word that has come to define Hindalco

Aluminium is as strong as any other metal or steel but it is three times lighter, recyclable and non-corrosive in nature. It is widely used in many applications across consumer and industrial segments.

The materials we manufacture make the world stronger. Our products are known for their world-class quality and superiority. The business model we have built has helped us weather many a storm in our six decades of existence. The learnings from the challenging times are ingrained in our operations, and have helped us create a robust, resilient, scalable and integrated business model.

We believe that just like our past, our future too will further fortify our position as a leading manufacturer of aluminium and copper products in the world. Armed with our prudence and foresight, we are ready to scale greater heights.

## HOW WE HAVE SCALED UP

	FY 2014-15	FY 2018-19
<b>Aluminium - domestic sales volume</b>		
Aluminium metal (in all forms)	806 Kt	<u>1,274</u> Kt
Of which VAP (excluding wire rods)	244 Kt	<u>301</u> Kt
<b>Novelis shipments</b>	3,050 Kt	<u>3,274</u> Kt
<b>Copper - domestic sales volume</b>		
Copper metal (in all forms)	387 Kt	<u>359</u> Kt
Of which Copper Continuous Cast Rods (CCR)	156 Kt	<u>243</u> Kt

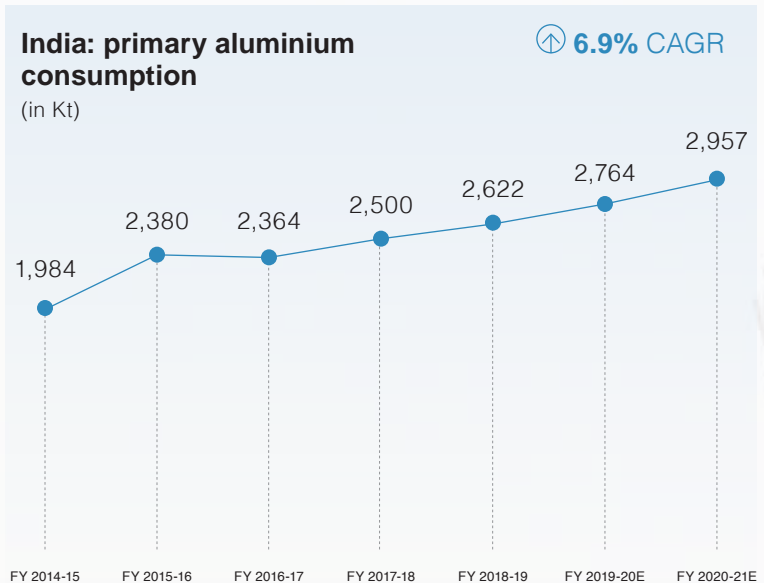
## EXTERNAL GROWTH DRIVERS

# The trends that shape our markets

### RISING DOMESTIC CONSUMPTION OF NON-FERROUS METALS

As India continues to be among the fastest growing major economies in the world, India's low per capita consumption of aluminium and copper compared to the developed economies provides significant headroom for growth.

Consumption of primary aluminium is likely to record a CAGR of 6.9% over FY 2015-21. With both upstream and downstream businesses witnessing strong momentum, we are well placed to capitalise on this opportunity.



Source: Company data, Industry E: Estimates

### REFORMS-ORIENTED APPROACH OF THE GOVERNMENT

The re-election of a reforms-oriented alliance at the Centre augurs well for the sector. This would mean that most of the measures undertaken over the past five years are likely to continue in full steam.

The government has focused on boosting the ease of doing business, improving transparency, and thereby bolstering investments into these sectors.

#### Key sectors to drive aluminium demand in India

<b>Auto</b>	3 <sup>rd</sup> largest auto market globally
<b>Power</b>	100% rural electrification
<b>Railways</b>	No. 1 passenger and 4 <sup>th</sup> largest freight carrier globally
<b>Electronics</b>	National Policy on Electronics (NPE) target of zero net imports by 2020
<b>Aerospace &amp; Defence</b>	Goal to grow indigenisation from 30% to 70% and increase private participation
<b>Construction</b>	Goal of 100+ Smart Cities and 500 Atal Mission for Rejuvenation and Urban Transformation (AMRUT) cities
<b>Solar Energy</b>	Target generation of 100 GW by 2020 and increase indigenisation
<b>Aluminium packaging</b>	Healthy growth prospects

## FOCUS ON IMPORT SUBSTITUTION

**With an aim to boost the domestic industry, the Government of India is emphasising on substituting imports with indigenous products.**

Initiatives such as the Make in India campaign promote the use of indigenous products in the Indian defence and aerospace industries. Given our dominant position in the domestic industry, we will be among the early beneficiaries from such measures.

**Initiatives such as Make in India promote indigenous products in the Indian defence and aerospace industries.**



## EVs OFFER SIGNIFICANT POTENTIAL

**EVs are gaining rapid traction around the world, which bodes well for aluminium demand.**

Currently, aluminium is used in chassis, doors, hoods, trunk lids, bumpers, crash boxes and wheels in an automobile. In EVs, aluminium application extends to housing cases that hold a vehicle's battery, light-weight wheels and brake mechanisms as well.

**Novelis is the largest aluminum recycler in the world.**



## FAVOURABLE SUBSTITUTION TRENDS

**Globally, there is increased adoption of light-weighting metals such as aluminium.**

The automobile and packaging sectors are the early adopters of light-weight metals. Aluminium enjoys infinite recyclability, which, coupled with its light weight, makes it a preferred input. It is also an eco-friendly alternative and is replacing plastic, steel and glass amongst other materials, in many industries.

**We are launching new and innovative products to make the most of this trend.**



## OUR STRATEGIC PRIORITIES

# Empowering our future

### Aluminium

#### Focus on growing downstream

We are making the requisite investments to ramp up our downstream business. This, along with a buoyant upstream business, will enable us to grow across the value chain of aluminium and cater to the rising demand for aluminium VAP in the domestic market. The downstream business is delinked to the direct LME movement impact as LME price is a pass through and therefore this will act as a key catalyst for our overall margins. We have earmarked \$1-1.2 Billion for downstream product expansion in India over the next five to six years.

#### Expand into fast-growing industries

As the packaging industry moves towards products that are more environment-friendly relative to plastic, it offers high growth potential. In addition to our existing products, we are launching some innovative products such as the aluminium-jute packaging material and aluminium foil packaging. We will be launching other world-class packaging products in the near future to further strengthen our existing portfolio of aluminium FRPs.

### Copper

#### Growing both upstream and downstream

We have recently added capacities in copper downstream products such as copper rods, and we are looking forward to add some new VAPs like copper grooved tubes to our product mix. Our aim is to achieve higher efficiencies and amplify our growth potential in this business.

#### Ramp-up share of VAP

Increasing the share of VAP like copper rods in our business will aid our margins and help us move up the value chain by gaining significant edge over our competitors. As we cater to the more specialised needs of our customers through such products, we will further strengthen our relationship with them.

#### Source copper concentrate efficiently

We have long-term contracts with the copper concentrate miners to assure sustainable procurement of material on time. Such contracts will serve the purpose of ensuring a steady availability of copper concentrate.



## Novelis

### Defend the core

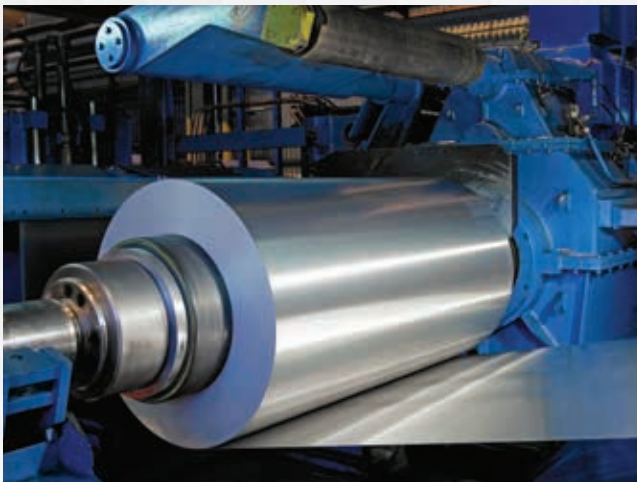
Customer centricity forms the core of all our businesses and it is our constant endeavour to provide them with improved quality products, best-in-class services and differentiated products. We work alongside our customers to provide innovative solutions to the beverage can, automotive and specialty markets. We are constantly driving up the share of recycled content in our business, optimising costs and innovating products.

### Diversify product portfolio

We constantly explore new verticals and markets to broaden our customer base. The pending Aleris acquisition will provide us entry into aerospace, expand our building & construction segment, and improve our product mix and overall margins.

### Invest in growth opportunities

We will look to expedite our growth by leveraging on the current organic and inorganic expansions plans across the US, China and Brazil, including the pending Aleris acquisition.



### Shape the automotive light-weighting industry through technology leadership

#### Shaping

Industry Defining

#### Adapting

Leveraging Existing Strengths

#### Reserving the Right to Play

Adapting to Competitor Moves

### Strategy and targets



Novelis aspires to shape the industry, leveraging innovation, global footprint and sustainability capabilities



Retain leadership position through investments in North America, Europe and China



Substantially increase automotive FRP shipments

## UPCOMING EXPANSION PROJECTS

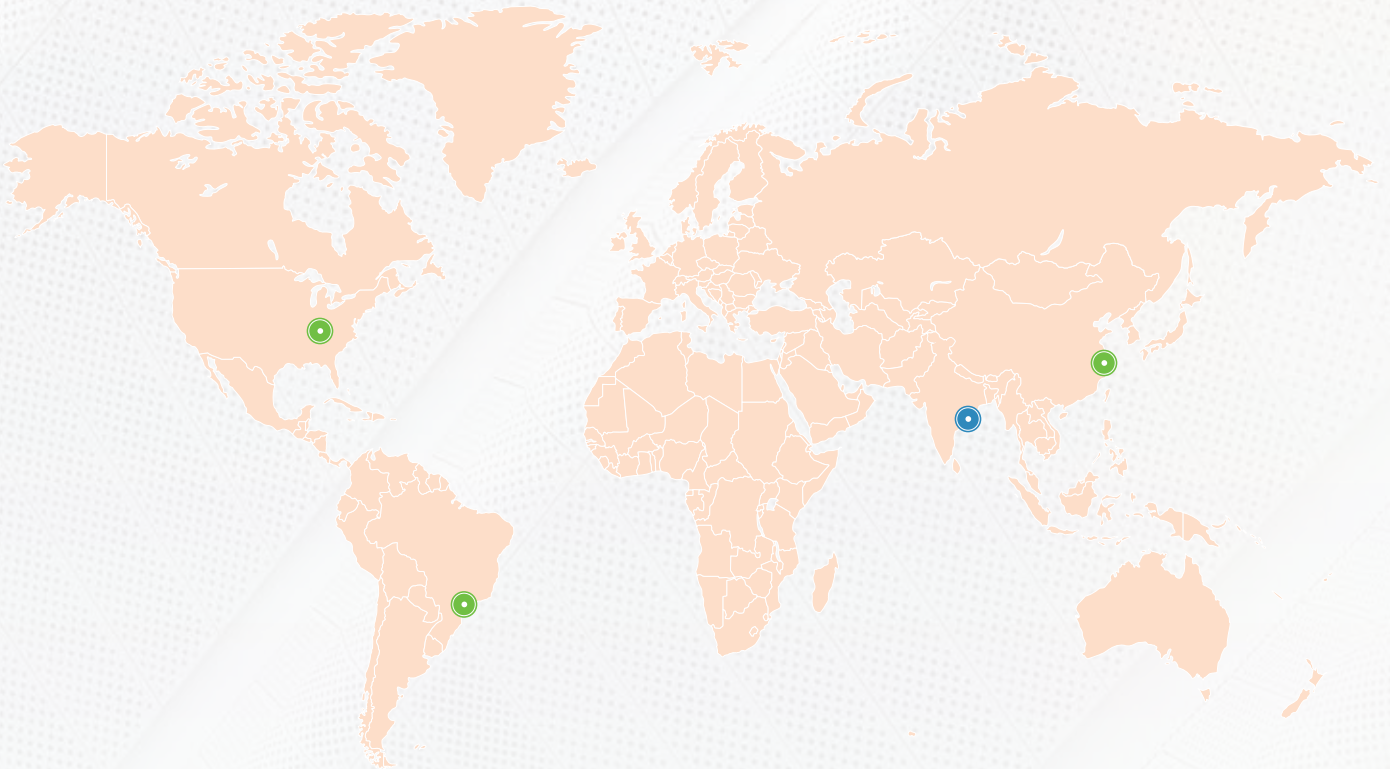
# Building for the future

In sync with our broader strategies, we are fortifying our manufacturing capabilities to become future-ready, today. Our capacity expansions will enable us to capture domestic as well as global opportunities. Most of these expansions are in the VAP segment in aluminium downstream, and besides being strong engines of growth, will lead to sustained or better margins. We intend to move up the value chain and be recognised for our high-end, specialised products catering to niche and specialised requirements.



The Utkal plant supplies alumina to Mahan and Aditya smelters through dedicated BTAP wagons and bulkers

## A SNAPSHOT OF OUR RECENTLY ANNOUNCED EXPANSION PROJECTS ACROSS GEOGRAPHIES



Business	Project	Capacity expansion	Time-lines	Project/ Acquisition cost
● India Aluminium upstream	Utkal Alumina refinery	500 Kt	In FY 2020-21	₹1,300 Crore
● India Aluminium downstream	Multiple locations	300-350 Kt	By FY 2024-25	\$1-1.2 Billion
<b>Novelis (organic)</b>				
● Aluminium Global Rolled Products	Guthrie, Kentucky, US	200 Kt: Automotive finishing line	In FY 2020-21	\$300 Million
	Changzhou, China	100 Kt: Automotive finishing line	In FY 2020-21	\$180 Million
	Pinda, Brazil	100 Kt: Rolling 60 Kt: Recycling	By FY 2021-22	\$175 Million
<b>Novelis (inorganic)</b>				
● Aluminium rolled products	Aleris Acquisition	1.0 Mt	Pending approvals	\$2.58 Billion (EV)

# Smarter

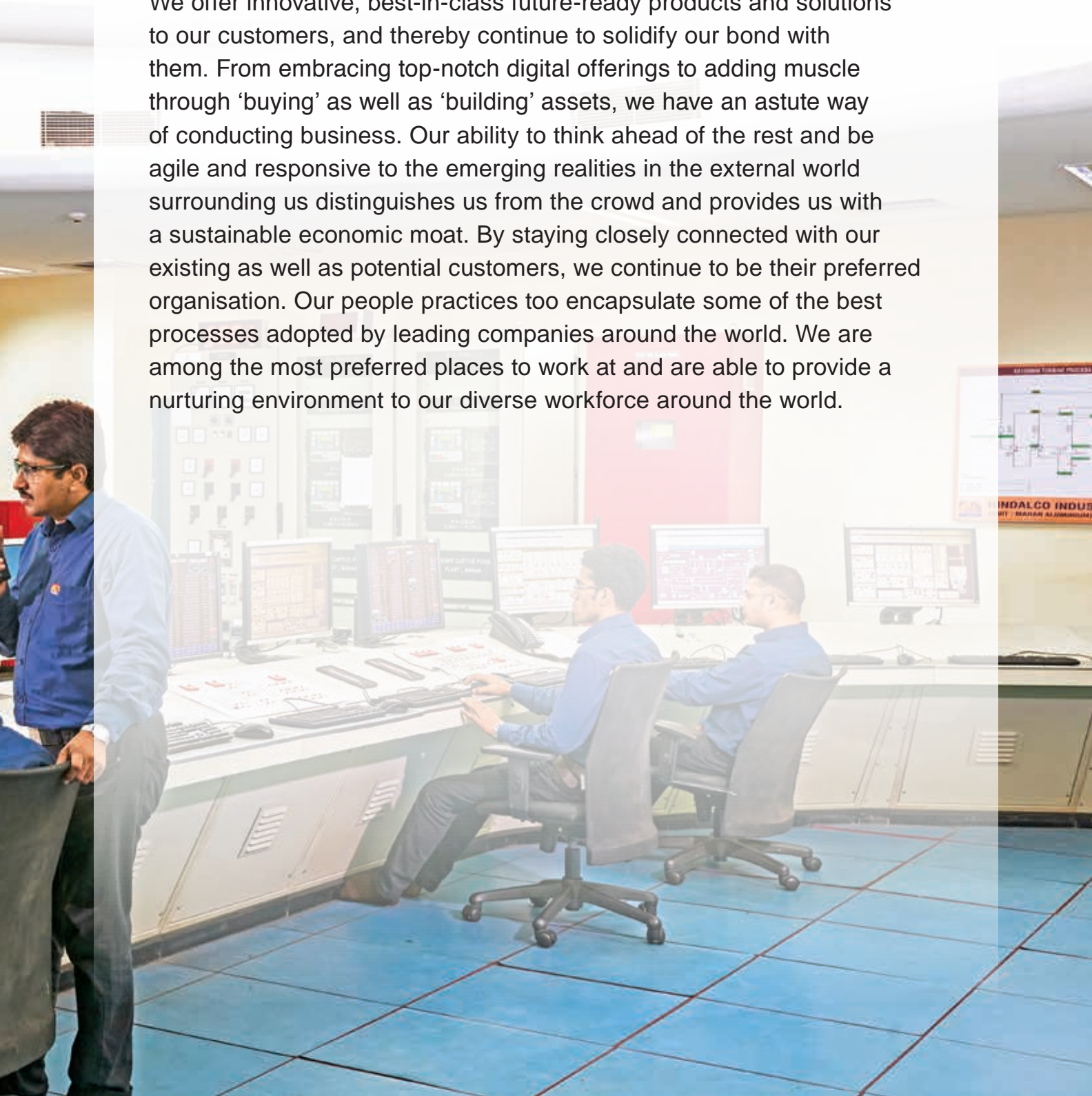
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# At Hindalco, we manufacture materials that make the world smarter

We offer innovative, best-in-class future-ready products and solutions to our customers, and thereby continue to solidify our bond with them. From embracing top-notch digital offerings to adding muscle through 'buying' as well as 'building' assets, we have an astute way of conducting business. Our ability to think ahead of the rest and be agile and responsive to the emerging realities in the external world surrounding us distinguishes us from the crowd and provides us with a sustainable economic moat. By staying closely connected with our existing as well as potential customers, we continue to be their preferred organisation. Our people practices too encapsulate some of the best processes adopted by leading companies around the world. We are among the most preferred places to work at and are able to provide a nurturing environment to our diverse workforce around the world.



## DIGITAL TRANSFORMATION AT HINDALCO

# Driving efficiencies through technology

We are undergoing a digital transformation to achieve higher visibility, speed and efficiency across our processes. We are embracing best-in-class digital technologies and leveraging analytics for data driven process management to become future-ready, today.

This transformation is based on a three-pronged approach:



**In our journey of digital transformation, we have partnered with startups as well as large technology providers to create mutually beneficial synergies.**



Hindalco launched its digital transformation drive in 2018

## DIGITAL VALUE CHAIN FOR HINDALCO

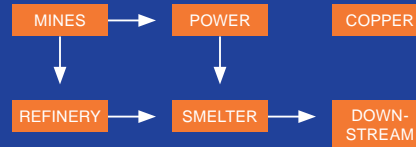
### People processes

- Connected workers for higher safety and compliance
- Smart shop floor with augmented reality based job aids
- VR-based training
- Digital culture and capability building

### Sourcing and delivery services

- Integrated planning and inventory control
- Secured transactions by deploying blockchain
- GPS-based logistics process digitalisation
- Automating procurement
- Drone-based stockpile survey across mines and coal yards

### Mines and manufacturing



Connected plant for improving:

- Plant reliability
- Quality consistency
- Cost control
- End-to-end visibility

Building digital twins prediction model for:

- Performance improvement via process optimisation
- Efficiency improvement through data insights
- Predictive analytics
- Process simulation



### Customer experience

Real-time visibility of end-to-end business processes by implementing

- Digitally enabled ERP solution
- CRM solution
- Chatbots

## DRIVING EFFICIENCIES THROUGH DIGITAL

The following initiatives have started yielding positive results:

1. **Blockchain for smart contract at foils plant**  
Workers, suppliers and Hindalco connected on a single, transparent and incorruptible digital ledger of economic transactions, which records financial transactions and other important developments through a smart contract. This helps users to identify and mitigate inefficiencies across the supply chain.
2. **Internet of Things at rolling plant**  
Entire plant data is connected to a digital platform for driving productivity improvements in downstream plants of Renukoot, Taloja and Mouda.
3. **GPS-based logistics solution for finished goods**  
Tracking truck movements right from the plant to customers/warehouse/ports. This has provided improved visibility on finished goods to customers

and marketing teams. Better operational control, faster damage control in case of accidents and optimal route usages are other benefits.

4. **Power plant digital twin prediction model**  
Use real-time process data of power plant to generate process alerts, detect anomaly, predict process performance and identify optimisation opportunities. This model offers insights for performance optimisation and real-time process alerts aiding the process of decision-making.

We are enthused by the success of our initial steps towards digital transformation and are looking to ramp up these initiatives to realise their full potential over the next few years.

# CUSTOMER ENGAGEMENT

## Delivering smart solutions

Our customers are at the epicentre of all our activities and we are dedicated to create higher value for them consistently. From providing innovative products to delighting them through our services, we provide them holistic experiences.

We have put in place specific policies and procedures to engage effectively with our customers at every stage and we fine-tune them to address any existing or emerging bottlenecks. These efforts have translated into solid, time-tested and trustworthy relationships with our marquee customers.

### There are four key dimensions of customer practices at our Company

Receiving, improvising and actioning customer feedback

Ensuring faster resolution of customer complaints

Improving ease of doing business

Creating higher customer engagement

Over the past few years, we have migrated from the customer satisfaction model to the NPS model and employ a mix of bottom-up and top-down NPS to get a 360-degree understanding of customers' perception.

**About 97% of our aluminium products are part of the NPS survey.**

NPS score of aluminium products increased from

**49** TO **64**  
FY 2015-16 FY 2018-19

NPS score of copper products increased from

**44** TO **64**  
FY 2015-16 FY 2018-19

Industry NPS score grew from

**49** TO **53**  
FY 2015-16 FY 2018-19

In a bid to achieve higher efficiencies, we have implemented superior technology across multiple stages such as providing price lists, simplifying order entry, live tracking of the consignment and automated notification/acknowledgement of payment.

We conduct monthly sales team meetings and plant huddles to track key developments around customer preferences. An annual workshop for reviewing feedback of customers received through the double-blind survey is also carried out for all the plants and zones. We engage regularly with our customers via customer visits, cluster meets, dealer meets, and new product launches.

## Case Study: Baddi Foils Private Limited

### Background

Baddi Foils Private Limited is one of our largest customers in terms of volumes and is associated with us for over 15 years. During FY 2017-18, it raised concerns around quality (owing to sharp rise in product volumes), delivery (transit damages and delay in supplies) and payment (financial flexibility for large orders).

### Action

To resolve these issues, we changed the packaging mode of our products, changed the order cycle & instituted automated promise date, and extended channel financing through Aditya Birla Finance to provide higher payment flexibility to the customer.

During FY 2018-19, we focused on identifying & executing collaborative cost-saving projects, improving On Time In Full (OTIF), reducing complaint resolution time and maintaining consistent quality.

### Impact

These efforts have started yielding multiple benefits already.

We saved ₹28 Lakh for the customer by increasing truck load by 3 tonnes and ₹12 Lakh for Hindalco by changing the packaging mode. Our production OTIF nearly doubled to 87.8% between the first quarter of FY 2017-18 and the fourth quarter of FY 2018-19. We brought down complaint resolution time significantly and increased share of wallet from 56% in FY 2017-18 to 67% in FY 2018-19.

Eventually, revenues from this customer grew by 18% in FY 2018-19.

Savings for customer

**₹28 Lakh**

Wallet share increased to

**67%**

FY 2018-19

Revenue growth by

**18%**

in FY 2018-19



## FOCUS ON RECYCLING

# Progressing towards a greener future

Aluminium is 100% recyclable and consumes 95% less energy while releasing 95% less greenhouse gases as compared to primary aluminium.

We, at Hindalco, are committed to manufacturing products that help make the world greener, stronger and smarter.

Novelis is an industry-leader when it comes to recycling aluminium. It continued to implement distinct initiatives to promote recycling during the year under review.

**In FY 2018-19, Novelis recycled more than 70 Billion used beverage cans and achieved an average of 61% recycled aluminium inputs, an increase of 29 percentage points from the baseline averages of fiscal years 2007-2009.**

The Yeongju Recycling Centre (South Korea), Novelis' beverage can recycling facility, has recycled a record 1 Mt used beverage cans since it was commissioned in 2012.

Novelis also lends financial support to the 'Can Capture' programme, which conducts recycling education programme in Denver (the US) to increase the collection of aluminium beverage cans citywide. The programme aims to increase the recycling rate in the city from 25% currently to 34% by 2020. This educational programme is expected to increase sustainability locally and encourage communities across the country to increase recycling.



Novelis' Yeongju Recycling Centre, South Korea

**1.0 Mt**  
used beverage cans  
recycled since 2012 at  
Yeongju Recycling Centre

To further the cause of recycling, Novelis has joined hands with Discovery Education to conduct the 'Life of a Can' programme. The aim of this programme is to educate the gen-next on key recycling facts such as the \$1.5 Billion of aluminium sent to landfills every year and the end-to-end recycling timeline for a can, while encouraging the development of students' critical-thinking skills through a holistic look at the recycling process and real-world implications of one's actions. This multi-year engagement programme offers digital resources designed to stimulate insightful conversations around the aluminium recycling process.

Novelis is expanding its recycling capacity by **60 Kt** in Pinda, Brazil by FY 2021-22

Novelis is further expanding its recycling capacity by adding another 60 Kt capacity in Pinda, Brazil which will come up by FY 2021-22.

Going forward in India, our Company is planning to get into end of life extrusion scrap processing at a new complex in Gujarat, towards our recycling initiatives.

**The Business Intelligence Group named 'Life of a Can' initiative as 'Sustainability Service of the Year' in the 2018 Sustainability Awards programme.**



Novelis' recycling plant in Pinda, Brazil

## PEOPLE AT HINDALCO

# Nurturing our talent pool

At Hindalco, our people are the driving force behind our success. We are committed to providing them an environment of all-round development, which puts emphasis on upskilling and equipping them with the ability to maximise the opportunities available within the Hindalco ecosystem.



Gyandharaa is a modern training facility at Aditya Aluminium

We take pride in the diversity of our talent pool in terms of nationality, gender and experience. Together they empower the organisation to make steady progress towards its goals. At the end of FY 2018-19, our workforce in India stood at around 25,000 and outside India at 11,000+.

Our entire spectrum of people practices comes under the four broad buckets:

- Provide people with a career, not just a job
- Conduct regular learning and development sessions
- Focus on enriching the lives of our people
- Giving regular rewards and recognitions

We highlight some prominent employee initiatives undertaken during the year.

### **WOMEN AT HINDALCO (WAH) CONCLAVE**

In March 2019, we conducted our first WAH conclave in Mumbai with the objective of getting our women employees on one platform to create best-in-class engagement and learning experience. Overall, 136 employees from various departments such as engineering, industrial relations, corporate social responsibility, human resources and shop floor participated in this conclave. The open discussions at the conclave provided a good platform for exchanging thoughts and ideas about how the organisation can further promote diversity and inclusivity.

**136** employees  
participated at Hindalco (WAH) conclave



## HINDALCO TECHNICAL UNIVERSITY

Launched in November 2017, the Hindalco Technical University has played a crucial role in driving the spirit of excellence across our talent pool.

### Objectives

- Be a pillar in Hindalco's strategy to achieve higher productivity, efficiency and operational excellence
- Provide a central platform for standardised technical training
- Prepare the people of Hindalco for future technology challenges

The university achieves these objectives by conducting technical training sessions, technical summits, knowledge management initiatives, techno fairs and events, and by developing small and medium enterprises (SMEs). It offers a diverse set of learning opportunities, spanning shop-floor, classroom, on-the-job, e-learning, workshops, simulation and knowledge-sharing platforms. The university has highly specialised, domain-specific schools, the School of Mines, the School of Refinery, the School of Smelter, the School of Power and the School of Downstream.

As part of the Hindalco Technical University initiative, we launched Virtual Reality (VR) enabled learning solutions in December 2018. This is a unique system aimed at providing our employees (existing and new) a closer understanding of the activities and processes undertaken at our smelters and mines. We have developed six VR cases to explain these processes.

**400+** employees

covered each in smelters and mines under VR training

## HINDALCO STRATEGY SESSION

Several teams across the organisation came together to align our strategy for the next 3-5 years, keeping in mind external trends, disruptions, global challenges and opportunities.

Team Hindalco identified the culture and capabilities required to deliver this strategy – collaboration, customer focus, ownership and accountability, talent development, world-class downstream capability. The team also developed a stop-start-continue list in terms of leadership behaviours that need to be demonstrated.

To give shape to the required capabilities and culture for future, many significant steps were taken across the organisation such as Parivartan in Renukoot and Kayakalp in Hindalco Mining Group.

## HINDALCO COACHING PROGRAMME

We launched the Hindalco Coaching Programme during FY 2018-19 in partnership with Gyanadoya –Aditya Birla Group Learning Centre and a few internationally recognised coaching and leadership development institutions. This programme places significant emphasis on promoting coaching culture and coaching style of leadership. We believe this programme will play an instrumental role in shaping future leaders and creating an enabling organisation.

**The success of our people focus is reflected in our annualised attrition rate of just 5% during FY 2018-19.**

## PEOPLE AT HINDALCO (continued)



### PEOPLE SPEAK

“ Engineers as we know find solutions and make things happen. The more complex a problem, the more creative you have to be to solve it. My habit of taking challenges, curiosity to learn new things and finding ways to do work effectively led me to choose engineering as my career.

**Serene Saptasagar,**  
Assistant Manager, Electrical

“ Engineering literally means ‘making things happen’. I always wanted to do something that would make a difference in the existing society. Being an Environmental Engineer, today I feel I am doing my bit to create a difference.

**Rinsu Varghese**  
Sr. Environmental Engineer

“ They said, maintenance field is not for women. Today, after successfully completing prestigious projects like CCR-3, CCR-1 Upgradation, filter press projects etc., I can proudly say, I’ve broken the cliches about women in engineering.

**Harshita Matta**  
Deputy Manager, Automation

# CORPORATE INFORMATION

## BOARD OF DIRECTORS

### Non-Executive Directors

**Mr. Kumar Mangalam Birla**  
Chairman

**Mrs. Rajashree Birla**

**Mr. Debnarayan Bhattacharya**  
Vice Chairman

**Mr. Madhukar Manilal Bhagat**

**Mr. Kailash Nath Bhandari**

**Mr. Askaran Agarwala**

**Mr. Yazdi Dandiwala**

**Mr. Ram Charan**

**Mr. Girish Dave**

**Ms. Alka Bharucha**

**Mr. Vikas Balia** (w.e.f. July 19, 2019)

### Executive Directors

**Mr. Satish Pai**  
Managing Director

**Mr. Praveen Kumar Maheshwari**  
Chief Financial Officer & CEO (Copper Business)

## COMPANY SECRETARY & COMPLIANCE OFFICER

**Mr. Anil Malik**

## CORPORATE

**Mr. Samik Basu**  
Chief Human Resources Officer

**Mr. Bibhu Prasad Mishra**  
President & Head Manufacturing Centre of Excellence

**Mr. V. R. Shankar**  
President & Head-Legal

**Mr. Chandan Agrawal**  
Chief Strategy Officer

## BUSINESS/UNIT HEADS

**Mr. Devotosh K. Das**  
Chief Marketing Officer (Aluminium)

**Mr. A. Krishna Kumar**  
President & Head-Chemicals & Specialties Business

**Mr. Satish Jajoo**  
Chief Operating Officer & Cluster Head  
(Renukoot, Renusagar and Mahan Units)

**Mr. B. Arun Kumar**  
President (Downstream Operations-Aluminium)

**Mr. Rajesh Gupta**  
Senior President & Cluster Head  
(Aditya and Hirakud Units)

**Mr. Pramod Unde**  
President (Mining and Minerals)

## SUBSIDIARIES

**Utkal Alumina International Limited**

**Mr. Nagesh Narisetty**  
President & Unit Head

**Novelis Inc.**

**Mr. Steve Fisher**  
President & CEO

## AUDITORS

**Price Waterhouse & Co Chartered Accountants LLP**

## COST AUDITORS

**R. Nanabhoy & Co., Mumbai**

## SAFETY

# Committed to ‘zero harm’

In our industry, workers are exposed to multi-faceted risks in their daily routine. It is thus of utmost importance that they have a thorough understanding of the safety practices needed to be followed. Our aim is to cause ‘zero harm’ to employees, communities and the environment around us.

To this end, we lay greater emphasis on imbuing safety practices as a culture and taking them beyond the realms of procedural checklists. We have made safety integral to our culture.

As we scale our businesses, a few hundred employees will get added every year. They belong to diverse cultural and economic backgrounds and many of them are unfamiliar with machines, chemicals and materials present and the associated hazards, which poses a key challenge for our safety team.

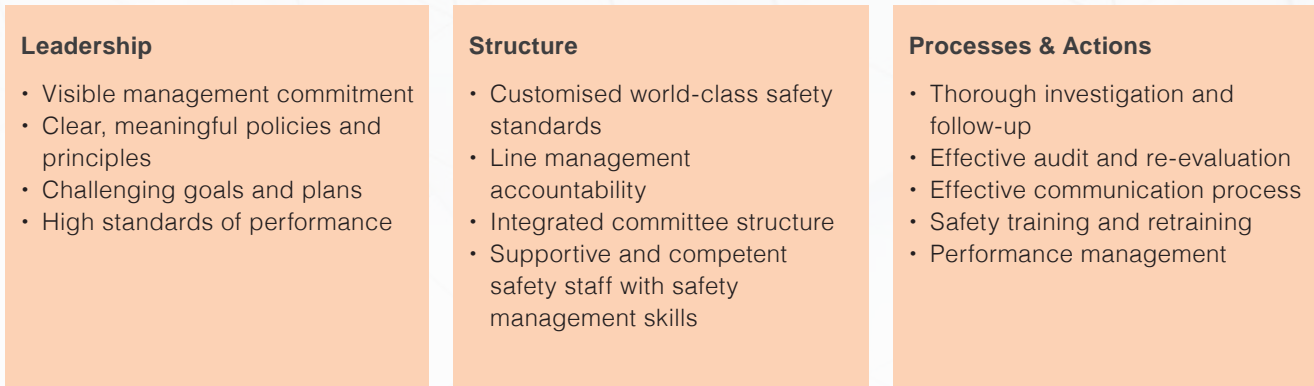
A couple of years ago, we designed a robust safety and health governance structure to address such challenges.



At Hindalco, safety underpins every decision and activity

### Safety and health governance structure

#### Safety management system





Hindalco has implemented 20 world-class safety standards and corporate safety guidelines at its units in India

Under this structure, the onus of safe operations was shifted to line managers from safety professionals. The functional heads lead various safety sub-committees and Heads of Departments lead task forces meant for safety standard implementation. Each task force is a cross-functional team and is assisted by at least two subject matter experts.

We have implemented 20 world-class safety standards and corporate safety guidelines and are constantly working to ensure risk control in important areas of human behaviour, mining activities, road traffic management, contractor management and crisis management.

These initiatives span multiple domains such as organisational safety competency and capability improvement, safety leadership development and a cross-auditing activity to enhance sharing experiences and sharing best practices across Hindalco.

One of our focus areas is to provide superior-quality safety training to our people.

**In FY 2018-19, we invested over 3.7 man-days/person in imparting safety training to employees and contractor workforce.**

Going forward, we will continue to improve on our safety practices and procedures and are confident of improving our safety performance.

## SUSTAINABILITY

# Reducing our ecological footprint

We are committed to operating in a responsible, sustainable manner and reducing our environmental footprint. In addition to deploying appropriate strategies and frameworks, we are leaving no stone unturned to achieve our sustainability goals. We aspire to become an industry benchmark and are continuously upgrading our business practices and operations.

We have identified the following SDG goals and are making steadfast progress in each of them.



**Some of the prominent sustainability initiatives during the year under review are highlighted here.**

- Assessed manufacturing units for water stress and implemented suitable mitigation measures
- Commissioned a 30 MW captive solar power plant at Aditya Aluminium
- Achieved zero fluoride emission from copper operations by tail gas scrubber modifications and using improved low fluoride raw material
- Biodiversity impact assessment study in collaboration with International Union for Conservation of Nature (IUCN) at four of our operational locations is under progress.
- Continued to be part of Xynteo, a Norway-based environmental advisory platform, to partner with various industry leaders for developing solutions for sustainable mining

**Hindalco has partnered with Xynteo – a Norway based environmental advisory platform and various industry leaders to develop solutions for sustainable mining.**



Over the past three years use of recycled water at the units has doubled

**Achieved utilisation of:**

**100% of the fly ash generated from our copper operations**

**76% of the fly ash generated from our aluminium operations**

**100% of copper slag generated during the year**

**46% of fly ash generated during previous years**

**100% of phospho-gypsum generated during the year**

**Additional 45% of phospho-gypsum generated during previous years**

## Case Study : Sustainable Green Energy and its integration with aluminium smelter

### Background

In November 2018, we implemented 'Sustainable Green Energy Project' at Aditya Aluminium, Sambalpur (Odisha). The aim of this project was to promote sustainable energy and reduce Green House Gas (GHG) emissions by installing a 30 MW solar plant at this smelter.

### Action

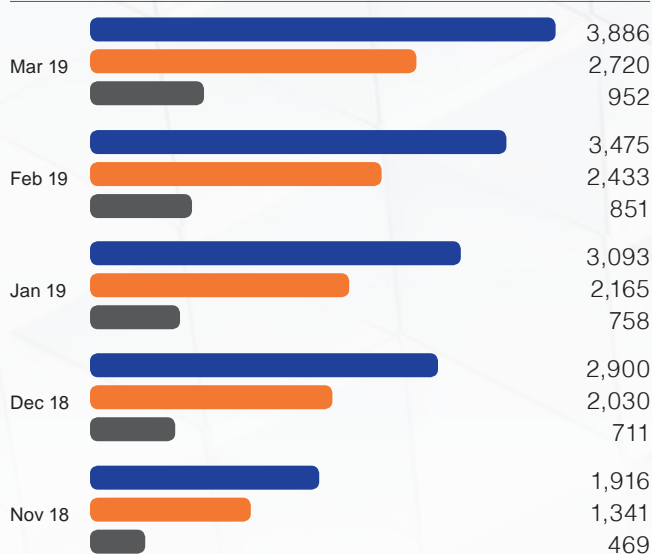
As the solar plant required ~150 acres of land, we installed the solar panels on ash filled land and built the foundations with piling. We faced multiple challenges while installing the solar plant. These included integration with running 220 kV system, managing solar generation variation in islanding condition and islanding stability, and getting multiple statutory approvals, among others.

In this scenario, we envisaged various plant operating conditions, and after thorough brainstorming, undertook multiple steps for stabilising the solar plant. These included enabling low voltage ride through solar inverters to sustain voltage dip, giving control current zero command to transductor control of rectifier to manage load and generation, implementing underfrequency-based load shedding revision, among others.

### Impact

Successful implementation of this solar plant led to significant benefits for us. Even in the project stabilisation period of the first five months of operations, the project generated 15,270 MWh of electricity, saving 10,690 tonne of coal and avoided 3,740 tonne of Ash & 15,450 tonne of CO<sub>2</sub>.

### Tangible benefits from the solar plant



■ Power generation (Mwh) ■ Savings in coal quantity (tonne) ■ Savings in ash quantity (tonne)

**This project has received widespread appreciation and a paper on the project has been published by Conseil International des Grands Réseaux Électriques (CIGRE)\* study committee (SC) C6.**

We are implementing similar projects at other sites after evaluating the solar radiation in the area thoroughly.

*\*The International Council on Large Electric Systems*

# CORPORATE SOCIAL RESPONSIBILITY (CSR)

## Empowering communities

We, at Hindalco, are committed to acting as a responsible citizen and contributing meaningfully to the improvement of our communities. To this end, we have identified a few focus areas and are working diligently to achieve our own goals.

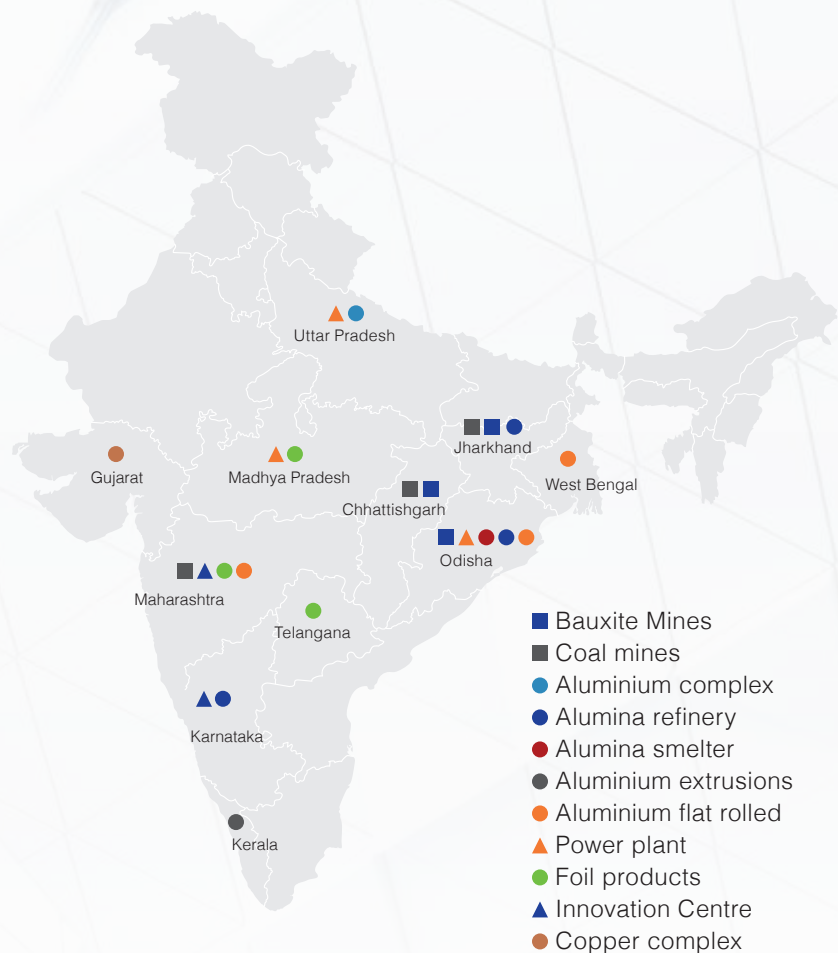
### CSR: OUR FOCUS AREAS

- Education
- Healthcare
- Sustainable livelihood
- Infrastructure development
- Social reforms

Our efforts are leading to encouraging results, motivating us to progress ahead on our journey of driving inclusive growth. This journey has only begun for us and we believe there is still immense potential to empower our communities in future.

### OUR CSR FOOTPRINT IN INDIA

We are spread over 21 locations in India benefitting 1.2 million people and 103 model villages across 11 states, 22 districts, 26 talukas, 36 blocks, 732 villages and 39 slums.



**1.2 million**  
people benefited from our CSR  
initiatives across different states



## KEY INITIATIVES IMPLEMENTED DURING THE YEAR

### Education

- Increased retention rate of students to 97% in government schools through our Shala Pravesh Utsav
- Covered 500 students in our digital education programme in various government schools
- Provided computer education to the rural youth through our programmes in partnership with the Department of Education, NIIT foundation, Odisha Knowledge Corporation Ltd. and Rajiv Gandhi Computer Academy

**6,512** students  
in *Anganwadis* and *Balwadis*

#### Number of students

- In our schools: 8,247
- Received educational/uniform material: 19,922
- Received mid-day meal: 40,000

### Healthcare

- Provided 15 ambulance services for emergency patients in Muri under the Jeevan Mitra Seva Yojana and saved 4,077 critical patients across 86 villages
- Provided access to safe and clean drinking water to 1 Lakh beneficiaries in collaboration with the Gram Panchayats
- Provided potable drinking water through hand pumps, wells and RO plants
- Supplied water through tankers and laid down water pipelines
- Organised 55 adolescent health awareness talks benefiting ~4,023 girls
- Installed five sanitary napkin vending machines at Dahej and Taloja

**15,418** people  
benefited from 1,904 medical camps

#### Patients benefited from hospitals/ Dispensaries/Clinics: 2,44,034

**Started 19 family welfare centres to provide safe motherhood and child survival services, benefiting 50,626 mothers**



## CORPORATE SOCIAL RESPONSIBILITY (CSR) (continued)

### Sustainable livelihood

- Facilitated capacity-building sessions on agriculture and allied activities
- Organised camps to provide training on modern agriculture farming techniques
- Helped farmers through demonstration plots and soil testing
- Promoted farmers club for collective growth by sharing their knowledge on procurement of inputs and economies of scale
- Trained more than 27 batches at the Aditya Birla Rural Technological Park on computer literacy, cosmetology, repair of electric and electronic goods, handicrafts, bag making, soft toys, tailoring and knitting, ways to enhance agricultural output and veterinary science
- Trained 250 aspirants and conducted capacity-building programmes for 679 people

**Beneficiaries of job oriented skills training programme: 5,864**

**Participants at Farmers Meetings and Melas: 19,182**

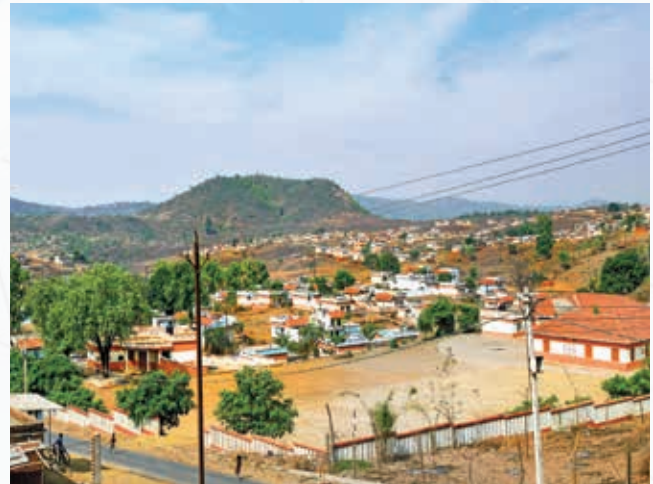


### Infrastructure development

- Assisted in development and construction of village approach roads, culverts, *panchayat bhawan*, pond excavation, bathrooms, protection wall, channel pitching, rural houses, check dams, bus stops and so on

**₹6.8 Crore**

spent towards constructing community assets and repairing community infrastructure



## Social reforms

- Our Company's focus areas include reduction in child labour and illiteracy, elimination of child marriages and abuse of the girl child and women, alcoholism and poor hygiene
- Supported them through cultural programmes and sport events
- Collaborated with government agencies and other groups
- Organised eight mass marriages where 1,553 marriages were solemnised

**Conducted 336 social awareness camps reaching out to 79,570 participants**

**Distributed about 6,219 blankets to underprivileged and supported 1,924 orphanage and old age home residents**



## CORPORATE SOCIAL RESPONSIBILITY (CSR) (continued)

### Case study: Project Saksham

#### Background

Utkal Alumina rolled out Project Saksham in FY 2014-15 to empower unskilled rural women and help them earn a livelihood. Consequently a garment manufacturing facility was set up and women were trained to make clothes. The initiative is scheduled to run till FY 2019-20.

Project Saksham overcame three major roadblocks during the course of its journey – machine maintenance, hiring professionals and ensuring quality production.

**We plan to replicate the project in the periphery of Utkal Alumina's mines, once we complete a few business cycles. Both the units will operate in synergy and thus will have higher efficiency and profitability.**

#### Action

While Utkal Alumina International Limited is financing and facilitating this project, The Tikri Agro-craft Producer Company owns the garment manufacturing unit.

#### Impact

**So far, 62 women have been trained and 30 women are earning their livelihood from the unit.**

Market linkages have been established with:

##### Corporates

- Essel Mining Industries Ltd.
- Utkal Alumina International
- Hindalco Industries, Hirakud
- Aditya Aluminium, Lapanga

##### Educational Institutions

- Jawahar Navodaya Vidyalaya
- Kasturba Gandhi Balika Vidyalaya
- Ekalavya Model Residential School
- Aditya Birla Public School
- *Anganwadi* centres – Integrated Child Development Services (ICDS)



## Case study: Project Unnati

### Background

Project Unnati spans 30 villages covering tribal and backward areas of Dudhi *tahsil*, Sonebhadra District (Uttar Pradesh). Unnati created livelihood opportunities for 25,844 beneficiaries through programmes such as agriculture development, water management, health, education, training and women empowerment.

### Key challenges faced while implementing this project:

- Illiteracy, unskilled youth, unemployment
- Negligible participation of women in income generation activities
- 90% of population dependent on agriculture
- Poor infrastructure and communication facilities
- Huge outward migration
- Negligible knowledge on advanced practices of agriculture

### Action

Our team conducted an assessment of the needs in all targeted villages. We involved villagers, block officials and local government officials right from the planning stage. We also availed of the benefits extended under various government schemes.

### Our activities were bucketed under four clusters:

#### Capacity building

- Development of land and water committees
- Providing training to farmers
- Promoting Self Help Groups (SHGs)

#### Structural measures

- Constructing contour furrows, earthen bunds and sunken ponds
- Renovating and constructing dams
- Constructing irrigation wells and dug wells
- Undertaking lift irrigation

#### Skill upgradation

- Identification and selection of unskilled or semi-skilled youth
- Providing vocational training and skill upgradation
- Conducting refresher courses

#### Additional support

- Distributing seeds, fertilisers to farmers and providing them with information on animal husbandry and breed improvement
- Facilitating formation of SHGs for women
- Helping with trade selection and training
- Supporting rural youth and farmers by developing backward- and forward-market linkages

### Impact

**62%**

of trained youth are engaged in work

Crop productivity has increased by

**~40%**

Water table has increased by

**1.2 m**

Adequate availability of food throughout the year

Seasonal outward migration has dropped by

**50%**

Involvement of women in economic activity has improved by

**70%**

**We plan to replicate this project in 20 more villages of the Dudhi *tahsil* covering 7,860 families.**

## AWARDS & ACCOLADES

# Recognised for our excellence



**Leadership Award** in Mega Large Business Metals Sector in the Frost Sullivan and TERI Sustainability Awards 4.0 in 2019



**Breaking New Grounds Award** at the Global Diversity Equity Inclusion Summit an event run by Ask Insights, UNDP and Business World magazine



**FICCI CSR Award 2018** for commendable work in Agricultural Development at the FICCI CSR Summit



**CII ITC Sustainability Awards 2018** for Excellence in CSR - Mahan Aluminium



**India CSR Award 2018** for the third consecutive year, from India CSR Network, for Sustainable Livelihood Project in agricultural development - Mahan Aluminium

- **Frost & Sullivan India Manufacturing Excellence Award**, 2018 in the Gold category- Aditya Aluminium
- Winner in the large enterprise category at **ICC Social Impact Award/ Summit** - Hindalco Birla Copper
- **Awarded Top plant of the world** in Coal category by Power magazine for the best coal based CPP, amongst the top 6 power plants in the world - Aditya Aluminium



Renukoot CSR team awarded with **Times National CSR Award 2018** by CSR Times in Livelihood category

Hindalco Everlast Aluminium Roofing & Structurals voted as the best in the aluminium roofing category



**National Award for Manufacturing Competitiveness (NAMC) Gold Award** – Hirakud

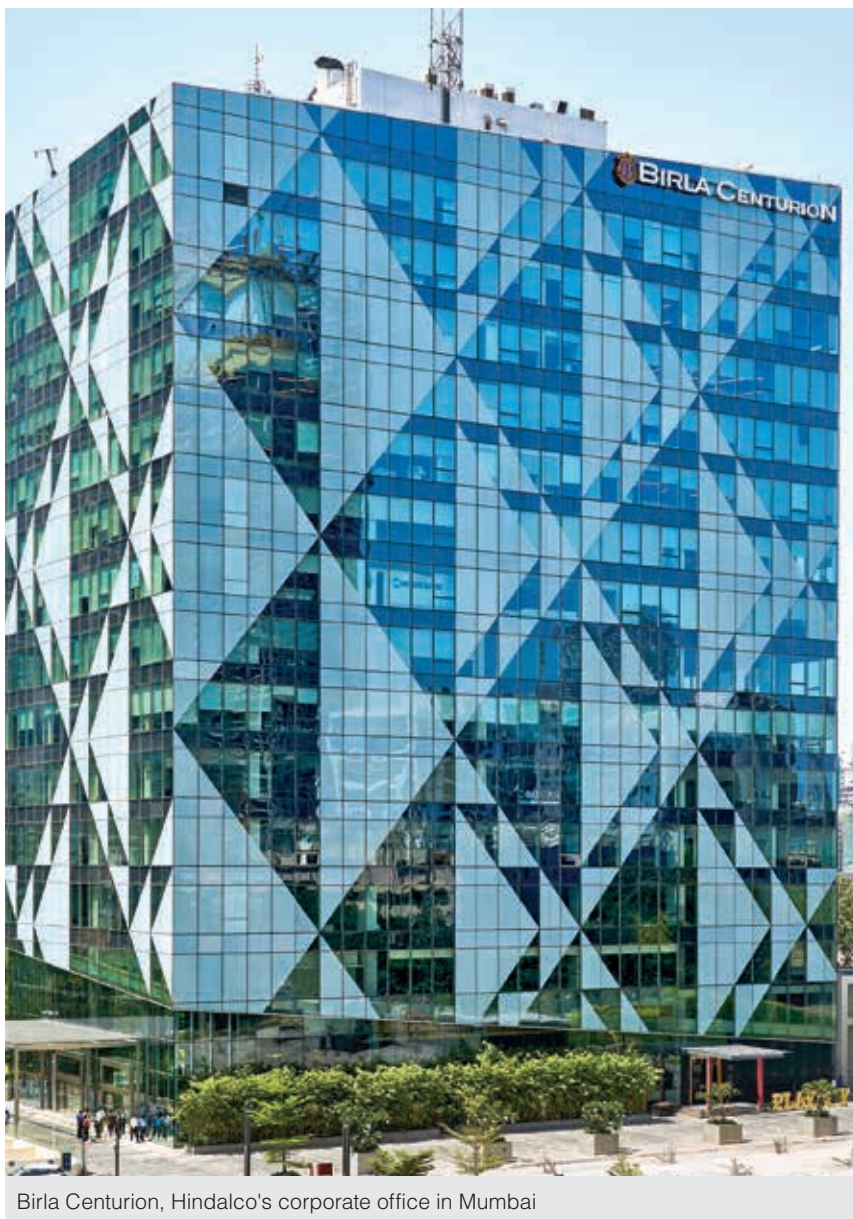


**FAME Excellence Gold Award 2018** for Environment Protection – Hirakud



## MANAGEMENT DISCUSSION & ANALYSIS

Hindalco Industries Limited (HIL), the metals flagship company of the Aditya Birla Group, is a global leader in aluminium and copper. Hindalco is the world's largest aluminium rolling and recycling company and one of Asia's leading producers of primary aluminium. In India, the company's aluminium business encompasses the entire gamut of operations from bauxite mining, alumina refining, coal mining, captive power plants and aluminium smelting to downstream rolling, extrusions and foils.



Birla Centurion, Hindalco's corporate office in Mumbai

Hindalco's wide spectrum of value-added products serves key industry sectors such as building and construction, automotive, packaging, electrical, defence, aerospace, telecom, consumer durables, among others.

Novelis Inc., Hindalco's wholly-owned subsidiary, is the leading producer of flat-rolled aluminium products and the world's largest recycler of aluminium. It leverages its global manufacturing and recycling footprint to deliver consistent, high-quality products around the world. Novelis provides innovative solutions to its customers in the beverage cans, automobile and speciality Flat Rolled Product (FRP) segments. It operates an integrated network of technically advanced rolling and recycling facilities across North America, South America, Europe and Asia.

Hindalco's state-of-the-art copper facility is one of the world's largest single-location custom smelters with downstream facilities, a fertiliser plant and a captive jetty. It produces copper cathodes and continuous cast copper rods (CCR) along with other by-products such as sulphuric acid and Di-Ammonium Phosphate (DAP).

FY 2018-19 was a record year for Hindalco in terms of operational



and financial performance, despite macroeconomic challenges and global uncertainties. Novelis reported its highest-ever shipments and adjusted EBITDA, primary aluminium registered its highest-ever metal production and EBITDA, and copper clocked its highest-ever domestic rod sales. Hindalco continued to deleverage its balance sheet by prepaying long-term loans of around ₹1,575 Crore in FY 2018-19, leading to a consolidated net debt to EBITDA of 2.48 times in FY 2018-19 versus 2.82 times in the previous year.

### KEY INITIATIVES DURING THE YEAR

Utkal Alumina's brownfield capacity expansion, by 500 Kt, is expected to be completed in FY 2020-21 with a capital outlay of around ₹1,300 Crore. This will further strengthen the Company's integration and boost the availability of best-in-class alumina to its aluminium smelters in India.

In the copper business, the newly commissioned continuous cast rod plant (CCR#3) at Dahej, Gujarat is ramping up well and achieved a production of 117 Kt, taking total CCR production in FY 2018-19 to 245 Kt.

Novelis, signed a definitive agreement to purchase Aleris Corp for \$2.6 Billion in July 2018. This will help broaden Novelis' automotive business, meet growing demand, diversify its global footprint and customer base, and enhance its Asia operations with full metal chain integration in China. The deal will help diversify Novelis' product portfolio further by providing entry into the aerospace segment.

Novelis announced expansion plans of 200 Kt automotive finishing facility in Guthrie, Kentucky in the US, and an additional 100 Kt of automotive finishing line in China, are expected to be commissioned in FY 2020-21. Further, the plan to expand its rolling, casting and recycling capacity in Pinda, Brazil to meet growing customer demand is also expected to be commissioned by FY 2021-22.

Novelis will also supply premium aluminium automotive body sheets for new vehicle designs, including the all-new Toyota RAV4 and NIO ES6 models in the US and China. In CY 2019, Novelis has partnered with Volvo Car Group to establish an automotive closed-loop recycling system in Europe to reduce CO<sub>2</sub> emissions, decrease waste and increase recyclability of aluminium.

## FY 2018-19: A YEAR OF MILESTONES

### Achieved highest-ever

Aluminium metal production

**1,295 Kt**

Alumina production

**2,893 Kt\***

Aluminium VAP production in India  
(excluding wire rods)

**321 Kt**

Copper rods production

**245 Kt**

Overall shipments in Novelis

**3,274 Kt**

Consolidated revenue

**₹1,30,542 Crore**

Consolidated EBITDA

**₹16,627 Crore**

Consolidated PAT

**₹5,495 Crore**

*\*including Utkal, the wholly-owned subsidiary*

# MANAGEMENT DISCUSSION & ANALYSIS

## 1. INDUSTRY ANALYSIS

### 1.1 Aluminium Segment and Industry Review

CY 2018 was a highly volatile year for the aluminium industry with the US being a pivot for major events. The first half of the year was completely dominated by the US sanctions on UC Rusal and the imposition of Section 232, i.e., import tariffs of 10% on all aluminium products. The second half was impacted by the eruption of trade war between the US and China. Alumina supply was also impacted during the year due to disruptions at one of the world's biggest refineries outside China, pushing alumina prices to an all-time high of \$700/tonne in CY 2018.

The US-China trade war dampened the global economic environment with most of the major economies experiencing a slowdown in growth, which in turn impacted aluminium consumption. In CY 2018, primary aluminium consumption growth moderated to 3% y-o-y from 6% y-o-y in CY 2017. The world, excluding China, reported aggregate consumption growth of around 2% in CY 2018, down from 3% in CY 2017, owing to subdued demand in Japan, the Middle East, Brazil, and Europe, while demand growth in North America remained flat at 2% y-o-y. Among user industries, only the packaging sector witnessed growth in CY 2018 versus CY 2017. However, consumption growth moderated in the construction, electrical, machinery, equipment and the transportation sectors.

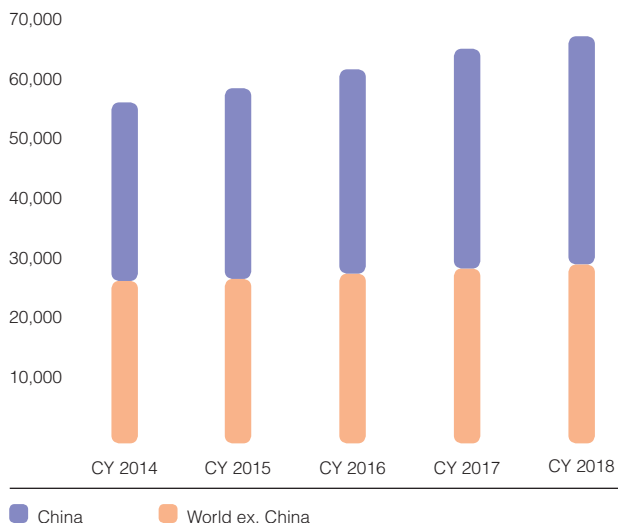


Aluminium FRP plant in Hirakud, Odisha

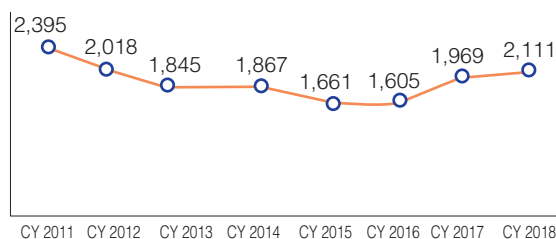
China in CY 2018 struggled on two fronts – the trade with the US and moderation in the domestic economy. Consequently, consumption growth slowed significantly to around 3% in the year from around 8% in CY 2017, owing to a sharp decline in demand from the transport, construction and electrical sectors.

Global aluminium production excluding China grew around 2% y-o-y in CY 2018 versus around 1% y-o-y a year ago; production growth in China slipped to around 1% y-o-y from 13% y-o-y in CY 2017. A surge in input costs, coupled with environmental regulations, made a majority of the smelters in China unviable. As a result, overall global production marginally grew by 0.5% y-o-y in CY 2018, around 8% y-o-y growth in CY 2017.

### Primary Consumption of Aluminium (Kt)

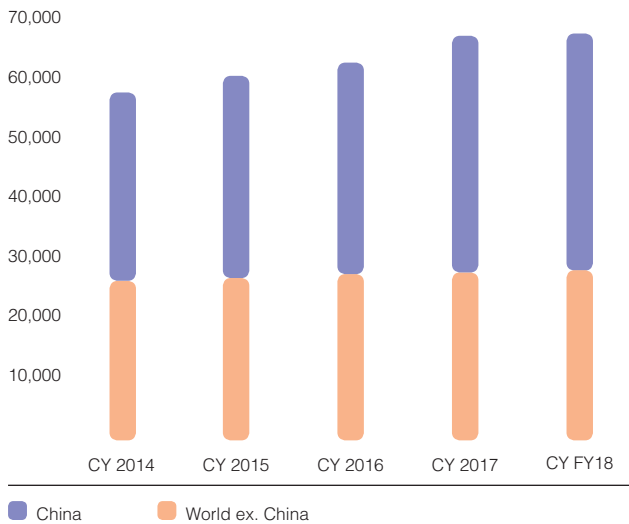


### Global Average Aluminium Prices (\$/tonne)



## Primary Production of Aluminium

(Kt)



The events in CY 2018 fuelled significant volatility in global aluminium prices. In the first half, prices peaked at \$2,700/tonne owing to the sanctions on UC Rusal and the imposition of Section 232, i.e., 10% import tariff on all aluminium products to the US. The disruption of alumina supply also fuelled volatility in global aluminium prices.

By the end of the second half, prices plunged to below \$1,900/tonne due to the US-China trade war and the removal of sanctions on US Rusal. A significant surge in input costs, along with a market deficit of around 2 Mt, restricted global aluminium prices to around \$1,900/tonne by the end of the year.

Average value of premiums at Main Japanese Port (MJP), European Rotterdam Premium and US Midwest premium in CY 2018 was \$117/tonne, \$165/tonne and 19 Cents/lb, versus \$109/tonne, \$147/tonne and 9 Cents/lb, respectively, in CY 2017.

In the domestic market, aluminium production maintained a strong growth of 9% in FY 2018-19 while domestic consumption remained robust at around 9.5%. User industries like transportation, construction and consumer durables were the major demand drivers.

**A significant surge in input costs, coupled with ~2 Mt global market deficit, restricted global aluminium prices to around \$1,900/tonne.**

Imports continued to be a concern for domestic players, which accounted for nearly 60% of the market in FY 2018-19. Overall imports including scrap touched ~2.3 Mt in FY 2018-19 from ~2 Mt in FY 2017-18.

### 1.1.1 Outlook

In CY 2019, the global macroeconomic environment is likely to remain highly volatile due to increased trade tensions between the US and China and uncertainty around Brexit. Central banks of major economies are taking an accommodative policy stance to aid economic growth.

According to the International Monetary Fund (IMF), global economic growth is expected to moderate further to 3.3% in CY 2019 from 3.6% in CY 2018.

As aluminium consumption is correlated with economic growth, global aluminium consumption growth may moderate to ~2% in CY 2019. Among the user industries, transportation, machinery and equipment are expected to face moderation while construction and electrical are likely to be supportive. China is expected to maintain a steady growth at 2% to 3% on the back of government stimulus. The world excluding China is expected to see aluminium consumption growth of around 1% in CY 2019 from around 2% in CY 2018 due to likely moderation in demand from North America and Europe. India and the Middle East, on the other hand, could witness some increase.

Global aluminium supply is likely to be flat at 64-65 Mt. Production in the world excluding China is expected to be around 28 Mt, driven by production from line 6 at Alba. Primary aluminium supply in China is likely to grow marginally in the 36-36.5 Mt range, on the back of ramp-ups at state-owned enterprises (SOEs).

**Global aluminium supply is likely to be at 64-65 Mt in CY 2019.**

In CY 2019, global aluminium production is unlikely to witness significant growth. This, coupled with inventories below 1 Mt leading to overall market deficit, are the factors that will support global prices of aluminium. Any easing of global trade tensions could provide additional positive support to aluminium prices.

Domestic demand is likely to remain robust at 7% in FY 2019-20, driven by construction and packaging. The increasing share of imports of aluminium products,

## MANAGEMENT DISCUSSION & ANALYSIS



Birla Copper is a leader in the Copper Continuous Cast Rod segment

including scrap, will continue to be a major concern for domestic aluminium producers.

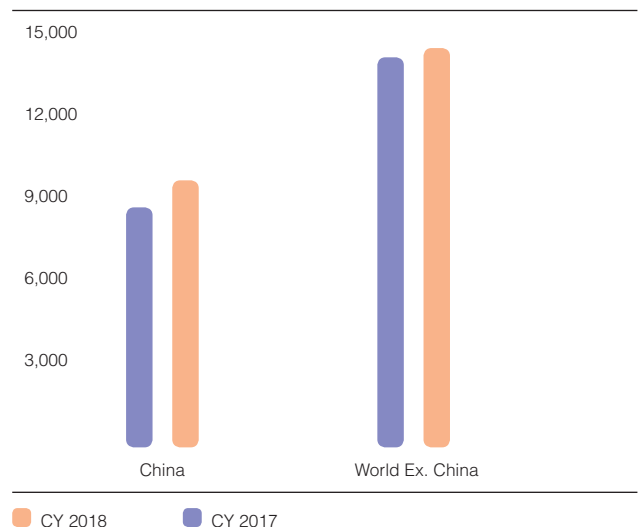
### 1.2 Copper Segment and Industry Review

The copper market was also impacted by global uncertainties, trade disputes, slowing Chinese economy (constitutes 50% of global consumption) and strengthening US dollar. In addition, there were fears of major supply disruptions as labour contracts at many major mines, especially in Chile and Peru, were up for renewal during the year. However, all the negotiations were concluded without any disruptions.

In CY 2018, concentrate production grew around 3.5%, with a majority of the production coming in the second half. However, concentrate output from the world's two biggest mines, Escondida in Chile and Grasberg in Indonesia fell, as the latter shifted from open cast to underground mining. The expectation of a likely disruption in CY 2018 led to a moderation in benchmark TC/RC to 21.1 c/lb from 23.7 c/lb in CY 2017.

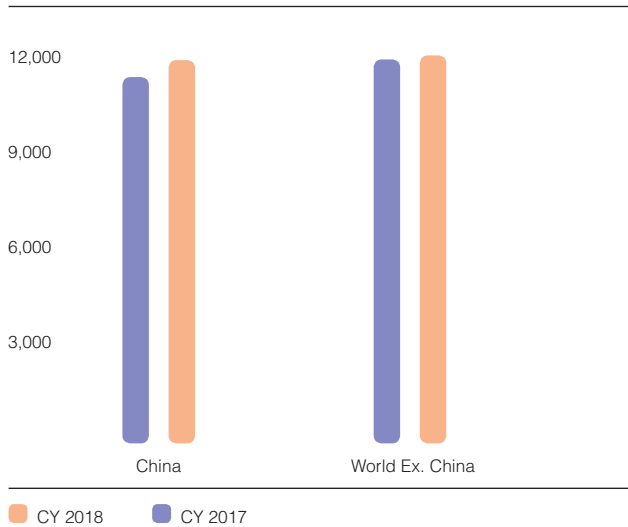
Global consumption of refined copper grew 2.8% y-o-y in CY 2018 versus 2.7% y-o-y in CY 2017; the world excluding China grew around 1% y-o-y versus around 0.3% y-o-y. Demand in Japan, North America and Europe (majorly driven by Germany) grew while that in South Korea and Taiwan witnessed a sharp decline.

Refined Copper Production (Kt)



## Refined Copper Consumption

(Kt)



Growth in Chinese demand was at 4.5% in CY 2018, down from 5% in CY 2017, due to its economic slowdown and the trade dispute with the US in the second half of CY 2018. However, the ban on grade 7 scrap imports supported primary copper consumption. Building & construction, machinery and consumer durables were the leading demand drivers.

In the domestic market, demand surged to 10% in FY 2018-19 as compared with 2% in FY 2017-18. This was largely driven by growth in electrical and electronics and consumer durables sectors. However, slowing industrial growth was a concern during the year. Imports from ASEAN and FTA countries continued to put pressure on the domestic market. During FY 2018-19, imports recorded an increase of 20% as against a growth of 7% in the previous year. As a result, the overall share of imports in the domestic market increased from 37% in FY 2017-18 to 42% in FY 2018-19. The majority of the imports were in the categories of rods and wires.

**Slowdown in Chinese economy and trade dispute with the US restricted the consumption growth in the second half of CY 2018.**

### 1.2.1 Outlook

As mentioned in the aluminium segment outlook, uncertainty in the macroeconomic environment is expected to continue in CY 2019; this will likely

impact copper consumption as well. However, any moderation in the global trade war scenario and Chinese stimulus are expected to support the overall copper demand in CY 2019.

Globally, demand for refined copper is likely to be around 24 Mt in CY 2019, up 2% to 2.5%. By region, demand in the world excluding China is likely to grow by around 2%, primarily driven by North East Asia, ASEAN and the European region, while North America could witness some moderation.

Demand in China is expected to grow around 3% in CY 2019, down from 4.5% in CY 2018 due to the ongoing uncertainty. However, easing of trade tensions with the US, scrap restriction and investments in infrastructure are likely to support growth in refined copper consumption globally.

The copper concentrate market is likely to be in a deficit of around 200 Kt in CY 2019, due to lower production from Grasberg and Escondida mines. Production in Africa is also expected to witness some moderation. The reduction in concentrate output and the surge in demand from Chinese smelters could adversely impact Tc/Rc in CY 2019 and beyond.

**Robust demand from the power sector, Government thrust on renewable energy, rising demand from the housing segment (urbanisation) and the consumer durables industry are likely to drive copper demand in India.**

In the domestic market, demand for refined copper in FY 2019-20 is likely to grow at FY 2018-19 levels of ~10%, driven by the robust power sector, the Government's thrust on renewable energy, rising demand from the housing segment (urbanisation) and the consumer durables industry. However, low-cost imports are a major concern for domestic producers.

## 1.3 Novelis – Industry Review and Business Overview

Economic growth and material substitution continue to drive increasing global demand for aluminium and rolled products. With the exception of China, where can sheet overcapacity and high competition remain, favourable market conditions and increasing customer preference

## MANAGEMENT DISCUSSION & ANALYSIS

for sustainable packaging are driving demand for recyclable aluminium beverage cans.

Meanwhile, demand for aluminium in the automotive industry continues to grow, justifying the investments made by Novelis in its automotive sheet finishing capacity in North America, Europe and Asia in recent years. The robust demand environment is also fuelling additional investments in Guthrie, Kentucky (US) and Changzhou, China.

This growing demand is primarily a reflection of automotive companies' preference for lightweight aluminium in vehicle structures and components, as they respond to stricter emissions and fuel economy regulations, while improving vehicle safety and performance.

In FY 2018-19, Novelis announced its plans to expand rolling, casting and recycling capability in Pinda, Brazil. The company also signed a definitive agreement to

acquire Aleris, pending regulatory approvals, which will further diversify Novelis' global footprint and portfolio.

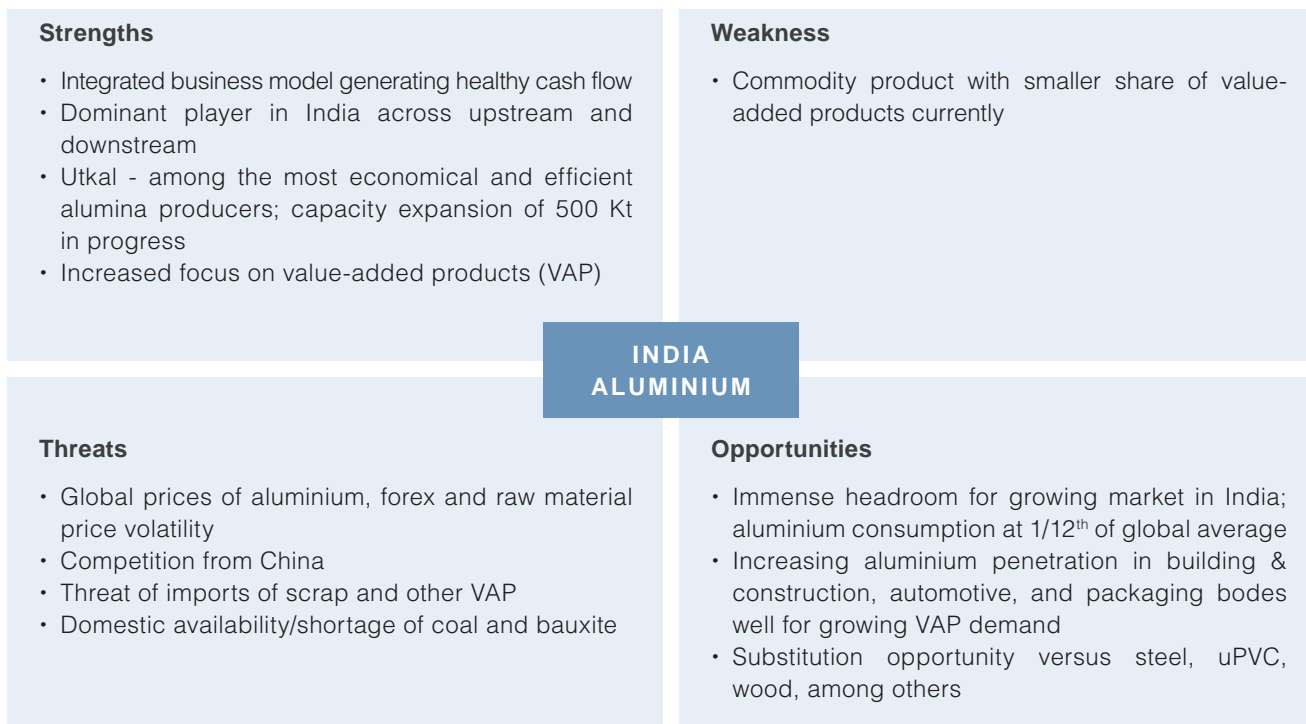
*Note: For a region wise detailed business overview, please refer to the 10K filed by Novelis Inc. dated May 08, 2019 for the year ended March 31, 2019.*

### 1.3.1 Outlook

Global FRP demand, excluding China, grew by 4-5%. The beverage can market is witnessing growth in the emerging markets of Asia and South America. Also, new end-use segments like sparkling water and the global shift from glass to aluminium are fuelling beverage can demand. The adoption of strong, lightweight and formable aluminium sheets in vehicle parts and structures is driving growth in the automotive body sheet segment. This market is expected to record a CAGR of 12% to 15% between CY 2018 and CY 2025, despite some recent softening in European and Chinese demand.

## 2. BUSINESS SEGMENT REVIEW

### 2.1 Hindalco – SWOT Analysis



**Strengths**

- Global presence - across 9 countries, enabling global play with marquee customers
- Market leader in can and automotive FRP products
- 61% share of recycling in Novelis portfolio leading to high cost competitiveness

**Weakness**

- Lack of access to Shanghai Futures Exchange (SHFE) metal in China

**NOVELIS****Threats**

- Increasing tariffs and protectionist measures
- LME-SHFE gap, leading to competitiveness in China
- Price erosion on account of growing competition

**Opportunities**

- Growing penetration of aluminium cans due to emerging market growth and growing consumer preference for sustainable beverage packaging options
- Growing automotive market driven by EVs, energy efficiency and light-weighting focus across the globe

**Strengths**

- Balanced portfolio of revenue streams to tide through volatile market
- Secured concentrate supply via long-term contracts with miners
- Increased focus on VAP in copper

**Weakness**

- Import dependence for copper concentrate supplies

**COPPER****Threats**

- Mine disruptions
- Duties & FTAs owing to rising trade politics

**Opportunities**

- Immense headroom for growth due to lower consumption versus global average

## MANAGEMENT DISCUSSION & ANALYSIS

### 2.2 Operational Performance and Financial Review

#### Financial Table – Hindalco Standalone and Consolidated

(₹ in Crore)

Description	Standalone		Consolidated	
	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18
<b>Revenue from Operations</b>	45,749	43,446	1,30,542	1,15,820
<b>Earnings Before Interest, Tax and Depreciation (EBITDA)</b>				
Aluminium	2,885	3,708	5,107	4,692
Copper	1,469	1,539	1,516	1,594
Novelis	-	-	9,194	7,903
Others (including other income)	833	825	810	836
<b>Total EBITDA</b>	<b>5,187</b>	<b>6,072</b>	<b>16,627</b>	<b>15,025</b>
Depreciation	1,693	1,617	4,766	4,606
Finance Cost	1,683	1,901	3,778	3,911
<b>Earnings before Exceptional Items, Tax and Share in Profit/(Loss) in Equity Accounted Investments</b>	<b>1,810</b>	<b>2,554</b>	<b>8,083</b>	<b>6,508</b>
Associate Profit/(Loss)	-	-	-	(125)
<b>Earnings before Exceptional Items and Tax</b>	<b>1,810</b>	<b>2,554</b>	<b>8,083</b>	<b>6,383</b>
Exceptional Income/ (Expenses) (Net)	-	(325)	-	1,774
<b>Profit Before Tax (After Exceptional Items)</b>	<b>1,810</b>	<b>2,229</b>	<b>8,083</b>	<b>8,157</b>
Taxes Paid	605	792	2,588	2,074
<b>Profit/ (Loss) After Tax</b>	<b>1,205</b>	<b>1,437</b>	<b>5,495</b>	<b>6,083</b>



Aditya Aluminium plant in Odisha



### 2.2.1 Hindalco Aluminium Business (excluding Novelis)

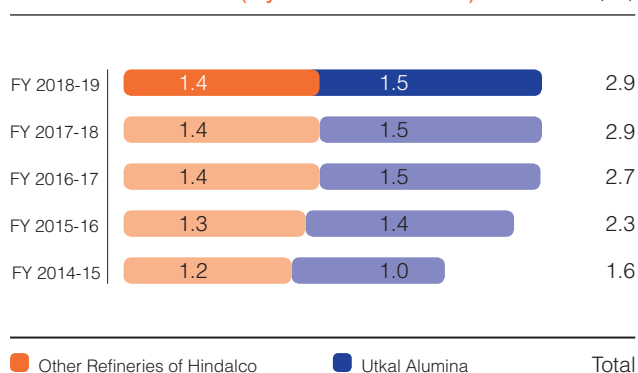
Revenue for Hindalco's aluminium business (excluding Novelis) touched ₹24,160\* Crore in FY 2018-19, from ₹21,396\* Crore in FY 2017-18, up by 13%. EBITDA was higher by 9% at ₹5,107 Crore versus ₹4,692 Crore a year earlier, backed by higher realisations and supporting macros. (\*The above numbers are without elimination of Inter-segment revenue)

In the consolidated financial statements, within the aluminium segment, the significant entities are Hindalco and Utkal Alumina International Ltd. Since Utkal Alumina is a wholly owned subsidiary of Hindalco and supplies substantial quantity of its production to Hindalco, the Company has analysed the combined performance of Hindalco's aluminium business along with Utkal Alumina.

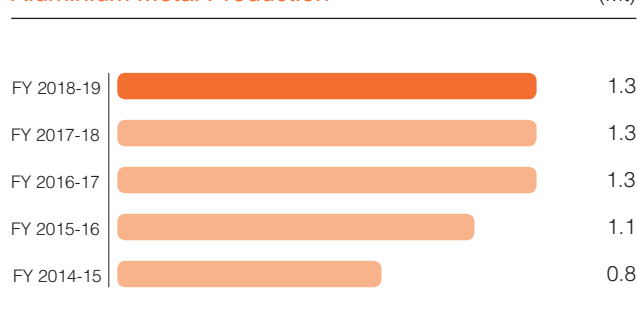
### 2.2.2 Operational Overview – HIL Aluminium (Including Utkal)

The Company achieved record performance in its aluminium business in FY 2018-19, despite challenges and volatility. This was supported by stable operations at all its manufacturing units in India with record production of aluminium at 1.295 Mt and alumina at 2.893 Mt. Overall metal sales in all forms stood at 1.274 Mt versus 1.281 Mt in FY 2017-18. Utkal Alumina continues to be the most economical and efficient alumina producer globally, running at maximum capacity to produce 1.5 Mt of world-class alumina and providing strong support to most of HIL's smelting facilities, leading to better cost optimisation and quality input. Production of VAP excluding wire rods was higher by 5% at 321 Kt.

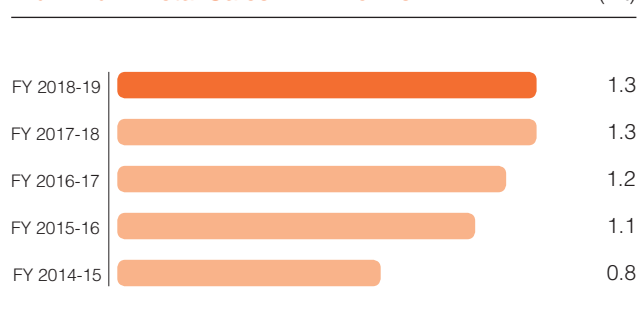
### Alumina Production (Hydrate as Alumina) (Mt)



### Aluminium Metal Production (Mt)



### Aluminium Metal Sales in All Forms\* (Mt)



\* including Wire rods and other Value-added Products.

On the coal side, the Company won back the entire quantity of Krishnashila coal linkage of 3.1 Mt in the auction conducted in September 2018, securing its overall linkages. The total quantity secured through coal linkages stands at 12.2 Mt, translating to about 73% of annual coal requirements of Hindalco. Overall, 96% (including Dahej plant) of annual coal requirement is secured through long-term linkages and captive mines. Currently, three captive mines – Gare Palma IV/4, Gare Palma IV/5 and Kathautia – are fully operational. The captive mine at Dumri is in the process of obtaining necessary statutory clearances and is expected to be operational in FY 2019-20.

**Currently 96% of annual coal requirement is secured through long-term linkages and captive mines.**

## MANAGEMENT DISCUSSION & ANALYSIS



Aluminium ingots manufactured at Aditya and Mahan smelters

### 2.2.3 Financial Overview

#### HIL Aluminium (Including Utkal)

Aluminium revenue including Utkal for FY 2018-19 rose 13%, on higher sales of aluminium metal, better realisations and supportive macros. EBITDA increased 9% on stable operations with supporting macros, despite cost increases of major inputs such as coal and furnace oil.

Description	₹ in Crore)		
	FY 2018-19	FY 2017-18	% Change over FY 2017-18
Revenue	23,775	21,089	13
EBITDA	5,202	4,790	9

### 2.3 Copper Business Review

#### 2.3.1 Operational Overview

The copper business continued to deliver consistent performance in FY 2018-19 in terms of revenue and EBITDA, despite production disruptions due to planned maintenance and related issues. Cathode production fell 15% from FY 2017-18 on account of planned maintenance shutdown in FY 2018-19. Copper rod production was the highest-ever at 245 Kt, up 47% in FY 2018-19, due to the ramp-up of the new CCR#3 adding 117 Kt to the total copper rod production. Production of DAP increased to 303 Kt from 205 Kt due to operational issues getting resolved in April-May 2018.

Total copper metal sales were at 359 Kt in FY 2018-19 down by 12% compared to prior year due to lower production. Sales of copper VAP (copper rods) were up by 48% at 243 Kt in FY 2018-19.

#### Copper Production

(Kt)

FY 2018-19	347
FY 2017-18	410
FY 2016-17	376
FY 2015-16	388
FY 2014-15	386

#### Copper Metal Sales in All Forms

(Kt)

FY 2018-19	359
FY 2017-18	407
FY 2016-17	375
FY 2015-16	386
FY 2014-15	387

### 2.3.2 Financial Overview

Copper revenue for FY 2018-19 remained stable at ₹22,155 Crore (versus ₹22,382 Crore in FY 2017-18), despite lower volumes. EBITDA fell 5% to ₹1,469 Crore (versus ₹1,539 Crore in FY 2017-18) on account of lower volumes and lower Tc/Rc during the year, partially offset by higher by-products realisations.

(₹ in Crore)			
Description	FY 2018-19	FY 2017-18	% Change over FY 2017-18
Revenue	22,155	22,382	(1)
EBITDA	1,469	1,539	(5)

## 2.4 Novelis Business Review

### 2.4.1 Operational Overview

Novelis Inc., the world's leading aluminium rolling and recycling facility, reported yet another year of record performance with a significant increase in net sales, shipments and adjusted EBITDA. The performance was mainly driven by its focus on improving efficiencies, favourable product mix, innovations and customer centricity.

The company launched three customer solution centres to accelerate collaborative innovation between Novelis and automakers for the next generation of vehicle design. Novelis has developed innovative products and processes to accelerate the adoption of lightweight aluminium across end markets, including the first aluminium sheet battery enclosure for electric vehicles. Novelis is supplying premium aluminium automotive body sheet for new vehicle designs, including the Toyota RAV4 and NIO ES6. It collaborated with Volvo Car Group to establish an automotive closed-loop recycling system in Europe to reduce CO<sub>2</sub> emissions, decrease waste and increase the recyclability of aluminium. Novelis leveraged its extensive recycling footprint and favourable market conditions to increase recycled content in its shipments from 57% in FY 2017-18 to 61% in FY 2018-19.

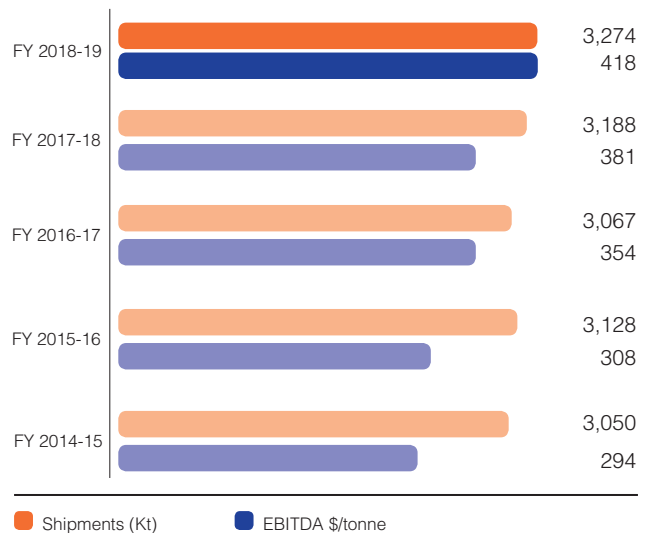
Total shipments of Flat Rolled Product increased around 3% to 3.274 Mt on account of higher overall shipments. The Beverage can sheet shipments increased from 60% of total shipments in FY 2017-18 to 63% in FY 2018-19, and the automotive body sheet shipment share of total shipments was maintained at 20% in FY 2018-19. Beverage can shipments grew by 7% y-o-y and automotive body sheet shipments grew by 2% y-o-y, despite challenges in some regions mainly Europe and China.

Novelis operates in four key geographies: North America, Europe, Asia and South America. In North America, in FY 2018-19, total shipments were 1,142 Kt, up from 1,083 Kt in FY 2017-18, due to strong growth in the US market. Novelis announced plans to set up a 200 Kt automotive finishing facility in Guthrie, Kentucky in the US, to cater to the growing automotive demand in this region. This is expected to be operational in FY 2020-21.

In Europe, Novelis shipped 896 Kt across product categories in FY 2018-19. In Asia, Novelis shipped 710 Kt of rolled products in FY 2018-19 versus 696 Kt in FY 2017-18. Its automotive finishing line expansion project of 100 Kt is expected to be operational in FY 2020-21. In South America, Novelis shipped 526 Kt in FY 2018-19, up from 495 Kt in the previous year.

In FY 2018-19, the company reported a record overall adjusted EBITDA/tonne of \$418, up from \$381, reflecting strong and consistent performance year after year.

### Shipments (Kt) and EBITDA \$/tonne



**The Beverage can sheet shipments increased from 60% of total shipments in FY 2017-18 to 63% in FY 2018-19, and the automotive body sheet shipment share of total shipments was maintained at 20% in FY 2018-19.**

## MANAGEMENT DISCUSSION & ANALYSIS

With Novelis' thrust on sustainability and recycled aluminium, the share of recycled inputs increased from 57% a year ago to 61% in FY 2018-19. The company has invested significantly in recycling initiatives and developed high-tech recycling capabilities over the years. Its new rolling, casting and recycling expansion in Brazil is expected to be commissioned in FY 2021-22.

### Recycling (%)



### 2.4.2 Financial Overview

Novelis' net sales increased 8% to \$12.3 Billion in FY 2018-19 driven by higher average aluminium price realisations and increased shipments. Adjusted EBITDA stood at \$1.368 Billion, up 13%, on the back of higher shipments, operating efficiencies, favourable product mix and metal costs, partially offset by lower can prices. Novelis reported free cash flow of \$408 Million driven by stronger adjusted EBITDA and lower interest, despite significant pressures from higher aluminium prices. Net income (without exceptional items) stood at \$468 Million in FY 2018-19 versus \$420 Million in FY 2017-18.

Description	(\$ in Million)		
	FY 2018-19	FY 2017-18	% Change over FY 2017-18
Net Sales	12,326	11,462	8
Adjusted EBITDA	1,368	1,215	13
Net Income/(loss) w/o Exceptional Item*	468	420	11

\*Tax-effected special items may include restructuring & impairment, metal price lag, gain/loss on assets held for sale, loss on extinguishment of debt, loss/gain on sale of business

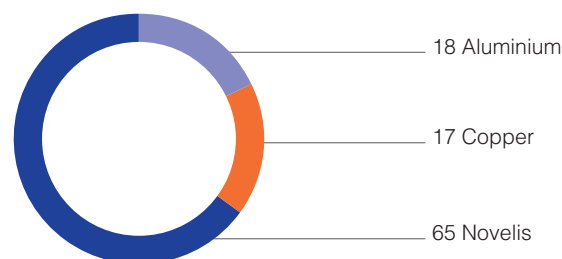
## 3. CONSOLIDATED FINANCIAL STATEMENTS

### 3.1 Revenue

Hindalco's consolidated revenue grew to ₹1,30,542 Crore in FY 2018-19 from ₹1,15,820 Crore in FY 2017-18 as a

result of excellent operating and financial performance of all the businesses and better realisations.

### Revenue Mix: FY 2018-19 (%)



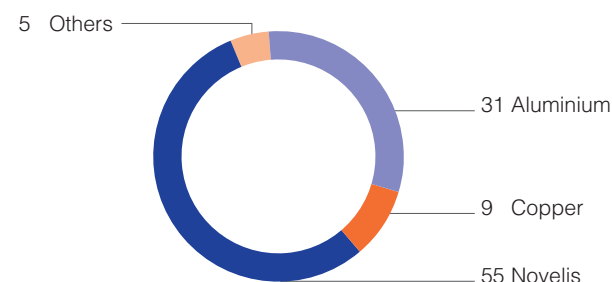
### Revenue (₹ in Crore)



### 3.2 EBITDA

FY 2018-19 consolidated EBITDA grew 11% to ₹16,627 Crore from ₹15,025 Crore in FY 2017-18. This record performance was on the back of strong traction in aluminium and copper businesses in India and the best-ever results by Novelis Inc. EBITDA margin was maintained at 13% in FY 2018-19.

### EBITDA Mix: FY 2018-19 (%)



**EBITDA**

(₹ in Crore)

FY 2018-19	16,627
FY 2017-18	15,025
FY 2016-17	13,558
FY 2015-16	10,004
FY 2014-15	10,049

**3.3 Finance Cost**

Finance cost reduced by 3% at ₹3,778 Crore in FY 2018-19 from ₹3,911 Crore in FY 2017-18 on account of ₹1,575 Crore prepayment of project loans in India. The Company in the last 3 years has prepaid over ₹10,500 Crore of long-term domestic loans.

**Long-Term Loans Prepaid**

(₹ in Crore)

FY 2018-19	1,575
FY 2017-18	7,966
FY 2016-17	1,031

**3.4 Depreciation (including impairment)**

Depreciation and amortisation increased to ₹4,766 Crore in FY 2018-19 from ₹4,607 Crore in FY 2017-18 mainly on account of progressive capitalisation.

**3.5 Exceptional Income/(Expense)**

There was no exceptional income in FY 2018-19. FY 2017-18 had an exceptional income of ₹1,774 Crore mainly on account of pre-tax gain due to Novelis selling approximately 50% ownership of its Ulsan facility in South Korea to Kobe Steel for \$314 Million.

**3.6 Taxes**

Provision for tax was at ₹2,588 Crore in FY 2018-19 as against ₹2,074 Crore in FY 2017-18. This increase in taxes was due to improvement in overall profitability of the Company in FY 2018-19.

**3.7 Profit/(Loss) After Tax**

Profit After Tax (PAT) in FY 2018-19 was at ₹5,495 Crore compared with ₹6,083 Crore in FY 2017-18. The FY 2017-18 number includes an exceptional gain (before tax) of ₹1,774 Crore mainly on account of the sale of approximately 50% stake of the Ulsan, South Korea facility under Novelis Inc. Adjusting for tax effected exceptional item in FY 2017-18, PAT grew by 22% in FY 2018-19 vs FY 2017-18 (₹4,518 Crore). Net margin in FY 2018-19 stands at 4.2% versus 5.3% in FY 2017-18.

**Profit After Tax**

(₹ in Crore)

FY 2018-19	5,495
FY 2017-18	4,518*
FY 2016-17	1,900
FY 2015-16	(251)
FY 2014-15	854

\*After adjusting for tax effected exceptional item

**3.8 Consolidated Net Debt to EBITDA**

To further bolster the balance sheet, the Company prepaid ₹1,575 Crore of long-term project loans in India. This has led to a noteworthy improvement in consolidated net debt to EBITDA to 2.48 times at the end of March 2019 versus 2.82 times at the end of March 2018.

Highest-ever Adjusted EBITDA of Novelis

**\$1.368** Billion

## MANAGEMENT DISCUSSION & ANALYSIS

### 3.9 Key Financial Ratios (Consolidated)

#### (i) Debtor Turnover (days)

Consolidated Debtors Turnover Days as on March 31, 2019 stood at 30 days versus 29 days at the end of March 31, 2018. This shows consistency in managing its credit with the customers and this also reflects strong financial position of most of its customers. Debtor Turnover (days) is calculated as Average Debtors/Total Consolidated Sales multiplied by 365.

#### (ii) Inventory Turnover (days)

Consolidated Inventory Turnover Days as on March 31, 2019 was at 67 days versus 68 days at the end of March 31, 2018. This shows how well the Company managed its inventory levels during the year. Inventory (days) is calculated as Average Inventory/Cost of Goods Sold (Cost of Sales + Depreciation) multiplied by 365.

#### (iii) Interest Coverage Ratio :

Consolidated Net Interest Coverage Ratio as on March 31, 2019 stood at 4.40 times versus 3.84 times at the end of March 31, 2018. This improved over the previous year because of better earnings (EBITDA) and lower interest cost due to prepayments and re-pricing of the long-term loans in India. This shows the Company's ability and strength to meet its interest obligations.

#### (iv) Current Ratio

Consolidated Current/Liquidity Ratio as on March 31, 2019 stood at 1.60 times versus 1.53 times at the end of March 31, 2018. This reflects a strong liquidity or solvency of the Company.

#### (v) Debt to Equity Ratio

Consolidated debt to equity ratio as on March 31, 2019 stood at 0.91 times versus 0.95 times as on March 31, 2018. This reflects the Company's strong balance sheet to meet its current short-term obligations.

#### (vi) Return On Net Worth (RONW)

Consolidated Return on Net Worth for FY 2018-19 stood at 9.56% versus 8.24% in FY 2017-18 (after adjusting for tax effected exceptional items in FY 2017-18). This shows the Company's strength in generating higher profits in FY 2018-19 on the shareholders' equity.

Adjusted EBITDA/tonne in Novelis

**\$418**



Novelis' Hot rolling plant at Oswego, New York

### 3.10 Consolidated Cashflow

Cash from operations for Hindalco Consolidated stood at ₹11,980 Crore in FY 2018-19 versus ₹10,898 Crore in FY 2017-18.

The Table below shows the comparative movement of cash flows:

Particulars	(₹ in Crore)	
	Consolidated	
	Year ended	
	31/03/2019	31/03/2018
<b>A. Cash Flow From Operating Activities</b>		
Operating Cashflow before working capital changes	15,554	14,092
Changes in working capital	(1,687)	(1,272)
<b>Cash generated from operations before Tax</b>	<b>13,868</b>	<b>12,821</b>
(Payment)/Refund of Direct Taxes	(1,888)	(1,923)
<b>Net Cash generated/ (used) -Operating Activities (a)</b>	<b>11,980</b>	<b>10,898</b>
<b>B. Cash Flow From Investment Activities</b>		
Net Capital Expenditure	(5,972)	(2,956)
Disposal of Investments in Subsidiaries (Net)	-	2,053
(Purchase) / Sale of treasury instrument (Net)	(308)	5,558
Investment in equity accounted investees	(6)	-
Loans & Deposits (given) / received back (Net)	94	(133)
Interest and dividends received	540	503
<b>Net Cash generated/ (Used) - Investing Activities (b)</b>	<b>(5,652)</b>	<b>5,026</b>
<b>C. Cash Flow From Financing Activities</b>		
Equity Raised	6	16
Treasury shares acquired by ESOP Trust	(124)	-
Net Debt outflows	(1,444)	(12,286)
Interest & Finance Charges paid	(3,577)	(3,849)
Dividend Paid (including Dividend Distribution Tax)	(323)	(294)
<b>Net Cash generated/ (Used) - Financing Activities (c)</b>	<b>(5,461)</b>	<b>(16,412)</b>
<b>Net Increase/(decrease) in Cash and Cash Equivalents (a) +(b) + (c)</b>	<b>867</b>	<b>(489)</b>

## 4. BUSINESS OUTLOOK

Hindalco showed strong resilience in the challenging business environment, global uncertainties and delivered its best-ever performance in FY 2018-19.

The Company will remain focused on strengthening its balance sheet, allocating capex towards growth strategies and generating positive free cash flows.

As a downstream strategy, share of VAP in Hindalco's total sales will continue to grow with focus on higher-margin products. Its integrated business approach with increasing emphasis on downstream value-added products including those by Novelis is leading to a more sustainable and resilient business model. This is continuously reducing the impact from volatility arising out of global aluminium price movements. As a result, in FY 2018-19, ~70% of Hindalco's consolidated EBITDA

including Novelis, Aluminium downstream and copper business was non-LME linked, reflecting a sustainable business model.

The newly commissioned copper CCR#3 mill is ramping up well, taking rod capacity to ~70% of cathode production, from 40% earlier. This VAP capacity will help the Company meet the growing demand for copper in the domestic market.

Hindalco will continue to keep a close watch on input prices, including coal, which affect the overall cost of production. The Company plans to mitigate this impact by utilising its resources well, with better efficiencies across all products and plant locations, including Novelis.

With the acquisition of Aleris, pending regulatory approvals, Novelis will cater to newer customers and products in the aerospace and truck & trailer businesses,

## MANAGEMENT DISCUSSION & ANALYSIS

which will enhance its existing product portfolio. This will help Novelis to further solidify its leadership position as the global aluminium value-added player.

Hindalco is also focusing on enriching its product mix and is evaluating investments in aluminium downstream facilities towards newer products and its existing product lines to cater to this demand. However, concerns over low-cost aluminium and copper imports continue to hurt the domestic players in these industries.

Novelis' organic and inorganic expansions will drive overall business to the next level and enhance product diversity. It will continue to take a balanced approach with focus on operational improvements and innovations that will drive profitable volume growth in its current product lines and other core end-markets. It is maintaining disciplined decision-making in each of its product categories.

### 5. PRICE RISK MANAGEMENT

Hindalco's financial performance was significantly impacted by fluctuations in aluminium prices, exchange rates and interest rates. The Company takes a structured approach to the identification, quantification and hedging of such risks by using commodity and currency derivatives and interest rate swaps which is driven by a comprehensive risk management policy.

### 6. SUSTAINABILITY

As stakeholder expectations are evolving and resources are becoming scarce, the Company is moving towards sustainable operating models of growth. It ensures that its transformation is for a resilient, responsible and reliable future. The Company strives to remain a leading metals company while ensuring that its operations are environmentally conscious and socially responsible. Keeping in view the changing business requirements of its customers, the Company has focused on developing products that are resource efficient for production as well as during their use across lifecycle. In order to reduce its carbon footprint, the Company is focusing on renewable energy generation. Hindalco has adopted the sustainability technical standards released by the Group's Sustainability Cell. The Company's sustainability committee which is chaired by the Managing Director reviews progress on various sustainability interventions on a regular basis. The focus is on improving health and safety performance of the Company.

The Company is aware of the impact that supply chain has on the environment and society and accordingly it has started involving its supply chain partners for various sustainability initiatives. The Company believes in propagating a culture of shared growth and is dedicated to the creation of community infrastructure. It is working towards developing applications and products which maximise recycling and minimise resource extraction in India.

Refer to pages 52-53 of the Report for more information on our sustainability initiatives.

### 7. SAFETY

Hindalco is committed to ensuring the well-being and safety of its employees, associates and the society. Safety is considered a core value across Hindalco, and the Company's plants and mines follow the environmental, health and safety management standards that integrate environment and safety responsibilities into everyday business. Hindalco continues its focused efforts to ensure 'zero harm' to its employees, the community and the environment. Initiatives that were rolled out to help achieve these objectives and to be a benchmark within the industry are in advanced stages of maturity. Extensive work is in progress to ensure risk controls in important areas such as human behaviour, mining activities, road traffic management, contractor management and crisis management. In order to build a sustainable and safe work environment, a common health and safety management system has been implemented across the Company. This system is in sync with world-class safety standards, provides organisational safety competency and capability improvement, safety leadership development, a cross auditing activity to enhance sharing experiences and best practices across Hindalco. To implement world class safety, the Company also provided, on an average, 4 man-days of safety training based on identified safety needs to all its permanent and contractual employees.

### 8. HUMAN CAPITAL

With around 25,000 direct employees in India and ~11,000 outside India, people are at the centre of driving excellence at Hindalco. The Aditya Birla Group is one of the most preferred employers in the country. This enables Hindalco to attract the required talent and retain them. The Company is investing more than 4 days/employee per annum on need-based training and development inputs on both behavioural/leadership





Hindalco has a range of programmes to build functional and behavioural competencies

and functional/technical aspects. The Company has also stepped up internal movements with a view to give new experiences to its employees. The Company has made its performance management process more robust and transparent, with increased focus on goal setting, regular feedback and calibration, as well as linking the Company's rewards to performance and market trends and practices. HR shared service has recently been set up to enhance and provide consistent employee experience on HR processes and systems. The Company has been closely working on increasing employee engagement and building an open, transparent and inclusive culture by working extensively on action plans based on the results of its employee engagement survey.

Refer to pages 46-48 of the Report for more information on our people practices.

## 9. INTERNAL CONTROLS

A strong internal control culture is pervasive throughout the Group. Regular internal audits at all locations are undertaken to ensure that the highest standards of internal control are maintained. The effectiveness of a business' internal control environment is a component of senior management performance appraisals. The principal aim of the internal control system is the management of business risks, with a view to enhance shareholder value and safeguard the Group's assets. It provides reasonable assurance on the internal control environment and against material misstatement or loss.

### Cautionary Statement

*Statements in this "Management Discussion and Analysis" describing the Company's objectives, projections, estimates, expectations or predictions may be "forward looking statements" within the meaning of applicable securities laws and regulations. Actual results could differ materially from those expressed or implied. Important factors that could make a difference to the Company's operations include global and Indian demand supply conditions, finished goods prices, feedstock availability and prices, cyclical demand and pricing in the Company's principal markets, changes in the government regulations, tax regimes, economic developments within India and the countries within which the Company conducts business and other factors such as litigation and labour negotiations. The Company assumes no responsibility to publicly amend, modify or revise any forward looking statements, on the basis of any subsequent development, information events or otherwise.*

## FINANCIAL HIGHLIGHTS - STANDALONE

₹ in Crore

	2018-19 <sup>®</sup>	2018-19 <sup>®</sup>	2017-18 <sup>®</sup>	2016-17 <sup>®</sup>	2015-16 <sup>®</sup>	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
<b>PROFITABILITY</b>	<b>US\$ in Mn*</b>										
Sales and Operating Revenues	6,546	45,749	43,446	39,383	36,713	36,869	30,101	28,070	28,297	25,348	20,570
Less: Cost of Sales	5,938	41,503	38,322	34,569	33,367	33,453	27,609	25,866	25,192	22,193	17,620
Operating Profit	<b>608</b>	<b>4,246</b>	<b>5,124</b>	<b>4,814</b>	<b>3,346</b>	<b>3,417</b>	<b>2,492</b>	<b>2,204</b>	<b>3,105</b>	<b>3,155</b>	<b>2,950</b>
Other Income	134	940	948	1,005	979	882	1,124	983	616	347	260
Less: Depreciation, Amortization and Impairment	242	1,693	1,617	1,428	1,282	837	823	704	690	687	667
Less: Interest and Finance Charges	241	1,683	1,901	2,323	2,390	1,637	712	436	294	220	278
Profit before Exceptional Items and Tax	<b>259</b>	<b>1,810</b>	<b>2,554</b>	<b>2,068</b>	<b>653</b>	<b>1,825</b>	<b>2,081</b>	<b>2,047</b>	<b>2,737</b>	<b>2,595</b>	<b>2,265</b>
Exceptional Income/ (Expenses) (Net)	-	-	(325)	85	-	(578)	(396)	-	-	-	-
Profit/ (Loss) before Tax from Continuing Operations	<b>259</b>	<b>1,810</b>	<b>2,229</b>	<b>2,153</b>	<b>653</b>	<b>1,247</b>	<b>1,685</b>	<b>2,047</b>	<b>2,737</b>	<b>2,595</b>	<b>2,265</b>
Less: Tax Expenses	87	605	793	596	99	322	272	347	500	458	349
Profit/ (Loss) from Continuing Operations	<b>172</b>	<b>1,205</b>	<b>1,436</b>	<b>1,557</b>	<b>554</b>	<b>925</b>	<b>1,413</b>	<b>1,699</b>	<b>2,237</b>	<b>2,137</b>	<b>1,916</b>
Profit/ (Loss) from Discontinued Operations (Net of Tax)	-	-	-	-	(2)	-	-	-	-	-	-
Profit/ (Loss) for the Period	<b>172</b>	<b>1,205</b>	<b>1,436</b>	<b>1,557</b>	<b>552</b>	<b>925</b>	<b>1,413</b>	<b>1,699</b>	<b>2,237</b>	<b>2,137</b>	<b>1,916</b>
<b>Business Reconstruction Reserve (BRR) #</b>											
Expenses adjusted against BRR (Net of Tax)	-	-	-	-	682	97	86	-	-	-	-
Profit/ (Loss) for the Period had the expenses not adjusted against BRR	<b>172</b>	<b>1,205</b>	<b>1,436</b>	<b>1,557</b>	<b>(130)</b>	<b>828</b>	<b>1,327</b>	<b>1,699</b>	<b>2,237</b>	<b>2,137</b>	<b>1,916</b>

## FINANCIAL POSITION

Gross Fixed Assets (excluding CWIP)	7,068	48,898	48,264	46,742	43,316	35,434	26,804	15,073	14,478	14,287	13,793
Capital Work-in-Progress (CWIP)**	142	982	737	712	3,079	10,744	17,277	23,605	16,257	6,030	3,703
Less: Accumulated Depreciation, Amortization and Impairment	<b>2,222</b>	<b>15,376</b>	<b>13,900</b>	<b>12,358</b>	<b>11,063</b>	<b>9,374</b>	<b>8,749</b>	<b>7,975</b>	<b>7,328</b>	<b>6,703</b>	<b>6,059</b>
Net Fixed Assets	<b>4,987</b>	<b>34,504</b>	<b>35,101</b>	<b>35,096</b>	<b>35,332</b>	<b>36,804</b>	<b>35,332</b>	<b>30,703</b>	<b>23,407</b>	<b>13,615</b>	<b>11,438</b>
Investments	3,685	25,495	27,025	29,332	27,311	21,251	21,907	20,482	18,087	18,247	21,481
Other Non-Current Assets / (Liabilities) (Net)	(226)	(1,565)	(708)	516	(1,038)	(1,193)	(1,174)	(751)	(207)	2,096	(1,367)
Net Current Assets	1,396	9,658	8,330	9,539	9,230	9,400	8,339	8,409	5,319	4,782	2,716
Capital Employed	<b>9,842</b>	<b>68,092</b>	<b>69,748</b>	<b>74,483</b>	<b>70,835</b>	<b>66,262</b>	<b>64,404</b>	<b>58,843</b>	<b>46,606</b>	<b>38,740</b>	<b>34,268</b>
Less: Loan Funds	2,823	19,534	20,297	27,150	28,676	29,007	27,672	24,871	14,574	9,040	6,357
Net Worth	<b>7,019</b>	<b>48,558</b>	<b>49,451</b>	<b>47,333</b>	<b>42,159</b>	<b>37,255</b>	<b>36,732</b>	<b>33,972</b>	<b>32,032</b>	<b>29,700</b>	<b>27,911</b>

₹ in Crore

	2018-19 <sup>®</sup>	2018-19 <sup>®</sup>	2017-18 <sup>®</sup>	2016-17 <sup>®</sup>	2015-16 <sup>®</sup>	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
	US\$ in Mn*										
<b>Net Worth represented by :</b>											
Equity Share Capital	32	222	223	223	205	207	206	191	191	191	191
Other Equity:											
Share Warrants	-	-	-	-	-	-	-	541	541	-	-
Reserves and Surplus	6,256	43,285	42,497	41,235	36,568	37,049	36,526	33,240	31,300	29,509	27,720
Other Comprehensive Income	730	5,051	6,731	5,875	5,386	-	-	-	-	-	-
	<b>7,019</b>	<b>48,558</b>	<b>49,451</b>	<b>47,333</b>	<b>42,159</b>	<b>37,255</b>	<b>36,732</b>	<b>33,972</b>	<b>32,032</b>	<b>29,700</b>	<b>27,911</b>

#### RATIOS AND STATISTICS

	Unit	2018-19 <sup>®</sup>	2017-18 <sup>®</sup>	2016-17 <sup>®</sup>	2015-16 <sup>®</sup>	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
Operating Margin	%	9.28	11.79	12.22	9.11	9.27	8.28	7.85	10.97	12.45	14.34
Net Margin	%	2.63	3.31	3.95	1.50	2.51	4.70	6.05	7.91	8.43	9.31
Gross Interest Cover	Times	3.08	3.18	1.73	1.81	1.75	1.50	1.61	3.62	5.74	5.23
Net Interest Cover	Times	3.08	3.19	2.51	1.81	2.63	5.08	7.31	12.67	15.92	11.55
Roce	%	5.13	6.39	5.90	4.30	5.22	4.34	4.22	6.50	7.27	7.42
Roe	%	2.48	2.90	3.29	1.31	2.48	3.85	5.00	6.98	7.20	6.86
Basic Eps	₹	5.41	6.45	7.56	(0.64)	4.48	7.09	8.88	11.69	11.17	10.82
Diluted EPS	₹	5.41	6.45	7.55	(0.64)	4.48	7.09	8.87	11.68	11.16	10.81
Cash EPS	₹	13.01	13.70	14.49	8.95	8.53	11.22	12.55	15.29	14.76	14.58
Dividend per Share <sup>##</sup>	₹	1.20	1.20	1.10	1.00	1.00	1.00	1.40	1.55	1.50	1.35
Capital Expenditure (Cash outflow)	₹ Crore	1,263	1,178	1,041	1,399	2,073	3,458	5,531	7,168	5,749	2,642
Debt Equity Ratio	Times	0.40	0.41	0.57	0.68	0.78	0.75	0.73	0.45	0.30	0.23
Book value per Share <sup>§</sup>	₹	216.24	220.28	211.00	204.16	180.41	177.92	177.44	167.31	155.14	145.87
Market Capitalisation <sup>§</sup>	₹ Crore	46,145	48,166	43,756	18,162	26,638	29,266	17,538	24,774	40,040	34,682
Number of Equity Shareholders	Nos.	304,345	299,521	319,783	392,888	338,655	361,686	441,166	383,724	320,965	339,281
Number of Employees	Nos.	22,865	23,555	23,679	24,118	21,976	20,902	20,238	19,975	19,341	19,539
Average Cash LME (Aluminium)	US\$	2,035	2,046	1,688	1,592	1,888	1,773	1,976	2,317	2,257	1,868
Average Cash LME (Copper)	US\$	6,337	6,451	5,152	4,852	6,556	7,103	7,855	8,485	8,140	6,112

\* Balance Sheet items are translated at closing exchange rate and Profit and Loss items are translated at average exchange rate.

\*\* Including Intangible assets under development.

# Financial restructuring scheme formulated by the Company under the provisions of the Companies Act, approved by the Bombay High Court, to deal with various costs associated with its organic and inorganic growth plan.

## Proposed/Interim Dividend for the Period.

® Figures for FY 2018-19, FY 2017-18, FY 2016-17 and FY 2015-16 are as per Ind AS compliant financial statements. Previous periods figures are as per Previous GAAP financial statements.

§ Including Treasury shares held by the Company.

## FINANCIAL HIGHLIGHTS - CONSOLIDATED

₹ in Crore

	2018-19 <sup>®</sup>	2018-19 <sup>®</sup>	2017-18 <sup>®</sup>	2016-17 <sup>®</sup>	2015-16 <sup>®</sup>	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
<b>PROFITABILITY</b>	<b>US\$ in Mn*</b>										
Sales and Operating Revenues	18,678	130,542	115,820	102,631	101,202	106,696	90,007	82,243	82,549	73,703	61,762
Less: Cost of Sales	16,460	115,042	101,899	90,183	92,387	97,751	81,721	74,406	74,365	65,775	52,017
Operating Profit	<b>2,218</b>	<b>15,500</b>	<b>13,921</b>	<b>12,448</b>	<b>8,815</b>	<b>8,944</b>	<b>8,286</b>	<b>7,837</b>	<b>8,184</b>	<b>7,929</b>	<b>9,746</b>
Other Income	161	1,127	1,105	1,111	1,189	1,105	1,017	1,012	783	513	323
Less: Depreciation, Amortization and Impairment	682	4,766	4,607	4,469	4,507	3,591	3,553	2,861	2,864	2,759	2,784
Less: Interest and Finance Charges	541	3,778	3,911	5,742	5,134	4,178	2,702	2,079	1,758	1,839	1,104
Profit before Share in Equity Accounted Investments, Exceptional Items and Tax	<b>1,156</b>	<b>8,083</b>	<b>6,508</b>	<b>3,348</b>	<b>362</b>	<b>2,280</b>	<b>3,049</b>	<b>3,909</b>	<b>4,345</b>	<b>3,843</b>	<b>6,181</b>
Share in Profit/ (Loss) in Equity Accounted Investments (Net of Tax)	-	-	(125)	(25)	172	175	67	(16)	50	(57)	(3)
Profit before Tax and Exceptional Items	<b>1,156</b>	<b>8,083</b>	<b>6,383</b>	<b>3,323</b>	<b>534</b>	<b>2,455</b>	<b>3,116</b>	<b>3,893</b>	<b>4,395</b>	<b>3,786</b>	<b>6,178</b>
Exceptional Income/ (Expenses) (Net)	-	-	1,774	(8)	(577)	(1,940)	(396)	-	-	-	-
Profit/ (Loss) before Tax from Continuing Operations	<b>1,156</b>	<b>8,083</b>	<b>8,157</b>	<b>3,315</b>	<b>(43)</b>	<b>515</b>	<b>2,720</b>	<b>3,893</b>	<b>4,395</b>	<b>3,786</b>	<b>6,178</b>
Less: Tax Expenses	370	2,588	2,074	1,433	498	256	525	886	786	964	1,829
Profit/ (Loss) from Continuing Operations	<b>786</b>	<b>5,495</b>	<b>6,083</b>	<b>1,882</b>	<b>(541)</b>	<b>258</b>	<b>2,195</b>	<b>3,007</b>	<b>3,608</b>	<b>2,822</b>	<b>4,349</b>
Profit/ (Loss) from Discontinued Operations (Net of Tax)	-	-	-	-	(161)	-	-	-	-	-	-
Profit/ (Loss) before Non-Controlling Interest	<b>786</b>	<b>5,495</b>	<b>6,083</b>	<b>1,882</b>	<b>(702)</b>	<b>258</b>	<b>2,195</b>	<b>3,007</b>	<b>3,608</b>	<b>2,822</b>	<b>4,349</b>
Less: Non-Controlling Interest in Profit/ (Loss)	-	(1)	-	(18)	(451)	(596)	20	(20)	211	366	424
Net Profit/ (Loss) for the Period	<b>786</b>	<b>5,496</b>	<b>6,083</b>	<b>1,900</b>	<b>(251)</b>	<b>854</b>	<b>2,175</b>	<b>3,027</b>	<b>3,397</b>	<b>2,456</b>	<b>3,925</b>
<b>Business Reconstruction Reserve (BRR)<sup>#</sup></b>											
Expenses adjusted against BRR (Net of Tax)	-	-	-	-	682	97	86	-	500	(3,439)	304
Profit/ (Loss) for the Period had the expenses not adjusted against BRR	<b>786</b>	<b>5,496</b>	<b>6,083</b>	<b>1,900</b>	<b>(933)</b>	<b>757</b>	<b>2,089</b>	<b>3,027</b>	<b>2,896</b>	<b>5,896</b>	<b>3,621</b>
<b>FINANCIAL POSITION</b>											
Gross Fixed Assets (excluding CWIP)	18,811	130,142	125,094	121,186	123,522	101,940	87,914	60,054	53,961	48,207	45,622
Capital Work-in-Progress (CWIP)**	592	4,097	2,063	1,814	4,214	14,111	23,059	33,834	22,798	9,253	5,801
Less: Accumulated Depreciation, Amortization and Impairment	6,401	44,283	40,006	36,499	37,849	29,981	26,750	22,126	18,661	15,802	16,622
Net Fixed Assets	<b>13,002</b>	<b>89,956</b>	<b>87,151</b>	<b>86,501</b>	<b>89,887</b>	<b>86,070</b>	<b>84,223</b>	<b>71,763</b>	<b>58,098</b>	<b>41,657</b>	<b>34,801</b>
Investments	1,303	9,012	10,781	15,157	12,438	12,346	12,961	12,601	10,551	10,855	11,246
Other Non-Current Assets / (Liabilities) (Net)	(1,420)	(9,825)	(8,497)	(6,737)	(8,859)	(7,235)	(6,924)	(6,573)	(5,758)	(3,142)	(3,938)
Net Current Assets	3,004	20,783	17,499	14,961	15,074	16,571	18,289	16,901	11,771	11,330	5,172
Capital Employed	<b>15,889</b>	<b>109,926</b>	<b>106,934</b>	<b>109,882</b>	<b>108,540</b>	<b>107,752</b>	<b>108,549</b>	<b>94,692</b>	<b>74,662</b>	<b>60,700</b>	<b>47,281</b>
Less: Loan Funds	7,576	52,415	52,074	63,817	67,552	68,467	66,163	57,603	41,042	29,460	23,999
Less: Non-Controlling Interest	1	9	9	6	381	956	1,781	1,759	1,709	2,217	1,737
Net Worth	<b>8,312</b>	<b>57,502</b>	<b>54,852</b>	<b>46,059</b>	<b>40,607</b>	<b>38,329</b>	<b>40,605</b>	<b>35,330</b>	<b>31,911</b>	<b>29,023</b>	<b>21,545</b>

₹ in Crore

	2018-19 <sup>®</sup>	2018-19 <sup>®</sup>	2017-18 <sup>®</sup>	2016-17 <sup>®</sup>	2015-16 <sup>®</sup>	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
	US\$ in Mn*										
<b>Net Worth represented by :</b>											
Equity Share Capital	32	222	223	223	205	207	206	191	191	191	191
Other Equity:											
Share Warrants	-	-	-	-	-	-	6	541	541	-	-
Equity Component of Compound Financial Instruments	1	4	4	4	3	-	-	-	-	-	-
Reserves and Surplus	7,603	52,600	47,645	41,770	36,443	38,122	40,393	34,597	31,179	28,832	21,353
Other Comprehensive Income	676	4,676	6,980	4,062	3,956	-	-	-	-	-	-
	<b>8,312</b>	<b>57,502</b>	<b>54,852</b>	<b>46,059</b>	<b>40,607</b>	<b>38,329</b>	<b>40,605</b>	<b>35,330</b>	<b>31,911</b>	<b>29,023</b>	<b>21,545</b>

#### RATIOS AND STATISTICS

	Unit	2018-19 <sup>®</sup>	2017-18 <sup>®</sup>	2016-17 <sup>®</sup>	2015-16 <sup>®</sup>	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
Operating Margin	%	11.87	12.02	12.13	8.71	8.38	9.21	9.53	9.91	10.76	15.78
Net Margin	%	4.21	5.25	1.85	(0.25)	0.80	2.42	3.68	4.12	3.33	6.36
Gross Interest Cover	Times	4.43	3.86	2.36	1.91	1.95	1.85	2.04	3.16	3.56	6.99
Net Interest Cover	Times	4.40	3.84	2.36	1.95	2.41	3.44	4.26	5.10	4.59	9.12
ROCE	%	10.79	9.74	8.27	5.06	5.99	5.30	6.32	8.17	9.36	15.41
ROE	%	9.56	11.09	4.13	(0.62)	2.23	5.36	8.57	10.64	8.46	18.22
Basic EPS	₹	24.67	27.30	9.22	(4.55)	4.14	10.91	15.81	17.74	12.84	22.17
Diluted EPS	₹	24.66	27.29	9.22	(4.55)	4.13	10.91	15.81	17.74	12.83	22.16
Cash EPS	₹	46.07	47.98	30.91	20.78	21.53	28.73	30.75	32.70	27.25	37.88
Capital Expenditure (Cash outflow)	₹ Crore	6,005	3,001	2,938	4,245	5,978	9,424	11,871	12,512	7,909	4,276
Debt Equity Ratio	Times	0.91	0.95	1.39	1.66	1.79	1.63	1.63	1.29	1.02	1.11
Book value per Share	₹	256.08	244.33	205.32	196.64	185.61	196.67	184.53	166.68	151.61	112.60

\* Balance Sheet items are translated at closing exchange rate and Profit and Loss items are translated at average exchange rate.

\*\* Including Intangible assets under development.

# Financial restructuring scheme formulated by the Company under the provisions of the Companies Act, approved by the Bombay High Court, to deal with various costs associated with its organic and inorganic growth plan.

® Figures for FY 2018-19, FY 2017-18, FY 2016-17 and FY 2015-16 are as per Ind AS compliant financial statements. Previous periods figures are as per Previous GAAP financial statements.

# DIRECTORS' REPORT

Dear Shareholders,

Your Directors have pleasure in presenting the 60<sup>th</sup> Annual Report and the Audited Standalone and Consolidated Financial Statements of your Company for the year ended March 31, 2019.

## FINANCIAL HIGHLIGHTS

₹ in Crore

	Standalone		Consolidated	
	2018-19	2017-18	2018-19	2017-18
<b>Revenue from Operations</b>	<b>45,749</b>	<b>43,446</b>	<b>130,542</b>	<b>115,820</b>
Other Income	940	948	1,127	1,105
<b>Profit Before Interest, Tax and Depreciation (PBITDA)</b>	<b>5,187</b>	<b>6,072</b>	<b>16,627</b>	<b>15,025</b>
Depreciation, Amortization and Impairment Loss/(Reversal)(Net)	1,693	1617	4,766	4,606
Finance Costs	1,683	1,901	3,778	3,911
<b>Profit before Exceptional Items, Tax &amp; Share in Profit / (Loss) in Equity Accounted Investments</b>	<b>1,810</b>	<b>2,554</b>	<b>8,083</b>	<b>6,508</b>
Share of Equity Accounted Investments	-	-	-	(125)
<b>Profit before Exceptional Items and Tax</b>	<b>1,810</b>	<b>2,554</b>	<b>8,083</b>	<b>6,383</b>
Exceptional Items	-	(325)	-	1,774
<b>Profit before Tax</b>	<b>1,810</b>	<b>2,229</b>	<b>8,083</b>	<b>8,157</b>
Tax Expenses	605	792	2,588	2,074
<b>Profit/ (Loss) for the period</b>	<b>1,205</b>	<b>1,437</b>	<b>5,495</b>	<b>6,083</b>
Other Comprehensive Income (Loss)	(1,681)	957	(2,466)	2,991
<b>Total Comprehensive Income</b>	<b>(476)</b>	<b>2,394</b>	<b>3,029</b>	<b>9,074</b>
<b>Basic EPS</b>	<b>5.41</b>	<b>6.45</b>	<b>24.67</b>	<b>27.3</b>

### Appropriations to Reserves:

	₹ in Crore	
	2018-19	2017-18
<b>Appropriations</b>		
Opening Balance in Retained Earnings and Other Comprehensive Income	10,800	8,847
Total Comprehensive Income for the Current Year	(477)	2,394
Dividends paid	(307)	(291)
Transferred to Debenture Redemption Fund	(150)	(150)
Closing Balance in Retained Earnings and Other Comprehensive Income	9,866	10,800

### Dividend:

For the year ended March 31, 2019, the Board of Directors of your Company has recommended dividend of ₹ 1.20 per share (previous year ₹ 1.20 per share) to equity shareholders.

Equity shares that may be allotted upon exercise of options granted under the Employee Stock Option Scheme and out of the Share Capital Suspense Account before the book closure for payment of dividend, will rank pari passu with the existing shares and shall also be entitled to receive the aforesaid dividend.

In terms of provisions of Regulation 43A of the Securities and Exchange Board of India (Listing Obligations & Disclosure Requirements) Regulations, 2015, herein after referred to as "Listing Regulations" your Company has formulated a Dividend Distribution Policy. The Policy is given in **Annexure I** to the Full Annual Report and is also accessible from your Company's website [www.hindalco.com](http://www.hindalco.com).

## OVERVIEW AND STATE OF THE COMPANY'S AFFAIRS

### Standalone full year highlights

Hindalco Industries Limited registered a revenue of ₹ 45,749 crore for the fiscal year 2019 vs ₹ 43,446 crore in the previous year. EBITDA (Earnings before Interest, Tax, Depreciation and Amortisation) stood at ₹ 5,187 crore, down 15 percent compared to the previous year, due to lower realisations in Aluminium on account of lower LME and high input costs and also due to lower Copper EBITDA on account of lower volumes, impacted by planned maintenance shut down in FY19. Depreciation was higher by 5 percent due to progressive capitalization in FY19. The Finance Cost was down by 11 percent at ₹ 1,683 crore on account of prepayment of long term loans of ₹ 1,575 crore in FY19 and also some reduction in pricing of the project loans. Profit before Tax (and Before Exceptional Items) stood at ₹ 1,810 crore, down by 19 percent compared to the previous year due to lower EBITDA. Net Profit for FY19 stood at ₹ 1,205 crore in FY19 as compared to ₹ 1,436 crore in the previous year.

## Consolidated Full Year Highlights

Hindalco's Consolidated Revenue stood at ₹ 130,542 crore for FY19 compared to ₹ 115,820 crore in the previous year. This was on the back of record performance in all the businesses including best ever performance by Novelis Inc. The Company recorded best ever consolidated PBITDA (Profit before Interest, Tax, Depreciation and Amortisation) of ₹ 16,627 crore, up by 10.98 percent supported by stable operations and improving efficiencies and supporting macros. Consolidated Profit before Tax (and Before Exceptional Items) reached ₹ 8,083 crore, up by 26.70 percent compared to the previous year on account of strong overall business performance and savings in interest outgo. Net Profit in FY19, stood at ₹ 5,495 crore compared to ₹ 6,083 crore in the previous year. For detailed analysis, refer to the Management Discussion and Analysis section of the Full and Abridged Annual Report.

### Highlights of the Company's Subsidiaries:

#### (a) Utkal Alumina International Limited.

Utkal Alumina revenues has grown to ₹ 4,073 crore in FY 19 compared to ₹ 2,863 crore in FY 18 up 42 percent as a result of excellent operating performance.

The EBITDA for FY 19 stood at ₹ 2,355 crore up 98 percent compared to ₹ 1,187 crore in FY 18. The Profit After Tax in FY 19 was ₹ 1,425 crore v/s ₹ 561 crore in FY18 up 154 percent YoY.

Particulars	₹ in Crore		
	FY 19	FY 18	Growth
Revenue	4,073	2,863	42%
EBITDA	2,355	1,187	98%
PAT	1,425	561	154%

#### (b) Novelis Inc.

Performance highlights of Novelis Inc. are provided in the Management Discussion and Analysis Section.

### Key Initiatives

Utkal Alumina's brownfield capacity expansion of 500 Kt., is expected to be completed in FY21 with an capital outlay of around ₹ 1,300 crore. This will further strengthen the Company's integration and boost availability of best-in-class alumina to the Company's aluminium smelters in India. In the Copper business, newly commissioned Continuous Copper Cast Rod Plant (CCR#3) at Dahej, Gujarat is ramping up well and did a production of 117 Kt. in FY19 taking the total CCR production to 245 Kt. Novelis announced other expansion plans of a 200 Kt. automotive finishing facility in Guthrie, Kentucky in the US and additionally the 100 Kt. of Auto finishing line in China is expected to be commissioned in FY21. The recently announced plans to expand rolling, casting and recycling capacity in Pinda, Brazil to meet growing customer demand is also expected to be commissioned by FY22.

Novelis signed a definitive agreement to purchase Aleris Corp for US \$2.6 billion in July 2018. This will strengthen its leadership position in the fastest growing automotive segment, thereby enhancing its Asia operations with full metal chain integration in China, further diversifying its portfolio with its entry into the aerospace segment. This transaction is expected to close in FY20 post all the pending regulatory approvals.

## HUMAN RESOURCES

Several innovative people-focused initiatives have been instituted at the Group level, and these are translated into action at all of the Group Companies. Our basic objective is to ensure that a robust talent pipeline and a high-performance culture centred around accountability is in place. We feel this is critical to enable us retain our competitive edge.

## RESEARCH AND DEVELOPMENT

Your Company's Research & Development (R&D) activities are focused on providing innovative, cost-effective and sustainable solutions to support consistent growth of business. The R&D activities of your Company include process, product and application development, to develop short term as well as long term solutions to the issues faced by non-ferrous sector, such as raw material quality, new product development, cost effective management of waste generated during processing, recovery of values from by products as well as any waste products, developing better understanding of the science of processes, reducing the specific energy consumption and carbon footprint etc. Specific programs have also been initiated to foster better understanding of the requirement of existing and prospective customers, and to provide a better service through application development, so as to increase your Company's market share in the chosen market space. Technical competencies developed by your Company will go a long way in terms of quick absorption of technologies, enabling pushing boundaries of our processes, so as to increase the economic performance and improve our new product / new application pipeline to address the impending market opportunities.

Your Company already operates three Hindalco Innovation Centres (HIC), one HIC-Alumina at Belagavi, Karnataka working on R&D of bauxite ore, alumina refining and specialty alumina, hydrate products; as well as waste management; one HIC-SemiFab located at Taloja, near Mumbai, Maharashtra working in the area of tribology, Metallurgy related to aluminium fabricated products and new applications and Modelling. Third Innovation Centre at HIC-Copper at Birla Copper, Dahej, is focusing on maximisation of copper recovery as well recovery of various metal values, such as, Selenium, Tellurium, Nickel, Bismuth

## DIRECTORS' REPORT

etc., from the effluent generated in the plant. Further, Hindalco Technology Team is also engaged with energy and environment management including increased use of renewable energy in the plants. In addition, your Company engages the Aditya Birla Group's corporate research and development centre, Aditya Birla Science and Technology Company Private Limited ("ABSTCPL"), for conducting R&D in select areas of work, through chartered R&D projects. These are based on the domain expertise and R&D facilities available in ABSTCPL. The engagement has resulted into patent applications, out of which some have already been granted and balance will be assigned to your Company. ABSTCPL's forte of having multidisciplinary teams of technical experts, scientists and engineers, enables your Company to develop building competencies in select areas, as a long term value to business. Both the HICs at Belagavi and Taloja as well as ABSTCPL are DSIR, GOI, recognised R&D Centres. Besides, HIC – SemiFab is accredited to ISO 17025 : 2017 and ISO 9001 : 2015 Quality Management Systems.

### CONSOLIDATED FINANCIAL STATEMENTS

The Consolidated Financial Statements for the year ended March 31, 2019 have been prepared by your Company in accordance with the provisions of the Companies Act, 2013, ("the Act") read with the Companies (Accounts) Rules, 2014, applicable Accounting Standards and the provisions of Listing Regulations and forms part of the Full Annual Report.

### EMPLOYEE STOCK OPTION SCHEMES

#### ESOS – 2006:

During the year ended March 31, 2019, the Company has allotted 52,330 fully paid-up equity share of ₹ 1/- each of the Company (previous year 133,438) on exercise of options under ESOS 2006.

#### ESOS – 2013:

During the year ended March 31, 2019, the Company has allotted 515,013 fully paid-up equity share of ₹ 1/- each of the Company (previous year 1,575,374) on exercise of options under ESOS 2013.

The details of Stock Options and Restricted Stock Units granted under the above mentioned Schemes are available on your Company's website viz. [www.hindalco.com](http://www.hindalco.com).

A certificate from the Statutory Auditor on the implementation of your Company's Employees Stock Option Schemes will be placed at the ensuing Annual General Meeting for inspection by the members.

There is no material change in the schemes and the aforementioned schemes are in compliance with SEBI (Share Based Employee Benefits) Regulations, 2014.

#### ESOS – 2018:

The Board of Directors of your Company have, based on the recommendation of the NRC Committee, approved formulation of a new scheme viz. 'Hindalco Industries Limited Employee Stock Option Scheme 2018' ("ESOS – 2018") in terms of the Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014 ("the SEBI SBEB Regulations"). ESOS-2018 will be administered by the NRC Committee through a trust, viz. the Hindalco Employee Welfare Trust. Shareholders of your Company have by resolution dated September 21, 2018 approved ESOS-2018. The NRC Committee has on July 11, 2018 formulated ESOS-2018 and granted 5,575,700 Stock Options during the year.

### CORPORATE GOVERNANCE

Your Directors reaffirm their continued commitment to good corporate governance practices. Your Company fully adheres to the standards set out by the Securities and Exchange Board of India for Corporate Governance practices.

The entire report on Corporate Governance forms part of Full Annual Report.

### ABRIDGED ANNUAL REPORT

In terms of the provision of Section 136(1) of the Act, Rule 10 of Companies (Accounts of Companies) Rules, 2014 and Regulation 36 of the Listing Regulations, the Board of Directors has decided to circulate the Abridged Annual Report containing salient features of the Balance Sheet and Statement of Profit and Loss and other documents to the shareholders for the FY 2018-19, under the relevant laws.

The Abridged Annual Report is being circulated to the members excluding 'Dividend Policy', 'Remuneration Philosophy/Policy', 'Secretarial Audit Report', 'Annual Report on CSR Activities', 'Full Report on Corporate Governance', 'Shareholders' Information' and 'Extract of Annual Return'.

Members who desire to obtain the Full version of the Annual Report may write to the Company Secretary at the registered office. Full version of the Annual Report is also available on the Company's website [www.hindalco.com](http://www.hindalco.com).

### DIRECTORS' RESPONSIBILITY STATEMENT

As stipulated in Section 134(3)(c) of the Act, your Directors subscribe to the "Directors' Responsibility Statement" and confirm that:

- a) in the preparation of the Annual Accounts, applicable Accounting Standards have been followed along with proper explanations relating to material departures;



- b) the Accounting Policies selected have been applied consistently and judgments and estimates have been made that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at March 31, 2019 and of the profit of your Company for that period;
- c) proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of your Company and for preventing and detecting fraud and other irregularities;
- d) the annual accounts of your Company have been prepared on a going concern basis;
- e) your Company had laid down Internal Financial Controls and that such Internal Financial Controls are adequate and were operating effectively;
- f) your Company has devised proper system to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

## ENERGY, TECHNOLOGY AND FOREIGN EXCHANGE

The information on conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo stipulated under Section 134(3)(m) of the Act, read with Companies (Accounts) Rules, 2014 is set out in **Annexure II** to the Full and Abridged Annual Report.

## PARTICULARS OF EMPLOYEES

In accordance with the provisions of Section 197(12) of the Act, read with the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, the names and other particulars of employees are to be set out in the Directors' Report, as an addendum thereto. However, in line with the provisions of Section 136(1) of the Act, the Report and Accounts as set out therein, are being sent to all Members of your Company excluding the aforesaid information about the employees. Any Member, who is interested in obtaining these particulars about employees may write to the Company Secretary at the Registered Office of your Company.

Disclosures pertaining to remuneration and other details as required under Section 197(12) read with Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 are attached as **Annexure III** to the Full and Abridged Annual Report.

## DIRECTORS

### Board constitution and changes:

Mrs. Rajashree Birla (DIN: 00022995) will retire from office by rotation at the ensuing Annual General Meeting, and being eligible, offers herself for re-appointment.

Mrs. Rajashree Birla has given required declaration under the Act and Listing Regulations.

Pursuant to the provisions of the Act, the Shareholders in Fifty-Fifth Annual General Meeting of your Company held on September 24, 2014 appointed Mr. M. M. Bhagat (DIN: 00006245), Mr. Ram Charan (DIN: 03464530) & Mr. K. N. Bhandari (DIN: 00026078) as Non-Executive Independent Director of the Company to hold office for the period of five consecutive years from the date of Annual General Meeting held on September 24, 2014 till the conclusion of ensuing Annual General Meeting to be held in calendar year 2019.

Mr. M. M. Bhagat has concluded his 5 (five) year tenure as Independent Director. He does not offer himself for re-appointment for a second term, due to his personal commitments.

Mr. Ram Charan and Mr. K. N. Bhandari are eligible to be re-appointed as Non-Executive Independent Directors for a second term of a further period of five years, subject to approval of Shareholders at the ensuing Annual General Meeting. They have respectively given the required declarations under the Act and the Listing Regulations.

Dr. Vikas Balia (DIN: 00424524) is appointed as Independent Director on the Board of the Company w.e.f. July 19, 2019, subject to Shareholder approval at the ensuing Annual General Meeting. Dr. Balia has given the required declarations under the Act and the Listing Regulations.

Brief resume of the Directors being appointed and re-appointed form part of the Notice of the ensuing Annual General Meeting.

The Board recommends the re-appointment of Mrs. Rajashree Birla, Mr. Ram Charan and Mr. K. N. Bhandari; and appointment of Dr. Vikas Balia. Resolutions seeking your approval are included in the Notice convening the Annual General Meeting.

### Independent Directors Statement:

Independent Directors on your Company's Board have submitted declarations of independence to the effect that they meet the criteria of independence as provided in Section 149(6) of the Act and Regulation 16(1)(b) of the Listing Regulations.

## DIRECTORS' REPORT

### Policy on appointment and remuneration of Directors and Key Managerial Personnel:

The Nomination and Remuneration Committee has formulated the remuneration policy of your Company which is attached as **Annexure IV** to the Full Annual Report.

### Meetings of the Board:

The Board of Directors of your Company met seven times during the year, details of which are given in the Corporate Governance Report forming part of the Full Annual Report.

### Annual Evaluation:

The Board carried out an annual performance evaluation of its own performance, the Directors individually as well as evaluation of the working of the Committees of the Board as mandated under the Act and Listing Regulations, as amended from time to time.

The evaluation exercise has been carried out by the Board members on the basis of structured questionnaire prepared for the Board, Independent Directors, Non-Executive Directors, Executive Directors, Committees of the Board and Chairman of the Board. The questionnaire focussed on various aspects such as receipt of timely information from management, execution of duties and obligations. The Consolidated Evaluation Report of the Board was discussed at the meeting of the Board.

The Nomination and Remuneration Committee evaluated the performance of Individual Directors. Similarly, the Independent Directors evaluated the performance of Non-Independent Directors and the Chairman; and assessed the quality, quantity and flow of information between the Management and the Board that is necessary for the Board to effectively and reasonably perform its duties.

The Directors expressed their satisfaction with the evaluation process.

### AUDIT COMMITTEE

The Audit Committee comprises of Mr. M. M. Bhagat, Mr. K. N. Bhandari and Mr. Y. P. Dandiwala: Independent Directors of your Company. Mr. Satish Pai: Managing Director and Mr. Praveen Kumar Maheshwari: Chief Financial Officer and Whole-Time Director are the permanent invitees. Further details relating to the Audit Committee are provided in the Corporate Governance Report forming part of the Full Annual Report.

### KEY MANAGERIAL PERSONNEL

In terms of provisions of Section 203 of the Act, Mr. Satish Pai: Managing Director, Mr. Praveen Kumar Maheshwari: Chief Financial Officer and Mr. Anil Malik: Company Secretary are the Key Managerial Personnel of your Company.

### VIGIL MECHANISM

Your Company has in place a vigil mechanism for directors and employees to report concerns about unethical behaviour, actual or suspected fraud or violation of your Company's Code of Conduct. Adequate safeguards are provided against victimisation to those who avail of the mechanism and direct access to the Chairman of the Audit Committee in exceptional cases is provided to them.

The vigil mechanism is available on your Company's website viz. [www.hindalco.com](http://www.hindalco.com).

### AUDITORS

#### Statutory Auditors

M/s. Price Waterhouse & Co. Chartered Accountants LLP (Registration No. 304026E/E-300009), are the Statutory Auditors of the Company who are appointed for a period of five years i.e., to hold office from the conclusion of the Fifty Eighth Annual General Meeting held in 2017 till the conclusion of the Sixty-third Annual General Meeting of the Company, to be held in the calendar year 2022.

The observation made in the Auditor's Report are self explanatory and therefore, do not call for any further comments under Section 134(3)(f) of the Act.

During the FY 2018-2019, the Auditors have not reported any matter under Section 143(12) of the Act, therefore no details is required to be disclosed under Section 134(3)(ca) of the Act.

#### Cost Accounts & Cost Auditors

In terms of the Section 148 of the Act read with Rule 8 of the Companies (Accounts) Rules, 2014, it is stated that the cost accounts and records are made and maintained by the Company as specified by the Central Government under sub-section (1) of Section 148 of the Act.

In terms of the provisions of Section 148 of the Act read with the Companies (Cost Records and Audit) Amendment Rules, 2014, the Board of Directors of your Company have on the recommendation of the Audit Committee, appointed M/s. R. Nanabhoy & Co., Cost Accountants, Mumbai as Cost Auditors, to conduct the cost audit of your Company for the Financial Year ending March 31, 2020, at a remuneration as mentioned in the Notice convening the Annual General Meeting. As required under the Act, the remuneration payable to the cost auditor is required to be placed before the members in a General Meeting for their ratification. Accordingly, a resolution seeking member's ratification for the remuneration payable to Cost Auditors forms part of the Notice of the ensuing Annual General Meeting.

During the FY 2018-2019, the Auditors have not reported any matter under Section 143(12) of the Act, therefore no details is required to be disclosed under Section 134(3)(ca) of the Act.

### Secretarial Auditors

Pursuant to provisions of Section 204 of the Act read with the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, the Company has appointed BNP & Associates, Company Secretaries, Mumbai as Secretarial Auditor for conducting the secretarial audit of your Company for the Financial Year ended March 31, 2019. The Report of the Secretarial Auditors is annexed herewith as **Annexure VA** to the Full Annual Report.

As per Regulation 24A of the Listing Regulations, material unlisted subsidiaries of a Listed Entity incorporated in India is required to annex a Secretarial Audit Report issued by a Company Secretary in practice.

In compliance with the above requirement, the Secretarial Audit Report of Utkal Alumina International Limited, a material subsidiary of your Company, is given in **Annexure VB** to the Full Annual Report.

The Secretarial Audit Reports do not contain any qualification, reservation or adverse remark.

### ENVIRONMENT PROTECTION AND POLLUTION CONTROL

Your Company is committed to sustainable development. A detailed report of the Company's initiatives and commitment to environment conservation is part of Sustainability & Business Responsibility Report forming part of the Full and Abridged Annual Report.

### PARTICULARS OF LOANS, GUARANTEES AND INVESTMENTS

Details of Loans, Guarantee and Investments covered under the provisions of Section 186 of the Act read with Companies (Meetings of Board and its Powers) Rules, 2014 are given in the notes to Financial Statements of the Full Annual Report.

### CORPORATE SOCIAL RESPONSIBILITY

In terms of the provisions of Section 135 of the Act read with Companies (Corporate Social Responsibility Policy) Rules, 2014, the Board of Directors of your Company has constituted a Corporate Social Responsibility ("CSR") Committee which is chaired by Mrs. Rajashree Birla: Non-Executive Director. The other Members of the Committee for the Financial Year ending March 31, 2019 were Mr. Y. P. Dandiwalwa: Independent Director, Mr. A. K. Agarwala: Non-Executive Director, Mr. Satish Pai: Managing Director and Mr. D. Bhattacharya: Non-Executive Director. Dr. Pragnya Ram: Group Executive President, Corporate Communication & CSR, is a permanent invitee to the Committee.

Your Company also has in place a CSR Policy and the same is available on your Company's website viz. [www.hindalco.com](http://www.hindalco.com).

The Committee recommends to the Board activities to be undertaken during the year.

Your Company is a caring corporate citizen and lays significant emphasis on development of the communities around which it operates. Your Company has identified several projects relating to Social Empowerment & Welfare, Infrastructure Development, Sustainable Livelihood, Health Care and Education during the year and initiated various activities in neighbouring villages around plant locations. During the FY 2018-19 the Company has spent ₹ 34.14 crore under Section 135 of the Act on CSR activities, which represent 2.28% of average net profits of the Company for last three Financial Years.

The Annual Report on CSR activities is attached as **Annexure VI** to the Full Annual Report.

### RISK MANAGEMENT

Pursuant to the requirement of Listing Regulations the Company has constituted Risk Management Committee, which is mandated to review the risk management plan / process of your Company.

Risk evaluation and management is an ongoing process within the Organization. Your Company has comprehensive risk management policy which is periodically reviewed by the Risk Management Committee.

### CONTRACTS AND ARRANGEMENTS WITH RELATED PARTIES

During the Financial Year, your Company entered into related party transactions which were on arm's length basis and in the ordinary course of business. There are no material transactions with any related party as defined under Section 188 of the Act read with Companies (Meetings of Board and its Powers) Rules, 2014 and Listing Regulations. All related party transactions have been approved by the Audit Committee of your Company.

The policy on Related Party Transactions as approved by the Audit Committee and the Board is available on your Company's website viz. [www.hindalco.com](http://www.hindalco.com).

### EXTRACT OF ANNUAL RETURN

In terms of the provisions of Section 92(3) of the Act read with the Companies (Management and Administration) Rules, 2014, an extract of the Annual Return of your Company for the Financial Year ended March 31, 2019 is given in **Annexure VII** to the Full Annual Report.

### BUSINESS RESPONSIBILITY REPORT

As per Listing Regulations, a separate section of Business Responsibility Report forms part of the Full and Abridged Annual Report.

## DIRECTORS' REPORT

### INTERNAL CONTROL SYSTEM AND THEIR ADEQUACY

Your Company has an Internal Control System (IFC), commensurate with the size, scale and complexity of its operations. The scope and authority of the Internal Audit (IA) function is defined by the Audit Committee.

The Internal Audit Department monitors and evaluates the efficacy and adequacy of internal control system in the Company, its compliance with operating systems, accounting procedures and policies at all locations of the Company.

Based on the report of Internal Auditors, the process owners undertake corrective action in their respective areas and thereby strengthen the controls. Significant audit observations and corrective actions thereon are presented to the Audit Committee of the Board.

### INTERNAL FINANCIAL CONTROL

Your directors confirm having laid down Internal Financial Controls and that such internal financial controls are adequate and were operating effectively.

### SUBSIDIARY, JOINT VENTURES OR ASSOCIATE COMPANIES

The Financial Statements of your Company's subsidiaries and related information have been placed on the website of your Company viz. [www.hindalco.com](http://www.hindalco.com) and also available for inspection during business hours at the registered office of your Company. Any Member, who is interested in obtaining a copy of Financial Statements of your Company's subsidiaries, may write to the Company Secretary at the registered office of your Company.

In accordance with the provisions of the Section 129(3) of the Act, read with the Companies (Accounts) Rules, 2014, a report on the performance and financial position of each of the Subsidiaries, Associates and Joint Venture is attached as **Annexure VIII** to the Full and Abridged Annual Report.

The names of Companies which have become or ceased to be Subsidiaries, Joint Ventures and Associates are also provided in the aforesaid statement.

### OTHER DISCLOSURES

- There were no material changes and commitments affecting the financial position of your Company between end of Financial Year and the date of report.
- Your Company has not issued any shares with differential voting rights.
- There was no revision in the Financial Statements.

- Your Company has not issued any sweat equity shares.
- Mr. Satish Pai is a director on the Board of Novelis Inc, wholly owned subsidiary. He is in receipt of annual fee of US\$ 1, 50,000 in the calendar year 2018. Mr. Praveen Kumar Maheshwari: Whole Time Director and Chief Financial Officer has not received any commission / remuneration from your Company's subsidiaries.
- There is no change in the nature of business.
- During the year under review, your Company has not accepted any fixed deposits from the public falling under Section 73 of the Act read with the Companies (Acceptance of Deposits) Rules, 2014. Thus, as on March 31, 2019, there were no deposits which were unpaid or unclaimed and due for repayment.
- There are no significant and material orders passed by the regulators or courts or tribunals impacting the going concern status and Company's operations in future.
- As per the requirement of the Sexual Harassment of Women at the Workplace (Prevention, Prohibition and Redressal) Act, 2013, your Company has complied with provisions relating to the constitution of Internal Complaint Committee under POSH.
- Directors of your Company hereby state and confirm that the Company has complied with all the applicable Secretarial Standards.

### APPRECIATION

Your Directors place on record their sincere appreciation for the assistance and guidance provided by the Honorable Ministers, Secretaries and other officials of the Ministry of Mines, Ministry of Coal, the Ministry of Chemicals and Fertilizers and various State Governments. Your Directors thank the Financial Institutions and Banks associated with your Company for their support as well.

Your Company's employees are instrumental in your Company scaling new heights, year after year. Their commitment and contribution is deeply acknowledged.

Your involvement as Shareholders is greatly valued. Your Directors look forward to your continuing support.

For and on behalf of the Board

**Satish Pai**  
Managing Director  
DIN:06646758

**M.M. Bhagat**  
Independent Director  
DIN:00006245

Mumbai  
Dated : July 19, 2019

# ANNEXURE I

## Dividend Distribution Policy

### 1. Introduction

- 1.1. As per the Listing Regulations, the Company is required to formulate and disclose its Dividend Distribution Policy. Accordingly the Board of Directors of the Company ('the Board') has approved this Dividend Distribution Policy for the Company at its meeting held on February 13, 2017.
- 1.2. The objective of this policy is to provide clarity to stakeholders on the dividend distribution framework to be adopted by the Company. The Board of Directors shall recommend dividend in compliance with this policy, the provisions of the Act, Rules made thereunder and other applicable legal provisions.

### 2. Target Dividend Payout

- 2.1. Dividend will be declared out of the current year's Profit after Tax of the Company.
- 2.2. Only in exceptional circumstances including but not limited to loss after tax in any particular Financial Year, the Board may consider utilising retained earnings for declaration of dividends, subject to applicable legal provisions.
- 2.3. 'Other Comprehensive Income' (as per applicable Accounting Standards) which mainly comprises of unrealized gains/losses, will not be considered for the purpose of declaration of dividend.
- 2.4. The Board will endeavor to achieve a dividend payout ratio (gross of dividend distribution tax) in the range of 10 percent to 30 percent of the Standalone Profit after Tax, net of dividend payout to preference shareholders, if any.

### 3. Factors to be Considered for Dividend Payout

The Board will consider various internal and external factors, including but not limited to the following before making any recommendation for dividends:

- Stability of earnings
- Cash flow position from operations
- Future capital expenditure, inorganic growth plans and reinvestment opportunities
- Industry outlook and stage of business cycle for underlying businesses
- Leverage profile and capital adequacy metrics
- Overall economic / regulatory environment
- Contingent liabilities
- Past dividend trends
- Buyback of shares or any such alternate profit distribution measure
- Any other contingency plans

### 4. General

Retained earnings will be used for the Company's growth plans, working capital requirements, debt repayments and other contingencies.

### 5. Review

This policy would be subject to revision / amendment on a periodic basis as may be necessary.

### 6. Disclosure

This policy (as amended from time to time) will be available on the Company's website and in the annual report.

## ANNEXURE II

### Disclosure of Particulars with Respect to Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo as Prescribed Under Rule 8(3) of the Companies (accounts) Rules, 2014

#### A. CONSERVATION OF ENERGY

##### a. STEPS TAKEN ON CONSERVATION OF ENERGY

- i. Mandatory Energy Audit is conducted in all units.
- ii. In addition to the existing Energy Managers/ Auditors across all units, additional 12 professionals qualified in the Energy Manager/ Auditor examination conducted by BEE in 2018-19.
- iii. Reduction in steam consumption in Aluminium Refinery units through process optimization and loss reduction.
- iv. Reduction in Aluminium Smelter energy consumption through various initiatives like new design / copper insert collector bar, bus bar / riser design change, Step stub Anode, Anode Current density equalization, Magnetic Compensation Busbaretc.
- v. Efficiency improvement in Boilers by minimising Radiation / Convection / leakage Losses and through process optimization.
- vi. Revamping of Turbo Generator.
- vii. Revamping of Anode Baking Furnace.
- viii. Regenerative burner in Cast House.
- ix. Auxiliary power reduction through automation & process optimization.
- x. Replacement of Metallic Fan blade of Cooling Towers with FRP blades.
- xi. Rationalization of motor, pump & fan capacities and replacement of inefficient pumps & motors with high efficiency pumps & motors.
- xii. Energy efficient & corrosion resistant coating in pumps.
- xiii. Revamping / replacement of Annealing & Homogenizing Furnaces.
- xiv. Reduction in lighting consumption by installing translucent roofing sheet / sun pipe,

replacement of conventional light with energy efficient LED Light.

- xv. Installation of VFD in variable load application,
- xvi. Compressed Air system efficiency improvement through replacement of inefficient compressors, arresting leakages, process optimization etc.
- xvii. Power Factor improvement

##### b. STEPS TAKEN BY THE COMPANY FOR UTILISING ALTERNATE SOURCES OF ENERGY.

- i. Use of biomass as a supplementary fuel in our boilers.
- ii. Use of translucent roofing sheet / Sun light pipe for more use of Natural light.
- iii. Use of turbine ventilators in place of conventional exhaust system.
- iv. Installation of Solar water & solar emulsion heaters.
- v. 30 MWp Solar PV Power plant for captive consumption has been successfully commissioned during the year at Aditya Aluminium, Odisha.
- vi. During the year, 2 locations (Taloja & Belagavi) obtained Renewable Power (Solar & Wind) under open access.
- vii. Contract has been finalized and project initiated for Solar project at 2 locations totaling 5.0 MWp.
- viii. Contract finalization of solar project at 2 locations totaling 14 MWp are in advanced stage and feasibility study has been completed at 3 location with solar project totaling 40 MWp.
- ix. Feasibility study is underway for 200 MW Renewable Hybrid Power.

##### c. CAPITAL INVESTMENT ON ENERGY CONSERVATION EQUIPMENT & PROJECTS.

The Capital investment on Energy conservation equipment & projects for the year was ₹ 153 crore.

## B. TECHNOLOGY ABSORPTION

### a) Efforts made towards technology absorption:

- i. Grinding aid trials were taken and the technology adopted in the Bauxite grinding mills at Belgaum to realise increased grinding rate thus removing the constraint in grinding rate capacity for meeting plant production rate.
- ii. Trials were conducted at Renukoot to identify fuels with high calorific values and utilise heat value optimally without affecting plant equipment in long run and at the same time be compliant to environmental concerns.
- iii. Attempts continued at Renukoot towards use of Red Mud into building material compound with different mixes along with its application into construction sites.
- iv. Following were the areas of Technology Absorption at Aditya Smelter:
  - Virtual Reality (VR) based training Module in Pot Room.
  - Installation of Weigh bridge for Hot metal transfer.
  - AI based DGA analysis Rectifier Transformer.
  - KPI digitization.
  - Installation of ATS for Power Redundancy of Pot Micro.
  - GPS installation in all technological vehicle.
  - New XRD (D8-endeavor-German) commissioned in LAB.
- v. At HIC Alumina, Belagavi, R&D in following Bauxite & Alumina areas were carried out
  - Development of high purity alumina (3N) for electronic / electrical ceramics applications.
  - Development of different types of low / ultra low soda alumina for wear ceramics, spark plug and technical ceramics applications.
  - Development of dispersible low soda alumina for refractory and environmental ceramics applications.
  - Development of high density precipitated superfine hydrate for high voltage cable application.

- Quality improvement of selected alumina and hydrates for both domestic and export markets.
  - Process improvement made in Bayer plant, in order to improve process efficiency.
  - Research for the usage of bauxite residue in roofing sheet application.
- vi. The following were the areas of Technology absorption at Dahej Copper Unit:
    - CONTIROD Technology from SMS Group, Germany for Continuous Cast Copper Rod - III.
    - Dilute Oxygen Combustion Technology - Fuel Burner in Anode.
    - Tail Gas Scrubber at SAP3.
  - vii. Efforts were made towards technology developments / absorption in the following areas at Mahan / Aditya / Hirakud Smelters:
    - Cast House Server Virtualization for enhanced reliability and efficiency.
    - Trending and analysis of process parameters in Ingot & Sow Casting line through EBA Software.
    - Digitization of raw material management system of carbon plant.
    - QR code based equipment checklist mobile application.
    - GAP - MES Replication of Amillios software.
    - Mobile App for critical parameters of PTM.
    - Copper insert collector bar technology developed for higher amperage cells.

### b) Benefits derived like product improvement, cost reduction, product development or import substitution

- i. Several new products were developed at Renukoot. These include the following:
  - Fan blade supply, Cable wrap via Tension Leveller for bucking free material.
  - Special alloy and temper Circles for Storage containers, Sheets for doors and windows.
  - Coil in 0.73 mm gauge as Transformer Stock.

## ANNEXURE II

- Wind Mill chequered sheets, Rice Cooker Stock, Colour coated Panels for Export, Circles for Cookware in European Market as well as Indian Market.
  - High Strength Roofing, Alloy for Transport (Pump Housing), Battery Case of Auto Rickshaw, building and construction material etc.
- ii. Benefits derived as a result of R&D at HIC Belagavi include:
- Increase in sales volume / realization in value added products leading to higher revenue for Specialty Chemicals Business.
  - Improved plant operation and capacity utilization.
  - Increase in market share and profitability
  - Enhancement of customer satisfaction.
  - Utilization of waste / generation of wealth from wastes.
  - Energy reduction.
- iii. Benefits derived related to technology related efforts at Dahej include:
- Increased production of Continuous Cast Copper Rod.
  - Increase in Production of Anode.
  - Reduction in SO<sub>2</sub> emission from stack.
  - Advancement of basic skill and knowledge in production of high products.
  - Conservation of natural resources and environment – water, energy and basic raw material.
  - Continue to maintain cost of production to remain economically viable.
  - Improvement of Quality and increase in volume of Continuous cast rod.

**c) In case of imported technology (imported during the last three years reckoned from the beginning of the financial year)**

Technology Imported for	Year of Import	Has Technology been fully absorbed	If not fully absorbed, areas where this has not taken place, reason thereof and future plan of action
Flash Smelter upgradation at Dahej	2016-17	Yes	NA
CONTIROD Technology at Dahej	2017-18	Yes	NA
Dilute Oxygen Combustion Technology Dahej	2018-19	Yes	NA
Upgrade of Anode baking furnace-5 at Renukoot using Riedhammer, Germany	2017-18	In progress	PG parameters fine-tuning in consultation with Tech supplier

**d) Expenditure Incurred on Research & Development (R&D)**

The Company has spent ₹ 26.83 crore for Research and Development during the Financial Year 2018-2019.

**C. FOREIGN EXCHANGE EARNINGS & OUT GO.**

- a) Activities related to exports.  
Exports (FOB) during the year were ₹ 13,463.17 crore.
- b) Total Foreign Exchange used and earned.
- (1) Foreign Exchange used ₹ 20,318.81 crore.
- (2) Foreign Exchange Earned ₹ 13,468.98 crore.

For and on behalf of the Board

**Satish Pai**  
Managing Director  
DIN:06646758

**M.M. Bhagat**  
Independent Director  
DIN:00006245

Mumbai  
Dated : July 19, 2019



## ANNEXURE III

### Details Pertaining to Remuneration as Required Under Section 197(12) of the Companies Act, 2013 read with Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014

- i. The percentage increase / decrease in remuneration of each Director, Chief Financial Officer and Company Secretary during the Financial year 2018-19, ratio of the remuneration of each Director to the median remuneration of the employees of the Company for the Financial year 2018-19 are as under:

Sr. No.	Name of Director/KMP	Remuneration* of Director/KMP for financial year 2018-19 (₹ in Lakhs)	% increase / decrease in Remuneration in the Financial Year 2018-19	Ratio of remuneration of each Director/ to median remuneration of employees
1	Kumar Mangalam Birla	360.60	-30.25%	64.28
2	Rajashree Birla	12.00	94.81%	2.14
3	A. K. Agarwala	8.84	0.80%	1.58
4	M. M. Bhagat	14.35	0.21%	2.56
5	Y. P. Dandiwala	12.23	0.91%	2.18
6	K. N. Bhandari	15.98	6.18%	2.85
7	Alka Bharucha	5.23	**	**
8	Ram Charan	6.29	-6.54%	1.12
9	D. Bhattacharya <sup>^</sup>	7.58	0.93%	1.35
10	Girish Dave	6.90	0.88%	1.23
11	Satish Pai	2871.50	36.92%	511.85
12	Praveen Kumar Maheshwari	427.38	4.63%	76.18
13	Anil Malik	137.01	6.21%	24.42

\* Remuneration includes commission payable to Non-Executive Directors for the year ended March 31, 2019 which is subject to the approval of the members of the Company. Sitting fees paid to Directors is excluded.

<sup>^</sup> Mr. D. Bhattacharya was Managing Director till July 31, 2016 and then was inducted as Non-Executive Director. In addition to the above, his remuneration for the year 2018-19 includes ₹ 2.56 crore as perquisites on stock options exercised and ₹ 0.02 crore as medical reimbursement. At the time of retirement, Board had approved pension of ₹ 0.335 crore per month, hence he has been paid ₹ 4.02 crore as a pension for his past services as the Managing Director.

\*\* Was appointed as Independent Director w.e.f. July 11, 2018.

- i. The median remuneration of employees of the Company during the financial year was ₹ 5.61 Lacs.
- ii. In the financial year, there was an increase of 3.70% in the median remuneration of employees.
- iii. There were 22,865 permanent employees on the rolls of Company as on March 31, 2019.
- iv. Average percentage increase made in the salaries of employees other than the managerial personnel in the last financial year i.e. 2018-19 was 3.7% whereas the increase in the managerial remuneration for the same financial year was 31.65%. For the purpose of managerial remuneration, Mr. Satish Pai: Managing Director and Mr. Praveen Maheshwari: Whole time Director, are considered.
- v. It is hereby affirmed that the remuneration paid is as per the Remuneration Philosophy / Policy of the Company.
- vi. Remuneration excludes amortization of fair value of employee share based payments under IndAs 102 and provision for gratuity and leave encashment recognised on the basis of actuarial valuation as separate figures are not available.
- vii. During the current Financial Year, Mr. Satish Pai has been granted 1,985,292 Stock Options and 466,805 Restricted Stock Options (RSU's); and Mr. Praveen Kumar Maheshwari has been granted 119,116 Stock Options and 28,008 RSU's. .

For and on behalf of the Board

**Satish Pai**  
Managing Director  
DIN:06646758

**M. M. Bhagat**  
Independent Director  
DIN:00006245

Mumbai  
Dated : July 19, 2019

## ANNEXURE IV

Hindalco Industries Limited (“the Company”) an Aditya Birla Group Company adopts this Executive Remuneration Philosophy / Policy as applicable across Group Companies. This philosophy / policy is detailed below:

### Executive Remuneration Philosophy / Policy

At the Aditya Birla Group, we expect our executive team to foster a culture of growth and entrepreneurial risk-taking. Our Executive Remuneration Philosophy / Policy supports the design of programs that align executive rewards – including incentive programs, retirement benefit programs, promotion and advancement opportunities – with the long-term success of our stakeholders.

### Our business and organizational model

Our Group is a conglomerate and organized in a manner such that there is sharing of resources and infrastructure. This results in uniformity of business processes and systems thereby promoting synergies and exemplary customer experiences.

#### I. Objectives of the Executive Remuneration Program

Our executive remuneration program is designed to attract, retain, and reward talented executives who will contribute to our long-term success and thereby build value for our shareholders.

Our executive remuneration program is intended to:

1. Provide for monetary and non-monetary remuneration elements to our executives on a holistic basis
2. Emphasize “Pay for Performance” by aligning incentives with business strategies to reward executives who achieve or exceed Group, business and individual goals.

#### II. Covered Executives

Our Executive Remuneration Philosophy/Policy applies to the following:

1. Directors of the Company
2. Key Managerial Personnel: Chief Executive Officer and equivalent (eg: Deputy Managing Director), Chief Financial Officer and Company Secretary.
3. Senior Management: As decided by the Board

#### III. Business and Talent Competitors

We benchmark our executive pay practices and levels against peer companies in similar industries, geographies and of similar size. In addition, we look at secondary reference (internal and external) benchmarks in order to ensure that pay policies and levels across the Group are broadly equitable and support the Group’s global mobility objectives for

executive talent. Secondary reference points bring to the table, the executive pay practices and pay levels in other markets and industries, to appreciate the differences in levels and medium of pay and build in as appropriate for decision making.

#### IV. Executive Pay Positioning

We aim to provide competitive remuneration opportunities to our executives by positioning target total remuneration (including perks and benefits, annual incentive pay-outs, long term incentive pay-outs at target performance) and target total cash compensation (including annual incentive pay-outs) at target performance directionally between median and top quartile of the primary talent market. We recognize the size and scope of the role and the market standing, skills and experience of incumbents while positioning our executives.

We use secondary market data only as a reference point for determining the types and amount of remuneration while principally believing that target total remuneration packages should reflect the typical cost of comparable executive talent available in the sector.

#### V. Executive Pay-Mix

Our executive pay-mix aims to strike the appropriate balance between key components: (i) Fixed Cash compensation (Basic Salary + Allowances) (ii) Annual Incentive Plan (iii) Long-Term Incentives (iv) Perks and Benefits

Annual Incentive Plan:

We tie annual incentive plan pay-outs of our executives to relevant financial and operational metrics achievement and their individual performance. We annually align the financial and operational metrics with priorities / focus areas for the business.

Long-Term Incentive:

Our Long-term incentive plans incentivize stretch performance, link executive remuneration to sustained long term growth and act as a retention and reward tool.

We use stock options as the primary long-term incentive vehicles for our executives as we believe that they best align executive incentives with stockholder interests.

We grant restricted stock units as a secondary long term incentive vehicles, to motivate and retain our executives.

## VI. Performance Goal Setting

We aim to ensure that for both annual incentive plans and long term incentive plans, the target performance goals shall be achievable and realistic.

Threshold performance (the point at which incentive plans are paid out at their minimum, but non-zero, level) shall reflect a base-line level of performance, reflecting an estimated 90% probability of achievement.

Target performance is the expected level of performance at the beginning of the performance cycle, taking into account all known relevant facts likely to impact measured performance.

Maximum performance (the point at which the maximum plan payout is made) shall be based on an exceptional level of achievement, reflecting no more than an estimated 10% probability of achievement.

## VII. Executive Benefits and Perquisites

Our executives are eligible to participate in our broad-based retirement, health and welfare, and other employee benefit plans. In addition to these broad-based plans, they are eligible for perquisites and benefits plans commensurate with their roles. These benefits are designed to encourage long-term careers with the Group.

### **Other Remuneration Elements**

Each of our executives is subject to an employment agreement. Each such agreement generally provides for a total remuneration package for our executives including continuity of service across the Group Companies.

We limit other remuneration elements, for e.g. Change in Control (CIC) agreements, severance agreements, to instances of compelling business need or competitive rationale and generally do not provide for any tax gross-ups for our executives.

### **Risk and Compliance**

We aim to ensure that the Group's remuneration programs do not encourage excessive risk taking. We review our remuneration programs for factors such as, remuneration mix overly weighted towards annual incentives, uncapped pay-outs, unreasonable goals or thresholds, steep pay-out cliffs at certain performance levels that may encourage short-term decisions to meet pay-out thresholds.

### **Claw back Clause**

In an incident of restatement of financial statements, due to fraud or non-compliance with any requirement of the Companies Act 2013 and the rules made thereafter, we shall recover from our executives, the remuneration received in excess, of what would be payable to him / her as per restatement of financial statements, pertaining to the relevant performance year.

### **Implementation**

The Group and Business Centre of Expertise teams will assist the Nomination & Remuneration Committee in adopting, interpreting and implementing the Executive Remuneration Philosophy / Policy. These services will be established through "arm's length", agreements entered into as needs arise in the normal course of business.

## ANNEXURE V A

**Form No. MR-3**  
**SECRETARIAL AUDIT REPORT FOR THE FINANCIAL**  
**YEAR ENDED 31<sup>ST</sup> MARCH 2019**

[Pursuant to Section 204 (1) of the Companies Act, 2013 and Rule no. 9  
of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To

The Members

**Hindalco Industries Limited**

Ahura Centre, 1<sup>st</sup> Floor,  
B Wing Mahakali Caves Road,  
Mumbai - 400093

We have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by **HINDALCO INDUSTRIES LIMITED** having CIN No. L27020MH1958PLC011238 (hereinafter called the 'Company') for the audit period covering the financial year ended on **March 31, 2019** (the 'audit period') Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of Secretarial Audit; we hereby report that in our opinion, the Company has, during the audit period complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter.

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on March 31, 2019 according to the provisions of:

- (i) The Companies Act, 2013 (the 'Act') and the Rules made thereunder;
- (ii) The Securities Contracts (Regulation) Act, 1956 and the Rules made thereunder;
- (iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;
- (iv) Foreign Exchange Management Act, 1999 and the Rules and Regulations made thereunder to the extent of Overseas Direct Investment and External Commercial Borrowings.
- (v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992;

- (a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;
- (b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;
- (c) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014;
- (d) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993; and
- (e) The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015.

(vi) Other laws specifically applicable to the Company are:

- (a) The Mines Act, 1952; and
- (b) The Mines and Minerals (Regulation and Development) Act, 1957.

We have also examined compliance with the applicable clauses of the Secretarial Standards issued by the Institute of Company Secretaries of India during the audit period;

During the audit period, the Company has complied with the provisions of the Acts, Rules, Regulations and Bye-laws mentioned above.

During the period under review, provisions of the following regulations were not applicable to the Company:

- (i) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008;
- (ii) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009;
- (iii) The Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998; and
- (iv) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009;
- (v) The Foreign Exchange Management Act, 1999 and the Rules and Regulations made thereunder to the extent of Foreign Direct Investment.

**We further report that –**

The Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors. The changes in the composition of the Board of Directors that took place during the audit period under review was carried out in compliance with the provisions of the Act.

Adequate notice is given to all directors to schedule the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance except for one Board Meeting where consent for shorter notice was obtained from majority of the directors. System exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

Decisions at the meetings of the Board of Directors of the Company were carried through on the basis of majority. There were no dissenting views by any member of the Board of Directors during the audit period.

**We further report that** there are adequate systems and processes in the Company commensurate with the size and operations of the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

We further report that –

**We further report that** during the audit period, no specific event / action has occurred during the year which has a major bearing on the Company's affairs.

For BNP & Associates  
Company Secretaries  
[Firm Regn. No. P2014MH037400]

**Avinash Bagul**

Place : Mumbai

Date : May 14, 2019

FCS : 5578

ACS : 19862

**Note: This report is to be read with our letter of even date which is annexed as Annexure A and forms an integral part of this report.**

## ANNEXURE A

To,

The Members,

**Hindalco Industries Limited**

Secretarial Audit Report of even date is to be read along with this letter.

1. The compliance of provisions of all laws, rules, regulations, standards applicable to Hindalco Industries Limited (the 'Company') is the responsibility of the management of the Company. Our examination was limited to the verification of records and procedures on test check basis for the purpose of issue of the Secretarial Audit Report.
2. Maintenance of secretarial and other records of applicable laws is the responsibility of the management of the Company. Our responsibility is to issue Secretarial Audit Report, based on the audit of the relevant records maintained and furnished to us by the Company, along with explanations where so required.
3. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial and other legal records, legal compliance mechanism and corporate conduct. The verification was done on test check basis to ensure that correct facts as reflected in secretarial and other records produced to us. We believe that the processes and practices we followed, provides a reasonable basis for our opinion for the purpose of issue of the Secretarial Audit Report.
4. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Company.
5. Wherever required, we have obtained the management representation about the compliance of laws, rules and regulations and major events during the audit period.
6. The Secretarial Audit Report is neither an assurance as to the future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

For BNP & Associates  
Company Secretaries  
[Firm Regn. No. P2014MH037400]

Place : Mumbai  
Date : May 14, 2019

**Avinash Bagul**  
FCS : 5578  
ACS : 19862

# ANNEXURE V B

## Form No. MR-3 SECRETARIAL AUDIT REPORT For the year ended on 31<sup>st</sup> March 2019

[Pursuant to section 204 (1) of the Companies Act, 2013 and Rule No.9 of the Companies  
(Appointment and Remuneration of Managerial Personnel) Rules, 2014]

To,

The Members

**Utkal Alumina International Limited**

J 6 Jayadev Vihar,  
Bhubaneswar  
Orissa-751013

We have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by **Utkal Alumina International Limited having CIN U13203OR1993PLC003416** (hereinafter called 'the Company') for the period covering the financial year ended on March 31, 2019 (the "audit period"). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/ statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of Secretarial Audit; We hereby report that in our opinion, the Company has, during the audit period complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter.

- (i) The Companies Act, 2013 ('the Act') and the Rules made thereunder;
- (ii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;
- (iii) The Securities and Exchange Board of India (Registrar to issue And Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with Client;
- (iv) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015; and
- (v) The Securities Contracts (Regulation) Act, 1956 and the Rules made thereunder to the extent of transfer of securities.

We have also examined compliance with the applicable clauses of the Secretarial Standards on Board meetings and general meeting issued by the Institute of Company Secretaries of India;

During the audit period, the Company has complied with the provisions of the Act, Rules, Regulations, Standards, etc. mentioned above.

We have also examined, on test check basis, the relevant documents and records maintained by the Company with respect to the following laws specifically applicable to the Company:

- (i) Mines Act, 1952 and Mines Rules, 1955; and
- (ii) Mines and Minerals (Development and Regulation) Act 1957 and Mineral Conservation and Developments Rules, 1988.

Based on such examination and having regard to the compliance system prevailing in the Company, the Company has complied with the provisions of the above laws during the audit period.

During the audit period, provisions of the following Act/ Regulations were not applicable to the Company:

- (i) Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings;
- (ii) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992:
  - (a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;
  - (b) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018;
  - (c) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014;
  - (d) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009;
  - (e) The Securities and Exchange Board of India (Buyback of Securities) Regulation, 2018;
  - (f) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008; and

## ANNEXURE V B

- (g) The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015.

**We further report that -**

The Board of Directors of the Company is duly constituted with proper balance of Non-Executive Directors and Independent Directors. The changes in the composition of the Board of Directors that took place during the audit period were carried out in compliance with the provisions of the Act.

Adequate notice is given to all directors to schedule the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance, and where the same were given at shorter notice than seven days, prior consent thereof were obtained and a system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

Decisions at the meetings of the Board of Directors of the Company were carried through on the basis of majority. There were no dissenting views by any member of the Board of Directors during the audit period.

**We further report that** there are adequate systems and processes in the Company commensurate with the size and operations of the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

**We further report that** during the audit period, the following specific event / action having a major bearing on the Company's affairs were held:-

- (a) Pursuant to an agreement dated November 10, 2000 between Orissa Mining Corporation Limited (OMCL) and Utkal Alumina International Limited (the Company), the OMCL had agreed that in consideration of it rendering the requisite services to the Company and in consideration for transferring by it to the Company of the prospective license and mining lease of Baphilimali Mines and all rights thereto, the Company was required to issue fully Convertible Cumulative Preference Shares aggregating to ₹ 20 crores which would carry a rate of return of 15% p.a.

Subsequently the Company had entered into a debenture subscription agreement dated October 01, 2007 with OMCL, wherein it was agreed to issue and redeem the Debentures to assure the payment of Rs. 20 crore to OMCL till the time preference shares are issued to them. Since the Company is not in a position to issue preference shares to OMCL, the Company had issued one debenture of ₹ 3,00,00,000/- which got redeemed on September 30, 2018. Hence the Company has issued new One Zero Coupon Unsecured Redeemable Non-convertible Debentures of ₹ 3,00,00,000 (Rupees Three crore to OMC).

- (b) Company has executed Alumina Offtake Agreement with the Hindalco Industries Limited viz. Holding Company on July 26, 2010. For the operational convenience, Company carried out revision in the agreement on May 3, 2018. The volume discount was increased from 10% to 20% w.e.f. October 01, 2018 and accordingly Company executed revised Memorandum of Undertaking for the same.
- (c) Company made investment in 25,00,000 (Twenty Five Lakh) 7% Non-Convertible, Non-Cumulative Redeemable Preference Shares of Rs. 100 each of Aditya Birla Health Services Limited.

**Venkataraman K.**

Associate Partner

ACS No.:- 8897/COP No.:- 12459

For BNP & Associates

Company Secretaries

[Firm Regn. No. P2014MH037400]

[PR No.:- 544/2017]

Place : Mumbai

Date : April 30, 2019

*Note: This report is to be read with our letter of even date which is annexed as Annexure A and forms an integral part of this report.*



# ANNEXURE A

## Annexure A to the Secretarial Audit Report for the Financial Year Ended 31<sup>st</sup> March 2019

To,

The Members,

**Utkal Alumina International Limited**

1. The compliance of provisions of all laws, rules, regulations, standards applicable to **Utkal Alumina International Limited** (the 'Company') is the responsibility of the management of the Company. Our examination was limited to the verification of records and procedures on test check basis for the purpose of issue of the Secretarial Audit Report.
2. Maintenance of secretarial and other records of applicable laws is the responsibility of the management of the Company. Our responsibility is to issue Secretarial Audit Report, based on the audit of the relevant records maintained and furnished to us by the Company, along with explanations where so required.
3. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial and other legal records, legal compliance mechanism and corporate conduct. The verification was done on test check basis to ensure that correct facts as reflected in secretarial and other records produced to

us. We believe that the processes and practices we followed, provides a reasonable basis for our opinion for the purpose of issue of the Secretarial Audit Report.

4. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Company.
5. Wherever required, we have obtained the management representation about the compliance of laws, rules and regulations and major events during the audit period.
6. The Secretarial Audit Report is neither an assurance as to the future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

**Venkataraman K.**

Associate Partner

ACS No.:- 8897/COP No.:- 12459

For BNP & Associates

Company Secretaries

[Firm Regn. No. P2014MH037400]

[PR No.:- 544/2017]

Place : Mumbai

Date : April 30, 2019

## ANNEXURE VI

## Annual Report on CSR Activities: 2018-19

1	A brief outline of the Company's CSR policy, including overview of projects or programs proposed to be undertaken and a reference to the web link to the CSR policy and projects or programs	: To actively contribute to the social and economic development of the underserved communities, lifting the burden of poverty and helping bring in inclusive growth. In so doing, build a better, sustainable way of life for the weaker sections of society and raise the Country's Human Development Index. The projects which are identified includes Education, Health Care, Sustainable Livelihood, Infrastructure Development and Social Change. The Company's CSR policy is available on the Company's website viz. www.hindalco.com.
2	Composition of the CSR Committee	: Mrs. Rajshree Birla, Chairperson Mr. Satish Pai, Member Mr. Askaran Agarwala, Member Mr. D. Bhattacharya, Member Mr. Y. P. Dandiwalwa, Member Dr. Pragnya Ram, Group Executive President, Corporate Communication & CSR, Permanent Invitee
3	Average net profit of the Company for last three financial years	: ₹ 1,498.46 crore
4	Prescribed CSR Expenditure (two percent of the amount as in Item 3 above)	: ₹ 29.97 crore
5	Details of CSR spent during the financial year	
	Total amount spent for the financial year 2018-19	: ₹ 34.14 crore
	Amount unspent(as against amount mentioned at point 4 above)	: NIL
	Manner in which the amount spent during the financial year	: Details Given Below

Sr. No	CSR Projects/Activities Identified	Sector in which the project is covered	Projects / Programmes; Local Area / Others. The States/ District where the project undertaken	Amount Outlay (Budget) Project / Programme wise (₹ in Lakhs)	Amount Spent on the Project/ Programmes (₹ in Lakhs)	Cumulative Expenditure up to reporting period (₹ in Lakhs)	Amount Spent: Direct or through implementing agency*
1	<b>Preschool education</b> Balwadies / play schools / crèches; Strengthening Anganwadis	Education	Belagavi (Karnataka); Daltanganj, Lohardaga, Gumla & Latehar (Jharkhand); Howrah(WB); Sonbhadra (UP); Balrampur (Chhattisgarh); Singrauli (MP)	17.00	17.94	17.94	Direct / HJST
2	<b>School Education Program</b> Enrolment awareness programmes / events; Formal schools; Education Material (Study materials, Uniform, Books etc.); Scholarship (Merit and Need based assistance) School competitions/ Best teacher award; Cultural events Quality of Education (support teachers, Improve education methods); Specialised Coaching; Exposure visits / awareness Formal schools inside campus (Company Schools) Support to Midday Meal Project	Education	Kolhapur (Maharashtra); Belgavi (Karnataka); Ranchi, Palamau, Lohardaga, Gumla & Latehar (Jharkhand); Howrah(WB); Sonbhadra (UP); Balrampur (Chhattisgarh); Koraput (Odisha); Singrauli (MP); Sangareddy (Telengana)	1090.00	1099.73	1099.73	Direct / HJST

Sr. No	CSR Projects/Activities Identified	Sector in which the project is covered	Projects / Programmes; Local Area / Others. The States/ District where the project undertaken	Amount Outlay (Budget) Project / Programme wise (₹ in Lakhs)	Amount Spent on the Project/ Programmes (₹ in Lakhs)	Cumulative Expenditure up to reporting period (₹ in Lakhs)	Amount Spent: Direct or through implementing agency*
3	<b>Education support programs:</b> Knowledge Centre / Library; Adult / Non Formal Education; Celebration of National days; Computer education; Reducing drop out and Continuing Education; Kasturba Gandhi Balika Vidyalaya; Career counselling	Education	Nagpur, Raigarh & Kolhapur (Maharashtra); Daltanganj, Lohardaga, Gumla & Latehar (Jharkhand); Howrah (WB); Sonbhadra (UP); Balrampur (Chhattisgarh); Koraput (Odisha); Sigravli (MP); Ernakulam (Kerala); Bharuch (Gujarat)	60.00	71.84	71.84	Direct
4	<b>Vocational and Technical Education:</b> Strengthening ITI's; Skill Based Individual Training Programmes	Education	Raigarh & Nagpur (Maharashtra); Ranchi, Lohardaga, Gumla & Latehar (Jharkhand); Sonbhadra (UP)	35.00	40.10	40.10	Direct
5	<b>School Infrastructure:</b> New School Building Construction; Renovation and Maintenance of School buildings; School Sanitation & drinking Water; School Furniture & Fixtures	Education	Raigarh & Kolhapur (Maharashtra); Belgavi (Karnataka); Ranchi, Daltanganj, Lohardaga, Gumla & Latehar (Jharkhand); Howrah (WB); Sonbhadra (UP); Raigad, Balrampur (Chhattisgarh); Sigravli (MP)	167.00	193.77	193.77	Direct
6	<b>Preventive Health Care:</b> Immunization; Pulse Polio Programme; Health Check up camps; Mobile Dispensary; Malaria / Diarrhoea Control Programme; School Health Check ups; Yoga and fitness classes	Health Care	Nagpur, Raigarh & Kolhapur (Maharashtra); Belgavi (Karnataka); Ranchi, Lohardaga, Gumla & Latehar (Jharkhand); Howrah (WB); Ernakulam (Kerala); Bharuch (Gujarat); Sonbhadra (UP); Balrampur, Raigad (Chhattisgarh); Singravli (MP)	100.00	112.94	112.94	Direct / HJST
7	<b>Curative Health Care program:</b> Hospitals / Dispensaries / Clinics; General Health Check up camps; Specialised Health Camps; Eye Camps; Surgical Camps; Tuberculosis	Health Care	Raigarh & Kolhapur (Maharashtra); Belgavi (Karnataka); Palamau, Lohardaga, Gumla & Latehar (Jharkhand); Howrah (WB); Sonbhadra (UP); Balrampur (Chhattisgarh); Koraput (Odisha); Sigravli (MP)	185.00	195.13	195.13	Direct / HJST
8	<b>Reproductive and Child Health:</b> Mother and Child Care; Adolescent Health Care; Infant and Child Health; Support to Family Planning programmes; Nutritional Programmes for mother and Child	Health Care	Raigarh & Kolhapur (Maharashtra); Belgavi (Karnataka); Lohardaga, Gumla & Latehar (Jharkhand); Howrah (WB); Sonbhadra (UP); Balrampur (Chhattisgarh). Sigravli (MP)	30.00	31.53	31.53	Direct
9	<b>Quality/Support Program:</b> Referral services; Treatment of BPL, Old age and Needy patients; HIV-AIDS Awareness; RTI/ STD Awareness; Support to differently abled; Ambulance Services; Blood Donations / Grouping	Health Care	Kolhapur (Maharashtra); Palamau, Daltanganj, Lohardaga, Gumla & Latehar (Jharkhand); Howrah (WB); Sonbhadra (UP); Balrampur (Chhattisgarh); Sigravli (MP)	50.00	65.81	65.81	Direct / HJST
10	<b>Health Infrastructure:</b> Renovation of Health centres; Village / Community Sanitations; Individual Toilets; Repair and installation of new drinking water sources; Water purifications	Health Care	Kolhapur (Maharashtra); Belgavi (Karnataka); Lohardaga, Gumla & Latehar (Jharkhand); Howrah (WB); Sonbhadra (UP); Balrampur (Chhattisgarh)	190.00	201.25	201.25	Direct / HJST

## ANNEXURE VI

Sr. No	CSR Projects/Activities Identified	Sector in which the project is covered	Projects / Programmes; Local Area / Others. The States/ District where the project undertaken	Amount Outlay (Budget) Project / Programme wise (₹ in Lakhs)	Amount Spent on the Project/ Programmes (₹ in Lakhs)	Cumulative Expenditure up to reporting period (₹ in Lakhs)	Amount Spent: Direct or through implementing agency*
11	<b>Agriculture and Farm Based:</b> Agriculture and Horticulture trainings; Transfer of technology; Support to Demonstration Plots; Agricultural implements and inputs; Exposure Visits; Integrated Agriculture / Horticulture programmes; Soil Health and Organic farming	Environment and Sustainable Livelihood	Lohardaga, Gumla & Latehar (Jharkhand); Sonbhadra (UP); Balrampur (Chhattisgarh); Singrauli (MP); Koraput (Odisha)	48.00	54.46	54.46	Direct / HJST
12	<b>Animal Husbandry:</b> Animal Vaccination and Treatment; Breed improvement; Milk productivity improvement programmes and Trainings	Environment and Sustainable Livelihood	Lohardaga, Gumla & Latehar (Jharkhand); Sonbhadra (UP); Balrampur (Chhattisgarh); Singrauli (MP); Nagpur (Maharashtra)	6.00	11.11	11.11	Direct
13	<b>Non farm &amp; Skills Based Income generation Program:</b> Capacity Building Programmes; Rural enterprise Development and Income Generation programme(IGP) support; Support to SHGs for IGP	Environment and Sustainable Livelihood	Kolhapur (Maharashtra); Belgavi (Karnataka); Palamau, Daltanganj, Lohardaga, Gumla & Latehar (Jharkhand); Sonbhadra (UP); Balrampur (Chhattisgarh); Singrauli (MP)	72.00	84.24	84.24	Direct / HJST
14	<b>Natural Resource conservation programs &amp; Non-conventional Energy:</b> Bio gas support Programme; Solar Energy Support; Other energy efficient supports; Plantations; Soil Conservation; Land development; Water Conservation and harvesting structures; Development of Common pasture land	Environment and Sustainable Livelihood	Ernakulum (Kerala); Kolhapur (Maharashtra); Belgavi (Karnataka); Howrah (WB); Palamau, Lohardaga, Gumla & Latehar (Jharkhand); Sonbhadra (UP); Raigad, Balrampur (Chhattisgarh); Singrauli (MP)	90.00	92.54	92.54	Direct / HJST
15	<b>Livelihood Infrastructure:</b> Construction of Check Dams; Lift Irrigation	Environment & Sustainable Livelihood	Howrah (WB); Sonbhadra (UP); Balrampur (Chhattisgarh); Singrauli (MP)	32.00	43.83	43.83	Direct
16	<b>Rural Infrastructure development:</b> Construction and Repair of Community Infrastructures	Rural Development projects	Raigarh & Kolhapur (Maharashtra); Belgavi (Karnataka); Ranchi, Palamau, Lohardaga, Gumla & Latehar(Jharkhand); Howrah (WB); Sonbhadra (UP); Balrampur, Raigad (Chhattisgarh); Singrauli (MP).	670.00	680.12	680.12	Direct
17	<b>Institutional building &amp; strengthening:</b> Strengthening and Formation of Community Based Organisations/ SHGs	Social Empowerment	Raigarh (Maharashtra); Belgavi (Karnataka); Lohardaga, Gumla & Latehar (Jharkhand); Howrah (WB); Sonbhadra (UP); Singrauli (MP)	32.00	39.51	39.51	Direct / HJST
18	<b>Support to development organizations:</b> Support to Old age Homes; Orphanages etc.	Social Empowerment	Raigarh & Kolhapur (Maharashtra); Belgavi (Karnataka); Palamau, Lohardaga, Gumla & Latehar (Jharkhand); Sonbhadra (UP)	2.00	3.08	3.08	Direct / HJST
19	<b>Social Security:</b> Support to Old age, Widow, physically Challenged Persons / poor	Social Empowerment	Singrauli(MP); Nagpur, Kolhapur (Maharashtra); Lohardaga, Gumla & Latehar (Jharkhand); Sonbhadra (UP); Raigad (Chhattisgarh)	23.00	25.92	25.92	Direct

Sr. No	CSR Projects/Activities Identified	Sector in which the project is covered	Projects / Programmes; Local Area / Others. The States/ District where the project undertaken	Amount Outlay (Budget) Project / Programme wise (₹ in Lakhs)	Amount Spent on the Project/ Programmes (₹ in Lakhs)	Cumulative Expenditure up to reporting period (₹ in Lakhs)	Amount Spent: Direct or through implementing agency*
20	<b>Awareness Programmes:</b> Community Awareness programmes / Campaign against social abuse, early marriages, HIV prevention etc.	Social Empowerment	Koraput(Odisha), Belgavi (Karnataka); Raigarh & Kolhapur (Maharashtra); Palamau, Lohardaga, Gumla & Latehar (Jharkhand); Bharuch (Gujarat); Sonbhadra (UP); Singrauli (MP)	53.00	75.53	75.53	Direct
21	<b>Social Events to minimise causes of poverty:</b> Support to mass marriages, widow remarriages; National days celebrations; Support with basic amenities	Social Empowerment	Sonbhadra (UP); Nagpur, Kolhapur (Maharashtra); Belgavi (Karnataka); Daltanganj, Palamau, Lohardaga, Gumla & Latehar (Jharkhand); Singrauli (MP)	25.00	38.89	38.89	Direct / HJST
22	<b>Protection and promotion of heritage/ culture / Sports:</b> Support to rural cultural programmes, Festivals & Melas	Promotion of heritage / Art and culture/ sports	Lohardaga, Gumla & Latehar(Jharkhand); Bharuch (Gujarat); Sonbhadra (UP); Kolhapur (Maharashtra); Belgavi (Karnataka); Howrah(WB); Singrauli (MP); Balrampur (Chhattisgarh)	52.00	61.74	61.74	Direct / HJST
23	<b>Overheads</b>			180.00	173.20	173.20	Direct
24	<b>Total (₹ in Lakhs)</b>			3209.00	3414.21	3414.21	

\* HJST- Hindalco Jana Seva Trust is the implementing agency in some of our projects, registered under Trust Act.

## 6. Reason for not spending two percent of the average net profit of the last three financial years on CSR:

Not Applicable

## RESPONSIBILITY STATEMENT

The Responsibility Statement of the Corporate Social Responsibility Committee of the Board of Directors of the Company is as indicated:

"The implementation and monitoring of CSR Policy is in compliance with CSR objectives and policy of the Company."

**Mr. Satish Pai**  
Managing Director  
(DIN:06646758)

**Mrs. Rajashree Birla**  
Chairperson, CSR Committee  
(DIN:00022995)

Date: April 24, 2019

This report was approved by the Corporate Social Responsibility Committee at its meeting held on April 24, 2019.

## ANNEXURE VII

## FORM NO. MGT 9

EXTRACT OF ANNUAL RETURN AS ON THE FINANCIAL YEAR ENDED ON 31<sup>ST</sup> MARCH, 2019  
Pursuant to Section 92(3) of the Companies Act, 2013 and Rule 12(1) of the Companies  
(Management & Administration) Rules, 2014.

## I. REGISTRATION &amp; OTHER DETAILS

1	Corporate Identification Number (CIN) of the Company	L27020MH1958PLC011238
2	Registration Date	December 15, 1958
3	Name of the Company	Hindalco Industries Limited
4	Category / Sub-category of the Company	Public Limited - Limited by shares and Company having share capital
5	Address of the Registered office & contact details	Ahura Centre, 1 <sup>st</sup> Floor, 'B' Wing, Mahakali Caves Road, Andheri (East), Mumbai-400 093 Tel: (91-22) 6691 7000 Fax: (91-22) 6691 7000
6	Whether listed Company Yes / No	Yes
7	Name, Address & contact details of the Registrar & Transfer Agent, if any	In House Share Transfer Agent Ahura Centre, 1 <sup>st</sup> Floor, 'B' Wing, Mahakali Caves Road Mumbai, 400 093 Contact No: 022 6691 7001

## II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

(All the business activities contributing 10 % or more of the total turnover of the Company shall be stated)

S. No.	Name and Description of main products / services	NIC Code of the Product / service	% to total turnover of the Company
1	Aluminium and Aluminium Products	24202	46.94
2	Copper and Copper Products	24201	36.34

## III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

Sr. No.	Name and address of the Company	CIN / GLN	Holding / Subsidiary / Associate	% of shares held	Applicable Section
1	Minerals & Minerals Limited C/o Hindalco Complex, Court Road, Lohardaga, Jharkhand 835302	U26990JH1970PLC000875	Subsidiary	100.00	2(87)(ii)
2	Utkal Alumina International Limited J-6 Jayadev Vihar, Bhubaneswar, Odisha 751013	U13203OR1993PLC003416	Subsidiary	100.00	2(87)(ii)
3	Suvas Holdings Limited Chandermukhi Building, Nariman Point, Mumbai 400021	U40300MH2000PLC128785	Subsidiary	74.00	2(87)(ii)
4	Renukeshwar Investments & Finance Limited C/o Hindalco Industries Ltd, P.O. Renukoot Sonbhadra, Uttar Pradesh 231217	U65910UP1994PLC017080	Subsidiary	100.00	2(87)(ii)
5	Renuka Investments & Finance Limited C/o Hindalco Industries Ltd, P.O. Renukoot Sonbhadra, Uttar Pradesh 231217	U65910UP1994PLC017081	Subsidiary	100.00	2(87)(ii)
6	Dahej Harbour and Infrastructure Limited Dist: Bharuch, Gujarat 392130	U45201GJ1998PLC035047	Subsidiary	100.00	2(87)(ii)

Sr. No.	Name and address of the Company	CIN / GLN	Holding / Subsidiary / Associate	% of shares held	Applicable Section
7	Lucknow Finance Company Limited C/o Hindalco Industries Ltd, P.O. Renukoot Sonbhadra, Uttar Pradesh 231217	U65992UP1989PLC010802	Subsidiary	100.00	2(87)(ii)
8	Hindalco-Almex Aerospace Limited Ahura Centre, 1 <sup>st</sup> Floor, B Wing Mahakali Caves Road, Andheri (East) Mumbai Mumbai City MH 400093	U27203MH2007PLC166651	Subsidiary	97.18	2(87)(ii)
9	Tubed Coal Mines Limited Ahura Centre, 1 <sup>st</sup> Floor, B Wing, Mahakali Caves Road, Mumbai Mumbai Mh 400093	U10100MH2007PLC174466	Subsidiary (Joint Operation)	60.00	2(87)(ii)
10	East Coast Bauxite Mining Company Private Limited J-6 Jayadev Vihar, Bhubaneswar, Odisha 751013	U13203OR2007PTC009597	Subsidiary	74.00	2(87)(ii)
11 <sup>^</sup>	Mauda Energy Limited Ahura Centre, 1 <sup>st</sup> Floor, B Wing Mahakali Caves Road, Andheri (East) Mumbai Mumbai City MH 400093	U40103MH2009PLC196230	Subsidiary	100.00	2(87)(ii)
12 <sup>^</sup>	Utkal Alumina Technical & General Services Limited J-6, Jayadev Vihar, Bhubaneswar, Khorbha OR 751013	U93090OR2013PLC017341	Subsidiary	100.00	2(87)(ii)
13 <sup>^</sup>	Hindalco Guinea SARL Republic of Guinea, Conakry, Dixinn, Diariou Diallo Building, 5 <sup>th</sup> Floor	NA	Subsidiary	100.00	2(87)(ii)
14	A V Minerals (Netherlands) N.V. Amerika Building, Hoogoorddreef 15, 1101 BA Amsterdam (Netherlands)	NA	Subsidiary	100.00	2(87)(ii)
15 <sup>**</sup>	Hindalco do Brasil Industria e Comercio de Alumina Ltda Ouro Preto, State of Minas Gerais, at Avenida Américo René Gianetti, s/n, Saramenha, ZIP Code 35400-000	NA	Subsidiary	100.00	2(87)(ii)
16 <sup>**</sup>	A V Metals Inc. 79 Wellington Street West, Suite 3000, Toronto, Ontario, Canada M5K 1N2	NA	Subsidiary	100.00	2(87)(ii)
17 <sup>**</sup>	Novelis Inc. 231 Church Street, Mississauga, Ontario L5M 1N1, Canada	NA	Subsidiary	100.00	2(87)(ii)
18 <sup>**</sup>	Novelis (India) Infotech Ltd. Ahura Centre, 1 <sup>st</sup> Floor, B Wing Mahakali Caves Road, Andheri (East) Mumbai Mumbai City Mh 400093 In	NA	Subsidiary	100.00	2(87)(ii)
19 <sup>**</sup>	4260848 Canada Inc. 231 Church Street, Mississauga, Ontario L5M 1N1, Canada	NA	Subsidiary	100.00	2(87)(ii)
20 <sup>**</sup>	4260856 Canada Inc. 231 Church Street, Mississauga, Ontario L5M 1N1, Canada	NA	Subsidiary	100.00	2(87)(ii)

## ANNEXURE VII

Sr. No.	Name and address of the Company	CIN / GLN	Holding / Subsidiary / Associate	% of shares held	Applicable Section
21 <sup>##</sup>	8018227 Canada Inc. 231 Church Street, Mississauga, Ontario L5M 1N1, Canada	NA	Subsidiary	100.00	2(87)(ii)
22 <sup>##</sup>	Novelis Corporation (Texas) 211 E. 7 <sup>th</sup> Street, Suite 620, Austin, 78701-3218, USA	NA	Subsidiary	100.00	2(87)(ii)
23 <sup>##</sup>	Novelis Acquisitions LLC c/o Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Subsidiary	100.00	2(87)(ii)
24 <sup>##</sup>	Novelis Holdings Inc c/o Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Subsidiary	100.00	2(87)(ii)
25 <sup>##</sup>	Novelis South America Holdings LLC c/o Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808	NA	Subsidiary	100.00	2(87)(ii)
26 <sup>##</sup>	Novelis Services (Europe) Inc c/o Corporation Service Company, 251 Little Falls Drive, Wilmington, New Castle County, Delaware 19808 USA	NA	Subsidiary	100.00	2(87)(ii)
27 <sup>##</sup>	Novelis do Brasil Ltda Av. Das Nacoes Unidas, 12.551-14 <sup>th</sup> and 15 <sup>th</sup> floor, Torre Empresarial World Trade Centre, Brooklin Novo, Cep-04578-000, Brazil	NA	Subsidiary	100.00	2(87)(ii)
28 <sup>##</sup>	Novelis Lamines France SAS Rue Blaise Pascal, Technopolis, Batiment E, 28000 Chartres, France	NA	Subsidiary	100.00	2(87)(ii)
29 <sup>##</sup>	Novelis PAE SAS 725 rue Aristide Berges, Voreppe 38340, France	NA	Subsidiary	100.00	2(87)(ii)
30 <sup>##</sup>	Novelis Aluminium Beteiligungs GmbH Hannoversche Strasse 1, Gottingen, 37075, Germany	NA	Subsidiary	100.00	2(87)(ii)
31 <sup>##</sup>	Novelis Deutschland GmbH Hannoversche Strasse 1, Gottingen 37075, Germany	NA	Subsidiary	100.00	2(87)(ii)
32 <sup>##</sup>	Novelis Sheet Ingot GmbH (Germany) Hannoverschestrassse 1, Göttingen 37075, Germany	NA	Subsidiary	100.00	2(87)(ii)
33 <sup>##</sup>	Novelis Aluminium Holding Company 25/28 North Wall Quay, Dublin 1, Ireland	NA	Subsidiary	100.00	2(87)(ii)
34 <sup>##</sup>	Novelis Italia SpA Via Vittorio Veneto No. 106, Bresso, Milan, Italy	NA	Subsidiary	100.00	2(87)(ii)
35 <sup>##</sup>	Novelis de Mexico SA de CV Integra Servicios Integrales de Negocios, S.C., Calle Lazaro Cardenas No. 206, Colonia Leones, Monterrey, Nuevo Leon, C.P., 64600, Mexico	NA	Subsidiary	100.00	2(87)(ii)
36 <sup>##</sup>	Novelis Korea Limited 250 Jeokseo-Dong, Yeongju-City, Kyungsangbuk-Do, Korea	NA	Subsidiary	100.00	2(87)(ii)



Sr. No.	Name and address of the Company	CIN / GLN	Holding / Subsidiary / Associate	% of shares held	Applicable Section
37 <sup>##</sup>	Novelis AG (Switzerland) Sternenfeldstr. 19, Kusnacht, CH-8700, Switzerland	NA	Subsidiary	100.00	2(87)(ii)
38 <sup>##</sup>	Novelis Switzerland SA Route des Lamoins 15, Sierre, 3960 Switzerland	NA	Subsidiary	100.00	2(87)(ii)
39 <sup>##</sup>	Novelis UK Ltd. Latchford Lock Works, Thelwall Lane, Warrington, Cheshire, WA4 1NN, UK	NA	Subsidiary	100.00	2(87)(ii)
40 <sup>##</sup>	Novelis Europe Holdings Limited Latchford Lock Works, Thelwall Lane, Warrington, Cheshire, WA4 1NN, UK	NA	Subsidiary	100.00	2(87)(ii)
41 <sup>##</sup>	Novelis Services Limited Latchford Lock Works, Thelwall Lane, Warrington, Cheshire, WA4 1NN, UK	NA	Subsidiary	100.00	2(87)(ii)
42 <sup>##</sup>	Novelis (Shanghai) Aluminium Trading Company Room 17T23, Shanghai World Financial Center, 100 Century Avenue, Pudong New Area, Shanghai, China	NA	Subsidiary	100.00	2(87)(ii)
43 <sup>##</sup>	Novelis (China) Aluminium Products Co. Ltd. No.19 Xingtang Road, Xin Bei District, Changzhou City, Jiangsu Province, China	NA	Subsidiary	100.00	2(87)(ii)
44 <sup>##</sup>	Novelis MEA Ltd (Dubai) Office No. 902, Level 9, Al Fattan Currency House, Tower, Dubai International Financial Centre, Dubai, UAE	NA	Subsidiary	100.00	2(87)(ii)
45 <sup>##</sup>	Novelis Vietnam Company Limited No. 3 VSIP II-A, Street No. 19, Vietnam-Singapore Industrial Park II-A, Tan Uyen District, Binh Duong Province, Vietnam	NA	Subsidiary	100.00	2(87)(ii)
46 <sup>##</sup>	Brecha Energetica Ltda Fazenda Usina Da Brecha, S/n, Municipio de Guaraciaba, Estado de Minas Gerais, CEP 35436-000-Brazil	NA	Subsidiary	99.99	2(87)(ii)
47 <sup>##</sup>	Novelis Services (North America) Inc c/o Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Subsidiary	100.00	2(87)(ii)
48 <sup>##</sup>	Global Employment Organization PAC c/o Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808 USA	NA	Subsidiary	100.00	2(87)(ii)
49	Deutsche Aluminium Verpackung Recycling GMBH Postfach 10 06 64, 41490 Grevenbroich / Aluminiumstr, Grevenbroich 41515, Germany	NA	Associate	30.00	2(6)
50	France Aluminium Recyclage SA Rhenane Nord- RD52, Biesheim 68600, France	NA	Associate	20.00	2(6)
51	Aditya Birla Renewable Subsidiary Limited Centre S.K. Ahire Marg, Worli, Mumbai-400 030	NA	Associate	26.00	2(6)
52	Aditya Birla Science and Technology Company Private Limited Aditya Birla Centre, C Wing, 1 <sup>st</sup> Floor, S.K. Ahire Marg, Worli, Mumbai 400030	U74200MH2006PTC158951	Associate	49.00	2(6)

\*\* 100% subsidiary of A V Minerals (Netherlands) N.V.

\*# 100% subsidiary of A V Metals Inc.

## 100% subsidiary of Novelis Inc.

^ Subsidiaries which have been liquidated / amalgamated / sold / strike off during the Financial Year 2018-19.

## ANNEXURE VII

## IV. SHARE HOLDING PATTERN

(Equity share capital breakup as percentage of total equity)

## (i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the end of the year [As on 31-March-2018]				No. of Shares held at the end of the year [As on 31-March-2019]				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
<b>A. Promoters</b>									
(1) Indian									
a) Individual / HUF	2,398,696	-	2,398,696	0.11	2,398,696	-	2,398,696	0.11	0.00
b) Central Govt	-	-	-	-	-	-	-	-	-
c) State Govt(s)	-	-	-	-	-	-	-	-	-
d) Bodies Corp.	745,082,362	-	745,082,362	33.19	745,082,362	-	745,082,362	33.18	-0.01
e) Banks / FI	-	-	-	-	-	-	-	-	-
f) Any other	16,316,130	-	16,316,130	0.73	16,316,130	-	16,316,130	0.73	0.00
<b>Sub Total (A) (1)</b>	<b>763,797,188</b>	<b>-</b>	<b>763,797,188</b>	<b>34.02</b>	<b>763,797,188</b>	<b>-</b>	<b>763,797,188</b>	<b>34.01</b>	<b>-0.01</b>
(2) Foreign									
a) NRI Individuals	-	-	-	-	-	-	-	-	-
b) Other Individuals	-	-	-	-	-	-	-	-	-
c) Bodies Corp.	-	-	-	-	-	-	-	-	-
d) Any other	-	-	-	-	-	-	-	-	-
<b>Sub Total (A) (2)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL (A)</b>	<b>763,797,188</b>	<b>-</b>	<b>763,797,188</b>	<b>34.02</b>	<b>763,797,188</b>	<b>-</b>	<b>763,797,188</b>	<b>34.01</b>	<b>-0.01</b>
<b>B. Public Shareholding</b>									
<b>1. Institutions</b>									
a) Mutual Funds	248,857,314	15,420	248,872,734	11.09	297,206,144	15,420	297,221,564	13.24	2.15
b) Banks / FI	4,861,440	48,550	4,909,990	0.22	5,731,524	48,550	5,780,074	0.26	0.04
c) Central Govt / State Govt	58,040	287,480	345,520	0.22	2,415,954	287,480	2,703,434	0.12	-0.10
d) Venture Capital Funds	-	-	-	-	-	-	-	-	-
e) Insurance Companies	175,224,777	6,080	175,230,857	7.81	196,436,757	6,080	196,442,837	8.75	0.94
f) FIs	630,630,488	5,820	630,636,308	28.09	531,936,583	5,820	531,942,403	23.69	-4.40
g) Foreign Venture Capital Funds	-	-	-	-	-	-	-	-	-
h) Others (specify)	-	-	-	-	-	-	-	-	-
<b>Sub-total (B)(1):-</b>	<b>1,059,632,059</b>	<b>363,350</b>	<b>1,059,995,409</b>	<b>47.22</b>	<b>1,033,726,962</b>	<b>363,350</b>	<b>1,034,090,312</b>	<b>46.05</b>	<b>-1.17</b>
<b>2. Non-Institutions</b>									
a) Bodies Corp.									
i) Indian	86,419,731	186,204	86,605,935	3.86	111,976,240	118,232	112,094,472	4.99	1.13
ii) Overseas	10,010	32,554,840	32,564,850	1.45	-	32,554,840	32,554,840	1.45	0.00
b) Individuals									
i) Individual shareholders holding nominal share capital upto ₹ 1 lakh	105,872,937	9,609,127	115,482,064	5.14	104,811,267	7,737,825	112,549,092	5.01	-0.13
ii) Individual shareholders holding nominal share capital in excess of ₹ 1 lakh	13,241,255	666,061	13,907,316	0.62	15,935,925	666,061	16,601,986	0.74	0.12
c) Others (specify)									
Non Resident Indians	5,442,504	1,508,330	6,950,834	0.31	5,740,534	1,268,823	7,009,357	0.31	0.00
Overseas Corporate Bodies	-	-	-	-	-	-	-	-	-
Foreign Nationals	156,756	-	156,756	0.01	163,159	-	163,159	0.01	0.00
Clearing Members	8,663,814	-	8,663,814	0.39	6,696,493	-	6,696,493	0.30	-0.09
Trusts	4,996,937	-	4,996,937	0.22	7,227,190	-	7,227,190	0.32	0.10
Foreign Bodies - D R	-	-	-	0.00	-	-	-	-	-
<b>Sub-total (B)(2):-</b>	<b>224,803,944</b>	<b>44,524,562</b>	<b>269,328,506</b>	<b>12.00</b>	<b>252,550,808</b>	<b>42,345,781</b>	<b>294,896,589</b>	<b>13.13</b>	<b>1.14</b>
<b>Total Public (B)</b>	<b>1,284,436,003</b>	<b>44,887,912</b>	<b>1,329,323,915</b>	<b>59.21</b>	<b>1,286,277,770</b>	<b>42,709,131</b>	<b>1,328,986,901</b>	<b>59.18</b>	<b>-0.03</b>

Category of Shareholders	No. of Shares held at the end of the year [As on 31-March-2018]				No. of Shares held at the end of the year [As on 31-March-2019]				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
<b>C. Shares held by Custodian for GDRs &amp; ADRs</b>									
Shares held by Custodian	137,278,490	21,000	137,299,490	6.12	138,182,847	21,000	138,203,847	6.15	0.04
Shares Held by Promoters	14,542,309	-	14,542,309	0.65	14,542,309	14,542,309	14,542,309	0.65	0.00
<b>Sub Total (C)</b>	<b>151,820,799</b>	<b>21,000</b>	<b>151,841,799</b>	<b>6.76</b>	<b>152,725,156</b>	<b>21,000</b>	<b>152,746,156</b>	<b>6.80</b>	<b>0.04</b>
<b>Grand Total (A+B+C)</b>	<b>2,200,053,990</b>	<b>44,908,912</b>	<b>2,244,962,902</b>	<b>100.00</b>	<b>2,202,800,114</b>	<b>42,730,131</b>	<b>2,245,530,245</b>	<b>100.00</b>	<b>-</b>

**(ii) Shareholding of Promoter**

Sr. No.	Shareholder's Name	Shareholding at the beginning of the year			Shareholding at the end of the year			% change in Shareholding during the year
		No. of Shares	% of total Shares of the Company	% of Shares Pledged / encumbered to total shares	No. of Shares	% of total Shares of the Company	% of Shares Pledged / encumbered to total shares	
1	IGH Holdings Private Limited	349,963,487	15.59	0.00	349,963,487	15.59	0.00	0.00
2	Turquoise Investments and Finance Private Limited	124,012,468	5.52	0.00	124,012,468	5.52	0.00	0.00
3	Trapti Trading & Investments Pvt Ltd	93,063,124	4.15	0.00	93,063,124	4.15	0.00	0.00
4*	Grasim Industries Ltd	88,048,812	3.92	0.00	88,048,812	3.92	0.00	0.00
5	Pilani Investment & Ind. Corp. Ltd.	29,185,398	1.30	0.00	29,857,969	1.33	0.00	0.03
6	Umang Commercial Company Limited	27,330,360	1.22	0.00	27,330,360	1.22	0.00	0.00
7	Birla Institute of Technology and Science	21,583,090	0.96	0.00	21,583,090	0.96	0.00	0.00
8	Trustee Holding Shares Under the Scheme of Merger of HIL / IGCL / IGFL on Behalf of Hindalco	16,316,130	0.73	0.00	16,316,130	0.73	0.00	0.00
9	Birla Group Holdings Private Limited	6,731,467	0.30	0.00	6,731,467	0.30	0.00	0.00
10	Kumar Mangalam Birla	865,740	0.04	0.00	865,740	0.04	0.00	0.00
11	Manav Investment & Trading Co. Ltd.	672,571	0.03	100	0	0.00	0.00	-0.03
12	Aditya Vikram Kumar Mangalam Birla Huf	648,632	0.03	0.00	648,632	0.03	0.00	0.00
13	Rajashree Birla	612,470	0.03	0.00	612,470	0.03	0.00	0.00
14	TGS Investment And Trade Private Limited	4,485,249	0.20	0.00	4,485,249	0.20	0.00	0.00
15	Vasavadatta Bajaj	121,319	0.01	0.00	121,319	0.01	0.00	0.00
16	Neerja Birla	114,640	0.01	0.00	114,640	0.01	0.00	0.00
17	Kumar Mangalam Birla F & N G of Ananyashree Birla	35,895	0.00	0.00	35,895	0.00	0.00	0.00
18	Global Holdings Private Limited	6,336	0.00	0.00	6,336	0.00	0.00	0.00
19*	PT Indo Bharat Rayon	9,633,890	0.43	0.00	9,633,890	0.43	0.00	0.00
20*	PT Sunrise Bumi Textile	3,004,167	0.13	0.00	3,004,167	0.13	0.00	0.00
21*	PT Elegant Textile Industry	1,902,752	0.08	0.00	1,902,752	0.08	0.00	0.00
22*	Surya Kiran Investments Pte Ltd.	1,500	0.00	0.00	1,500	0.00	0.00	0.00
		<b>778,339,497</b>	<b>34.67</b>	<b>0.03</b>	<b>778,339,497</b>	<b>34.67</b>	<b>0.00</b>	<b>0.00</b>

\* Includes 0.65 % shares held by GDR

## ANNEXURE VII

**(iii) Change in Promoters' Shareholding (please specify, if there is no change)**

Sr. No.	Particulars	Date	Reason	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
				No. of shares	% of total shares	No. of shares	% of total shares
1.	Manav Investment & Trading Co. Ltd.						
	At the beginning of the year	01-04-18		672,571	0.03	672,571	0.03
	Changes during the year	28-09-18	Sale	(672,571)	0.03		
	At the end of the year	31-03-19		Nil	0.00	Nil	0.00
2.	Pilani Investment & Ind. Corp. Ltd.						
	At the beginning of the year	01-04-18		29,185,398	1.30	29,185,398	1.30
	Changes during the year	28-09-18	Purchase	672,571	0.03		
	At the end of the year	31-03-19		29,857,969	1.33	29,857,969	1.33

**(iv) Shareholding Pattern of top ten Shareholders**

(Other than Directors, Promoters and Holders of GDRs and ADRs):

Sr. No.	Name	Shareholding		Date	Increase / Decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning (01.04.2018) / end of year (31.03.2019)	% of the Total shares of the Company				No. of shares	% of total shares
1	LIFE INSURANCE CORPORATION OF INDIA	151468104	6.75	01-Apr-2018			151468104	6.75
				11-May-2018	4983711	Purchase	156451815	6.97
				18-May-2018	2489951	Purchase	158941766	7.08
				25-May-2018	7102103	Purchase	166043869	7.39
				01-Jun-2018	2712293	Purchase	168756162	7.52
		170858048	7.61	08-Jun-2018	2101886	Purchase	170858048	7.61
2	MORGAN GUARANTY TRUST COMPANY OF NEW YORK, AS DEPOSITARY	151820799	6.76	01-Apr-2018			151820799	6.76
				27-Apr-2018	1411	Purchase	151822210	6.76
				25-May-2018	-1564907	Sale	150257303	6.69
				06-Jul-2018	-29500	Sale	150227803	6.69
				13-Jul-2018	-101200	Sale	150126603	6.69
				10-Aug-2018	511020	Purchase	150637623	6.71
				07-Sep-2018	586966	Purchase	151224589	6.73
				14-Sep-2018	109611	Purchase	151334200	6.74
				30-Nov-2018	246100	Purchase	151580300	6.75
				14-Dec-2018	619767	Purchase	152200067	6.78
				31-Dec-2018	-31313	Sale	152168754	6.78
				04-Jan-2019	346560	Purchase	152515314	6.79
				18-Jan-2019	49200	Purchase	152564514	6.79
				01-Feb-2019	-213583	Sale	152350931	6.78
				08-Feb-2019	272371	Purchase	152623302	6.80
				15-Feb-2019	112	Purchase	152623414	6.80
				22-Mar-2019	-1300	Sale	152622114	6.80
		152725156	6.80	31-Mar-2019	103042	Purchase	152725156	6.80

Sr. No.	Name	Shareholding		Date	Increase / Decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning (01.04.2018) / end of year (31.03.2019)	% of the Total shares of the Company				No. of shares	% of total shares
3	ICICI PRUDENTIAL BALANCED FUND	36089768	1.61	01-Apr-2018			36089768	1.61
				06-Apr-2018	2166828	Purchase	38256596	1.70
				13-Apr-2018	-4000000	Sale	34256596	1.53
				20-Apr-2018	-2648782	Sale	31607814	1.41
				27-Apr-2018	-749000	Sale	30858814	1.37
				15-Jun-2018	-920682	Sale	29938132	1.33
				27-Jul-2018	4278274	Purchase	34216406	1.52
				03-Aug-2018	4000000	Purchase	38216406	1.70
				31-Aug-2018	749014	Purchase	38965420	1.74
				05-Oct-2018	-21255	Sale	38944165	1.73
				26-Oct-2018	-437500	Sale	38506665	1.71
				09-Nov-2018	-736500	Sale	37770165	1.68
				01-Mar-2019	170434	Purchase	37940599	1.69
				15-Mar-2019	1339232	Purchase	39279831	1.75
4	FRANKLIN TEMPLETON INVESTMENT FUNDS	21546804	0.96	01-Apr-2018			21546804	0.96
				18-May-2018	-446469	Sale	21100335	0.94
				25-May-2018	57358	Purchase	21157693	0.94
				22-Jun-2018	-771873	Sale	20385820	0.91
				10-Aug-2018	50171	Purchase	20435991	0.91
				07-Sep-2018	581877	Purchase	21017868	0.94
				14-Sep-2018	820915	Purchase	21838783	0.97
				21-Sep-2018	1190400	Purchase	23029183	1.03
				30-Sep-2018	2289600	Purchase	25318783	1.13
				05-Oct-2018	2166400	Purchase	27485183	1.22
				12-Oct-2018	3460409	Purchase	30945592	1.38
				19-Oct-2018	-1798586	Sale	29147006	1.30
				02-Nov-2018	-2172146	Sale	26974860	1.20
				23-Nov-2018	2299404	Purchase	29274264	1.30
		07-Dec-2018	5499181	Purchase	34773445	1.55		
		14-Dec-2018	1241229	Purchase	36014674	1.60		
5	NOMURA INDIA INVESTMENT FUND MOTHER FUND	37397515	1.67	01-Apr-2018			37397515	1.67
				13-Apr-2018	2000000	Purchase	39397515	1.75
				08-Jun-2018	-1000000	Sale	38397515	1.71
				14-Sep-2018	-1113714	Sale	37283801	1.66
				21-Sep-2018	-886286	Sale	36397515	1.62
				30-Sep-2018	-1000000	Sale	35397515	1.58
				05-Oct-2018	-1084407	Sale	34313108	1.53
6	ICICI PRUDENTIAL FOCUSED BLUECHIP EQUITY FUND	17165384	0.76	01-Apr-2018	17165384	0.76	17165384	0.76
				06-Apr-2018	2193412	Purchase	19358796	0.86
				20-Apr-2018	-2000000	Sale	17358796	0.77
				20-Jul-2018	1575392	Purchase	18934188	0.84
				27-Jul-2018	1378425	Purchase	20312613	0.90

## ANNEXURE VII

Sr. No.	Name	Shareholding		Date	Increase / Decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning (01.04.2018) / end of year (31.03.2019)	% of the Total shares of the Company				No. of shares	% of total shares
				03-Aug-2018	1685448	Purchase	21998061	0.98
				24-Aug-2018	560665	Purchase	22558726	1.00
				31-Aug-2018	409696	Purchase	22968422	1.02
				05-Oct-2018	-1641162	Sale	21327260	0.95
				12-Oct-2018	147017	Purchase	21474277	0.96
				19-Oct-2018	414282	Purchase	21888559	0.97
				16-Nov-2018	2000000	Purchase	23888559	1.06
				30-Nov-2018	2000000	Purchase	25888559	1.15
				18-Jan-2019	1776038	Purchase	27664597	1.23
				25-Jan-2019	724867	Purchase	28389464	1.26
		29339464	1.31	15-Feb-2019	950000	Purchase	29339464	1.31
7	ICICI PRUDENTIAL LIFE INSURANCE COMPANY LIMITED	6770562	0.30	01-Apr-2018			6770562	0.30
				06-Apr-2018	81204	Purchase	6851766	0.31
				13-Apr-2018	3919612	Purchase	10771378	0.48
				20-Apr-2018	-256	Sale	10771122	0.48
				27-Apr-2018	-674275	Sale	10096847	0.45
				04-May-2018	1559804	Purchase	11656651	0.52
				11-May-2018	-463	Sale	11656188	0.52
				18-May-2018	752649	Purchase	12408837	0.55
				25-May-2018	-290226	Sale	12118611	0.54
				01-Jun-2018	208571	Purchase	12327182	0.55
				08-Jun-2018	550772	Purchase	12877954	0.57
				15-Jun-2018	2564271	Purchase	15442225	0.69
				22-Jun-2018	441522	Purchase	15883747	0.71
				30-Jun-2018	720731	Purchase	16604478	0.74
				06-Jul-2018	49945	Purchase	16654423	0.74
				13-Jul-2018	-540870	Sale	16113553	0.72
				20-Jul-2018	-2207540	Sale	13906013	0.62
				27-Jul-2018	312732	Purchase	14218745	0.63
				03-Aug-2018	-661351	Sale	13557394	0.60
				10-Aug-2018	26428	Purchase	13583822	0.60
				17-Aug-2018	638569	Purchase	14222391	0.63
				24-Aug-2018	29237	Purchase	14251628	0.63
				31-Aug-2018	42493	Purchase	14294121	0.64
				07-Sep-2018	39583	Purchase	14333704	0.64
				14-Sep-2018	-113551	Sale	14220153	0.63
				21-Sep-2018	170425	Purchase	14390578	0.64
				30-Sep-2018	974805	Purchase	15365383	0.68
				05-Oct-2018	354043	Purchase	15719426	0.70
				12-Oct-2018	2135654	Purchase	17855080	0.80
				19-Oct-2018	178714	Purchase	18033794	0.80
				26-Oct-2018	-444884	Sale	17588910	0.78

Sr. No.	Name	Shareholding		Date	Increase / Decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning (01.04.2018) / end of year (31.03.2019)	% of the Total shares of the Company				No. of shares	% of total shares
				02-Nov-2018	-99653	Sale	17489257	0.78
				09-Nov-2018	336492	Purchase	17825749	0.79
				16-Nov-2018	284803	Purchase	18110552	0.81
				30-Nov-2018	114891	Purchase	18225443	0.81
				07-Dec-2018	-13853	Sale	18211590	0.81
				14-Dec-2018	-131449	Sale	18080141	0.81
				21-Dec-2018	657241	Purchase	18737382	0.83
				28-Dec-2018	-51390	Sale	18685992	0.83
				31-Dec-2018	16553	Purchase	18702545	0.83
				04-Jan-2019	-129514	Sale	18573031	0.83
				11-Jan-2019	-8897	Sale	18564134	0.83
				18-Jan-2019	460356	Purchase	19024490	0.85
				25-Jan-2019	556226	Purchase	19580716	0.87
				01-Feb-2019	-288425	Sale	19292291	0.86
				08-Feb-2019	-778826	Sale	18513465	0.82
				15-Feb-2019	-176024	Sale	18337441	0.82
				22-Feb-2019	461569	Purchase	18799010	0.84
				01-Mar-2019	246652	Purchase	19045662	0.85
				08-Mar-2019	139476	Purchase	19185138	0.85
				15-Mar-2019	1232310	Purchase	20417448	0.91
				22-Mar-2019	13366	Purchase	20430814	0.91
		23285078	1.04	31-Mar-2019	2854264	Purchase	23285078	1.04
8	GOVERNMENT OF SINGAPORE	22864618	1.02	01-Apr-2018			22864618	1.02
				06-Apr-2018	606337	Purchase	23470955	1.05
				20-Apr-2018	207546	Purchase	23678501	1.05
				27-Apr-2018	-438896	Sale	23239605	1.03
				04-May-2018	-12065	Sale	23227540	1.03
				18-May-2018	-28946	Sale	23198594	1.03
				25-May-2018	-6679	Sale	23191915	1.03
				01-Jun-2018	256383	Purchase	23448298	1.04
				08-Jun-2018	653804	Purchase	24102102	1.07
				15-Jun-2018	582439	Purchase	24684541	1.10
				22-Jun-2018	102190	Purchase	24786731	1.10
				13-Jul-2018	103340	Purchase	24890071	1.11
				20-Jul-2018	129303	Purchase	25019374	1.11
				27-Jul-2018	-9266	Sale	25010108	1.11
				03-Aug-2018	-11807	Sale	24998301	1.11
				10-Aug-2018	-66330	Sale	24931971	1.11
				24-Aug-2018	298347	Purchase	25230318	1.12
				31-Aug-2018	683135	Purchase	25913453	1.15
				07-Sep-2018	425359	Purchase	26338812	1.17
				14-Sep-2018	-1845779	Sale	24493033	1.09
				21-Sep-2018	238077	Purchase	24731110	1.10
				05-Oct-2018	-382648	Sale	24348462	1.08

## ANNEXURE VII

Sr. No.	Name	Shareholding		Date	Increase / Decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning (01.04.2018) / end of year (31.03.2019)	% of the Total shares of the Company				No. of shares	% of total shares
				12-Oct-2018	-15100	Sale	24333362	1.08
				19-Oct-2018	161799	Purchase	24495161	1.09
				02-Nov-2018	39363	Purchase	24534524	1.09
				16-Nov-2018	102583	Purchase	24637107	1.10
				23-Nov-2018	-641894	Sale	23995213	1.07
				30-Nov-2018	585734	Purchase	24580947	1.09
				07-Dec-2018	-1191018	Sale	23389929	1.04
				14-Dec-2018	9751	Purchase	23399680	1.04
				21-Dec-2018	190390	Purchase	23590070	1.05
				28-Dec-2018	-10007	Sale	23580063	1.05
				04-Jan-2019	-159221	Sale	23420842	1.04
				11-Jan-2019	-790176	Sale	22630666	1.01
				08-Feb-2019	359901	Purchase	22990567	1.02
				15-Feb-2019	-305	Sale	22990262	1.02
				01-Mar-2019	-407252	Sale	22583010	1.01
				08-Mar-2019	-396932	Sale	22186078	0.99
				15-Mar-2019	631278	Purchase	22817356	1.02
		22931100	1.02	22-Mar-2019	113744	Purchase	22931100	1.02
9	SBI LIFE INSURANCE CO. LTD	7341090	0.33	01-Apr-2018			7341090	0.33
				06-Apr-2018	-44195	Sale	7296895	0.32
				13-Apr-2018	647566	Purchase	7944461	0.35
				20-Apr-2018	847588	Purchase	8792049	0.39
				27-Apr-2018	-95687	Sale	8696362	0.39
				04-May-2018	3493	Purchase	8699855	0.39
				11-May-2018	-359	Sale	8699496	0.39
				18-May-2018	-931	Sale	8698565	0.39
				25-May-2018	-162896	Sale	8535669	0.38
				01-Jun-2018	-16705	Sale	8518964	0.38
				08-Jun-2018	540	Purchase	8519504	0.38
				15-Jun-2018	228802	Purchase	8748306	0.39
				22-Jun-2018	44022	Purchase	8792328	0.39
				30-Jun-2018	-82203	Sale	8710125	0.39
				06-Jul-2018	51484	Purchase	8761609	0.39
				13-Jul-2018	854849	Purchase	9616458	0.43
				20-Jul-2018	-408911	Sale	9207547	0.41
				27-Jul-2018	-148338	Sale	9059209	0.40
				03-Aug-2018	-9457	Sale	9049752	0.40
				10-Aug-2018	45937	Purchase	9095689	0.41
				17-Aug-2018	-1734	Sale	9093955	0.40
				24-Aug-2018	-77192	Sale	9016763	0.40
				31-Aug-2018	-18286	Sale	8998477	0.40



Sr. No.	Name	Shareholding		Date	Increase / Decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning (01.04.2018) / end of year (31.03.2019)	% of the Total shares of the Company				No. of shares	% of total shares
				07-Sep-2018	498043	Purchase	9496520	0.42
				14-Sep-2018	336451	Purchase	9832971	0.44
				21-Sep-2018	45354	Purchase	9878325	0.44
				30-Sep-2018	-327621	Sale	9550704	0.43
				05-Oct-2018	1584761	Purchase	11135465	0.50
				12-Oct-2018	-10886	Sale	11124579	0.50
				19-Oct-2018	110018	Purchase	11234597	0.50
				26-Oct-2018	-8138	Sale	11226459	0.50
				02-Nov-2018	2464	Purchase	11228923	0.50
				09-Nov-2018	-215280	Sale	11013643	0.49
				16-Nov-2018	149159	Purchase	11162802	0.50
				23-Nov-2018	237629	Purchase	11400431	0.51
				30-Nov-2018	-154750	Sale	11245681	0.50
				07-Dec-2018	456108	Purchase	11701789	0.52
				14-Dec-2018	882859	Purchase	12584648	0.56
				21-Dec-2018	-76764	Sale	12507884	0.56
				28-Dec-2018	-52352	Sale	12455532	0.55
				31-Dec-2018	-3337	Sale	12452195	0.55
				04-Jan-2019	-581319	Sale	11870876	0.53
				11-Jan-2019	-1900	Sale	11868976	0.53
				18-Jan-2019	1003688	Purchase	12872664	0.57
				25-Jan-2019	9701	Purchase	12882365	0.57
				01-Feb-2019	5241	Purchase	12887606	0.57
				08-Feb-2019	337746	Purchase	13225352	0.59
				15-Feb-2019	201315	Purchase	13426667	0.60
				22-Feb-2019	-68268	Sale	13358399	0.59
				01-Mar-2019	-280674	Sale	13077725	0.58
				08-Mar-2019	4329310	Purchase	17407035	0.78
				15-Mar-2019	64483	Purchase	17471518	0.78
				22-Mar-2019	72633	Purchase	17544151	0.78
		17711520	0.79	31-Mar-2019	167369	Purchase	17711520	0.79
10	ICICI PRUDENTIAL DYNAMIC PLAN	11933398	0.53	01-Apr-2018			11933398	0.53
				06-Apr-2018	623392	Purchase	12556790	0.56
				13-Apr-2018	101663	Purchase	12658453	0.56
				15-Jun-2018	-102604	Sale	12555849	0.56
				13-Jul-2018	1444151	Purchase	14000000	0.62
				17-Aug-2018	442243	Purchase	14442243	0.64
				24-Aug-2018	216905	Purchase	14659148	0.65
				05-Oct-2018	-3962	Sale	14655186	0.65
				30-Nov-2018	1799590	Purchase	16454776	0.73
				25-Jan-2019	500000	Purchase	16954776	0.76
		17209589	0.77	22-Mar-2019	254813	Purchase	17209589	0.77

## ANNEXURE VII

## (v) Shareholding of Directors and Key Managerial Personnel:

Sr. No.	Shareholding of each Directors and each Key Managerial Personnel	Date	Reason	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
				No. of shares	% of total shares	No. of shares	% of total shares
1	Name: Mr. Kumar Mangalam Birla*						
	At the beginning of the year	01-04-18		901,635	0.04		
	Changes during the year						
	At the end of the year	31-03-19		901,635	0.04	901,635	0.04
2	Name: Smt. Rajashree Birla						
	At the beginning of the year	01-04-18		612,470	0.03		
	Changes during the year						
	At the end of the year	31-03-19		612,470	0.03	612,470	0.03
3	Name: Mr. A.K. Agarwala						
	At the beginning of the year	01-04-18		116,148	0.01		
	Changes during the year						
	At the end of the year	31-03-19		116,148	0.01	116,148	0.01
4	Name: Mr. M.M. Bhagat						
	At the beginning of the year	01-04-18		4,100	0.00		
	Changes during the year						
	At the end of the year	31-03-19		4,100	0.00	4,100	0.00
5	Name: Mr. K.N. Bhandari						
	At the beginning of the year	01-04-18		5,071	0.00		
	Changes during the year						
	At the end of the year	31-03-19		5,071	0.00	5,071	0.00
6	Name: Mr. Y.P. Dandiwala						
	At the beginning of the year	01-04-18		206	0.00		
	Changes during the year						
	At the end of the year	31-03-19		206	0.00	206	0.00
7	Name: Mr. Ram Charan						
	At the beginning of the year	01-04-18		Nil	NA		
	Changes during the year						
	At the end of the year	31-03-19				Nil	NA
8	Name: Mrs. Alka Bharucha						
	At the beginning of the year	01-04-18		Nil	NA		
	Changes during the year						
	At the end of the year	31-03-19				Nil	NA
9	Name: Mr. D.Bhattacharya						
	At the beginning of the year	01-04-18		1,365,205	0.06		
	Changes during the year		Exercise of stock option	206,732			
	At the end of the year	31-03-19		1,571,937	0.08	1,571,937	0.08
10	Name: Mr. Satish Pai						
	At the beginning of the year	01-04-18		30,000	0.00		
	Changes during the year						
	At the end of the year	31-03-19		30,000	0.00	30,000	0.00
11	Name: Mr. Girish Dave						
	At the beginning of the year	01-04-18		Nil	NA		
	Changes during the year						
	At the end of the year	31-03-19				Nil	NA

Sr. No.	Shareholding of each Directors and each Key Managerial Personnel	Date	Reason	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
				No. of shares	% of total shares	No. of shares	% of total shares
12	Name: Mr. Praveen Kumar Maheshwari						
	At the beginning of the year	01-04-18		Nil	NA		
	Changes during the year						
	At the end of the year	31-03-19				Nil	NA
13	Name: Mr. Anil Malik						
	At the beginning of the year	01-04-18		20,660	0.00		
	Changes during the year		Exercise of stock option	5,026			
	At the end of the year	31-03-19		25,686	0.00	25,686	0.00

\* Including shares held as father and natural guardian of Ms. Ananyashree Birla. Additionally he holds 648,632 equity shares as a Karta of Aditya Vikram Kumar Mangalam Birla HUF

## V. INDEBTEDNESS

Indebtedness of the Company including interest outstanding / accrued but not due for payment.

₹ in Crore				
Particulars	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
<b>Indebtedness at the beginning of the financial year</b>				
i) Principal Amount	17,241.37	3,055.88	-	20,297.26
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	531.12	11.28	-	542.40
<b>Total (i+ii+iii)</b>	<b>17,772.50</b>	<b>3,067.16</b>	<b>-</b>	<b>20,839.66</b>
<b>Change in Indebtedness during the financial year</b>				
* Addition	95.38	8,769.98	-	8,865.37
* Reduction	(1,574.81)	(8,020.55)	-	(9,595.36)
Net Change	(1,479.43)	749.43	-	(730.00)
<b>Indebtedness at the end of the financial year</b>				
i) Principal Amount	15,746.13	3,788.20	-	19,534.33
ii) Interest due but not paid	-	-	-	-
iii) Interest accrued but not due	541.76	23.91	-	565.67
<b>Total (i+ii+iii)</b>	<b>16,287.89</b>	<b>3,812.11</b>	<b>-</b>	<b>20,100.00</b>

\*Including Exchange Rate Difference on Foreign Exchange Borrowings

### Note:

1. Includes current maturities of long term loan.
2. Includes Sales tax deferral.
3. Cash Credit - Movement is not available, hence not considered for movement.
4. Addition / Reduction excluding Interest payment.
5. Includes finance leases as secured loans.
6. Addition / Reduction does not include unamortized fees. However, the opening and closing Principal is after adjustment of unamortized expenses.

## ANNEXURE VII

## VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

## A. Remuneration to Managing Director, Whole-time Directors and / or Manager:

Sr. No.	Particulars of Remuneration	Name of MD / WTD / Manager		Total Amount
		Mr. Satish Pai Managing Director	Mr. Praveen Kumar Maheshwari Whole time Director	
1	Gross salary			
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	21.06	4.02	25.08
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	6.99	0.06	7.05
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961	-	-	-
2	Stock Option	-	-	-
3	Sweat Equity	-	-	-
4	Commission	-	-	-
	- as % of profit	-	-	-
	- others, specify	-	-	-
5	Others- Employers Contribution to Provident Fund	0.67	0.12	0.79
	Employer Contribution to Superannuation Fund not included in perquisiteExemption	-	0.02	0.02
	COE Reimbursement		0.06	0.06
	<b>Total (A)</b>	<b>28.72</b>	<b>4.28</b>	<b>33.00</b>
	Ceiling as per the Act			<b>166.06</b>

## B. Remuneration to other Directors

Sr. No.	Particulars of Remuneration	Name of Directors										Total Amount
		Mr. Kumar Mangalam Birla	Smt. Rajashree Birla	Mr. A.K. Agarwala	Mr. D. Bhattacharya	Mr. M.M. Bhagat	Mr. K.N. Bhandari	Mr. Y.P. Dandiwal	Mr. Ram. Charan	Mrs. Alka Bharucha	Mr. Girish Dave	
1	Independent Directors											
	Fee for attending board committee meetings					0.06	0.06	0.04	0.01	0.02	0.04	0.23
	Commission					0.14	0.16	0.12	0.06	0.05	0.07	0.58
	Others, please specify											
	<b>Total (1)</b>					<b>0.20</b>	<b>0.22</b>	<b>0.16</b>	<b>0.07</b>	<b>0.07</b>	<b>0.11</b>	<b>0.81</b>
2	Other Non-Executive Directors											
	Fee for attending board committee meetings	0.03	0.02	0.06	0.05							0.16
	Commission	3.61	0.12	0.09	0.08							3.90
	Others, please specify											
	<b>Total (2)</b>	<b>3.64</b>	<b>0.14</b>	<b>0.15</b>	<b>0.13</b>							<b>4.06</b>
	<b>Total (B)=(1+2)</b>											<b>4.87</b>
	<b>Total Managerial Remuneration (A+B)</b>											<b>37.87</b>
	Overall Ceiling as per the Act											<b>182.67</b>

### C. Remuneration to Key Managerial Personnel other than MD / Manager / WTD

₹ in Crore

Sr. No.	Particulars of Remuneration Name	Name of Key Managerial Personnel		Total Amount
		Mr. Praveen Kumar Maheshwari	Mr. Anil Malik	
		CFO	CS	
1	Gross salary			
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	4.02	1.19	5.21
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	0.06	0.08	0.14
	(c) Profits in lieu of salary under section 17(3) Income- tax Act, 1961			
2	Stock Option			
3	Sweat Equity			
4	Commission			
	- as % of profit			
	- others, specify			
5	Others- Employers Contribution to Providend Fund	0.12	0.04	0.16
	Employers Contribution to Superannuation Fund not included in perquisite	0.02	0.02	0.04
	COE Reimbursement	0.06	0.04	0.10
	<b>Total</b>	<b>4.27</b>	<b>1.37</b>	<b>5.64</b>

### VII. PENALTIES / PUNISHMENT / COMPOUNDING OF OFFENCES:

Type	Section of the Companies Act	Brief Description	Details of Penalty / Punishment / Compounding fees imposed	Authority [RD / NCLT / COURT]	Appeal made, if any (give Details)
<b>A. COMPANY</b>					
Penalty					
Punishment					
Compounding					
<b>B. DIRECTORS</b>					
Penalty					
Punishment					
Compounding					
<b>C. OTHER OFFICERS IN DEFAULT</b>					
Penalty					
Punishment					
Compounding					

## ANNEXURE VIII

## Form AOC-1

Pursuant to first proviso to sub-section (3) of Section 129 read with Rule 5 of Companies (Accounts) Rules, 2014, Statement containing salient features of the financial statement of subsidiaries/associate companies/joint ventures

## Part "A" - Subsidiaries

Figures INR in Core & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments - Shares, Debentures, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
1	Minerals and Minerals Limited {}	India	INR	0.05	8.30	22.12	13.77	-	44.48	1.90	0.57	1.34	-	100
2	Renuka Investments and Finance Limited {}	India	INR	9.25	132.99	142.89	0.65	127.29	10.74	10.45	(0.03)	10.48	-	100
3	Renukeshwar Investments and Finance Limited {}	India	INR	4.80	82.28	87.08	0.00	78.46	7.63	7.62	(0.03)	7.66	-	100
4	Suvas Holding Limited {}	India	INR	29.25	(1.78)	38.53	11.06	-	0.05	(2.07)	(0.48)	(1.59)	-	74
5	Utkal Alumina International Limited {}	India	INR	6,251.48	814.40	10,041.86	2,975.98	23.57	4,190.06	1,776.63	351.53	1,425.10	-	100
6	Hindalco-Alimex Aerospace Limited {}	India	INR	88.56	(4.66)	93.78	9.89	19.09	77.13	5.12	0.82	4.30	-	97.18
7	Lucknow Finance Company Limited {}	India	INR	9.90	6.32	17.18	0.96	7.86	2.77	2.33	0.52	1.82	-	100
8	Dahel Harbour and Infrastructure Limited {}	India	INR	50.00	38.88	108.19	19.30	46.20	79.33	45.24	13.26	31.98	-	100
9	East Coast Bauxite Mining Co.Pvt.Ltd. {}	India	INR	0.01	(0.03)	0.01	0.03	-	-	(0.00)	-	(0.00)	-	74
10	Mauda Energy Limited {}	India	INR	-	-	-	-	-	-	-	-	-	-	100
11	Utkal Alumina Technical and General Services Ltd. {} <sup>(*)</sup>	India	INR	-	-	-	-	-	-	(0.04)	-	(0.04)	-	100
12	A V Minerals ( Netherlands) N.V. *	Netherlands	INR	12,029.17	(1,026.23)	11,003.03	0.08	11,002.89	-	(485.01)	-	(485.01)	-	100
			USD	1,738.70	(148.33)	1,590.38	0.01	1,590.36	0.00	(69.40)	0.00	(69.40)	-	
13	A V Metals Inc. #*	Canada	INR	-	10,818.19	10,818.20	0.01	10,818.20	-	-	-	-	-	100
			USD	0.00	1,563.66	1,563.66	0.00	1,563.66	0.00	0.00	0.00	0.00	-	
14	Novelis Inc. ##*	Canada	INR	10,931.22	(7,832.25)	17,302.74	14,203.78	0.00	4,214.63	(269.42)	20.22	(289.64)	-	100
			USD	1,560.00	(1,192.07)	2,500.94	2,053.01	0.00	603.03	(38.55)	2.89	(41.44)	-	
15	4260848 Canada Inc. *	Canada	INR	848.51	(574.99)	278.44	4.92	0.00	0.00	0.00	4.97	(4.97)	-	100
			USD	122.64	(83.11)	40.25	0.71	0.00	0.00	0.00	0.71	(0.71)	-	
16	4260856 Canada Inc. *	Canada	INR	1,272.80	(872.78)	407.36	7.35	0.00	0.00	0.00	7.42	(7.42)	-	100
			USD	183.97	(126.15)	58.88	1.06	0.00	0.00	0.00	1.06	(1.06)	-	
17	Novelis South America Holdings LLC *	USA	INR	0.01	(0.01)	-	-	-	-	-	0.00	-	-	100
			USD	0.00	(0.00)	0.00	0.00	0.00	0.00	0.00	0.00	-	-	
18	Novelis (India) Infotech Ltd. \$	India	INR	1.00	-	-	(1.0)	-	-	-	-	-	-	100
19	Novelis Corporation (Texas) *	USA	INR	-	(6,655.60)	23,211.57	29,867.16	-	34,501.61	1,335.91	304.31	1,031.61	-	100
			USD	0.00	(962.00)	3,355.00	4,317.00	0.00	4,938.49	191.14	43.54	147.60	-	
20	Novelis de Mexico SA de CV *	Mexico	INR	0.05	(0.05)	-	-	-	-	-	0.00	-	-	100
			USD	0.01	(0.01)	0.00	0.00	0.00	0.00	0.00	0.00	-	-	
21	Novelis do Brasil Ltda. *	Brazil	INR	1,694.41	4,641.80	11,783.72	5,447.52	-	14,440.96	2,255.47	817.94	1,437.53	-	100
			BRL	958.53	2,625.87	6,666.06	3,081.66	0.00	7,806.02	1,219.19	442.14	777.05	-	
22	Novelis Korea Limited *	Korea	INR	2.61	3,366.54	9,293.58	5,924.42	0.00	13,850.12	469.58	90.80	378.78	-	100
			KRW	416.78	537,572.22	1,484,006.00	946,017.00	0.00	2,206,141.00	74,798.00	14,463.00	60,335.00	-	

Figures INR in Core & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments - Shares, Debentures, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
23	Novelis UK Ltd. *	England	INR	1,315.50	766.27	2,960.80	879.03	-	3,995.91	94.80	25.47	69.32	-	100
			GBP	146.09	85.10	328.80	97.62	0.00	435.76	10.34	2.78	7.56	-	
24	Novelis Services Limited *	England	INR	1,390.69	1,813.10	3,209.91	6.12	-	413.46	334.41	44.79	289.61	-	100
			USD	201.01	262.07	463.96	0.89	0.00	59.16	47.85	6.41	41.44	-	
25	Novelis Deutschland GmbH *	German	INR	937.64	34.70	6,006.27	5,033.93	-	23,472.81	242.76	0.00	242.76	-	100
			EUR	120.80	4.47	773.78	648.52	0.00	2,902.24	30.02	0.00	30.02	-	
26	Novelis Aluminium Beteiligungs GmbH *	England	INR	0.19	0.17	0.37	0.00	0.00	0.00	(0.00)	0.00	(0.00)	-	100
			EUR	0.03	0.02	0.05	0.00	0.00	0.00	(0.00)	0.00	(0.00)	-	
27	Novelis Switzerland SA *	Switzerland	INR	34.74	2,928.73	4,000.97	1,037.50	0.00	5,510.48	179.04	38.06	140.98	-	100
			CHF	5.00	421.48	575.78	149.31	0.00	781.70	25.40	5.40	20.00	-	
28	Novelis Laminés France SAS *	France	INR	24.06	24.44	50.15	1.65	-	4.81	0.45	0.17	0.29	-	100
			EUR	3.10	3.15	6.46	0.21	0.00	0.60	0.06	0.02	0.04	-	
29	Novelis Italia SPA *	Italy	INR	745.17	(249.93)	1,127.78	632.54	-	1,730.58	(1.81)	0.44	(2.25)	-	100
			EUR	96.00	(32.20)	145.29	81.49	0.00	213.97	(0.22)	0.05	(0.28)	-	
30	Novelis Aluminium Holding Company *	Ireland	INR	1,685.15	578.44	6,833.64	4,570.05	-	264.12	61.60	35.81	25.79	-	100
			EUR	217.10	74.52	880.37	588.76	0.00	32.66	7.62	4.43	3.19	-	
31	Novelis PAE SAS *	France	INR	31.36	82.98	225.03	110.69	-	199.85	5.40	0.75	4.66	-	100
			EUR	4.04	10.69	28.99	14.26	0.00	24.71	0.67	0.09	0.58	-	
32	Novelis Europe Holdings Limited *	Wales	INR	339.68	2,051.99	5,402.05	3,010.38	-	(6.86)	(151.22)	0.00	(151.22)	-	100
			USD	49.10	296.60	780.81	435.12	0.00	(0.98)	(21.64)	0.00	(21.64)	-	
33	Novelis AG (Switzerland) *	Switzerland	INR	6.95	1,250.70	4,937.22	3,679.57	-	6,497.52	49.95	0.42	49.54	-	100
			CHF	1.00	179.99	710.52	529.53	0.00	921.72	7.09	0.06	7.03	-	
34	Novelis Holdings Inc. *	USA	INR	0.00	1,709.17	2,109.17	400.00	-	-	(258.89)	(18.54)	(240.29)	-	100
			USD	0.00	247.04	304.86	57.82	0.00	0.00	(37.03)	(2.65)	(34.38)	-	
35	8018227 Canada Inc. *	France	INR	0.00	(590.35)	1,754.99	2,345.34	0.00	0.00	(133.74)	5.82	(139.56)	-	100
			USD	0.00	(85.33)	253.67	339.00	0.00	0.00	(19.14)	0.83	(19.97)	-	
36	Novelis Acquisitions LLC *	USA	INR	-	-	-	-	-	-	-	0.00	-	-	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	
37	Novelis Sheet Ingot GmbH (Germany) *	German	INR	155.24	-	1,359.43	1,204.19	-	727.55	(7.60)	0.00	(7.60)	-	100
			EUR	20.00	0.00	175.14	155.14	0.00	89.96	(0.94)	0.00	(0.94)	-	
38	Novelis MEA Ltd (Dubai) *	USA	INR	6.31	635.42	1,680.49	1,038.76	-	3,679.21	213.02	0.00	213.02	-	100
			USD	0.91	91.84	242.90	150.14	0.00	526.42	30.48	0.00	30.48	-	
39	Novelis (Shanghai) Aluminium Trading Company *	China	INR	22.82	91.53	122.41	8.06	-	49.15	5.49	2.13	3.36	-	100
			CNY	22.14	88.80	118.76	7.82	0.00	47.22	5.28	2.05	3.23	-	
40	Novelis (China) Aluminium Products Co. Ltd. *	China	INR	468.26	95.18	1,658.40	1,094.97	-	1,762.22	176.77	46.01	130.75	-	100
			CNY	454.28	92.33	1,608.91	1,062.29	0.00	1,692.89	169.81	44.20	125.61	-	
41	Novelis Vietnam Company Limited (Vietnam) *	Vietnam	INR	5.93	26.77	42.95	10.25	0.00	11.60	(5.27)	0.06	(5.33)	-	100
			VND	19,648.92	88,645.26	142,231.96	33,937.78	0.00	38,474.81	(17,492.08)	205.94	(17,698.02)	-	
42	Novelis Services (North America) Inc. *	USA	INR	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	-	-	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	
43	Novelis Services (Europe) Inc. *	USA	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	

## ANNEXURE VIII

Figures INR in Core &amp; Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments		Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit (Loss) after Tax	% of Share Holding
								Shares, Debentures, Bonds & Others	Total					
44	Brecha Energetica Ltda *	Brazil	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	99.99
			BRL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	
45	Global Employment Organization (GEO) - Repurpose of Eurofoil and PAE Delaware *	USA	INR	2.25	(0.66)	13.72	12.13	-	(0.12)	-	(0.02)	(0.09)	-	100
			USD	0.33	(0.10)	1.98	1.75	0.00	(0.02)	0.00	(0.00)	(0.01)	-	
46	Hindalco Guinea SARL %*	South Africa	INR	-	-	-	-	-	-	-	0.00	-	-	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	
47	Hindalco Do Brazil Industria Comercio de Alumina LTDA #*	Brazil	INR	939.40	(794.53)	319.61	174.75	0.00	(132.05)	342.65	0.00	(132.05)	-	100
			Reais	531.42	(449.47)	180.81	98.85	0.00	(71.47)	185.46	0.00	(71.47)	-	

\*Subsidiary of AV Minerals (Netherlands) N.V.

# Subsidiary of AV Metals Inc.

\* Subsidiary of Utkal Alumina International Limited

% De-registered/Dissolved/Liquidated etc.

\$ Under Liquidation

\* Balance sheet items are translated at closing exchange rate and Profit/(Loss) items are translated at average exchange rate.

() For Indian Entities, Revenue includes Turnover + Other Income

List of Subsidiaries which have been liquidated / amalgamated / sold during FY 18-19	From Ccy	To Ccy	Avg spot rate for the year	Closing rate for 31st March 2019	From Ccy	To Ccy	Avg spot rate for the year	Closing rate for 31st March 2019	List of Subsidiaries which are yet to commence operations.
Mauda Entergy Limited	AUD	INR	50.939	49.114	BRL	USD	3.783	3.914	East Coast Bauxite Mining Co.Pvt.Ltd
Utkal Alumina Technical and General Services Ltd. @	BRL	INR	18.500	17.677	CHF	USD	0.991	0.996	
Hindalco Guinea SARL	CAD	INR	53.259	51.777	CNY	USD	6.713	6.712	
	CHF	INR	0.014	0.014	EUR	USD	1.158	1.122	
	CNY	INR	0.096	0.097	GBP	USD	1.313	1.302	
	EUR	INR	80.878	77.622	JPY	USD	110.876	110.815	
	GBP	INR	91.699	90.048	SEK	USD	8.963	9.291	
	JPY	INR	1.587	1.602	SGD	USD	1.358	1.355	
	NOK	INR	8.398	8.030					
	SEK	INR	7.799	7.446					
	SGD	INR	51.453	51.061					
	USD	INR	69.891	69.185					



## Part "B" Statement pursuant to Section 129 (3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

Sr. No.	Name of Associates / Joint Ventures	Shares of Associate/Joint Ventures held by the company on the year end				Profit/Loss for the year			Description of how there is significant influence	Base on why the associate / joint venture is not considered
		Latest Audited Balance Sheet Date	Number of shares	Amount of investment (₹ in crore)	Extent of Holding% attributable	Networth to Shareholding as per latest audited balance sheet (₹ in Crore)	Considered in consolidation (₹ in Crore)	Not considered in consolidation		
<b>Associates</b>										
1	Aditya Birla Science and Technology Company Private Limited	31-Mar-19	9,800,000	9.80	49.00	15.16	0.36		Note A	
2	Aditya Birla Renewables Subsidiary Ltd	31-Mar-19	5,746,000	5.75	26.00	5.88	0.13			
3	Associates of Novellis Inc. @	31-Mar-19	3,001,00	10.64		5.57	0.26			
<b>Joint Ventures</b>										
1	Hydromine Global Minerals (GMBH) Limited	31-Mar-18	6,465,000	1.00	45.00	30.45	-	(0.14)	Note B	Held for sale
2	MNH Shakti Limited	31-Mar-19	12,765,000	12.77	15.00	12.69	-			Held for sale
<b>Joint Operations</b>										
1	Mahan Coal Limited	31-Mar-19	41,250,000	19.25	50.00	20.79	1.19		Note A	Held for sale
2	Tubed Coal Mines Limited	31-Mar-19	15,296,700	0.00	60.00	1.80	0.03			Held for sale
3	Associates of Novellis Inc. @	31-Mar-19	10,041.00	38.69		19,953.59	331.03			
<b>@ - Associates of Novellis Inc.</b>										
	Deutsche Aluminium VerpackungRecycling GMBH	31-Dec-18	1	7,148,995	30%	2,973,989	105,408		Equity	
	France Aluminium Recyclage SA	31-Dec-18	3,000	3,492,995	20%	2,599,160	155,561.0		Equity	
<b>@ - Joint Operations of Novellis Inc.</b>										
	Aluminium Norf GmbH	31-Dec-18	1	2,382,998	50%	3,473,045,620	261,398,102		Equity	
	Ulsan Aluminium	31-Mar-19	5,000	1,564,177	50%	18,619,833,354	115,640,646		Equity	
	Logan	31-Mar-19	40	27.67	40%	(2,139,285,325)	(46,005,989)		Consolidated	
	AluInfra	31-Dec-18	5,000	34,743,650	50%	NOTE B	NOTE B		Equity	

Note A: There is significant influence due to percentage holding of share capital

Note B: Non-availability of Financial Statements

For and on behalf of the Board of Hindalco Industries Limited

**Praveen Kumar Maheshwari**  
Whole-time Director & Chief Financial Officer  
DIN-00174361

**Satish Pai**  
Managing Director  
DIN-06646758

**Anil Malik**  
Company Secretary

**M M Bhagat**  
Director  
DIN-00006245

# SUSTAINABILITY & BUSINESS RESPONSIBILITY REPORT

## Building Sustainable Businesses at the Aditya Birla Group:

At the Aditya Birla Group, we endeavour to become the leading Indian conglomerate for sustainable business practices across our global operations. We define a “Sustainable Business” as one that can continue to survive and thrive within the growing needs and tightening legal and resource constraints of a “Sustainable World”. We believe that this means that as we go forward towards the constrained operating environments of 2030 and 2050 that for a continued “Sustainable World” it can increasingly only contain “Sustainable Businesses”.

To achieve our Group vision, we are innovating away from the traditional sustainability models to one consistent with our vision to build sustainable businesses capable of operating in the next three decades. It is in our own interests to mitigate our own impact in every way we can as this is a direct assistance to creating a sustainable planet. It also prepares us for further mitigation and the need to adapt to a world that is a full two degrees or even three or four hotter than today.

We began our quest with the question, “If everyone and every business followed the law as written today, is the planet sustainable?” We quickly concluded that around the year 2050, when the Earth’s population reaches an estimated 9 billion, climate change, water scarcity, pollution, biodiversity loss and an overload of waste, if left unchecked, would set the planet on a possibly irreversible unsustainable course. It is therefore intuitive that leaders must find ways to transform industries such that international bodies can codify and governments can legislate over time to reduce the damage and it is imperative that the Aditya Birla Group remains ahead of the curve.

The first step of our programme to build sustainable businesses is focused on increasing the capability of our business management systems. Under this programme called “Responsible Stewardship” we try to move from merely complying with current legal standards to conforming to the international standards set by the global bodies of the International Finance Corporation (IFC), the Organisation for Economic Cooperation and Development (OECD), the International Standards Organisation (ISO), Occupational Health and Safety Advisory Services (OHSAS), the Global Reporting Initiative (GRI), the Forestry Stewardship Council and others. To support our businesses in this endeavour, we have created the Aditya Birla Group’s Sustainable Business Framework of Policies, Technical Standards, and Guidance Notes to give our leaders, managers, employees and contract employees the chance to train, learn, understand,

and apply improvement techniques to help our businesses reach higher standards of performance. Our Group Sustainable Business Framework is currently certified to 14 international standards (<http://sustainability.adityabirla.com/>) So far, we have had much success with respect to reductions in accidents, energy use, water use, and have implemented our first Biodiversity plans. Our programme to achieve the World Business Council for Sustainable Development’s Water and Sanitation and Hygiene pledge (WASH) to ensure that we provide safe drinking water, sanitation and hygiene in all our operations has resulted in our building over 600 new bathrooms, many for women and differently abled people. Each of these achievements helps reduce and mitigate our impact on the planet and are imperative to building the sustainable business platform for our future.

If we are to create fully sustainable business models and systems for the future then “Responsible Stewardship” by itself is not enough. We need other components to help us with a greater transformation. We need to understand the global mega-trends and their effect on us; geographically, physically, technologically and how the legal system (including regulations and tax) will need to change in order to motivate business to create a sustainable world. Our performance will need to be improved further to meet the changes needed to mitigate and adapt to these External Factors. By talking to our Strategic Stakeholders knowledgeable in these issues, we can scan the horizon to better understand their likely risk to our business. With this information, we enhance our business models, strategies and risk profiles in order to “Future Proof” them and our value chains in the medium to long term. Since only “Sustainable” business can exist in a Sustainable World then a Sustainable Value Chain can also only contain these businesses and so it becomes imperative to map our value chains to look for vulnerabilities. Our goal is to create not only Sustainable Businesses but also Sustainable Value Chains of which we can be a key member. We are helping our leaders to understand which external changes might heavily influence our value chains and business models in the future and what might be expected of our products and brands. For example, the world will need businesses that are able to mitigate and adapt to climate change, with robust and sustainable supply chains that are also impervious to all external forces that will inevitably begin to affect us in the future. To build sustainable businesses will take time, particularly when we consider some of our very complex value chains but by pushing to be a leader today, we are giving our businesses the best possible chance of achieving long-term success not only for ourselves but also for our value chains and hence for our planet.

# BUSINESS RESPONSIBILITY REPORT

## Hindalco Sustainability Vision

Hindalco endeavours to become the leading Indian conglomerate for sustainable business practices across our global operations. We believe that this means that as we go forward towards the constrained operating environments of 2030 and 2050 that for a continued “Sustainable World” it can increasingly only contain “Sustainable Businesses”.

Hindalco has been publishing Sustainability Report since FY 11 using the Global Reporting Initiative (GRI) Framework. The report for 2017-18 titled ‘Create – Conserve – Enhance - Repeat’ has been assured to the **Comprehensive Option of GRI standard** by DNV (External independent assessing agency).

The Company will also publish Sustainability Report for FY 2018-19 and it will be hosted on its website [www.hindalco.com](http://www.hindalco.com). Any shareholder interested in obtaining a physical copy of the same may write to the Company Secretary at the Registered Office of your Company.

### Section A: General Information about the Company

1. Corporate Identity Number (CIN) of the Company	L27020MH1958PLC011238			
2. Name of the Company	Hindalco Industries Limited			
3. Registered address	Ahura Centre, 1 <sup>st</sup> Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai: 400093			
4. Website	<a href="http://www.hindalco.com">www.hindalco.com</a>			
5. E-mail id	<a href="mailto:anil.malik@adityabirla.com">anil.malik@adityabirla.com</a>			
6. Financial Year reported	April 01, 2018 to March 31, 2019			
7. Sector(s) that the Company is engaged in (industrial activity code-wise)	ITC Code	Product Description		
	7601	Aluminium Ingots		
	7606	Aluminium Rolled Products		
	7605	Aluminium Redraw Rods		
	740311	Copper Cathodes		
	740710	Continuous Cast Copper Rods		
8. List three key products/services that the Company manufactures/provides (as in balance sheet):	(i)	Aluminium Ingots / Rolled Products		
	(ii)	Copper Cathodes		
	(iii)	Concast Copper Rods		
9. Total number of locations where business activity is undertaken by the Company	Major International Locations			
	i.	<ul style="list-style-type: none"> <li>• USA</li> <li>• Germany</li> <li>• United Kingdom</li> <li>• Brazil</li> <li>• South Korea</li> </ul>		
	Number of National Locations:			
		<ul style="list-style-type: none"> <li>• 4 Aluminium;</li> <li>• 1 Copper Unit</li> <li>• 4 Chemical Units (including one unit of Utkal Alumina International Limited, wholly owned subsidiary of the Company)</li> </ul>		
	ii.	<ul style="list-style-type: none"> <li>• 4 Power Units</li> <li>• 5 Rolled FRP</li> <li>• 2 Extrusions</li> <li>• 1 Foil</li> <li>• Registered Office and Zonal Marketing Offices</li> <li>• Bauxite and Coal Mines in the state of Jharkhand, Chhattisgarh, Maharashtra and Orissa.</li> </ul>		
10. Markets served by the Company	Local	State	National	International
	√	√	√	√

## BUSINESS RESPONSIBILITY REPORT

### Section B: Financial Details of the Company (Standalone)

1. Paid-up Capital (INR)	₹ 222.39 crores
2. Total Turnover (INR)	₹ 45,749.16 crore
3. Total Profits after taxes (INR)	₹ 1205.43 crore
4. Total Spending on Corporate Social Responsibility (CSR) as percentage of profit after tax (%)	The Company's total spending on CSR was ₹ 34.14 Crores which is 2.28% of the average net profit for the previous three financial years.
5. List of activities in which expenditure in 4 above has been incurred	<ul style="list-style-type: none"> <li>a. Education</li> <li>b. Health Care</li> <li>c. Women empowerment</li> <li>d. Sustainable Livelihood</li> <li>e. Infrastructure Development</li> </ul>

### Section C: Other Details

#### 1. Does the Company have any Subsidiary Company/ Companies?

Yes, as on 31<sup>st</sup> March, 2019, the Company has 45 subsidiaries-10 domestic and 34 foreign .

#### 2. Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s):

Hindalco's Sustainability Report covers only the India Operations. Further, Novelis Inc., also publishes Sustainability Report based of Global Reporting Initiative (GRI) framework.

#### 3. Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities?

At present, suppliers and distributors with whom the Company does business, do not participate in the Business Responsibility initiatives of the Company directly.

### Section D: BR Information

#### 1. Details of Director/Directors responsible for BR

##### a. Details of the Director/Director responsible for implementation of the BR policy/policies

DIN Number	01055000
Name	Mr. Y. P. Dandiwala
Designation	Independent Director

#### b. Details of the BR head

Sr. No.	Particulars	Details
1.	DIN Number (if applicable)	N.A.
2.	Name	Mr. Anil Malik
3.	Designation	President & Company Secretary
4.	Tel. No.	022-66626666
5.	E-mail id	anil.malik@adityabirla.com

#### 2. The National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business released by the Ministry of Corporate Affairs has adopted nine areas of Business Responsibility. These briefly are as follows:

- P1 Businesses should conduct and govern themselves with Ethics, Transparency and Accountability
- P2 Businesses should provide goods and services that are safe and contribute to sustainability throughout their life cycle
- P3 Businesses should promote the well being of all employees
- P4 Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised.
- P5 Businesses should respect and promote human rights
- P6 Business should respect, protect, and make efforts to restore the environment
- P7 Businesses, when engaged in influencing public and regulatory policy, should do so in a responsible manner
- P8 Businesses should support inclusive growth and equitable development
- P9 Businesses should engage with and provide value to their customers and consumers in a responsible manner

The mapping of the aforesaid principles to the disclosures shall be made in the Sustainability Report 2018-19 will be available on our website [www.hindalco.com](http://www.hindalco.com).

# CORPORATE GOVERNANCE REPORT

## GOVERNANCE PHILOSOPHY

The Aditya Birla Group is committed to the adoption of best governance practices and its adherence in the true spirit, at all times. Our governance practices are a product of self desire reflecting the culture of the trusteeship i.e., deeply ingrained in our value system and reflected in our strategic thought process. At a macro level, our governance philosophy rests on five basic tenets viz., Board accountability to the Company and the shareholders, strategic guidance and effective monitoring by the Board, protection of minority interests and rights, equitable treatment of all shareholders as well as superior transparency and timely disclosures.

In line with this philosophy, Hindalco Industries Limited (the Company), flagship Company of the Aditya Birla Group, is striving for excellence through adoption of best governance and disclosure practices. The Company, as a continuous process, strengthens the quality of disclosures, on the Board composition and its functioning, remunerations paid and level of compliance with various Corporate Governance Codes.

### Compliance with Corporate Governance Guidelines

The Company is fully compliant with the requirements under Securities and Exchange Board of India (Listing Obligations & Disclosure Requirements) Regulations 2015, and amendment thereto hereinafter referred to the "Listing

Regulations". Your Company's compliance with these requirements is presented in the subsequent sections of this report.

## BOARD OF DIRECTORS

### Composition of the Board

Your Company's Board comprises of 10 Non Executive Directors as on March 31, 2019 with considerable experience in their respective fields. Of these, 6 Directors are Independent Directors which includes one woman director.

None of the Directors on the Board is a Member of more than 10 Committees or a Chairman of more than 5 Committee (as specified in Regulation 26 of Listing Regulations), across all the Companies in which they hold Directorships. Further, none of the Non-Executive Directors serve as Independent Directors in more than seven listed companies and none of the Executive or Whole-time Directors serve as Independent Directors on any listed Company. All the Directors have periodically intimated about their Directorship and Membership in the various Boards / Committees of other companies. The same is within permissible limits as provided by the Companies Act, 2013 and Listing Regulations.

The details of the Directors with regard to outside directorships and committee positions as at March 31, 2019 are as follows:

Director	Category	No. Of other Directorships Held <sup>4</sup>	No. of outside Companies Committee Positions Held <sup>5</sup>		Name of Outside Listed Entity where the person is a Director	Category of Directorship in outside Listed Entities
		Public	Member	Chairman		
Mr. Kumar Mangalam Birla <sup>6</sup> [DIN: 00012813]	Non-Executive Chairman	08	-	-	1. Grasim Industries Limited 2. UltraTech Cement Limited 3. Vodafone Idea Limited 4. Century Textiles and Industries Limited 5. Aditya Birla Capital Limited	Non-Executive Chairman Non-Executive Chairman Non-Executive Chairman Non-Executive Vice Chairman Non-Executive Chairman
Mrs. Rajashree Birla <sup>6</sup> [DIN: 00022995]	Non-Executive	06	-	-	1. Grasim Industries Limited 2. UltraTech Cement Limited 3. Piani Investment and Industries Corporation Limited 4. Century Textiles and Industries Limited 5. Century Enka Limited	Non-Executive Director Non-Executive Director Non-Executive Director Non-Executive Director Non-Executive Director
Mr. A. K. Agarwala <sup>2</sup> [DIN: 00023684]	Non-Executive	05	-	-	1. Tanfac Industries Limited	Non-Executive Director
Mr. D. Bhattacharya [DIN: 00033553]	Non-Executive Director	02	02	-	1. Vodafone Idea Limited	Non-Executive Director

## CORPORATE GOVERNANCE REPORT

Director	Category	No. Of other Directorships Held <sup>4</sup>	No. of outside Companies Committee Positions Held <sup>5</sup>		Name of Outside Listed Entity where the person is a Director	Category of Directorship in outside Listed Entities
		Public	Member	Chairman		
Mr. M. M. Bhagat <sup>1</sup> [DIN: 00006245]	Independent <sup>1</sup>	05	-	01	1. VCK Capital Market Services Limited	Independent Director
Mr. K. N. Bhandari <sup>1</sup> [DIN: 00026078]	Independent <sup>1</sup>	08	05	04	1. Jaiprakash Associates Limited 2. Gujarat Sidhee Cement Limited 3. Saurashtra Cement Limited 4. Andhra Cement Limited 5. Jaiprakash Power Ventures Limited 6. Shristi Infrastructure Developments Corporation Limited	Independent Director Independent Director Independent Director Independent Director Independent Director Independent Director
Mrs. Alka Bharucha <sup>1,3</sup> [DIN: 00114067]	Independent <sup>1</sup>	08	05	03	1. UltraTech Cement Limited 2. Orient Electric Limited 3. Honda Siel Power Products Limited 4. Birlasoft Limited	Independent Director Independent Director Independent Director Independent Director
Mr. Ram Charan <sup>1</sup> [DIN: 03464530]	Independent <sup>1</sup>	01	-	-	-	-
Mr. Y. P. Dandiwala <sup>1</sup> [DIN: 01055000]	Independent <sup>1</sup>	03	02	01	1. Century Textile and Industries Limited 2. Pilani Investment and Industries Corporation Limited	Independent Director Independent Director
Mr. Girish Dave <sup>1</sup> [DIN: 00036455]	Independent <sup>1</sup>	02	03	-	1. UltraTech Cement Limited 2. PCS Technology Limited	Independent Director Independent Director
Mr. Satish Pai [DIN: 06646758]	Managing Director	-	-	-	-	-
Mr. Praveen Kumar Maheshwari [DIN: 00174361]	Whole-Time Director	01	01	-	-	-

1. Independent Director means a director defined as such under Regulation 16 of the Listing Regulations and Section 149 of the Companies Act, 2013.

2. Mr. A. K. Agarwala was an Executive Director till September 10, 2003. Thereafter, he has moved to other responsibilities in the Aditya Birla Group.

3. Mrs. Alka Bharucha was appointed as an Independent Director w.e.f July 11, 2018.

4. Excludes Directorship held in Private Limited Companies, Foreign Companies and Companies under Section 8 of the Companies Act, 2013.

5. Represents only membership/chairmanship of Audit Committee and Stakeholders Relationship Committee of Indian Public Limited Companies.

6. No other Director is related to any other Director on the Board except for Mr. Kumar Mangalam Birla and Mrs. Rajashree Birla who are son and mother respectively.

# Mr. Jagdish Khattar (DIN:00013496) has resigned as an Independent Director w.e.f May 04, 2018 due to his personal commitment.

### Board's functioning and Procedure

Hindalco's Board of Directors plays a primary role in ensuring good governance and functioning of the Company. All statutory and other significant & material information including information as mentioned in Regulation 17 (7) read together with Schedule II of Listing Regulations is placed before the Board to enable it to discharge its responsibility of strategic supervision of the Company as trustees of the shareholders.

**Your Company's Board of Directors have identified the following skills / expertise / competencies to function and discharge their responsibilities effectively:**

- Industry knowledge
- Innovation
- Financial literacy
- Corporate Governance
- Strategic expertise
- Marketing
- Legal and Compliance
- Sustainability
- Risk Management
- Human Development
- General Management

**Board members collectively display the following personal qualities:**

- *Integrity* – fulfilling a director's duties and responsibilities;
- *Curiosity and courage* – to ask questions and courage to persist in asking or challenging management and fellow board members where necessary;
- *Interpersonal skills* – work well in a group, listen well, be tactful, able to communicate point of view frankly;
- *Interest* – in the organisation, its business and the people;
- *Instinct* – good business instincts and acumen, ability to get to the crux of the issue quickly;
- Believer in gender diversity and
- *Active participation* – at deliberations in the meeting.

Your Company's Board comprises of an equal number of Independent and Non-Independent Directors. The Directors are professionals, possessing wide experience and expertise in their areas of function - strategy; finance; governance and legal; marketing, insurance, among others, which together with their collective wisdom fuel your Company's growth. With one-sixth of the Board comprising of woman directors, the Board reflects gender diversity.

**A brief profile of the Directors of your Company is as follows:**

**Kumar Mangalam Birla** was appointed as a Non-Executive Chairman of our Company with effect from October 19, 1995. He also serves as Chairman of the Board of Directors of various companies of the Aditya Birla group in India and overseas. He was also an erstwhile director on the Central Board of Directors of the RBI. He is a member of London Business School's Asia Pacific Advisory Board. He is a Chartered Accountant and holds an MBA degree from the London Business School. He earned a Bachelor of

Commerce from University of Mumbai in 1989 and Masters in Business Administration from London business School in 1992.

**Rajashree Birla** is a Non-Executive Director and was appointed on the Board of Directors on March 15, 1996. She also serves as a director on the Board of Directors of various companies of the Aditya Birla group in India and overseas. As Chairperson of Aditya Birla Centre for Community Initiatives and Rural Development, the body responsible for development projects, she oversees social and welfare related work of the Aditya Birla group. She is a member of the Board of Advisors of the Vision Foundation of India, Mumbai. She was conferred the Padma Bhushan by the Government of India for her contribution in the area of social work in 2011.

**Debnarayan Bhattacharya** is a Non-Executive Director and the Vice Chairman of our Company with effect from July 31, 2016. He has experience in managing business operations. He joined the Aditya Birla Group in 1998 and has held several key positions within the Aditya Birla Group. He was appointed as Managing Director of the Company in the year 2003. He is qualified in Bachelor of Engineering (Chemicals) and IIT from Kharagpur.

**Askaran Agarwala** is a Non-Executive Director of our Company and was appointed on the Board in 1998. He is a Trustee of several organisations including Sarla Basant Birla Param Bhakti Trust, Aditya Vikram Birla Memorial Trust, The Aditya Birla Foundation and Hellen Keller Institute of the Deaf and Blind. He holds a degree in Commerce and Law of Calcutta University and is fellow member of the Institute of Chartered Accountants of India.

**Madhukar Manilal Bhagat** is a Non-Executive and Independent Director of our Company. He was appointed in the year 1996. He has a Bachelor's degree in Commerce from Calcutta University and has qualified as an associate in the general branch of the Chartered Insurance Institute, London and also an associate of the Insurance Institute of India. Prior to joining our Company, he has also served as the Chairman and Managing Director of United India Insurance Company Limited.

**Kailash Nath Bhandari** is a Non-Executive and Independent Director on the Board of our Company. Prior to joining our Company, he has also served as the Chairman and Managing Director of the New India Assurance Company Limited. He holds a Bachelor's degree in Arts and Law.

**Ram Charan** is a Non-Executive and Independent Director of our Company. He holds the Bachelor of Engineering, MBA and Doctorate from Harvard Business School. He is a best-selling author and Global Adviser to Senior business leaders and Board of Directors of various companies around the world. He has authored and co-authored books on corporate governance.

## CORPORATE GOVERNANCE REPORT

**Girish Mohanlal Dave** is a Non-Executive and Independent Director of our Company and was appointed as the Director with effect from May 28, 2016 for a period of five years. He holds the Master's degree in Commerce from Gujarat University and the Bachelor's degree in Law from Gujarat University. He has varied and extensive experience in financial, banking and project finance laws and has been an advisor to various banks and corporates in India. He is Advocate on the rolls of the Bar Council of Maharashtra and Goa. He is also a member of the Bombay Bar Association, the International Bar Association and Alliance of Business Lawyers.

**Yazdi Dandiwala** is a Non-Executive Director and Independent Director of our Company with effect from August 14, 2015 for a period of five years. He is qualified as a Bachelor in Science and holds a degree in Law. He is Solicitor by profession. He is currently a partner of Mulla & Mulla and Craigie Blunt & Caroe, Advocates & Solicitors. He has experience as a corporate Commercial Lawyer with experience in corporate and commercial transactions.

**Alka Bharucha** is a Non-Executive Director and Independent Director of our Company with effect from July 11, 2018 for a period of five years. She earned her B.A (Hons) in 1976 and LLB in 1979 from University of Bombay. She graduated with LLM degree from the London School of Economics & Political Science. She is member of Bar Council of Maharashtra and Goa, the Bombay incorporated Law Society, the Society of England and an Advocate on record of Supreme Court of India. She is currently a partner of Bharucha & Partners Advocates & Solicitors. She is ranked by Chambers Global, Legal 500 and Who's Who Legal, etc., amongst India's leading lawyers.

**Satish Pai** was appointed as Whole-Time Director on our Board since August, 2013 and appointed as the Managing Director of our Company with effect from August 01, 2016 for a period of five years. He holds a Bachelor's degree in Mechanical Engineering from the Indian Institute of Technology, Madras. He has experience in areas such as operations, recruitment, and training.

**Praveen Kumar Maheshwari** is currently working as the Whole-Time Director and Chief Financial Officer for Hindalco Industries Limited, an industry leader in Aluminium & Copper; and the metals flagship company of the Aditya Birla Group. Mr. Maheshwari, a Chartered Accountant with an MBA from IIM - Ahmedabad, has over 35 years of work experience in all areas of Finance including mergers & acquisitions, fund raising, investor relations in India and in other global markets. Prior to joining Hindalco Industries Limited he worked with Bharat Forge Limited as Group CFO & Executive Director - Finance.

### Board Meetings

The Company Secretary drafts the agenda for each meeting along with the explanatory notes. The Board meets at least

once a quarter to review the quarterly results and other items on the agenda. Various Board Committees meet as per the legal requirement or otherwise to transact the business delegated by Board of Directors.

Since the Companies Act 2013, read with the relevant rules made thereunder, facilitates the participation of Director in Board/Committee Meetings through video conferencing or other audio visual mode the option to participate in the meeting through video conferencing was made available for the Directors except in respect of such meetings/Items which are not permitted to be transacted through video conferencing.

The Members of the Board have complete freedom to express their opinion and decisions are taken after detailed discussion. The details of Board Meetings held during FY 2018-2019 are as outlined below:

Date of Board Meeting	City	No. of Directors Present
May 16, 2018	Mumbai	08 out of 11
July 11, 2018	Mumbai	10 out of 11
July 26, 2018	Mumbai	10 out of 12
August 10, 2018	Mumbai	10 out of 12
September 21, 2018	Mumbai	11 out of 12
November 02, 2018	Mumbai	08 out of 12
February 12, 2019	Mumbai	10 out of 12

The details of attendance of each Director at the Board Meetings and Last Annual General Meeting (AGM) are as follows:

Name of Director	No. of Board Meetings		Attended Last AGM®
	Held	Attended	
Mr. Kumar Mangalam Birla	07	05	Yes
Mrs. Rajashree Birla	07	04	Yes
Mr. A. K. Agarwala	07	07	Yes
Mr. D. Bhattacharya	07	07	Yes
Mr. M. M Bhagat	07	06	Yes
Mr. K. N. Bhandari	07	07	Yes
Mrs. Alka Bharucha	05	03	Yes
Mr. Ram Charan	07	01	No
Mr. Y. P. Dandiwala	07	06	Yes
Mr. Girish Dave	07	07	Yes
Mr. Satish Pai	07	07	Yes
Mr. Praveen Kumar Maheshwari	07	07	Yes

®AGM held on September 21, 2018

### PERFORMANCE EVALUATION OF BOARD

Pursuant to the provisions of Companies Act, 2013 and Listing Regulations, the Directors have carried annual performance evaluation of Board, Independent Directors,



Non-Executive Directors, Executive Directors, Committee and Chairman of the Board.

The evaluation framework focused on various aspects of Board and Committees such as review, timely information from management etc. Also, performance of individual directors was divided into Executive, Non-Executive and Independent Director and based on the parameters such as contribution, attendance, decision making, action oriented, external knowledge etc.

The evaluation exercise has been carried out by the Board on the basis of Evaluation template for Board, Independent Director, Non-Executive Director, Executive Directors, Committees and Chairman of the Board. The template had various questions to be replied by the directors on aforesaid parameters. The Nomination and Remuneration Committee evaluated the performance on the basis of response received from the Directors. Similarly, the Independent Directors evaluated the performance of Non Independent Directors, Chairman and assessed the quality, quantity and flow of information between the Company, Management and the Board.

Outcome of the evaluation exercise:

1. The Board as a whole perform satisfactorily.
2. Independent Directors are rated high in understanding the Company's business and expressing their view during the Board Meeting.
3. The Non-Executive Director scored well in all aspects.
4. Directors rated Executive Director as action oriented and good in implementing Board decisions.
5. Board members rated high to the Chairman leading the board effectively.
6. Board members has shown satisfaction in functioning of the Committees.

## INDEPENDENT DIRECTOR'S MEETING

During the year under review, the Independent Directors met without the presence of Non Independent Directors and members of the management interalia to discuss:

- Evaluate the performance of Non Independent Directors and the Board of Directors as a whole.
- Evaluate the performance of the Chairman, taking into account the views of Executive and Non Executive Directors.
- Evaluate the quality, content and timelines of flow of information between the Management and the Board that is necessary for the Board to effectively and reasonably perform its duties.

The Independent Directors expressed satisfaction on the overall performance of the Directors and the Board as a whole.

In the opinion of the Board, the Independent Directors fulfil all the conditions specified in the Listing Regulations as amended and are independent of the management.

## FAMILIARISATION PROGRAMME FOR INDEPENDENT DIRECTORS

All new Independent Directors inducted on the Board are given a letter of appointment setting out their roles, functions, duties and responsibilities.

The Directors are familiarised with your Company's Business and its operations. Interactions are held between the Directors and Senior Management of your Company. Directors are familiarised with organisational set-up, functioning of various department, internal control processes and relevant information pertaining to your Company. They are periodically updated on industry scenario, changes in regulatory framework and the impact thereof on the working of your Company.

The details on the Company's Familiarisation Programme for Independent Directors can be accessed at: <http://hindalco.com/about-us/management-team/board-of-directors>.

## COMMITTEES OF THE BOARD OF DIRECTORS

The Board has constituted following Committees of Directors to deal with matters and monitor the activities falling within the respective terms of reference:-

### AUDIT COMMITTEE

#### Constitution of Audit Committee and its functions

Your Company has an Audit Committee at the Board level which acts as a link between the Management, the Statutory and the Internal Auditors and the Board of Directors and oversees the financial reporting process. The Committee is governed by a Charter which is in line with the regulatory requirements mandated by the Companies Act, 2013 and Listing Regulations.

The Committee comprises of three Non Executive Directors, all of whom are Independent Directors. The followings are the members of Audit Committee:

Mr. M.M. Bhagat	–	Chairman
Mr. K.N. Bhandari	–	Member
Mr. Y.P. Dandiwala	–	Member

During the year, the Audit Committee met 4 times i.e on May 16, 2018, August 10, 2018, November 02, 2018 and

## CORPORATE GOVERNANCE REPORT

February 12, 2019 to deliberate on various matters. The attendance of each Audit Committee members are as follows:

Name of the Director	No. of Meetings Held	No. of Meetings Attended
Mr. M. M. Bhagat	04	04
Mr. K. N. Bhandari	04	04
Mr. Y. P. Dandiwala	04	03

- The Chairman of the Audit Committee, Mr. M. M. Bhagat was present at the last Annual General Meeting of your Company held on September 21, 2018.
- The Managing Director, Whole-Time Director, CFO, the representative of the Statutory Auditor, Head of the Internal Audit are permanent invitees of the Audit Committee. The representative of the Cost Auditors are invited to the Audit Committee Meetings whenever matters relating to cost audit is considered.
- Mr. Anil Malik, Company Secretary, acted as Secretary to the Committee.

### **Role of Audit Committee:**

- Oversight of the listed entity's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible;
- Recommendation for appointment, remuneration and terms of appointment of auditors of the listed entity;
- Approval of payment to statutory auditors for any other services rendered by the statutory auditors;
- Reviewing, with the management, the annual financial statements and auditor's report thereon before submission to the board for approval, with particular reference to:
  - Matters required to be included in the Director's Responsibility Statement to be included in the Board's Report in terms of clause (c) of sub section (3) of Section 134 of the Companies Act, 2013;
  - Changes, if any, in accounting policies and practices and reasons for the same;
  - Major accounting entries involving estimates based on the exercise of judgment by management;
  - Significant adjustments made in the financial statements arising out of audit findings;
  - Compliance with listing and other legal requirements relating to financial statements;
  - Disclosure of any related party transactions;
  - Modified opinion(s) in the draft audit report;
- Reviewing, with the management, the quarterly financial statements before submission to the board for approval;
- Reviewing, with the management, the statement of uses / application of funds raised through an issue (public issue, rights issue, preferential issue, etc.), the statement of funds utilized for purposes other than those stated in the offer document / prospectus / notice and the report submitted by the monitoring agency monitoring the utilisation of proceeds of a public or rights issue, and making appropriate recommendations to the board to take up steps in this matter;
- Reviewing and monitoring the auditor's independence and performance, and effectiveness of audit process;
- Approval or any subsequent modification of transactions of the listed entity with related parties;
- Scrutiny of inter-corporate loans and investments;
- Valuation of undertakings or assets of the listed entity, wherever it is necessary;
- Evaluation of internal financial controls and risk management systems;
- Reviewing, with the management, performance of statutory and internal auditors, adequacy of the internal control systems;
- Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit;
- Discussion with internal auditors of any significant findings and follow up there on;
- Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the board;
- Discussion with Statutory Auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern;
- To look into the reasons for substantial defaults in the payment to the depositors, debenture holders, shareholders (in case of non-payment of declared dividends) and creditors;
- To review the functioning of the whistle blower mechanism;
- Approval of appointment of Chief Financial Officer after assessing the qualifications, experience and background, etc. of the candidate;

- (20) Carrying out any other function as is mentioned in the terms of reference of the Audit Committee.
- (21) Reviewing the utilisation of the loans and / or advances from / investments by the Holding Company in the subsidiary exceeding ₹ 100 crore or 10% of the asset size of the subsidiary, whichever is lower including existing loans / advances/ investments existing as on April 01, 2019.
- B. The audit committee reviews the following information:
- (1) Management Discussion and Analysis of financial condition and results of operations;
  - (2) Statement of significant related party transactions (as defined by the audit committee), submitted by management;
  - (3) Management letters / letters of internal control weaknesses issued by the Statutory Auditors;
  - (4) Internal audit reports relating to internal control weaknesses; and
  - (5) The appointment, removal and terms of remuneration of the Chief Internal Auditor;
  - (6) Statement of deviations:
    - (a) Quarterly statement of deviation(s) including report of monitoring agency, if applicable, submitted to Stock Exchange(s) in terms of Regulation 32(1) of the Listing Regulations.
    - (b) Annual statement of funds utilized for purposes other than those stated in the offer document/prospectus/notice in terms of Regulation 32(7) of the Listing Regulations.
4. Review of various measures and initiatives taken by the listed entity for reducing the quantum of unclaimed dividends and ensuring timely receipt of dividend warrants/ annual reports/ statutory notices by the shareholders of the Company.

The following are the members of the Committee:

Mr. K. N. Bhandari	–	Chairman
Mr. M. M. Bhagat	–	Member
Mr. A. K. Agarwala	–	Member

Mr. Anil Malik, Company Secretary, is the Compliance officer and acts as secretary to the Committee.

During the year under review, the Committee met four times i.e on May 16, 2018, August 10, 2018, November 02, 2018 and February 12, 2019 to deliberate on various matters referred above. Details of attendance by Directors for the Committee meetings are as follows:

Name of the Director	No. of Meetings Held	No. of Meetings Attended
Mr. K. N. Bhandari	04	04
Mr. M. M. Bhagat	04	04
Mr. A. K. Agarwala	04	04

The Company's shares are compulsorily traded and delivered in the dematerialised form in all Stock Exchanges. To expedite the transfer in the physical segment, necessary authority has been delegated to certain officers, who are authorised to transfer up to 10,000 shares under one transfer deed.

#### **Number of shareholders complaints received so far/number not solved to the satisfaction of shareholders/number of pending complaints**

Details of complaints received, disposed off and pending during the year, number of shares transferred during the year, time taken for affecting these transfers and the number of share transfers pending are furnished in the "Shareholder Information" section of this Annual Report.

## **STAKEHOLDER'S RELATIONSHIP COMMITTEE**

The Company has a "Stakeholder's Relationship Committee" at the Board level to specifically look into various aspects of interests of shareholders, debenture holders and other security holders.

The role of the committee is to specifically look into various aspects of interest of shareholders, debenture holders and other security holders including:

1. Resolving the grievances of the security holder of the Company including complaints related to transfer/transmission of shares, non-receipt of Annual Reports non-receipts of declared dividends issue of new/duplicate Certificate, General Meetings etc.
2. Review of measures taken for effective exercise of voting rights by shareholders.
3. Review of adherence to service standards adopted by the Company in respect of various services being rendered by the Company as a Share transfer agent.

## **NOMINATION AND REMUNERATION COMMITTEE**

The Board has formed a Nomination and Remuneration Committee consisting of the following members:

Mr. M. M. Bhagat	–	Chairman
Mr. Kumar Mangalam Birla	–	Member
Mr. K. N. Bhandari	–	Member

As per Section 178 of Companies Act, 2013 and Regulation 19 of Listing Regulations, the terms of reference are as follows:

- Identify persons who are qualified to become Directors and who may be appointed in Senior Management

## CORPORATE GOVERNANCE REPORT

and recommend to the Board their appointment and removal.

- Formulation of criteria for evaluation of performance of Independent Directors and the Board.
- Carry out evaluation of every Director's performance.
- Formulate the criteria for determining qualifications, positive attributes and independence of a Director.
- Recommend to the Board a policy, relating to the remuneration for the Directors, Key Managerial Personnel and other employees.
- Devise a policy on Board diversity.
- Whether to extend or continue the term of appointment of Independent Director on the basis of report of performance evaluation of Independent Director.

The scope and functions of the Committee is in accordance with the provisions of the Companies Act, 2013 and Listing Regulations.

During the year under review, the Committee met thrice i.e on May 16, 2018, July 11, 2018 and September 21, 2018 to deliberate on various matters referred above. The details of attendance of the members is as below:

Name of the Director	No. of Meetings Held	No. of Meetings Attended
Mr. M. M. Bhagat	03	02
Mr. Kumar Mangalam Birla	03	02
Mr. K. N. Bhandari	03	03

### CORPORATE SOCIAL RESPONSIBILITY COMMITTEE (CSR)

The Corporate Social Responsibility Committee comprises of the following members:

Mrs. Rajashree Birla	–	Chairman
Mr. Satish Pai	–	Member
Mr. A.K. Agarwala	–	Member
Mr.D. Bhattacharya	–	Member
Mr. Y. P. Dandiwala	–	Member*

\* Mr. Y. P. Dandiwala is inducted as member w.e.f. May 16, 2018

Dr. Pragnya Ram, Group Executive President- Corporate Communications and CSR is a permanent invitee to the Committee.

The terms of reference of Corporate Social Responsibility Committee broadly comprises of following:

- Formulate and Recommendation of CSR Policy to the Board indicating the activities to be undertaken by the Company as specified in Schedule VII of Companies Act, 2013.

- Recommend the amount of expenditure to be incurred on the activities referred to in clause(a).
- Provide guidance on various CSR activities to be undertaken by the Company and to monitor its progress.

During the year under review, the Committee met once i.e. on May 07, 2018 to deliberate on various matters referred above. The details of attendance of the members is as below:

Name of the Director	No. of Meetings Held	No. of Meetings Attended
Mrs. Rajashree Birla	01	01
Mr. A. K. Agarwala	01	01
Mr. D. Bhattacharya	01	-
Mr. Y. P. Dandiwala*	-	-
Mr. Satish Pai	01	-

\*Mr. Y. P. Dandiwala is inducted as member w.e.f May 16, 2018

### RISK MANAGEMENT COMMITTEE

The Company has a robust risk management framework to identify, monitor and minimise risk as also identify business responsibilities.

Your Company has comprehensive Risk Management Policy. The following are the Members of Risk Management Committee:

• Mr. A.K. Agarwala	–	Chairman
• Mr. Satish Pai	–	Member
• Mr. D. Bhattacharya	–	Member
• Mr. Praveen Kumar Maheshwari	–	Member
• Mr. Vikram Sondhi	–	Member
• Mr. Anil Mathew	–	Member
• Mr. Jagdish Chandra Laddha	–	Member

Mr. Anil Malik, Company Secretary is Compliance Officer of the Risk Management and also acts as Secretary to the Committee.

During the year under review, the Committee met four times i.e on April 16, 2018, July 09, 2018, September 28, 2018 and January 07, 2019 to deliberate on various matters. Details of attendance by Directors for the Committee meetings are as follows:

Name of the Director / member	No. of Meetings Held	No. of Meetings Attended
Mr. A. K. Agarwala	04	04
Mr. Satish Pai	04	04
Mr. D. Bhattacharya	04	04
Mr. Praveen Kumar Maheshwari	04	04
Mr. Vikram Sondhi	04	04
Mr. Anil Mathew	04	04
Mr. Jagdish Chandra Laddha	04	03

## Non-Executive Director's Compensation and Disclosure

All fees/compensation including sitting fee paid to the Non-Executive Directors of the Company are fixed by Board of Directors within the limits approved by the shareholders. Details of sitting fees/compensation paid including stock options, if any, to them are given at the respective places in the report.

### Remuneration of Directors and Others

Your Company has two Executive Directors, the Board of Directors decides the remuneration of the Managing Director and Whole-Time Director on the recommendation of Nomination and Remuneration Committee.

The Company has a system where all the Directors or Senior Management of the Company are required to disclose all pecuniary relationship or transactions with the Company. There were no pecuniary relationships or transactions between your Company and Non-Executive Director during the year.

Besides sitting fees ₹ 50,000/- per meeting of the Board, ₹ 25,000/- per meeting of the Audit Committee and ₹ 20,000/- per meeting for any other Committee thereof, the Company also pays Commission to the Non-Executive Directors.

For FY 2018-19, the Board has approved payment of ₹ 4.50 crores (previous year ₹ 6.0 crores) as Commission to the Non-Executive Directors of the Company pursuant to the authority given by the shareholders at the Annual General Meeting held on September 24, 2014 to pay Commission not exceeding 1% of the net profits of the Company to the Non Executive Directors of the Company. The amount of commission payable is determined after assigning weightage to attendance and the type of meeting and other responsibilities.

Executive Directors are paid remuneration within the limits envisaged under Section 147, Schedule V of Companies Act, 2013. The said remuneration is approved by the Board as well as shareholders of the Company.

### The details of Remuneration package, fees paid etc. to Directors for the year ended March 31, 2019:

#### (a) Non-Executive Directors:

Name of Director	Sitting Fees Paid	Commission payable	Total Payments Paid / Payable in 2018-19
	(₹ In Lakhs)	(₹ in Lakhs)	(₹ in Lakhs)
Mr. Kumar Mangalam Birla <sup>1 2</sup>	2.90	360.60	363.50
Mrs. Rajashree Birla <sup>2</sup>	2.20	12.00	14.20
Mr. A. K. Agarwala	6.10	8.84	14.94
Mr. D. Bhattacharya <sup>6</sup>	5.10	7.58	12.68
Mr. M. M. Bhagat	6.00	14.35	20.35
Mr. K. N. Bhandari	5.90	15.98	21.88
Mr. Ram Charan	0.50	6.29	6.79
Mrs. Alka Bharucha	1.50	5.23	6.73
Mr. Y. P. Dandiwala	3.75	12.23	15.98
Mr. Girish Dave	3.50	6.90	10.40

#### Notes:

- Mr. Kumar Mangalam Birla assumed the role of Executive Chairman of Aditya Birla Management Corporation Private Limited w.e.f. January 01, 2019. Accordingly he would not like to receive any commission from your Company w.e.f. January 01, 2019.
- No Director is related to any other Director on the Board, except Mr. Kumar Mangalam Birla and Mrs. Rajashree Birla, who are son and mother respectively.
- Your Company has a policy of not advancing any loan to its Directors except to Executive Director in the course of normal employment.
- The Company has obtained shareholders' approval for payment of commission to its Non-Executive Directors & Independent Directors, not exceeding 1% of Net Profit of the Company.
- Stock Options were not granted to any Non-Executive Directors.
- In addition to above, the Board approved pension of Mr. D. Bhattacharya of ₹ 0.335 crore per month, hence he has been paid ₹ 4.02 crore as pension and ₹ 0.02 crore towards reimbursement of medical expenses for his past service as Managing Director.

## CORPORATE GOVERNANCE REPORT

**(b) Paid to Executive Directors**

Executive Director	Relationship with other Directors	Remuneration for the year 2018-19			
		All elements of remuneration package i.e., salary, benefits, bonuses, pension etc.	Fixed component & performance linked incentives, along with performance criteria	Service contracts, notice period, severance fee	Stock option details, if any
Mr. Satish Pai (Managing Director) See Note (a), (f)	None	₹ 205,008,579	₹ 82,142,000	See Note (b)	See Note (c)
Mr. Praveen Kumar Maheshwari (Whole-Time Director) See Note (e), (f)	None	₹ 30,782,517	₹ 11,956,416	See Note (b)	See note (d)

(a) Mr. Satish Pai Managing Director was paid a sum of ₹ 82,142,000 towards performance bonus linked to achievement of targets.

(b) The appointment is subject to termination by three months notice in writing on either side. No severance fee is payable to the Managing Director or Whole-Time Director.

(c) 782,609 Stock Options were granted on October 09, 2013 to Mr. Satish Pai. These Stock Options are vested 25% each year over a period of 4 years from the date of grant. In addition, he has been granted 956,522 Stock Appreciation Rights (SARs). Mr. Pai has exercised 478,261 SARs and 478,261 SARs are still outstanding. Further, 1,985,292 Stock Options and 466,805 Restricted Stock Units RSUs has been granted during the current financial year.

(d) 55,630 Stock Options were granted on October 09, 2013 to Mr. Praveen Kumar Maheshwari. These Stock Options are vested 25% each year over a period of 4 years from the date of grant. Mr. Praveen Kumar Maheshwari was also granted 55,667 RSU on October 09, 2013 which are vested after expiry of 3 years from the date of grant. Further, 119,116 Stock Options and 28,008 RSUs has been granted during the current financial year.

(e) Mr. Praveen Kumar Maheshwari was paid a sum of ₹ 11,956,416 towards performance bonus linked to achievement of targets.

(f) Remuneration excludes amortization of fair value of employee share based payments under Ind AS 102 and provision for gratuity and leave encashment recognised on the basis of actuarial valuation as separate figures are not available.

All Directors have disclosed their shareholding in the Company. None of the Directors are holding any debentures or any other convertibles of the Company. Details of shareholding of Directors as on March 31, 2019 are as follows:

NAME OF THE DIRECTORS	SHARES (₹1 paid up)
Mr. Kumar Mangalam Birla*	901,635
Mrs. Rajashree Birla	612,470
Mr. A. K. Agarwala	116,148
Mr. D. Bhattacharya	1,571,937
Mr. M. M. Bhagat	4,100
Mr. K. N. Bhandari	5,071
Mr. Y. P. Dandiwala	206
Mr. Ram Charan	NIL
Mrs. Alka Bharucha	NIL
Mr. Girish Dave	NIL
Mr. Satish Pai	30,000
Mr. Praveen Kumar Maheshwari	NIL

\*Additionally he holds 648,632 equity shares as Karta of Aditya Vikram Kumar Mangalam Birla HUF.

**Code of Conduct**

The Hindalco Code of Conduct, as adopted by the Board of Directors, is applicable to all Directors, Senior Management of the Company. The Code is available on the Company's website viz: <http://www.hindalco.com/investor-centre/code-of-conduct>.

For the year under review, all Directors and Senior Management personnel of the Company have confirmed their adherence to the provisions of the said Code.

Declaration as required under Regulation 26(3) of the Listing Regulations.

We hereby confirm that:

All Directors and Senior Management have affirmed compliance with Code of Conduct for the financial year ended March 31, 2019.

**Satish Pai**

Date : May 16, 2019  
Place: Mumbai

Managing Director  
[DIN: 06646758]

**CODE OF CONDUCT FOR PREVENTION OF INSIDER TRADING**

In terms of the provisions of the Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015, as amended, your Company has adopted a 'Code of Conduct to regulate, monitor and report trading by designated persons in listed or proposed to be listed securities' of your Company ("the Code"). The Code aims at preserving and preventing misuse of unpublished price sensitive information. All Designated Persons (including Directors, Key Managerial Personnel and Employees) of your Company are covered under the Code, which provides inter

alia for periodical disclosures and obtaining pre-clearances for trading in securities of your Company.

## SUBSIDIARY COMPANIES

The Company has adopted a policy for determining 'material' subsidiaries and the policy can be accessed on your Company's website viz: [www.hindalco.com](http://www.hindalco.com). The Company is in compliance with the requirements of Regulation 24 of Listing Regulations with respective Corporate Governance for its subsidiary companies.

## DISCLOSURES

### (A) Related Party Transaction

All the related party transactions are strictly done on arm's length basis. The Company places all the relevant details of a related party transaction, entered in the normal course of business, before the Audit Committee from time to time. There was no material related party transaction, which are not in the normal course of the business, entered into by the Company during the year. Attention of the Members is drawn to the disclosures of transactions with the related parties set out in Notes to Accounts forming part of the Financial Statements. The Board of Directors have approved and adopted a policy on Related Party Transactions and the same has been uploaded on the website of the Company at <http://www.hindalco.com/investor-centre/policies>.

### (B) Non Compliances/Strictures/penalties Imposed

No Non Compliance/strictures/penalties have been imposed on the Company by Stock Exchange(s) or SEBI or any Statutory Authority on any matters related to capital markets during the last three years.

### (C) Disclosure of Accounting Treatment

Your Company has followed all relevant Accounting Standards while preparing the Financial Statements.

### (D) Risk Management

Risk evaluation and management is an ongoing process within the organisation. Your Company has comprehensive Risk Management Policy and it is periodically reviewed by the Board of Directors.

### (E) Proceeds from public issues, right issues, preferential issues etc:

During the year under review, the Company has not raised any proceeds from public issues, right issues or preferential issues.

### (F) Remuneration of Directors

This is included separately in this Section.

### (G) Management

Management Discussion and Analysis Report is prepared in accordance with the requirements laid out under Listing Regulations forms part of this Annual Report.

No material transaction has been entered into by the Company with the Promoters, Directors or the Management, their subsidiaries or relatives, etc., that may have a potential conflict with interests of the Company.

### (H) Shareholders

(i) The Company has provided the details of Directors seeking appointment/re-appointment in the Annual General Meeting Notice attached with this Annual Report.

(ii) Quarterly Presentations on the Company results are available on the website of the Company ([www.hindalco.com](http://www.hindalco.com)) and the Aditya Birla Group website ([www.adityabirla.com](http://www.adityabirla.com)).

### (I) Details of total fees paid to Statutory Auditor

During the FY 2018-19, the total fees charged for audit and non-audit services provided by Price Waterhouse & Co Chartered Accountants LLP (FRN 304026E/E300009) and other PricewaterhouseCoopers global network of firms to the Company and its subsidiaries on a consolidated basis is as follows:

Engagements	₹ in Crore	
	Price Waterhouse & Co Chartered Accountants LLP*	Other PricewaterhouseCoopers global network of firms**
Statutory Audit and Limited Review	3.11	42.91
Other audit related services	0.17	0.46
Tax compliance and advisory services	-	3.25
Other non-audit services- Certifications	0.32	1.03
<b>Total</b>	<b>3.60</b>	<b>47.65</b>

\*Excluding taxes and out of pocket Expenses

\*\*Excluding taxes

### Whistle Blower Policy

The Company promotes ethical behaviour in all its business activities and has put in place a mechanism for reporting illegal and unethical behaviour. The Company has a Vigil Mechanism and Whistle Blower Policy under which employees are free to report violations of applicable laws and regulations and Code of Conduct. The whistle blower may send the complaint to the independent reporting mechanism - Ethics Hotline or to the respective Values Standards Committee (VSC), depending on the level at which the violation is perceived to be happening, or the seniority of the individual/s involved. Employees may also report to the Chairman of the Audit Committee. During the

## CORPORATE GOVERNANCE REPORT

year under review, no employee was denied access to the Audit Committee.

### Prevention of Sexual Harassment

Your Company has zero tolerance for sexual harassment at workplace and has adopted a Policy on prevention, prohibition and redressal of sexual harassment at workplace in line with the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the Rules thereunder for prevention and redressal of complaints of sexual harassment at workplace.

The Company is committed to providing equal opportunities without regard to their race, caste, sex, religion, colour, nationality, disability etc. All women associates (permanent, temporary, contractual and trainees) as well as any women visiting the Company's office premises or women service providers are covered under this policy. All employees are treated with dignity with a view to maintain a work environment free of sexual harassment whether physical, verbal or psychological.

The Details of complaints filed, disposed and pending during the FY 2018-19 is as given below:

Number of complaints filed during the financial year	Number of complaints disposed of during the financial year	Number of complaints pending as at end of the financial year
6	4	2*

\*These cases are disposed in the month of April 2019.

### CEO/CFO Certification

The Managing Director and CFO have certified to the Board that:

- A. They have reviewed Financial Statements and the Cash Flow Statement for the year and that to the best of their knowledge and belief:
  1. these statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;
  2. these statements together present a true and fair view of the Company's affairs and are in compliance with existing Accounting Standards, applicable laws and regulations.
- B. There are, to the best of their knowledge and belief, no transactions entered into by the Company during the year which are fraudulent, illegal or violative of the Company's code of conduct.
- C. They accept responsibility for establishing and maintaining internal controls for financial reporting and that they have evaluated the effectiveness of internal control systems of the Company pertaining to financial reporting and they have disclosed to the Auditors and the Audit Committee, deficiencies in the design or operation of such internal controls, if any, of which they

are aware and the steps they have taken or propose to take to rectify these deficiencies.

D. They have indicated to the Auditors and the Audit Committee:

1. that there were no significant changes in internal control over financial reporting during the year;
2. that there were no significant changes in accounting policies during the year and that the same have been disclosed in the notes to the Financial Statements; and
3. instances of significant fraud of which they have become aware and the involvement therein, if any, of the management or an employee having a significant role in the Company's internal control system over financial reporting.

## REPORT ON CORPORATE GOVERNANCE

Your Company has complied with Corporate Governance requirements specified under Regulations 17 to 27 and clause (b) to (i) of sub regulation (2) of Regulation 46 of the Listing Regulations.

## COMPLIANCE

- I. A certificate from the Statutory Auditors confirming compliance with the conditions of Corporate Governance as stipulated in Listing Regulations forms part of Annual Report.
- II. A Certificate by Company Secretary in practice that none of the directors have been debarred or disqualified from being appointed for continuing as directors in the companies by the Board/Ministry of Corporate Affairs or any such statutory authority forms part of Annual Report As below:-

## CERTIFICATE

**Pursuant to Regulation 34(3) and Schedule V Para C clause (10)(i) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 ("SEBI Listing Regulations")**

To

The Members  
Hindalco Industries Limited  
Ahura Centre, 1<sup>st</sup> Floor,  
B Wing Mahakali Caves Road,  
Mumbai – 400093

We have examined the relevant books, papers, minutes books, forms and returns filed, notices received from the Directors during the FY 2018-19, and other records



maintained by the Company and also the information provided by the Company, its officers, agents and authorised representatives of Hindalco Industries Limited CIN.: L27020MH1958PLC011238 (hereinafter called the 'Company') having its Registered office at Ahura Centre, 1st Floor, B Wing Mahakali Caves Road, Mumbai – 400093 for the purpose of issue of a Certificate, in accordance with Regulation 34 (3) read with Schedule V Para-C sub clause 10 (i) of the Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) 2015 (LODR), as amended vide notification no [SEBI/LAD/NRO/GN/2018/10 dated May 9, 2018 issued by SEBI.

In our opinion and to the best of our knowledge and based on such examination as well as information and explanations furnished to us, which to the best of our knowledge and belief were necessary for the purpose of issue of this certificate and based on such verification as considered necessary, we hereby certify that none of the Directors stated below who are on the Board of the Company as on March 31, 2019 have been debarred or disqualified from being appointed or continuing as Directors of the Companies by Securities Exchange Board of India or The Ministry of Corporate Affairs or any such other statutory authority.

S. No.	Name of the Director	DIN	Date of Appointment in the Company
1	Kumar Mangalam Birla	00012813	16/11/1992
2	Rajashree Birla	00022995	15/03/1996
3	Aksaran Agarwala	00023684	11/09/1998
4	Debnarayan Bhattacharya	00033553	01/10/2008
5	Madhukar Manilal Bhagat	00006245	15/03/1996
6	Kailash Nath Bhandari	00026078	30/01/2006
7	Girish Mohanlal Dave	00036455	28/05/2016
8	Alka Marezban Bharucha	00114067	11/07/2018
9	Yazdi Piroj Dandiwala	01055000	14/08/2015
10	Ram Charan	03464530	12/02/2011
11	Satish Pai	06646758	13/08/2013
12	Praveen Kumar Maheshwari	00174361	28/05/2016

We further state that such compliance is neither an assurance as to the future viability of the Company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company.

**For BNP & Associates  
Company Secretaries**

**Mr. Avinash Bagul**

Partner

(FCS No. 5578 COP No. 19862)

Place : Mumbai

Dated : May 09, 2019

## GENERAL BODY MEETINGS

Details of Annual General Meetings

Location and time, where Annual General Meetings (AGMs) in the last three years were held:-

Year	AGM	Location	Date	Time
2017-18	AGM	Ravindra Natya Mandir	September 21, 2018	3.00 p.m
2016-17	AGM	Ravindra Natya Mandir	September 13, 2017	3.00 p.m
2015-16	AGM	Ravindra Natya Mandir	September 14, 2016	3.00 p.m

In the last three years special resolution as set out in the respective notices for AGM's were passed by shareholders.

Whether any special resolution passed last year through postal ballot? No

Person who conducted the postal exercise: Not Applicable

Whether any special resolution is proposed to be conducted through postal ballot: No

## MEANS OF COMMUNICATION

- Quarterly Results:

Newspaper	Cities of Publication
Business Standard (English)	All editions
Navshakti (Marathi)	Mumbai Edition only

- Any website, where displayed:  
www.hindalco.com  
www.adityabirla.com

- Whether the Company Website displays:

All official news releases	Yes
Presentation made to Institutional Investors/ Analysts	Yes

## General Shareholder Information

The same is provided in the 'Shareholder Information' section.

## Status of compliance of Non mandatory requirement

- The Company maintains a separate office for the Non-Executive Chairman. All necessary infrastructure and assistance are available to enable him discharge his responsibilities effectively.
- During the period under review, there is no audit qualification in the financial statement.
- The post of the Non-Executive Chairman of the Board is separate from that of the Managing Director/CEO.
- The Company has engaged internal auditors for aluminium and copper business separately and their report is reviewed by the Audit Committee.

## CORPORATE GOVERNANCE REPORT

### Auditor's Certificate Regarding Compliance of Conditions of Corporate Governance

#### To the Members of Hindalco Industries Limited

We have examined the compliance of conditions of Corporate Governance by Hindalco Industries Limited ("the Company"), for the year ended March 31, 2019 as stipulated in Regulations 17, 18, 19, 20, 21, 22, 23, 24, 24A, 25, 26, 27 and clauses (b) to (i) of sub-regulation (2) of regulation 46 and para C, D and E of Schedule V of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (as amended) (collectively referred to as "SEBI Listing Regulations, 2015").

The compliance of conditions of Corporate Governance is the responsibility of the Company's management. Our examination was carried out in accordance with the Guidance Note on Certification of Corporate Governance, issued by the Institute of Chartered Accountants of India and was limited to procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.

In our opinion and to the best of our information and according to the explanations given to us, we certify that the Company has complied with the conditions of Corporate Governance as stipulated in the SEBI Listing Regulations, 2015.

We state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the management has conducted the affairs of the Company.

#### **For Price Waterhouse & Co Chartered Accountants LLP**

Firm Registration No. 304026E/E-300009

**Sumit Seth**

Partner

Place : Mumbai

Date : July 19, 2019

Membership No:105869

UDIN :19105869AAAAAG3592

# SHAREHOLDER INFORMATION

## 1. Annual General Meeting

- Date and Time : August 30, 2019 at 03:00 p.m.
- Venue : Nehru Centre, Dr Annie Besant Road, Lotus Colony, Worli, Mumbai - 400018

## 2. Financial Year

- Financial reporting for the quarter ending June 30, 2019 : On or before August 14, 2019
- Financial reporting for the half year ending September 30, 2019 : On or before November 14, 2019
- Financial reporting for the quarter ending December 31, 2019 : On or before February 14, 2020
- Financial reporting for the year ending March 31, 2020 (Audited) : On or before May 30, 2020
- Annual General Meeting for the year ended March 31, 2020 : On or before August 31, 2020

## 3. Date of Book Closure

: August 17, 2019 to August 30, 2019 (both days inclusive)

## 4. Dividend Payment Date

: On or After August 30, 2019

## 5. Registered Office

: Ahura Centre, 1<sup>st</sup> Floor,  
B Wing, Mahakali Caves Road  
Andheri (East), Mumbai - 400 093.  
Tel: (91-22) 66917000  
Fax: (91-22) 66917001  
E-Mail: hilinvestors@adityabirla.com  
Website: www.adityabirla.com  
CIN No. L27020MH1958PLC011238

## 6. a Listing Details:

Equity Shares	Global Depository Receipts (GDRs)	Non-Convertible Debentures
<b>BSE Limited</b> Phiroze Jeejeebhoy Towers Dalal Street, Mumbai – 400 001.	<b>Luxembourg Stock Exchange</b> 35 A Boulevard Joseph II L-1840 Luxembourg	<b>National Stock Exchange of India Limited</b> “Exchange Plaza”, Bandra Kurla Complex Bandra (East), Mumbai – 400 051.
<b>National Stock Exchange of India Limited</b> “Exchange Plaza”, Bandra Kurla Complex Bandra (East), Mumbai – 400 051.		

*Note: Listing fees has been paid to all the Stock Exchanges as per their Schedule.*

## b Overseas Depository for GDRs

: J. P. Morgan Chase Bank N.A.  
P.O. Box 64504, St. Paul, MN 55164-0504  
jpmorgan.adr@eq-us.com

## c Domestic Custodian of GDRs

: Citibank N.A.  
Custody Services  
FIFC , 11<sup>th</sup> Floor, C-54 & 55, G Block, Bandra Kurla Complex,  
Bandra (East), Mumbai – 400 051  
Tel.: 91-22-61756895  
Fax: 91-22-26532205

## 7. ISIN

: Fully paid up equity share: ISIN INE038A01020  
GDR: ISIN US4330641022  
CUSIP No. 433064300

## SHAREHOLDER INFORMATION

### 8. Details of Debenture issued

Interest Payment Date	Interest	Series	Date of allotment	Tenure	Record Date	ISIN No.
April 25	Annually	9.55% Series (2012)-I	April 25, 2012	10 Years	7 days prior to each interest and/or redemption payment	INE038A07258
June 27	Annually	9.55% Series (2012)-II	June 27, 2012	10 Years	7 days prior to each interest and/or redemption payment	INE038A07266
August 02	Annually	9.60% Series (2012)-III	August 02, 2012	10 Years	7 days prior to each interest and/or redemption payment	INE038A07274

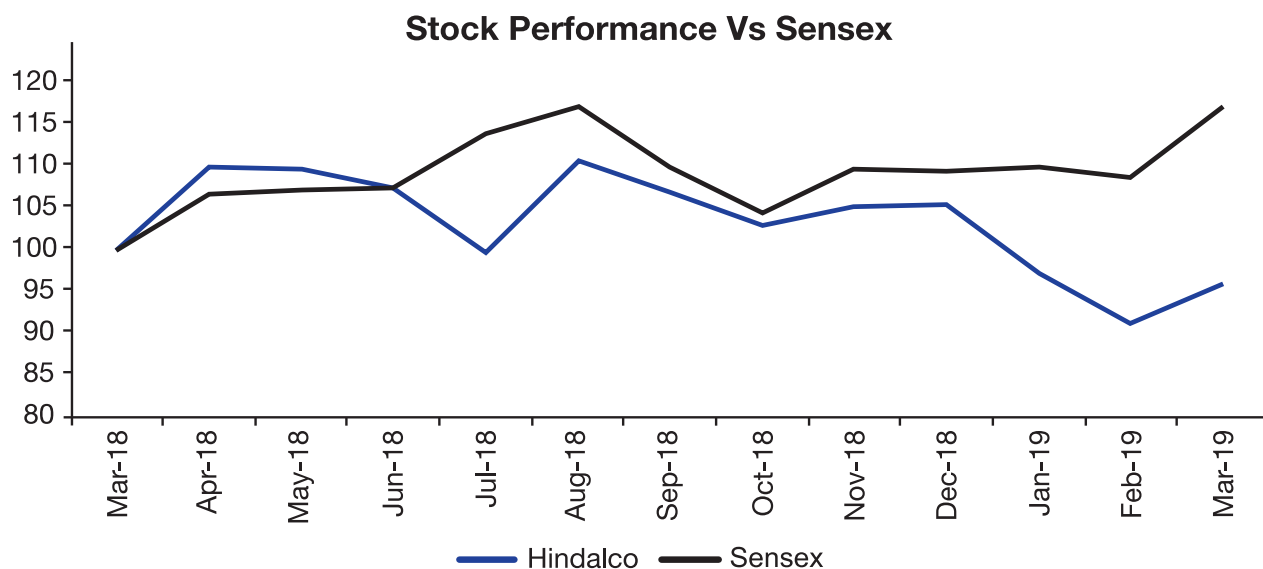
### 9. Stock Code

Stock Code:	Scrip Code	
Bombay Stock Exchange	500440	
National Stock Exchange	HINDALCO	
Stock Exchange	Reuters	Bloomberg
Bombay Stock Exchange	HALC.BO	HNDL IN
National Stock Exchange	HALC.NS	NHNDL IN
Luxembourg Stock Exchange (GDRs)	HALCg.LU	HDCD LI
<b>Name and Address of Debenture Trustee</b>	: IDBI Trusteeship Services Limited Asian Building, Ground Floor, 17 R. Kamani Marg Ballard Estate, Mumbai: 400 001	

### 10. Stock Price Data

	Bombay Stock Exchange				National Stock Exchange				Luxembourg Stock Exchange		
	High	Low	Close	Volume	High	Low	Close	Volume	High	Low	Close
	(In ₹)			(In Nos)	(In ₹)			(In Nos)	In US\$		
March-19	211.25	192.30	205.35	6,774,170	211.55	193.60	205.50	148,021,893	3.040	2.760	2.960
February-19	212.70	182.55	195.55	6,460,162	212.65	182.20	195.75	164,228,808	2.960	2.260	2.760
January-19	226.90	197.50	208.45	8,181,496	225.75	197.45	208.50	181,904,223	3.060	2.340	2.920
December-18	237.70	211.75	226.10	6,972,278	237.90	211.45	226.20	153,291,429	3.320	2.980	3.260
November-18	246.00	213.60	225.45	10,823,630	245.30	213.25	226.20	183,964,922	3.400	3.060	3.240
October-18	259.70	205.80	220.55	10,837,075	259.75	210.70	220.40	228,222,448	3.460	2.920	2.980
September-18	250.70	224.60	229.00	7,958,347	250.80	224.00	229.65	183,290,491	3.420	2.925	3.160
August-18	243.00	203.40	237.40	11,178,829	243.00	203.25	237.95	2,42,929,819	3.383	2.985	3.323
July-18	233.70	192.50	213.40	14,525,713	231.10	192.35	213.40	266,904,622	3.323	2.806	3.104
June-18	255.00	216.40	230.40	8,016,911	255.50	216.15	230.50	161,940,161	3.682	3.164	3.343
May-18	248.35	224.50	235.10	20,885,328	248.35	224.35	234.20	213,140,304	3.602	3.085	3.463
April-18	267.35	200.00	235.70	23,340,093	267.80	200.00	235.65	372,516,227	4.000	3.065	3.522

## 11. Stock Performance



## 12. Stock Performance over the past few years

	Absolute Returns (in %)		
	1YR	3YR	5YR
HINDALCO*	-4.20	133.70	45.00
SENSEX	17.30	52.60	72.80
NIFTY	14.90	50.20	73.40

	Annualised Returns (in %)		
	1YR	3YR	5YR
HINDALCO*	-4.20	32.70	7.70
SENSEX	17.30	15.10	11.60
NIFTY	14.90	14.50	11.60

\*Based on National Stock Exchange of India Limited (NSE) price data

## 13. Registrar and Transfer Agents

The Company has In-house Investors Service Department registered with SEBI as Category II Share Transfer Agent vide Registration No. INR 000003910.

### Investors Service Department

Hindalco Industries Limited  
 Ahura Centre, 1<sup>st</sup> floor,  
 B Wing, Mahakali Caves Road  
 Andheri (East), Mumbai-400 093.  
 Tel: (91-22) 6691 7000, Fax: (91-22) 6691 7001  
 E-mail: hilinvestors@adityabirla.com

## 14. Share Transfer System

Share transfer in physical form are registered and returned within a period of 15 days of receipt, provided the documents are clear in all respects. Officers of the Company have been authorized to approve transfers up to 10,000 Shares in physical form under one transfer deed and one Director of the Company has been authorized to approve the transfers exceeding 10,000 shares under one transfer deed.

The total number of shares transferred in the physical form during the year was 580,812.

## SHAREHOLDER INFORMATION

2018-19			
Transfer period (in days)	Number of Transfers	%	Number of Shares
1-10	1,111	97.46	555,446
11-15	27	2.37	23,246
15 and above	2	0.17	2,120
<b>Total</b>	<b>1,140</b>	<b>100</b>	<b>580,812</b>

### 15. Investor Services

a. Complaints received during the year:

Nature of complaints	2018-19		2017-18	
	Received	Cleared	Received	Cleared
Relating to Transfers, Transmissions				
Dividend, Interest, Redemption, Demat – Remat, Rights Issue and Change of Address etc.	23	23	22	22

b. Shares pending for transfer : Nil

### 16. Distribution of Shareholding as on 31<sup>st</sup> March

Number of equity Share held	2019			
	Number of Share Holders	% of Share Holders	Number of Shares held	% Share Holding
1-1000	284,407	93.45	41,597,845	1.85
1001-2000	8,742	2.87	12,868,022	0.57
2001-5000	6,297	2.07	20,058,850	0.89
5001-10000	2,359	0.78	16,797,927	0.75
10001-50000	1,690	0.56	34,004,851	1.51
50001-100000	218	0.07	15,483,775	0.69
100001 and above	632	0.21	2,104,718,975	93.73
<b>Total</b>	<b>304,345</b>	<b>100.00</b>	<b>2,245,530,245</b>	<b>100.00</b>

### 17. Dematerialisation of Shares and Liquidity

Around 98% of outstanding shares have been dematerialised. Trading in Hindalco shares is permitted only in the dematerialized form from April 05, 1999 as per notification issued by the Securities and Exchange Board of India.

**18. Details on use of public funds obtained in 3 yrs:** Not Applicable

**19. Outstanding GDR/Warrants/Convertible Bonds:**

138,203,847 GDRs are outstanding as on March 31, 2019. Each GDR represents one underlying equity share.

**20. Commodity price risk or foreign exchange risk and hedging activities:**

Your Company hedges its foreign currency exposure in respect of its imports and exports as per its policies. Your Company has constituted a Risk Management Committee consisting of Directors/Executives of your Company. Your Company has commodity/foreign exchange hedging from time to time considering various factors as per the policy of the Company.

The details as required under Listing Regulations, is as below:

1. Risk management policy of the listed entity with respect to commodities including through hedging. The Company has a Risk Management Policy for Managing its Commodity Price Risk. The Policy captures the objectives of Commodity Risk Management and the Treatment of Different Types of Exposures. The Policy lists down the Hedging Instruments that can be used, the Hedge Coverage ratios for different tenors and also mentions the Risk Management Structure at the Company.
2. Exposure of the Company to commodity and commodity risks faced by the Company throughout the year:
  - a. Total exposure of the Company to commodities in INR in Millions: 607,460
  - b. Exposure of the entity to various commodities is as below:

Commodity Name	Nature of risk (Physical)	UOM	Exposure in INR towards the particular commodity (₹ In Million)	Exposure in Quantity terms towards the particular commodity	Percentage of such exposure hedged through commodity derivatives				Total
					Domestic Market		International Market		
					OTC	Exchange	OTC	Exchange	
Aluminum	Sell	MT	2,10,896	1,278,882	-	-	13	28	41
Furnace Oil/LSHS/LDO	Buy	MT	7,756	208,052	-	-	14	-	14
Imported Coal	Buy	MT	2,872	354,644	-	-	-	-	-
Copper	Buy	MT	1,46,615	361,464	-	-	-	32	32
Copper	Sell	MT	1,70,650	358,977	-	-	-	28	28
Silver (Oz)	Buy	T/Oz	2,796	2,799,792	-	-	78	-	78
Silver (Oz)	Sell	T/Oz	2,740	3,445,691	-	-	82	-	82
Gold (KG)	Buy	KG	28,648	10,293	-	69	29	-	98
Gold (KG)	Sell	KG	34,487	1,126,610,981	-	768	22	-	98,100

**Notes:**

- i. Table above includes Exposure and % Hedges for FY 2018-19 only. Details of hedges done for future years has not been captured here.
  - ii. The table above includes commodities where a liquid derivative market exists.
  - iii. The Company has price risk on commodities where an active derivative market does not exist, like - Caustic Soda, Aluminum Fluoride, CP Coke, Alumina, Bauxite etc. These Commodities are not included in the table above.
  - iv. The Company maintains offset hedge book to eliminate the "pricing" timing mismatch for buy and sell position of Copper. Accordingly, exposure of Copper Buy position and Copper Sell position naturally hedged is 50% and 71% respectively. In case of Copper Buy exposure, 18% is not hedged represents unpriced transactions as at March 31, 2019 as the same will be hedged as per Company's policy. Exposure of Silver buy position and Silver sell position naturally hedged is 21% and 18% respectively. Exposure of Gold buy position and Gold sell position naturally hedged is 2% each. From July 01, 2018 RBI restricted Gold hedging in overseas market, started hedging on domestic exchange.
  - v. The Company has strategic view based exposure for Copper, Gold and Silver. However, the same is not included above as it is a small portion of the overall Copper, Gold & Silver volumes.
- c. The Company faces commodity price risk on purchase of its raw material as well as on sales of its products. The Company categorizes its price risk in broadly 2 categories - Offset Hedge Exposure and Strategic View Based Exposure. Under the Offset Hedge Program, we use derivative products to eliminate the price risk arising due to timing mismatch whereas for Strategic View Based exposure, derivative instruments are used to manage the price risk for future tenor. Hedging is done for commodities where an active derivative market exists.

## SHAREHOLDER INFORMATION

### 21. Location of Plant and Mines

Aluminium & Power		
<b>Renukoot Plant*</b> P.O. Renukoot-231217 Dist. Sonebhadra, Uttar Pradesh Tel: (05446) 252077-9 Fax: (05446) 252107/426	<b>Renusagar Power Division</b> P. O. Renusagar Dist. Sonebhadra, Uttar Pradesh Tel: (05446)277161-3/278592-5 Fax: (05446) 277164	<b>Hirakud Smelter</b> Hirakud 768 016 Dist. Sambalpur, Orissa Tel: (0663) 2481307/1452 Fax: (0663) 2481356
<b>Hirakud Power</b> Post Box No.12 Hirakud 768 016 Dist. Sambalpur, Orissa Tel: (0663) 2481307 Fax: (0663) 2481342/365-2541642	<b>Mahan Aluminium</b> Hindalco Industries Limited NH-75 E, Singrauli, Sidhi Rd, P.O. Bargawan, Pin: 486886 Dist. Singrauli MP Tel: 0780-5281014	<b>Aditya Aluminium</b> Hindalco Industries Limited Lapanga Dist. Sambalpur-768212, Odisha Tel: 0663-2114424 Fax: 0663-2590434
Chemicals		Copper
<b>Muri Alumina</b> Post Chotamuri-835 101 Dist. Ranchi, Jharkhand Tel: (06522) 244253/334 Fax: (06522) 244342	<b>Belagavi</b> Village Yamanapur Belagavi 590 010, Karnataka Tel: (0831) 2472716 Fax: (0831) 2472728	<b>Birla Copper Division</b> P.O. Dahej, Lakhigam Dist. Bharuch – 392 130, Gujarat Tel: (02641) 256004/06, 251009 Fax: (02641) 251002
Sheet, Foil, Wheel, Packaging & Extrusions		
<b>Belur Sheet</b> 39, Grand Trunk Road Belurmath 711 202 Dist. Howrah, West Bengal Tel: (033) 2654 7210/12 Fax: (033) 2654 9982/5740	<b>Taloja Sheet</b> Plot 2, MIDC Industrial Area Taloja A.V., Dist. Raigad Navi Mumbai - 410 208, Maharashtra Tel: (022) 2741 2261 66292929 Fax: (022) 2741 2430/31	<b>Alupuram Extrusions</b> Alupuram, P.B. No.30 Kalamassery - 683 104 Dist. Ernakulam, Kerala Tel: (0484) 2532441-48 Fax: (0484) 2532468
<b>Mouda Unit</b> Village Dahali Ramtek Road, Mouda Nagpur – 441 104 Tel: (07115) 660777/786	<b>Hirakud FRP</b> Hindalco Industries Limited Hirakud-768016 Dist. Sambhalpur, Odisha Tel: (0663) 6625000 Fax: (0663) 2481344	
Mines		
<b>Durgmanwadi Mines</b> At Post Radhanagri Dist. Kolhapur, Maharashtra - 416 212 Tel: (02321) 2371008 Fax: (02321) 237478	<b>Lohardaga Mines</b> Dist. Lohardaga 835 302 Jharkhand Tel/Fax: (06526) 224112	<b>Samri Mines</b> P.O.: Kusumi 497222 Dist. Sarguja, Chattisgarh Tel/Fax: (07778)274325
<b>Gare Palma Coal Mines (IV/4 &amp; IV/5)</b> Underground Coal Mines Village & Post Milupura Tehsil Tamnar, Dist. Raigarh Chhattisgarh: 496107	<b>Dumri Coal Mine</b> 103, Commerce Tower Near Mahavir Tower, Main Road, Ranchi-834001 Tel: (0651) 2330944/48 Fax: (0651)2330782	<b>Kathautia Coal Mine</b> Kathautia Open Cast Coal Mine (Koccm) Village Kathautia P.O. Naudiha PS Pandwa, Dist:Palamau Jharkhand: 822123

\*Renukoot works has also manufacturing facilities of Chemicals, Sheets and Extrusions.



## 22. Investor Correspondence:

The Company Secretary  
Hindalco Industries Limited  
Ahura Centre, 1<sup>st</sup> Floor, B Wing  
Mahakali Caves Road, Andheri (E)  
Mumbai: 400093  
Tel: (91-22) 66917000  
Fax: (91-22) 66917001  
Email: hilinvestors@adityabirla.com

## 23. Categories of Shareholding (as on 31<sup>st</sup> March)

Category of Shareholders	2019				2018			
	Number of Share Holders	% of Share Holders	Number of Shares held	% Share Holding	Number of Share Holders	% of Share Holders	Number of Shares held	% Share Holding
Promoters*	20	0.01	778,339,497	34.66	21	0.00	778,339,497	34.67
Mutual Funds & UTI	194	0.06	297,221,564	13.24	219	0.07	248,872,734	11.09
Banks/ Financial Institutions/Ins/ Govt	94	0.03	204,926,345	9.13	91	0.03	180,486,367	8.04
FII's	653	0.21	531,942,403	23.69	714	0.25	630,636,308	28.09
Corporates	2,312	0.76	112,094,472	4.99	2,400	0.80	86,605,935	3.85
Individuals/Shares In Transit/Trust	294,117	96.64	138,602,513	6.17	289,325	96.60	143,050,131	6.38
NRI's/ OCB's/Foreign Nationals	6,953	2.28	39,727,356	1.77	6,750	2.25	39,672,440	1.76
GDRs	1	0.00	138,203,847	6.15	1	0.00	137,299,490	6.12
Shares held by Employee trust	1	0.00	4,472,248	0.20	-	-	-	-
<b>Total</b>	<b>304,345</b>	<b>100.00</b>	<b>2,245,530,245</b>	<b>100.00</b>	<b>299,521</b>	<b>100</b>	<b>2,244,962,902</b>	<b>100</b>

\*Includes 14,542,309 GDRs held by Promoter Group Companies.

## 24. Per share data

Particulars	2018-19	2017-18	2016-17	2015-16	2014-15
Net Earnings (₹ in Crore)	1,205	1,436	1,557	552	925
Cash Earnings (₹ in Crore) <sup>#</sup>	2,899	3,053	2,985	1,834	1,762
Basic EPS (₹)	5.41	6.45	7.56	(0.64)	4.48
Cash EPS (₹)**	13.01	13.70	14.49	8.95	8.53
Dividend per share (₹)	1.20 <sup>@</sup>	1.20	1.10	1.00	1.00
Dividend pay out (%)***	26.92 <sup>@</sup>	22.58	19.08	41.23	26.59
Book Value per share (₹)	216.24	220.28	211.00	204.16	180.41
Price to earning (x)*	37.99	33.28	25.80	(137.42)	28.83
Price to cash earning (x)*	15.80	15.66	13.46	9.83	15.14
Price to Book Value (x)*	0.95	0.97	0.92	0.43	0.72

<sup>#</sup>Net Earnings plus Depreciation and Amortisation

<sup>@</sup>Proposed dividend

\*Stock Prices as on March 31

\*\*Cash EPS-Cash Earnings divided by Weighted Average number of Equity Shares used in computing basic EPS

\*\*\*Dividend includes Dividend Distribution Tax

## SHAREHOLDER INFORMATION

### 25. LIST OF CREDIT RATINGS

CARE Ratings have provided the following ratings for the FY 2018-19

Instrument	Rating	Rating Action
Long Term Bank facilities – Term Loan	CARE AA+; Stable (Double A Plus; Outlook: Stable)	Reaffirmed
Long Term Bank facilities – Fund based	CARE AA+; Stable (Double A Plus; Outlook: Stable)	Reaffirmed
Long Term/ Short Term Bank facilities – Non-Fund based (Double A Plus; Outlook: Stable/ A One Plus)	CARE AA+; Stable/CARE A1+	Reaffirmed
Short term Bank Facilities – Term Loan	CARE A1+ (A One Plus)	Assigned

CRISIL have reaffirmed their ratings as 'CRISIL AA/POSITIVE" (pronounced as CRISIL double A rating with positive outlook) rating on the Non-convertible debentures.

### 26. OTHER USEFUL INFORMATION FOR SHAREHOLDERS

Shareholders who have not yet encashed their dividend warrants for the years 2011-2012 to 2017-2018 may approach to the Company with a request letter quoting their Ledger Folio numbers / DP & Client ID along with dividend warrant(s) (if any) and a cancelled cheque leaf for revalidation/claim.

The details of dividend paid by the Company and the respective due dates of transfer of unclaimed/un-encashed dividend to the designated fund of the Central Government is given as below:

Date of Declaration	Financial Year of Dividend	Due date of transfer to the Government	Amount in ₹
September 11, 2012	2011-12	October 10, 2019	7,372,057.30
September 10, 2013	2012-13	October 10, 2020	6,736,023.00
September 24, 2014	2013-14	October 24, 2021	5,000,286.00
September 16, 2015	2014-15	October 16, 2022	6,013,285.49
September 14, 2016	2015-16	October 14, 2023	6,060,955.00
September 13, 2017	2016-17	October 13, 2024	7,141,911.90
September 21, 2018	2017-18	October 21, 2025	7,593,450.00

Pursuant to the provisions of Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Rules 2016 read with Investor Education and Protection Fund Authority (Accounting, Audit, Transfer and Refund) Amendment 2017, the Company is mandated to transfer all such shares to Investor Education and Protection Fund (IEPF) in respect of which dividend has not been claimed for 7 consecutive years or more.

The unclaimed dividend amount for the FY 2010-11 and 280,856 Equity Shares related to unclaimed dividend for the FY 2010-11 have been credited to Investor Education and Protection Fund (IEPF).

Shareholder can claim the unclaimed dividend amounts and shares credited to IEPF with a separate application made to the IEPF Authority, in Form IEPF-5, as prescribed under the Rules and are available at IEPF website i.e. [www.iepf.gov.in](http://www.iepf.gov.in).

#### In case of any query contact –

Hindalco Industries limited  
Ahura Centre, 1<sup>st</sup> floor, B Wing  
Mahakali Caves Road,  
Andheri (East), Mumbai-400 093.  
Tel: (91-22) 6691 7000, Fax: (91-22) 6691 7001  
Email ID: [hilinvestors@adityabirla.com](mailto:hilinvestors@adityabirla.com)

#### Green Initiative in Corporate Governance – Service of Documents in Electronic Form

As per Regulation 36 of Listing Regulations and Section 136 of the Companies Act 2013:

- Soft copies of Full Annual Report are sent to those shareholder(s) who have registered their email address with the Company or with any depository;
- Hard copy of statement containing the salient features of all the documents, as prescribed in Section 136 of Companies Act, 2013 or rules made thereunder to those shareholder(s) who have not so registered;
- Hard copies of Full Annual Reports to those shareholders, who have requested for the same.

#### Unclaimed Shares in Physical Form

Regulation 39(4) of the Listing Regulations provides the manner of dealing with shares issued in physical form pursuant to public issue or any other issue which remains unclaimed with the Company. In compliance with the provisions of Listing Regulations, the Company has sent three reminders to the shareholders whose share certificates are lying unclaimed.

Disclosures pursuant to Regulation 39(4) of Listing Regulations are as below:

- Aggregate number of shareholders and outstanding shares lying in Unclaimed Suspense account lying as at April 01, 2018:  
1,087 shareholders holding 555,896 equity shares of the Company.
- Number of shareholders who approached the issuer for transfer of shares from Unclaimed Suspense Account during the year:  
29 shareholders 19,275 equity shares of the Company.
- Number of shareholders to whom shares were transferred from Unclaimed Suspense Account during the year:  
29 shareholders 19,275 equity shares of the Company.
- Aggregate number of shareholders and outstanding shares lying in Unclaimed Suspense Account as at March 31, 2019:  
1,054 shareholders holding 536,621 equity shares of the Company.

## INVESTOR SERVICES

- i. Equity Shares of the Company are under compulsory demat trading by all investors, with effect from April 05, 1999. Considering the advantages of scrip less trading, shareholders are requested to consider dematerialization of their shareholding so as to avoid inconvenience in future, No physical transfers Pursuant to SEBI LODR Amendment Regulations, effective December 05, 2018, and BSE Circulars to Listed Companies – Amendment to Regulation 40 of Listing Regulations, (Cir. No. LIST/COMP/15/2018 dated July 05, 2018).  
BSE has issued a Circular to Listed Companies on July 05, 2018 informing about amendment to Regulation 40 of Listing Regulations vide Gazette notification dated June 8, 2018 has mandated that transfer of securities would be carried out in dematerialised form only. This restriction shall not be applicable to the request received for Deletion, Transmission or Transposition of physical shares.
  - ii. Shareholders/Beneficial Owners are requested to quote their Folio No./DP & Client ID Nos., as the case may be, in all correspondence with the Company.
- iii. Shareholders holding shares in physical form are requested to notify to the Company, change in their address/Pin Code number and Bank Account details promptly by written request under the signatures of sole / first joint holder. Beneficial Owners of shares in demat form are requested to send their instructions regarding change of name, change of address, bank details, nomination, power of attorney, etc. directly to their DP.
  - iv. To prevent fraudulent encashment of dividend warrants, members are requested to provide their Bank Account Details (if not provided earlier) to the Company (if shares are held in physical form) or to DP (if shares are held in demat form), as the case may be, for printing of the same on their dividend warrants.
  - v. Non-resident members are requested to immediately notify:-
    - change in their residential status on return to India for permanent settlement;
    - particulars of their NRE Bank Account with a bank in India, if not furnished earlier.
  - vi. In case of loss/misplacement of Share Certificate, investors should immediately lodge a FIR/Complaint with the police and inform to Company along with original or certified copy of FIR/acknowledged copy of the complaint.
  - vii. Shareholders are requested to keep record of their specimen signature before lodgment of shares with the Company to obviate possibility of difference in signature at a later date.
  - viii. Shareholders(s) of the Company who have multiple accounts in identical name(s) or holding more than one Share Certificates in the same name under different Ledger Folio(s) are requested to apply for consolidation of such Folio(s) and send the relevant Share Certificates to the Company.
  - ix. Shareholders are requested to give us their valuable suggestions for improvement of our investor services.
  - x. Shareholders are requested to quote their E-mail Ids, Telephone/Fax numbers for prompt reply to their communication.

## SOCIAL REPORT: 2018-19

“No one’, said Mahatma Gandhiji, ‘is free, until everyone, regardless of caste, and creed, is rid of not only discrimination, but also deprivation’. On this 150<sup>th</sup> Birth Anniversary of the Father of Nation, we reaffirm our pledge to inclusive growth.

As inclusive growth is our overall vision, we feel it is worthwhile to link our community engagement with the UN Sustainability Development Goals (SDGs).

We have set expectations in line with these goals. The SDGs, are a bold universal agreement, to end poverty, every which way. Its laudable vision, is also to craft an equal, fair and secure world for people, the planet, and prosperity, by 2030. These, were adopted by 193 member states, at the UN General Assembly Summit. The SDGs, came into effect, on January 1<sup>st</sup>, 2016.

The SDGs outlines 17 clear goals, all of which are universally relevant. They have also given 169 targets, specific to the different goals. Our Government, has accepted the goals, and based the structure, and focus of our nation’s social investment, on the SDG goals as well.

India has made huge strides. Poverty, in India is down to 21%, according to the Government estimates. In a highly laudatory article on India recently in the New York Times, it mentioned that “A booming economy is lifting 40 million, out of poverty and is expected to have the majority of its population in the middle-class, already equal to the entire US population, 2025”.

As a point in reference, let’s take the year 1947, when we became an independent country. In 1947, life expectancy was 32 years. Today, it is nearly 69 years. Infant mortality, is down from 161, for every thousand births, to 40 now. Access to quality maternal health services, has more than tripled as have institutional deliveries, which now stand at over 80% according to the WHO Report. The overall death rate, which was at 25.5 per thousand, has fallen to 7 per thousand. So, we see a phenomenal improvement.

Even as the struggle for equality, for dignity and for raising the quality of life of, each and every person in 1.2 billion cohort is still on, every effort is being made to mitigate this issue. The Government, has done enormous work and continues to focus on poverty alleviation but we have to do more. Fortunately, social investment, is gaining traction. There is the eco-system of investors, entrepreneurs, and enablers, all of whom are significantly engaged, in social impact initiatives. India, is in the midst, of a historic transformation. There is the promise, of the end to poverty by 2022. A decent roof, over every individual’s head, and a life of dignity, through sustainable livelihood.

Pursuing the SDGs, I strongly believe is, one of the ways to fast forward inclusive growth, and our social progress. In this context, I am very pleased to share with you, that in our CSR engagement, we are totally in sync with the first 8 goals. The remaining 9 goals pertain to sustainability, responsible industrialization and geopolitical issues. On sustainable development, climate change, ecosystems, among others, our Group is in line with them”.

— Mrs. Rajashree Birla  
Chairperson

*Aditya Birla Centre for Community Initiatives and Rural Development*

### On Track With SDGs

Our community engagement in our five focus areas viz. education, healthcare, sustainable livelihood, infrastructure development and social reform, have been linked with the key nine SDGs. A number of SDGs flow into each other and hence have been clubbed. For instance, SDG-1, which is to end poverty is an overarching goal that connects to all the other goals. Collectively our programmes aim at this very objective.

We are spread across 10 States, spanning 626 villages, reaching out to 10 lakh people. Over decades of unrelentingly battling with poverty, in collaboration with the District Authorities and leveraging Government Schemes, collectively we have been able to lift the burden of poverty from the shoulders of nearly 80% of the people. With Government initiatives, in full throttle, it should seem possible, to cut the poverty levels even further in the ensuing years.

The **second SDG**, is to end hunger, achieve food security, and improved nutrition and promote sustainable agriculture. Hunger issues are inextricably linked with poverty alleviation where water and agriculture play a major part. In the villages where we work, the malnutrition rate is minimal, in the range of approximately 4% to 5%. We have set for ourselves the target to lower it to 1% to 2% in the next 2-3 years, through our projects and taking Government Schemes forward as catalysts.

Water positivity, within the fence and beyond, is one of the most important tasks before us. It includes water conservation, and water harvesting structures. Water is the lifeline for agriculture. The farm based interventions, farmer training programmes, farmer producer groups, improved agriculture techniques, and animal husbandry management, take us close to the goal, of sustainable agriculture.

Our farmer meetings aimed at knowledge sharing on farm related activities, boosting agriculture and horticulture and training programmes that profess the best-in-class agricultural practices and mechanism, have touched the lives of over 16,705 farmers.

Furthermore, farmers are taken to the Krishi Vigyan Kendras in Uttar Pradesh, Madhya Pradesh and Chhattisgarh to attune them to the latest cropping patterns, which they can apply to their field. Small farmers are helped through exposure to demonstration plots in waste lands where the farming inputs are minimal. More than 4,464 farmers were provided with agricultural tools, seeds, fertilisers and other crop protection agents.

We developed 99 vermin compost tanks at Renukoot, Lohardaga and Singrauli to encourage farmers to adopt organic farming methods.

We constructed 26 check dams at Singrauli, Madhya Pradesh to provide assured irrigation facility. This enhances cash crop production over more than 1,600 acres of land.

This year 43,295 animals were immunized at veterinary camps and a large number were artificially inseminated for better breed. This has raised the milk output and consequently there has been a surge in the income of the farmers. Aditya Birla Technology Park is successfully implementing the cattle breeding project (Godhan) at Muirpur, Uttar Pradesh. Over 1,000 cattle received artificial insemination, benefitting 4000 farm families.

The **third SDG**, pertains to ensuring, healthy lives and promoting well-being for all, at all ages. Here what we do is indeed impressive. Nearly 7 lakh people across our units, have been the beneficiaries of our projects.

In over 1,528 rural medical and awareness camps and 47 specialty camps, 1,37,662 people were examined. Health check-ups were conducted for ailments such as malaria,

diarrhea, diabetes, hepatitis, arthritis, skin diseases, gynecological disorders and cardiac related issues. Our rural mobile medical van services complemented these efforts.

One of the major concern issues is that even where we are working more than 70% of women, including adolescent girls are anemic. In the near future, our aim is to bring it down to less than 20%, with the support of the District Authorities.

Splendid patient care is accorded at our Company's 3 hospitals, 21 dispensaries/ clinics located at Renukoot and Renusagar (Uttar Pradesh), Belagavi (Karnataka), Muri, Lohardaga & Kathautia (Jharkhand), Balrampur & Raigad (Chhattisgarh), Dahej (Gujarat) and Durgamwadi (Maharashtra). More than 1,35,558 patients were treated. We would also like to mention that our units at Kathautia, Maliparbat, Dumri, Durgamwadi and Taloja have extended support to 12 Government/ Charity run primary health centers, where 5,382 patients' recourse to these facilities.

In our Surgical Camps 45 patients underwent surgeries at Renukoot, Belagavi and Durgamwadi.

At eye camps, we treated 2,149 people, performed 90 intraocular operations and distributed 771 spectacles.

At 73 dental check camps at Dahej, Renukoot, Renusagar, Singrauli, Belur and Kathautia 6,230 persons were treated.

Over 364 patients were diagnosed with Tuberculosis and registered under the directly observed treatment (DOT) programme at 10 designated microscopic centers (DMC). These are at Hindalco family welfare center Renukoot, Renusagar and Lohardaga and the Aditya Birla Rural Technology Park, Muirpur.

Under preventive measures, we organised 18 seasonal disease camps on Malaria and Diarrhoea at Lohardaga and Samri Mines, where 4,125 people attended the camps. Furthermore, we distributed mosquito nets to 4,779 people at Renusagar, Singrauli, Lohardaga, Muri and Taloja.

Health check-up camps are carried out regularly in schools at our units. These include Lohardaga and Kathautia (Jharkhand), Renukoot (Uttar Pradesh), Belur (West Bengal), Taloja, Durgamwadi (Maharashtra), Singrauli (Madhya Pradesh) and Belagavi (Karnataka). Our medical teams examined 6,012 students on their general health, dental hygiene and eye care. At the same time, they also conducted blood grouping.

In collaboration with the District Health Department, our 19 Family Welfare Centers served 50,626 women (antenatal, post-natal care, mass immunization, nutrition and escort services for institutional delivery). Over 1,70,180 children were immunized against polio, BCG, DPT and Hepatitis-B across the Company's Units.

## SOCIAL REPORT: 2018-19

Our focused programme on adolescent health care covered, 4,023 girls at the Government's Girls High Schools and 9 Kasturba Gandhi Balika Vidyalayas.

In addition, to address issues related to menstrual health and hygiene of school going adolescent girls, we have installed 5 sanitary napkin vending machines and incinerators at Dahej (Gujarat) and Taloja (Maharashtra).

Our intensive motivational drive towards responsible family raising led to 333 villagers opting for planned parenthood across 4 locations.

Inclusive and equitable quality education, and in the larger context, promoting lifelong learning opportunities, for all is the pivot of the **fourth SDG**. HG Wells, the renowned, (early 20<sup>th</sup> Century) historian in his voluminous work "The Outline of History", wrote "Human history becomes more and more, a race between education and catastrophe".

Our proactive initiatives to foster education in the villages have yielded encouraging results. We would like to particularly mention our enrolment campaign titled "Shala Praveshotsav". This was popularized at Dahej (Gujarat). The campaign was successful. It not only got 100% students in schools but also stemmed the dropout rate. Under its aegis we also distributed education material including notebooks, school bags and uniforms to over 13,622 children. We leveraged the Sarva Shiksha Abhiyan. We align very well with the Kasturba Gandhi Balika Vidyalayas at Renukoot, Lohardaga, Muri and Samri encouraging girls to pursue education. Through the talent search programmes, we recognized 666 bright students, giving them scholarships.

Over 1,775 students from the hinterland attended the 6-month computer literacy programmes conducted by us.

At the 30 Balwadis, 1,522 pre-schoolers have taken their first steps towards informal learning processes. These centres are running at Renukoot, Lohardaga, Samri, Belagavi and Singrauli.

Over, 4,990 children are enrolled at 76 Anganwadis that we support at Renukoot, Singrauli, Samri, Belur, Lohardaga, Renuagar, Kathautia, Durgamwadi and Belagavi. Among these, we are working with 318 malnourished children and creating awareness besides health check-ups under the Integrated Child Development Scheme (ICDS) at Renukoot.

At our 10 Aditya Birla Public Schools (Renukoot, Renuagar, Dahej and Muri), we have enrolled 6,633 rural students. Additionally, 1,614 students have been enlisted in our 8 Aditya Birla Vidya Mandirs at Renukoot, Lohardaga, Kathautia and Samri.

In bridging the gap between pupil and teacher, more than 65 teachers have been supporting primary and secondary schools in Dumri, Garepalma, Lohardaga, Kathautia, Durgamwadi and Dahej.

In providing basic infrastructure, we constructed 9 additional class rooms at Belagavi, Durgamwadi, Garepalma and Dahej and repaired 15 school buildings each at Singrauli, Belur, Lohardaga, Samri, Belagavi, Taloja and Durgamwadi. We have also provided furniture to 15 schools at Renukoot, Singrauli, Lohardaga, Durgamwadi and Taloja.

We built 4 New school toilets at Lohardaga and Durgamwadi and repaired 3 school toilets at Samri, Kathautia and Durgamwadi to make them functional.

We are setting up a centralised kitchen at Chiri Village of Kuru Block of Lohardaga District of Jharkhand State to give nutritious food to 40,000 students of 250 schools within a radius of 40 kms from the kitchen in partnership with the Govt. of Jharkhand and ISKCON Food Relief Foundation (IFRF). The setting up of Mid-day meal Centralised kitchen has been recommended by the Government of Jharkhand.

The cost of the project is ₹ 5.07 Crores. It includes the construction of the kitchen building (prefabricated structure), setting up the kitchen equipment, customised vehicle to supply food, office, Quarters for workers, etc.

Women empowerment and gender equality, is the focus of the fifth SDG. We already have 1,450 self-help groups comprising of 19,328 women. We are working to broaden the base, and provide the last mile linkage.

The sixth, seventh and eighth SDGs, can be bunched together, as they are interlinked. These SDGs call for, water and sanitation, reliable, sustainable and modern energy and decent work and economic growth.

Towards providing accessibility to safe drinking water, we have installed 7 Reverse Osmosis (RO) plants, 36 hand pumps, repaired 240 hand pumps and dug wells. Pipelines and bore wells provide access to water, benefiting more than 50,265 villagers.

Additionally, 777 individual toilets and sanitation facilities were set-up at various locations. In the villages that we operate in and 55 villages have been declared ODF.

Imparting vocational training, skills training, coupled with our farm / non-farm based programmes and SHGs, meet with these goals. Collectively we have touched the lives of nearly 10,000 people.

At the Aditya Birla Rural Technology Park, more than 27 training batches were organised. The thrust continues on computer literacy, training in cosmetology, repair of electric and electronic goods, handicrafts, bag making, soft toys, tailoring and knitting, ways to enhance agricultural output, and veterinary science. This year 250 aspirants were trained. On capacity building training 16 additional programmes were held for 679 participants. Veterinary services offered to 466 farmers.

### **SDG-9: Build resilient infrastructure**

Towards better infrastructure, we are engaged in the connecting/repairing of roads, community halls and assets, rest places, installation of solar lights, construction of water tanks and installation of piped water supply. These activities have aided 88,556 people.

#### **Finally, on model villages**

Of the 626 villages that we work in, we have zeroed in on 98 villages for a transformative process that raises them to become model villages. So far in a 7-year time frame, we have been able to morph 55 villages into model villages.

#### **Our CSR spends**

All in all, our spends on community engagement for the year 2018-19 totalled ₹ 56.62 crores (Hindalco: ₹ 34.14 crores,

Enterprise Social Commitment (ESC): ₹ 4.65 crores, Utkal Alumina: ₹ 9.13 crores, Utkal ESC: ₹ 6.39 crores, Dahej Harbour Industries Ltd.: ₹ 1.44 crores). As catalysts, we mobilised close to ₹ 100 crores, leveraging diverse Government Schemes.

#### **In sum**

With all of us working so wholeheartedly, and the Government also fully committed, to inclusive growth, transparency and good governance, we can hope for a holistic transformation of our country. Very soon, in the next 5 years, India will be an even more resplendent nation. By then the word poverty will be struck off the lexicon and no mention of it will be made in relation to India.

Our Board of Directors, our Management and our colleagues across the Company are committed to inclusive growth.

# INDEPENDENT AUDITOR'S REPORT ON THE STANDALONE FINANCIAL STATEMENTS

## To the Members of Hindalco Industries Limited

### Report on the audit of the standalone financial statements

#### Opinion

1. We have audited the standalone financial statements of Hindalco Industries Limited ("the Company"), which comprise the balance sheet as at March 31, 2019, the statement of profit and loss, the statement of changes in equity and the statement of cash flows for the year then ended, and notes to the standalone financial statements, including a summary of significant accounting policies and other explanatory information.
2. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone financial statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2019, and total comprehensive loss (comprising of profit and other comprehensive loss), changes in equity and its cash flows for the year then ended.

#### Basis for opinion

3. We conducted our audit in accordance with the Standards on Auditing (SAs) specified under section 143(10) of the Companies Act, 2013. Our responsibilities under those Standards are further described in the Auditor's responsibilities for the audit of the standalone financial statements section of our report. We are independent of the Company in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the standalone financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Key audit matters

4. Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the standalone financial statements of the current period. These matters were addressed in the context of our audit of the standalone financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters	How our audit addressed the key audit matters
<p><b>A. Measurement of inventory quantities of coal, bauxite and work in progress consisting of precious metals</b></p> <p>Refer Notes 1D(j) and 11 (d) to the standalone financial statements.</p> <p>Of the Company's ₹ 11,394.46 crores of inventory as at March 31, 2019, ₹ 1,730 crores of inventory comprised of coal, bauxite and work in progress consisting of precious metals.</p> <p>This was determined a key audit matter, as the measurement of these inventory quantities lying at the Company's yards, smelter and refinery is complex and involves significant judgement and estimate resulting from measuring the surface area, dip measurement of materials in tanks/silos, etc.</p> <p>The Company uses internal and external experts, as applicable to perform volumetric surveys and assessments, basis which the quantity for these inventories is estimated.</p>	<p>Our audit procedures relating to the measurement of inventory quantities of coal, bauxite and work in progress of precious metals included the following:</p> <ul style="list-style-type: none"> <li>• Understanding and evaluating the design and operating effectiveness of controls over physical count and measurement of such inventory;</li> <li>• Evaluation of competency and capabilities of management's experts;</li> <li>• Physically observing inventory measurement and count procedures carried out by management using experts, to ensure its appropriateness and completeness; and</li> <li>• Obtaining and inspecting, inventory measurement and physical count results for such inventories, including assessing and evaluating the results of analysis performed by management in respect of differences between book and physical quantities.</li> </ul> <p>Based on the above procedures performed, we did not identify any material exceptions in the measurement of inventory quantities of coal, bauxite and work in progress inventories consisting of precious metals.</p>



Key audit matters	How our audit addressed the key audit matters
<p><b>B. Provisions recognised and contingencies disclosed with regard to certain legal and tax matters</b></p> <p>Refer Notes 1D(i), 10, 21, 25, 45 and 46 to the standalone financial statements.</p> <p>As at March 31, 2019, the Company has paid deposits under protest, recognised provisions and disclosed contingent liabilities towards various legal and tax matters. There are number of legal, direct and indirect tax cases against the Company, including environmental, mining, local and state levies, income tax holidays, availing of input tax credits etc.</p> <p>This is a key audit matter, as evaluation of these matters requires management judgement and estimation, interpretation of laws and regulations and application of relevant judicial precedents to determine the probability of outflow of economic resources for recognising provisions and making related disclosures in the standalone financial statements.</p>	<p>Our audit procedures relating to provisions recognised and contingencies disclosed regarding certain legal and tax matters included the following:</p> <ul style="list-style-type: none"> <li>• Understanding and evaluating the design and operating effectiveness of controls over the recognition, measurement, presentation and disclosures made in the standalone financial statements in respect of these matters;</li> <li>• Obtaining details of legal and tax matters, inspecting the supporting documents to evaluate management's assessment of probability of outcome and the magnitude of potential loss, and testing related provisions and disclosures in the standalone financial statements;</li> <li>• Reviewing orders and other communication from regulatory authorities and management responses thereto;</li> <li>• Reviewing management expert's legal advice and opinion as applicable, obtained by the Company's management for evaluating certain legal matters and evaluating competence and capabilities of the experts; and</li> <li>• Using auditor's experts for assistance in evaluating certain significant and complex direct and indirect tax matters.</li> </ul> <p>Based on the above procedures performed, we did not identify any material exceptions in the provision recognised and contingent liabilities disclosed in the standalone financial statements with regard to such legal and tax matters.</p>
<p><b>C. Accounting of derivatives and hedging transactions</b></p> <p>(Refer Notes 1B(P), 9, 20, and 52 to the standalone financial statements.)</p> <p>Company's financial performance is significantly impacted by fluctuations in prices of aluminium, copper, gold, silver, furnace oil, coal, foreign exchange rates and interest rates. The Company takes a structured approach to the identification, quantification and hedging of such risks by using various derivatives (e.g. forwards, swaps, futures and embedded derivatives) in commodities and / or foreign currencies. These hedges are designated as either cashflow or fair value hedges, and in certain cases remains non-designated.</p>	<p>Our audit procedures related to accounting of derivative and hedging transactions included the following:</p> <ul style="list-style-type: none"> <li>• Understanding and evaluating the design and operating effectiveness of controls over accounting of derivative and hedging transactions;</li> <li>• Testing qualifying criteria for hedge accounting in accordance with Ind AS 109, including: <ul style="list-style-type: none"> <li>√ Understanding the risk management objectives and strategies for different types of hedging programs;</li> <li>√ Evaluating that the hedging relationship consists only of eligible hedging instruments and hedged items;</li> <li>√ Using auditor's expert for assistance in verifying hedge effectiveness requirements of Ind AS 109, including the economic relationship between the hedged item and the hedging instrument.</li> </ul> </li> </ul>

## INDEPENDENT AUDITOR'S REPORT ON THE STANDALONE FINANCIAL STATEMENTS

Key audit matters	How our audit addressed the key audit matters
<p>As at March 31, 2019, the carrying value of the Company's derivatives included derivative assets amounting to ₹ 935.43 crores and derivative liabilities of ₹ 537.27 crores.</p> <p>Derivative and hedge accounting is considered a key audit matter, because of its significance to the financial statements, the volume, nature and types of hedging relationships, including complexity involved in the application of hedge accounting principles in accordance with Ind AS 109, Financial Instruments.</p>	<ul style="list-style-type: none"> <li>• Evaluating competence and capabilities of the auditor's experts;</li> <li>• Testing appropriateness of hedge accounting to qualified hedge relationships i.e. cash flow and fair value hedges;</li> <li>• Testing related presentation and disclosures in the standalone financial statements.</li> </ul> <p>Based on the above procedures performed, we did not identify any material exceptions in the amounts, presentation and disclosures made in the standalone financial statements relating to accounting of derivatives and hedging transactions.</p>
<p><b>D. Assessment of indication of impairment and the recoverable amount (RA) of certain Cash Generating Units (CGUs) within the Aluminium segment</b></p> <p>Refer Notes 1D(a), 2, 4 and 41 to standalone financial statements.</p> <p>External sources of information such as changes in the market and economic environment, including increase in the cost of input materials and decline in the Aluminium metal prices, required Company's management to assess whether there is any indication of impairment and therefore make an estimate of RA of certain CGUs within Aluminium segment having carrying value of net assets of ₹ 29,413 crores as at March 31, 2019.</p> <p>Based on such indications, impairment testing was performed by the Company's management in accordance with the requirements of Ind AS 36, Impairment of Assets. Management has calculated the RA of the CGUs using value in use method.</p> <p>This is a key audit matter, because of the significant carrying value of these CGUs and the estimation uncertainty in assumptions used for calculating the RA of these CGUs such as future metal prices, foreign exchange rates, discount rate, input costs and rate of growth over the estimation period.</p>	<p>Our audit procedures related to assessment of indication of impairment and RA of these CGUs included the following:</p> <ul style="list-style-type: none"> <li>• Understanding and evaluating the design and operating effectiveness of controls over identification and assessment of any potential impairment, including determining the carrying amount and RA of the CGUs;</li> <li>• Using auditor's experts for testing appropriateness of the method and model used for determining RA, mathematical accuracy of the models' calculations and evaluating reasonableness of key assumptions used in future cash flow projections such as future metal prices, foreign exchange rates, discount rate, input costs and rate of growth over the estimation period;</li> <li>• Evaluating competence and capabilities of the auditor's experts;</li> <li>• Performing sensitivity analysis over key assumptions to corroborate that RA is within a reasonable range; and</li> <li>• Testing related presentation and disclosures in the standalone financial statements.</li> </ul> <p>Based on the above procedures performed, we did not note any material exceptions in the management's assessment of the indication of impairment and conclusion that the RA of these CGUs within the Aluminium segment were not lower than their respective carrying amounts.</p>

### Other information

5. The Company's Board of Directors is responsible for the other information. The other information comprise the information included in the annual report, but does not include the financial statements and our auditor's report thereon. The annual report is expected to be made available to us after the date of this auditor's report.

Our opinion on the standalone financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the standalone financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information

is materially inconsistent with the standalone financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

When we read the annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate action as applicable under the relevant laws and regulations.

### **Responsibilities of management and those charged with governance for the standalone financial statements**

6. The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these standalone financial statements that give a true and fair view of the financial position, financial performance, changes in equity and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the accounting Standards specified under section 133 of the Act. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the standalone financial statement that give a true and fair view and are free from material misstatement, whether due to fraud or error.
7. In preparing the standalone financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. Those Board of Directors are also responsible for overseeing the Company's financial reporting process.

### **Auditor's responsibilities for the audit of the standalone financial statements**

8. Our objectives are to obtain reasonable assurance about whether the standalone financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit

conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these standalone financial statements.

9. As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:
  - Identify and assess the risks of material misstatement of the standalone financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
  - Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
  - Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
  - Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the standalone financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
  - Evaluate the overall presentation, structure and content of the standalone financial statements, including the disclosures, and whether the

## INDEPENDENT AUDITOR'S REPORT ON THE STANDALONE FINANCIAL STATEMENTS

standalone financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

10. We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
  11. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.
  12. From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the standalone financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.
- Report on other legal and regulatory requirements**
13. As required by the Companies (Auditor's Report) Order, 2016 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Companies Act, 2013, we give in the "**Annexure A**" a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.
  14. As required by Section 143(3) of the Act, we report that:
    - (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;
    - (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;
    - (c) The balance sheet, the statement of profit and loss, the statement of changes in equity and the statement of cash flows dealt with by this Report are in agreement with the books of account;
  - (d) In our opinion, the aforesaid standalone financial statements comply with the Accounting Standards specified under Section 133 of the Act;
  - (e) On the basis of the written representations received from the directors as on March 31, 2019 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2019 from being appointed as a director in terms of Section 164 (2) of the Act;
  - (f) With respect to the adequacy of the internal financial controls with reference to standalone financial statements of the Company and the operating effectiveness of such controls, refer to our separate Report in "**Annexure B**";
  - (g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:
    - i. The Company has disclosed the impact of pending litigations on its financial position in its standalone financial statements – Refer Notes 45 and 46 to the standalone financial statements;
    - ii. The Company has made provision, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts – Refer Notes 20 and 46 to the standalone financial statements;
    - iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company except amount of ₹ 0.07 crore; and
    - iv. The reporting on disclosures relating to Specified Bank Notes is not applicable to the Company for the year ended March 31, 2019.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**  
Partner  
Membership Number: 105869

Mumbai  
May 16, 2019

# ANNEXURE A TO INDEPENDENT AUDITOR'S REPORT

Referred to in paragraph 13 of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the standalone financial statements for the year ended March 31, 2019

- i. (a) The Company is maintaining proper records showing full particulars, including quantitative details and situation, of fixed assets.
- (b) The fixed assets are physically verified by the Management according to a phased programme designed to cover all the items over a period of 2 to 3 years, which, in our, is reasonable having regard to the size of the Company and the nature of its assets. Pursuant to the programme, a portion of the fixed assets has been physically verified by the Management during the year, and no material discrepancies have been noticed on such verification.
- (c) The title deeds of immovable properties, as disclosed in Note 2 on Property, Plant and Equipment and Note 3 on Investment Property to the standalone financial statements, are held in the name of the Company, except for the following:
- i. in respect of freehold land (Birla Copper and Muri unit) having gross block of ₹ 0.32 crore and building (Birla copper unit, Delhi and Mumbai branch) having gross block of ₹ 11.43 crores, the title deeds of which are held in the name of erstwhile companies which have subsequently been amalgamated with the Company;
- ii. in respect of freehold land (Mahan and Kathotia unit) having gross block of ₹ 30.87 crores, the title deeds of which are yet to be transferred in the name of the Company; and
- iii. in respect of freehold land (Birla copper unit) and building (Birla copper unit, Mumbai and Delhi branch) having gross block of ₹ 0.50 crore and ₹ 15.73 crores, respectively, the title deeds of which are presently not readily available with the Company.
- ii. The physical verification of inventory, excluding stocks with third parties, have been conducted at reasonable intervals by the Management during the year. In respect of inventory lying with third parties, these have substantially been confirmed by them. The discrepancies noticed on physical verification of inventory as compared to book records were not material.
- iii. The Company has not granted any loans, secured or unsecured, to companies, firms, limited liability partnerships or other parties covered in the register maintained under Section 189 of the Act. Therefore, the provisions of Clauses 3(iii), (iii)(a), (iii)(b) and (iii)(c) of the said Order are not applicable to the Company.
- iv. In our opinion, and according to the information and explanations given to us, the Company has complied with the provisions of Section 185 and 186 of the Companies Act, 2013, in respect of the loans and investments made, and guarantees and security provided by it.
- v. The Company has not accepted any deposits from the public within the meaning of Sections 73, 74, 75 and 76 of the Act and the Rules framed thereunder to the extent notified.
- vi. Pursuant to the rules made by the Central Government of India, the Company is required to maintain cost records as specified under Section 148(1) of the Act in respect of its products. We have broadly reviewed the same, and are of the opinion that, prima facie, the prescribed accounts and records have been made and maintained. We have not, however, made a detailed examination of the records with a view to determine whether they are accurate or complete.
- vii. (a) According to the information and explanations given to us, and the records of the Company examined by us, in our opinion, the Company is generally regular in depositing undisputed statutory dues in respect of provident fund, employees' state insurance, sales tax, income tax, service tax, duty of customs, duty of excise, value added tax, cess, goods and service tax, and other material statutory dues, as applicable, with the appropriate authorities. Also refer Note 31 to the standalone financial statements regarding management's assessment on certain matters relating to provident fund.
- (b) According to the information and explanations given to us, and the records of the Company examined by us, there are no dues of income tax which have not been deposited on account of any dispute. The particulars of dues of sales tax, service tax, duty of customs, duty of excise, value added tax and goods and service tax as at March 31, 2019, which have not been deposited on account of a dispute, are as follows:

## ANNEXURE A TO INDEPENDENT AUDITOR'S REPORT

Referred to in paragraph 13 of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the standalone financial statements for the year ended March 31, 2019

Name of the Statute	Nature of Dues	₹ in crores*	Period to which the amount relates	Forum where the disputes are pending
Central Sales Tax Act and Local Sales Tax (including VAT) Act	Sales tax	26.77	1995-2009, 2014-2016	Assistant Commissioner/Commissioner/Deputy Commissioner/ Revisionary Authorities Level/Joint Commissioner/ Additional Commissioner (A)
		0.46	2005-2006, 2009-2011	Tribunal
		32.51	1986-1987, 1989-1991, 1999-2007, 2012-2013	High Court
The Central Excise Act, 1944	Excise duty	7.13	2000-2004, 2006-2009, 2012-2018	Assistant Commissioner/ Commissioner/ Revisionary Authorities Level
		723.41	2001-2018	Customs, Excise and Service Tax Appellate Tribunal (CESTAT)
The Customs Act, 1962	Custom Duty	0.05	2004-2005	Commissioner (Appeal)
		23.36	2009-2014, 2016-2017	Customs, Excise and Service Tax Appellate Tribunal (CESTAT)
The Service Tax under the Finance Act, 1994	Service Tax	4.24	2001-2002, 2007-2017	Assistant Commissioner/ Commissioner/ Revisionary Authorities Level
		332.79	2004-2018	Customs, Excise and Service Tax Appellate Tribunal (CESTAT)
The Central Goods and Service Tax Act, 2017	Goods and service tax	27.12	2017-2018	High Court

\* Exclude matters in respect of which favourable order has been received at various appellate authorities.

- viii. According to the records of the Company examined by us, and the information and explanations given to us, the Company has not defaulted in repayment of loans or borrowings to any banks, financial institutions, or dues to debenture holders as at the balance sheet date. The Company does not have any loans or borrowings from Government as at the balance sheet date, therefore the provisions of Clause 3(viii) of the Order, to the extent, are not applicable to the Company.
- ix. In our opinion, and according to the information and explanations given to us, the moneys raised by way of term loans have been applied for the purposes for which they were obtained. The Company has not raised any moneys during the year by way of initial public offer and further public offer (including debt instruments).
- x. During the course of our examination of the books and records of the Company, carried out in accordance with the generally accepted auditing practices in India, and according to the information and explanations given to us, we have neither come across any instance of material fraud by the Company or on the Company by its officers or employees, noticed or reported during the year, nor have we been informed of any such case by the Management.
- xi. The Company has paid/ provided for managerial remuneration in accordance with the requisite approvals mandated by the provisions of Section 197 read with Schedule V to the Act.
- xii. As the Company is not a Nidhi Company, and the Nidhi Rules, 2014, are not applicable to it, the provisions of Clause 3(xii) of the Order are not applicable to the Company.
- xiii. The Company has entered into transactions with related parties in compliance with the provisions of Sections 177 and 188 of the Act. The details of such related party transactions have been disclosed in the standalone financial statements as required under Indian Accounting Standard (Ind AS) 24, Related Party Disclosures specified under Section 133 of the Act.
- xiv. The Company has not made any preferential allotment or private placement of shares, or fully or partly convertible debentures during the year under review. Accordingly, the provisions of Clause 3(xiv) of the Order are not applicable to the Company.
- xv. The Company has not entered into any non cash transactions with its directors or persons connected with them to which Section 192 of the Act applies. Accordingly, the provisions of Clause 3(xv) of the Order are not applicable to the Company.
- xvi. The Company is not required to be registered under Section 45-IA of the Reserve Bank of India Act, 1934. Accordingly, the provisions of Clause 3(xvi) of the Order are not applicable to the Company.

**For Price Waterhouse & Co Chartered Accountants LLP**

Firm Registration Number: 304026E/ E-300009

**Sumit Seth**

Partner

Membership Number: 105869

Mumbai

May 16, 2019

# ANNEXURE B TO INDEPENDENT AUDITOR'S REPORT

Referred to in paragraph 14 (f) of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the standalone financial statements for the year ended March 31, 2019

## Report on the internal financial controls with reference to standalone financial statements under clause (i) of Sub-section 3 of Section 143 of the Act

1. We have audited the internal financial controls with reference to standalone financial statements of Hindalco Industries Limited ("the Company") as of March 31, 2019 in conjunction with our audit of the standalone financial statements of the Company for the year ended on that date.

### Management's responsibility for internal financial controls

2. The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

### Auditor's responsibility

3. Our responsibility is to express an opinion on the Company's internal financial controls with reference to standalone financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing deemed to be prescribed under section 143(10) of the Act to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal financial controls and both issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to standalone financial statements was established and maintained and if such controls operated effectively in all material respects.
4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system with reference to standalone financial statements and their operating effectiveness. Our audit of internal financial controls with reference to standalone financial statements included obtaining

an understanding of internal financial controls with reference to standalone financial statements, 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. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the standalone financial statements, whether due to fraud or error.

5. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system with reference to standalone financial statements.

### Meaning of internal financial controls with reference to standalone financial statements

6. A company's internal financial controls with reference to standalone financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of standalone financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial controls with reference to standalone financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of standalone financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the standalone financial statements.

### Inherent limitations of internal financial controls with reference to standalone financial statements

7. Because of the inherent limitations of internal financial controls with reference to standalone financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to standalone financial statements to future periods are subject to the risk that the internal financial controls with reference to standalone financial statements may

## ANNEXURE B TO INDEPENDENT AUDITOR'S REPORT

**Referred to in paragraph 14 (f) of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the standalone financial statements for the year ended March 31, 2019**

become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

### Opinion

8. In our opinion, the Company has, in all material respects, an adequate internal financial controls system with reference to standalone financial statements and such internal financial controls with reference to standalone financial statements were operating effectively as at March 31, 2019, based on the internal control over financial reporting criteria established by the Company

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**

Partner

Membership Number: 105869

Mumbai

May 16, 2019



# STANDALONE BALANCE SHEET

as at March 31, 2019

₹ in Crore

	Note	As at 31.03.2019	As at 31.03.2018
<b>ASSETS</b>			
<b>Non-Current Assets</b>			
Property, Plant and Equipment	2	33,168.95	33,999.58
Capital Work in Progress		947.00	736.25
Investment Property	3	8.80	9.03
Intangible Assets	4	345.03	355.55
Intangible Assets Under Development		34.82	0.48
<b>Financial Assets</b>			
Investment in Subsidiaries	5	16,777.87	16,596.93
Investment in Associates	6	28.51	14.27
Other Investments	7A	4,916.20	6,638.47
Loans	8A	17.63	5.88
Other Financial Assets	9A	276.73	311.54
Non Current Tax Assets (Net)	25	281.80	1,242.79
Other Non-Current Assets	10A	1,161.98	861.49
		<b>57,965.32</b>	<b>60,772.26</b>
<b>Current Assets</b>			
Inventories	11	11,394.46	10,738.38
<b>Financial Assets</b>			
Other Investments	7B	3,772.32	3,775.59
Trade Receivables	12	2,124.88	1,737.25
Cash and Cash Equivalents	13	1,514.68	1,809.45
Bank Balances other than Cash and Cash Equivalents	14	65.19	11.90
Loans	8B	58.05	54.57
Other Financial Assets	9B	1,134.65	1,373.24
Current Tax Assets	25	1,423.38	316.55
Other Current Assets	10B	1,954.97	2,064.73
		<b>23,442.58</b>	<b>21,881.66</b>
Non-current Assets or Disposal Groups Classified as Held For Sale or as Held For Distribution to Owners	15A	94.33	74.99
		<b>23,536.91</b>	<b>21,956.65</b>
		<b>81,502.23</b>	<b>82,728.91</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Equity Share Capital	16	222.39	222.89
Other Equity	17	48,335.30	49,227.85
		<b>48,557.69</b>	<b>49,450.74</b>
<b>Liabilities</b>			
<b>Non-Current Liabilities</b>			
<b>Financial Liabilities</b>			
Borrowings	18A	15,633.88	17,198.94
Trade Payables	19A		
(I) total outstanding dues of micro enterprises and small enterprises; and		-	-
(II) total outstanding dues of creditors other than micro enterprises and small enterprises		1.55	24.04
Other Financial Liabilities	20A	70.32	138.91
Provisions	21A	409.86	404.10
Deferred Tax Liabilities (Net)	22	2,179.68	1,922.18
Other Non-current Liabilities	23A	642.13	640.31
		<b>18,937.42</b>	<b>20,328.48</b>

## STANDALONE BALANCE SHEET

as at March 31, 2019

	Note	As at 31.03.2019	As at 31.03.2018
₹ in Crore			
<b>Current liabilities</b>			
Financial Liabilities			
Borrowings	18B	3,895.10	3,092.96
Trade Payables	19B		
(I) total outstanding dues of micro enterprises and small enterprises; and		14.32	4.66
(II) total outstanding dues of creditors other than micro enterprises and small enterprises		5,719.35	5,519.39
Other Current financial Liabilities	20B	1,885.19	2,079.63
Provisions	21B	709.82	658.31
Other Current Liabilities	23B	684.66	778.17
Contract Liabilities	24	126.38	-
Current Tax Liabilities (Net)	25	972.27	816.54
		<b>14,007.09</b>	<b>12,949.66</b>
Liabilities Associated with Non-current Assets or Disposal Group classified as Held For Sale or as Held For Distribution to Owners	15B	0.03	0.03
		<b>14,007.12</b>	<b>12,949.69</b>
		<b>32,944.54</b>	<b>33,278.17</b>
		<b>81,502.23</b>	<b>82,728.91</b>
<b>Basis of Preparation and Significant Accounting Policies</b>	1		

The accompanying Notes are an integral part of the Standalone Financial Statements.  
This is the Standalone Balance Sheet referred to in our report of even date.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**

Partner  
Membership Number: 105869

**For and on behalf of the Board of Hindalco Industries Limited**

**Praveen Kumar Maheshwari**

Whole-time Director &  
Chief Financial Officer  
DIN-00174361

**Satish Pai**

Managing Director  
DIN-06646758

**Anil Malik**

Company Secretary

**M M Bhagat**

Director  
DIN-00006245

Place : Mumbai

Dated : May 16, 2019

# STANDALONE STATEMENT OF PROFIT AND LOSS

for the year ended March 31, 2019

₹ in Crore

	Note	Year ended 31.03.2019	Year ended 31.03.2018
<b>INCOME</b>			
Revenue from Operations	26	45,749.16	43,446.04
Other Income	27	940.03	947.82
<b>Total Income</b>		<b>46,689.19</b>	<b>44,393.86</b>
<b>EXPENSES</b>			
Cost of Materials Consumed	28	27,246.84	25,414.04
Purchases of Stock-in-Trade	29	235.03	4.92
Changes in inventories of Finished Goods, Work-in-Progress and Stock-in-Trade	30	(381.60)	(419.23)
Excise Duty on Sales		-	636.89
Employee Benefits Expense	31	1,981.71	1,894.65
Power and Fuel	32	6,936.94	6,030.11
Finance Cost	33	1,683.04	1,900.54
Depreciation and Amortization	34	1,693.16	1,617.32
Other Expense	35	5,483.63	4,760.59
<b>Total Expenses</b>		<b>44,878.75</b>	<b>41,839.83</b>
Profit/(Loss) before exceptional items and tax		1,810.44	2,554.03
Exceptional income (expense)	36	-	(325.21)
<b>Profit/(Loss) before tax</b>		<b>1,810.44</b>	<b>2,228.82</b>
<b>Tax Expenses</b>	37		
Current tax		374.80	412.44
Deferred tax		230.21	379.89
		<b>605.01</b>	<b>792.33</b>
<b>Profit/(Loss) for the year</b>		<b>1,205.43</b>	<b>1,436.49</b>
<b>Other Comprehensive Income</b>			
<b>Items that will not be reclassified to statement of profit and loss</b>	38		
Actuarial Gain/(Loss) on Defined Benefit Obligation		(3.51)	62.08
Change in fair value of equity instruments designated as FVTOCI		(1,736.19)	380.83
Income tax effect		2.41	(21.84)
<b>Items that will be reclassified to statement of profit and loss</b>	39		
Change in fair value of debt instruments designated as FVTOCI		2.37	(1.56)
Cash flow hedges		83.82	826.42
Income tax effect		(30.12)	(288.78)
<b>Other Comprehensive Income/ (Loss) for the year</b>		<b>(1,681.22)</b>	<b>957.15</b>
<b>Total comprehensive Income/ (Loss) for the year</b>		<b>(475.79)</b>	<b>2,393.64</b>

## STANDALONE STATEMENT OF PROFIT AND LOSS

for the year ended March 31, 2019

₹ in Crore

	Note	Year ended 31.03.2019	Year ended 31.03.2018
<b>Earnings Per Share</b>	40		
Earnings per equity share			
Basic (₹)		5.41	6.45
Diluted (₹)		5.41	6.45
<b>Basis of Preparation and Significant Accounting Policies</b>	1		

The accompanying Notes are an integral part of the Standalone Financial Statements.

This is the Standalone Statement of Profit and Loss referred in our report of even date.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**

Partner

Membership Number: 105869

**For and on behalf of the Board of Hindalco Industries Limited**

**Praveen Kumar Maheshwari**

Whole-time Director &  
Chief Financial Officer  
DIN-00174361

**Satish Pai**

Managing Director  
DIN-06646758

**Anil Malik**

Company Secretary

**M M Bhagat**

Director  
DIN-00006245

Place : Mumbai

Dated : May 16, 2019

# STANDALONE STATEMENT OF CHANGES IN EQUITY

for the year ending March 31, 2019

'A' Equity Share Capital	Note	₹ in Crore
Particulars		Amount
Equity Share capital as at 31 March 2017		222.72
Changes in Equity share capital during 2017-18	16	0.17
Equity Share capital as at 31 March 2018		222.89
Changes in Equity share capital during 2018-19	16	(0.50)
Equity Share capital as at 31 March 2019		222.39

## 'B' Other Equity

Particulars	Share Application Money Pending Allotment	Capital Reserve	Capital Redemption Reserve	Business Reconstruction Reserve	Securities Premium	Debt Redemption Reserve	Employee Stock Options Outstanding	Treasury Shares held by ESOP Trust	General Reserve	Retained Earnings	Gain (loss) on Equity Instruments FVTOCI	Gain (loss) on Debt Instruments FVTOCI	Other Reserves			Total	
													Effective Portion of Cash Flow Hedge	Cost Of Hedging Reserve	Total OCI		
Balance as at 31 March 2017	17	-	144.54	101.57	7,714.77	8,169.92	750.00	27.70	-	21,354.16	2,971.83	5,763.66	3.01	(305.89)	414.57	5,875.35	47,109.84
Profit for the year		-	-	-	-	-	-	-	-	1,436.49	-	-	-	-	-	-	1,436.49
Other comprehensive income		-	-	-	-	-	-	-	-	40.25	380.83	(1.02)	-	304.35	232.74	916.90	957.15
<b>Total Comprehensive Income for the year</b>		-	-	-	-	-	-	-	-	1,476.74	380.83	(1.02)	-	304.35	232.74	916.90	2,393.64
Share Application Money received during the year	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16
Realised gain/loss on Equity FVTOCI transferred in Equity		-	-	-	-	-	-	-	-	61.05	(61.05)	-	-	-	-	(61.05)	-
Dividends on Equity shares and dividend tax		-	-	-	-	-	-	-	-	(291.17)	-	-	-	-	-	-	(291.17)
Transfer to Debt Redemption Reserve		-	-	-	-	150.00	-	-	-	(150.00)	-	-	-	-	-	-	-
Equity shares issued under ESOS		-	-	-	-	27.25	-	(13.82)	-	-	-	-	-	-	-	-	13.43
Employee Share Options Expenses		-	-	-	-	-	-	1.95	-	-	-	-	-	-	-	-	1.95
<b>Total changes</b>		0.16	-	-	-	27.25	150.00	(11.87)	-	1,096.62	319.78	(1.02)	-	304.35	232.74	855.85	2,118.01
Balance as at 31 March 2018	17	0.16	144.54	101.57	7,714.77	8,197.17	900.00	15.83	21,354.16	4,068.45	6,083.44	1.99	(1.54)	647.31	6,731.20	49,227.85	
Profit for the year		-	-	-	-	-	-	-	-	1,205.43	-	-	-	-	-	-	1,205.43
Other comprehensive Income(Loss)		-	-	-	-	-	-	-	-	(2.27)	(1,735.02)	1.54	-	199.86	(145.33)	(1,681.22)	-
<b>Total Comprehensive Income(Loss) for the year</b>		-	-	-	-	-	-	-	-	1,203.16	(1,735.02)	1.54	-	199.86	(145.33)	(1,678.95)	(475.79)
Share Application Money received during the year	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
Dividends on Equity shares and dividend tax		-	-	-	-	-	-	-	-	(307.36)	-	-	-	-	-	-	(307.36)
Transfer to Debt Redemption Reserve		-	-	-	-	150.00	-	-	-	(150.00)	-	-	-	-	-	-	-

₹ in Crore

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# STANDALONE STATEMENT OF CHANGES IN EQUITY

for the year ending March 31, 2019

Particulars	Note	Reserves and Surplus										Other Reserves			Total		
		Share Application Money Pending Allotment	Capital Reserve	Capital Redemption Reserve	Business Reconstruction Reserve	Securities Premium	Debiture Redemption Reserve	Employee Stock Options Outstanding	Treasury Shares held by ESOP Trust	General Reserve	Retained Earnings	Gain (loss) on Equity Instruments FVTOCI	Gain (loss) on Debt Instruments FVTOCI	Effective Portion of Cash Flow Hedge		Cost Of Hedging Reserve	Total OCI
Equity shares issued under ESOS		(0.16)	-	-	-	9.11	-	(4.30)	-	-	-	-	-	-	-	-	4.65
Employee Share Options Expenses		-	-	-	-	-	-	9.70	-	-	-	-	-	-	-	-	9.70
Shares acquired by the Trust		-	-	-	-	-	-	-	-	(123.05)	-	-	-	-	-	-	(123.05)
Hedging (gain)/ loss and cost of hedging transferred to non-financial assets		-	-	-	-	-	-	-	-	-	-	-	(0.80)	-	-	(0.80)	(0.80)
<b>Total changes</b>		(0.06)	-	-	-	9.11	150.00	5.40	(123.05)	-	745.80	(1,735.02)	1.54	199.06	(145.33)	(1,679.75)	(892.55)
<b>Balance as at 31 March 2019</b>	17	0.10	144.54	101.57	7,714.77	8,206.28	1,050.00	21.23	(123.05)	21,354.16	4,814.25	4,348.42	3.53	197.52	501.98	5,051.45	48,335.30

Basis of Preparation and Significant Accounting Policies (Refer Note 1 of Audited Standalone Financial Statements)

The accompanying Notes are an integral part of the Standalone Financial Statements.

This is the Standalone Statement of Changes in Equity referred in our report of even date.

## For Price Waterhouse & Co Chartered Accountants LLP

Firm Registration Number: 304026E/ E-300009

### Sumit Seth

Partner

Membership Number: 105869

## For and on behalf of the Board of Hindalco Industries Limited

### Praveen Kumar Maheshwari

Whole-time Director &

Chief Financial Officer

DIN-00174361

### Satish Pai

Managing Director

DIN-06646758

### Anil Malik

Company Secretary

### M M Bhagat

Director

DIN-00006245

Place : Mumbai

Dated : May 16, 2019

# STANDALONE STATEMENT OF CASH FLOWS

for the year ending March 31, 2019

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>		
Profit before tax	1,810.44	2,228.82
<b>Adjustment for :</b>		
Finance costs	1,683.04	1,900.54
Depreciation and Amortisation	1,693.16	1,617.32
Employee Share Option Expenses	9.52	1.94
Bad Debts and Provisions for Doubtful Debts and Advances	16.30	24.33
Liabilities no longer required Written-back	(39.96)	(54.78)
Unrealised Foreign Exchange (Gain)/ loss	(17.88)	18.26
Unrealised (Gain)/ loss on Derivative Transactions	(126.96)	7.19
Fair Value (Gain) on modification of Borrowings	(50.27)	(52.92)
(Gain)/ loss on Assets held for Sale	-	1.08
(Gain)/Loss on PPE and Intangibles Sold/Discarded	25.54	16.42
Interest Income	(411.23)	(387.16)
Dividend Income	(104.52)	(45.53)
Gain on withdrawal of Financial Guarantee	(61.96)	-
Realised Gain/ (loss) of Cash Flow Hedges in OCI	(71.06)	361.74
(Gain)/ loss on Investments measured at FVTPL	(281.78)	(409.54)
<b>Operating profit before working capital changes</b>	<b>4,072.38</b>	<b>5,227.71</b>
<b>Changes in working capital:</b>		
Inventories	(261.59)	(1,691.00)
Trade and Other Receivables	(407.20)	112.06
Financial Assets	51.63	124.20
Non-Financial Assets	(160.73)	417.99
Trade and Other Payables	(95.19)	859.60
Financial Liabilities	8.74	3.65
Non-Financial Liabilities (including contract liabilities)	75.23	49.08
<b>Cash Generation from Operation</b>	<b>3,283.27</b>	<b>5,103.29</b>
Payment of Direct Taxes (Net of refund)	(364.91)	(688.90)
<b>Net Cash Generated Grom/(Used in) Operating Activities</b>	<b>2,918.36</b>	<b>4,414.39</b>
<b>CASH FLOW FROM INVESTING ACTIVITIES</b>		
Purchase of Property Plant Equipment and Intangible Assets	(1,262.96)	(1,177.72)
Sale of Property Plant Equipment and Intangible Assets	18.10	33.79
Investment in Subsidiaries	(180.94)	(2,474.62)
Investment in Associates	(5.75)	-
Purchase/Sale of Investments - Others (Net)	266.91	5,577.36
Repayment of Loans and Deposits	354.77	269.91
Loans and Deposits given	(271.65)	(401.51)
Interest Received	422.95	409.91
Dividend Received	104.52	45.53
<b>Net Cash Generated from/(Used in) Investing Activities</b>	<b>(554.05)</b>	<b>2,282.65</b>

# STANDALONE STATEMENT OF CASH FLOWS

for the year ending March 31, 2019

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>CASH FLOW FROM FINANCING ACTIVITIES</b>		
Proceeds from issue of Equity Shares (Including Share Application Money)	4.97	13.73
Treasury shares acquired by Trust	(123.60)	-
Pre-Payment of Long term Borrowings	(1,574.81)	(5,685.62)
Repayment of Finance Lease Liability	(5.03)	(4.45)
Proceeds/(Repayment) of Short term Borrowings (Net) (Refer Note 44)	946.99	(1,349.07)
Dividend Paid (including Dividend Distribution Tax)	(307.36)	(291.17)
Finance Cost Paid	(1,598.36)	(1,870.99)
<b>Net Cash Generated from/(Used in) Financing Activities</b>	<b>(2,657.20)</b>	<b>(9,187.57)</b>
Net Increase/(Decrease) in Cash and Cash Equivalents	(292.89)	(2,490.53)
Add: Opening Cash and Cash Equivalents before Fair Value Gain/Loss on Liquid Investments	1,805.44	4,295.96
<b>Cash and cash equivalents before fair value gain/(loss) on liquid investments</b>	<b>1,512.55</b>	<b>1,805.43</b>
Add: Fair Value Gain/(Loss) on Liquid Investments	2.13	4.02
Cash and Cash Equivalents as reported in Balance Sheet	<b>1,514.68</b>	<b>1,809.45</b>

	₹ in Crore	
	Year ended 31.03.2019	As At 31/03/2018
<b>Supplemental Information</b>		
Non-Cash Transactions from Investing and Financing Activities		
Acquisition of Property, Plant and Equipment (PPE) by means of Finance Lease	-	9.98
Acquisition of Property, Plant and Equipment (PPE) by means of Government Grant	-	678.02
Novation and Restructuring of Long-Term Borrowings	-	237.50

	Year ended 31.03.2019	As At 31/03/2018
<b>Cash and Cash Equivalents comprise of:</b>		
Cash on Hand	0.33	0.37
Cheques and Drafts on Hand	7.49	16.36
Balances with Bank		
Current Accounts	344.40	218.95
Deposit with Banks with Less than 3 Months Initial Maturity	0.05	8.13
Short-Term Liquid Investments in Mutual Funds	1,162.40	1,565.64
	<b>1,514.68</b>	<b>1,809.45</b>

## Basis of Preparation and Significant Accounting Policies

The accompanying Notes are an integral part of the Standalone Financial Statements. This is the Standalone Statement of Cash Flows referred in our report of even date.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**  
Partner  
Membership Number: 105869

**For and on behalf of the Board of Hindalco Industries Limited**

**Praveen Kumar Maheshwari**  
Whole-time Director &  
Chief Financial Officer  
DIN-00174361

**Anil Malik**  
Company Secretary

**Satish Pai**  
Managing Director  
DIN-06646758

**M M Bhagat**  
Director  
DIN-00006245

Place : Mumbai  
Dated : May 16, 2019



# NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

## 1. Company Overview

Hindalco Industries Limited (“the Company”) was incorporated in India in the year 1958 having its registered office at Ahura Centre, 1<sup>st</sup> Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai – 400093.

The Company has two main streams of business Aluminium and Copper. In Aluminium, the Company caters to the entire value chain starting from mining of bauxite and coal through production of value added products for various applications.

The Company also has one of the largest single location Copper smelting facility in India.

The equity shares of the Company are listed on the Indian Stock Exchanges (National Stock Exchange & Bombay Stock Exchange) and GDRs are listed on the Luxemburg Stock Exchange.

### 1A. Basis of preparation

The separate financial statements of Hindalco Industries Limited (“the Company”) comply in all material aspects with Indian Accounting Standards (“Ind-AS”) as prescribed under section 133 of the Companies Act, 2013 (“the Act”), as notified under the Companies (Indian Accounting Standards) Rules, 2015 (including subsequent amendments) and other accounting principles generally accepted in India.

The financial statements for the year ended 31st March 2019 have been approved by the Board of Directors of the Company in their meeting held on 16th May, 2019.

The financial statements have been prepared on historical cost convention on accrual basis except for following assets and liabilities which have been measured at fair value:

- Financial instruments - measured at fair value;
- Assets held for sale - measured at fair value less cost to sell;
- Plan assets under defined benefit plans - measured at fair value; and
- Employee share-based payments - measured at fair value

In addition, the carrying values of recognised assets and liabilities designated as hedged items in fair value hedges that would otherwise be carried at cost are adjusted to record changes in the fair values attributable to the risks that are being hedged in effective hedge relationship.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Company take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these financial statements is determined on such a basis, except for employee share-based payment, leasing transactions, and measurements that have some similarities to fair value but are not fair value, such as net realisable value in Inventories or value in use in Impairment of Assets. The basis of fair valuation of these items are given as part of their respective accounting policies.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

### Adoption of new Accounting Standards

The Company has applied the following Accounting Standards and its amendments for the first time for annual reporting period commencing April 1, 2018:

- Ind AS 115, Revenue from Contracts with Customers
- Amendment to Ind AS 20, Accounting for Government Grant and Disclosure of Government Assistance.
- Appendix B, Foreign Currency Transactions and Advance Consideration to Ind AS 21, The Effects of Change in Foreign Exchange Rate
- Amendment to Ind AS 12, Income Taxes
- Amendment to Ind AS 40, Investment Property

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

- Amendment to Ind AS 28, Investments in Associates and Joint Ventures and Ind AS 112, Disclosure of Interest in Other Entities

The Company had to change its accounting policies following the adoption of Ind AS 115. Most of the other amendments listed above did not have any impact on the amounts recognized in prior periods and are not expected to significantly affect the current and future periods.

The Financial Statements have been presented in Indian Rupees (INR), which is the Company's functional currency. All financial information presented in INR has been rounded off to the nearest two decimals of Crore unless otherwise stated.

### 1B. Significant Accounting Policies

A summary of the significant accounting policies applied in the preparation of the financial statements are as given below. These accounting policies have been applied consistently to all the periods presented in the financial statements.

#### A. Investment in Subsidiaries and joint ventures

The investments in subsidiaries and joint ventures are carried in the financial statements at historical cost except when the investment, or a portion thereof, is classified as held for sale, in which case it is accounted for as Non-current assets held for sale and discontinued operations. When the Company is committed to a sale plan involving disposal of an investment, or a portion of an investment, in any subsidiary or joint venture, the investment or the portion of the investment that will be disposed of is classified as held for sale when the criteria described above are met. Any retained portion of an investment in a subsidiary or a joint venture that has not been classified as held for sale continues to be accounted for at historical cost.

#### B. Investment in Associates

The investments in associates are carried in these financial statements at fair Value through Other Comprehensive Income (OCI) except when the investment, or a portion thereof, is classified as held for sale, in which case it is presented as Non-current assets held for sale and discontinued operations. When the Company is committed to a sale plan involving disposal of an investment, or a portion of an investment in an associate the investment or the portion of the investment that will be disposed of is classified as held for sale when the criteria described above are met. Any retained portion of an investment in an associate that has not been classified as held for sale continues to be accounted for at fair value through OCI.

Any difference between the carrying amount of the associate and the fair value of retained investment and proceeds from disposal is recognised in profit or loss.

#### C. Investment in joint operation

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

When the Company undertakes its activities under joint operations, the Company as a joint operator recognises in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly;
- its liabilities, including its share of any liabilities incurred jointly;
- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly

The Company accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the standard applicable to the particular assets, liabilities, revenues and expenses.

When the Company transacts with a joint operation in which the Company is a joint operator (such as a sale or contribution of assets), the Company is considered to be conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognised in the financial statements only to the extent of other parties' interests in the joint operation.

When the Company transacts with a joint operation in which the Company is a joint operator (such as a purchase of assets), the Company does not recognise its share of the gains and losses until it resells those assets to a third party.

#### D. Property, Plant and Equipment

Property, plant and equipment held for use in the production or/and supply of goods or services,

or for administrative purposes, are stated in the balance sheet at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

The initial cost at cash price equivalence of property, plant and equipment acquired comprises its purchase price, including import duties and non-refundable purchase taxes, any directly attributable costs of bringing the assets to its working condition and location and present value of any obligatory decommissioning costs for its intended use. Cost may also include effective portion on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment transferred from hedge reserve as basis adjustment.

In case of self-constructed assets, cost includes the costs of all materials used in construction, direct labour, allocation of overheads, directly attributable borrowing costs and effective portion of cash flow hedges of foreign currency transferred from the hedge reserve as basis adjustment.

Subsequent expenditure on major maintenance or repairs includes the cost of the replacement of parts of assets and overhaul costs. Where an asset or part of an asset is replaced and it is probable that future economic benefits associated with the item will be available to the Company, the expenditure is capitalised and the carrying amount of the item replaced is derecognised. Similarly, overhaul costs associated with major maintenance are capitalised and depreciated over their useful lives where it is probable that future economic benefits will be available and any remaining carrying amounts of the cost of previous overhauls are derecognised. All other costs are expensed as incurred.

#### **Capital work-in-progress**

Capital work-in-progress comprises of assets in the course of construction for production or/and supply of goods or services or administrative purposes, or for purposes not yet determined, are carried at cost, less any recognised impairment loss. At the point when an asset is operating at management's intended use, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset are capitalised where the asset is available for use but incapable of operating at normal levels until a period of commissioning has been completed.

#### **Depreciation**

Depreciation is charged so as to write off the cost or value of assets, over their estimated useful lives or, in the case of leased assets (including leasehold improvements), over the lease term if shorter. The lease period is considered by excluding any lease renewals options, unless the renewals are reasonably certain. Depreciation is recorded using the straight line basis. The estimated useful lives and residual values are reviewed at each year end, with the effect of any changes in estimate accounted for on a prospective basis. Each component of an item of property, plant and equipment with a cost that is significant in relation to the total cost of that item is depreciated separately if its useful life differs from the others components of the asset.

Depreciation commences when the assets are ready for their intended use. Depreciated assets in Property, Plant & Equipment and accumulated depreciation amounts are retained fully until they are removed from service.

The useful life of the items of PPE estimated by the management for the current and comparative period are in line with the useful life as per Schedule II of the Companies Act, 2013.

#### **Disposal of assets**

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between net disposal proceeds and the carrying amount of the asset and is recognised in the statement of profit and loss.

#### **E. Investment property**

Investment properties held to earn rentals or for capital appreciation or both are stated in the balance sheet at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Depreciation is charged on a straight line basis over their estimated useful lives. Any gain or loss on disposal of investment property is determined as the difference between net disposal proceeds and the carrying amount of the property and is recognized in the statement of profit and loss. Transfer to, or from, investment property is done at the carrying amount of the property.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### F. Intangible Assets

#### Intangible assets acquired separately

Intangible assets acquired are reported at cost less accumulated amortization and accumulated impairment losses. Amortization is charged on a straight line basis over their estimated useful lives other than Mining rights. The estimated useful life and amortization method are reviewed at the end of each annual reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

#### Internally-generated intangible assets

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if all of the following can be demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset is recognised. Where no internally-generated intangible asset can be recognized, development expenditure is charged to the statement of profit and loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately.

### Mineral Reserves, Resources and Rights (Mining Rights)

Mineral reserves, resources and rights (together mining rights) which can be reasonably valued, are recognised in the assessment of fair values on acquisition. Exploitable mineral rights are amortised using the unit of production basis over the commercially recoverable reserves. Mineral resources are included in amortisation calculations where there is a high degree of confidence that they will be extracted in an economic manner. Commercially recoverable reserves are proved and probable reserves. Changes in the commercial recoverable reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

#### De-recognition of intangible assets

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset are recognised in the statement of profit and loss when the asset is derecognised.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment annually, and whenever there is an indication that the asset may be impaired.

### G. Stripping cost

Stripping costs incurred during the mining production phase are allocated between cost of inventory produced and the existing mine asset. The stripping ratio, as approved by the regulatory authority, for the life of the mine is obtained by dividing the estimated quantity of overburden by the estimated quantity of mineable coal / bauxite reserve to be extracted over the life of the mine. This ratio is periodically reviewed and changes, if any, are accounted for prospectively.

Stripping costs are allocated and included as a component of the mine asset when they represent significantly improved access to ore, provided all the following conditions are met:

- it is probable that the future economic benefit associated with the stripping activity will be realised;
- the component of the ore body for which access has been improved can be identified; and

- the costs relating to the stripping activity associated with the improved access can be reliably measured.

The overburden removal costs are included in Mining Rights under Intangible assets and amortised based on stripping ratio on the quantity of coal / bauxite excavated.

#### **H. Non-current assets (or disposal groups) held for sale**

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal Group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such asset (or disposal Group) and its sale is highly probable. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

#### **I. Impairment of Non-Financial Assets**

At the end of each reporting period, the Company reviews the carrying amounts of its tangible, intangible and other non-financial assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset/cash generating unit is estimated in order to determine the extent of the impairment loss (if any). Recoverable amount is the higher of fair value less cost to sell and Value in use. Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market

assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in the statement of profit and loss.

Non-financial assets (other than Goodwill) that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period. Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately in the statement of profit and loss.

#### **J. Foreign currency Transactions**

In preparing the financial statements, transactions in currencies other than the Company's functional currency (foreign currencies) are recognised at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the rates prevailing at that date. Non-monetary items are measured at historical cost.

Exchange differences on monetary items are recognised in the separate statement of profit and loss in the period in which they arise, except for:

- eligible exchange differences on foreign currency borrowings relating to qualifying assets under construction are included in the cost of those assets when they are regarded as an adjustment to interest; and
- exchange differences on transactions entered into in order to hedge certain foreign currency risks (see below for hedge accounting policies).

Changes in the fair value of financial asset denominated in foreign currency classified as Fair Value through Other Comprehensive Income are analysed between differences resulting from exchange differences related to changes in the

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

amortised cost of the security and other changes in the carrying amount of the security. Exchange differences related to changes in amortised cost are recognised in the statement of profit and loss, and other changes in carrying amount are recognised in other comprehensive income.

Changes in the fair value of non-monetary equity instruments irrevocably classified as fair value through other comprehensive income includes gain or loss on account of exchange differences.

The fair value of financial liabilities denominated in a foreign currency is translated at the spot rate at the end of the reporting period. The foreign exchange component forms part of its fair value gain or loss.

### K. Provisions and contingencies

Provisions are recognized when there is a present obligation (legal or constructive) as a result of a past event and it is probable (“more likely than not”) that it is required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the estimated cash flows to settle the present obligation, its carrying amount is the present value of those cash flows. The discount rate used is a pre-tax rate that reflects current market assessments of the time value of money in that jurisdiction and the risks specific to the liability.

#### Onerous contracts

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist when a contract under which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received from it.

#### Restructurings

A restructuring provision is recognised when there is a detailed formal plan for the restructuring which has raised a valid expectation in those affected. The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring.

#### Restoration (including Mine closure), rehabilitation and decommissioning

Close-down and restoration costs are provided for in the accounting period when the obligation

arising from the related disturbance occurs, based on the net present value of the estimated future costs of restoration to be incurred during the life of the mining operation and post closure. Provisions for close-down and restoration costs do not include any additional obligations which are expected to arise from future disturbance.

The initial close-down and restoration provision is capitalised. Subsequent movements in the close-down and restoration provisions for ongoing operations, including those resulting from new disturbance related to expansions or other activities qualifying for capitalisation, updated cost estimates, changes to the estimated lives of operations, changes to the timing of closure activities and revisions to discount rates are also capitalised within “Property, Plant and Equipment”.

#### Environmental liabilities

Environment liabilities are recognised when the Company becomes obliged, legally or constructively, to rectify environmental damage or perform remediation work.

#### Litigation

Provision relating to legal, tax and other matters is recognised once it has been established that the Company has a present obligation based on consideration of the information which becomes available up to the date on which the Company's financial statements are approved and may in some cases entail seeking expert advice in making the determination on whether there is a present obligation.

#### Contingent Liabilities and Assets

A contingent liability is a possible obligation that arises from a past event, with the resolution of the contingency dependent on uncertain future events, or a present obligation where no outflow is probable. Material contingent liabilities are disclosed in the financial statements unless the possibility of an outflow of economic resources is remote. Contingent assets are not recognized in the financial statements.

### L. Leases

Leases are classified as finance leases wherever the terms of the lease transfers substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

#### The Company as lessor

Amounts due from lessees under finance leases are recorded as receivables at the amount of net investment in the leases. Finance lease income is

allocated to accounting periods so as to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease unless the receipts are structured to increase in line with an inflation price index or another systematic basis which is more representative of the time pattern in which economic benefits from the leased asset is diminished. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

#### **The Company as lessee**

Assets held under finance leases are initially recognised at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly to the statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Company's general policy on borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

Operating lease payments are recognised as an expense on a straight-line basis over the lease term, unless the payments are structured to increase in line with an inflation price index or another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are recognised as an expense in the period in which they are incurred.

In the event that lease incentives are received to enter into operating leases, such incentives are recognised as a liability. The aggregate benefit of incentives is recognised as a reduction of rental expense on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

#### **M. Inventories**

Inventories are stated at the lower of cost and net realizable value. The cost of finished goods and work in progress includes raw materials, direct labour, other direct costs and related production overheads. Costs of inventories include the transfer from equity any gains/losses on qualifying cash flow hedges for purchases of raw materials.

The Inventories are measured at Fair Value only in those cases where the Inventories are designated into a fair value hedge relationship.

Cost is determined using the weighted average cost basis. However, the same cost basis is applied to all inventories of a particular class. Inventories of stores and spare parts are valued at weighted average cost basis after providing for cost of obsolescence and other anticipated losses, wherever considered necessary.

Net realizable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

Materials and other supplies held for use in the production of inventories (finished goods, work-in-progress) are not written down below the cost if the finished products in which they will be used are expected to sell at or above the cost.

#### **N. Trade receivable**

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If the receivable is expected to be collected within a period of 12 months or less from the reporting date (or in the normal operating cycle of the business, if longer), they are classified as Current Assets otherwise as Non-Current Assets.

Trade receivables are measured at their transaction price on initial recognition, unless it contains a significant financing component or pricing adjustments embedded in the contract.

Trade receivables which are subject to a factoring arrangement without recourse are de-recognized from the Balance Sheet in its entirety. Under this arrangement, the Company transfers relevant receivables to the factor in exchange for cash and does not retain late payment and credit risk.

Trade receivables which arise from contracts where the sale price is provisional and revenue model have the character of a commodity derivative are measured at fair value. The fair value is measured at forward rate and subsequent changes are recognised as Other Operating Revenue.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### O. Financial Instruments

All financial assets are recognised on trade date when the purchase of a financial asset is under a contract whose term requires delivery of the financial asset within the timeframe established by the market concerned. Financial assets are initially measured at fair value, plus transaction costs, except for those financial assets which are classified as at fair value through profit or loss (FVTPL) at inception. All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value.

#### Classification of financial assets

Financial assets are classified as 'equity instrument' if it is a non-derivative and meets the definition of 'equity' for the issuer. All other non-derivative financial assets are 'debt instruments'.

Financial assets at amortised cost and the effective interest method

Debt instruments are measured at amortised cost if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instrument give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments meeting these criteria are subsequently measured at amortised cost using the effective interest method less any impairment, with interest recognised on an effective yield basis in investment income.

The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest over the relevant period. The effective interest rate is the rate that exactly discounts the estimated future cash receipts (including all fees on points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the debt instrument, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

The Company may irrevocably elect at initial recognition to classify a debt instrument that meets the amortised cost criteria above as at FVTPL if that designation eliminates or significantly reduces an accounting mismatch had the financial asset been measured at amortised cost.

### Financial assets at fair value through other comprehensive income (FVTOCI)

Debt instruments are measured at FVTOCI if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows and selling assets; and
- the contractual terms of the instrument give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments meeting these criteria are subsequently measured at fair value with any gains or losses arising on remeasurement recognised in other comprehensive income, except for impairment gains or losses and foreign exchange gains or losses. Interest calculated using the effective interest method is recognised in the Statement of Profit and Loss in investment income. When the debt instrument is derecognised the cumulative gain or loss previously recognised in other comprehensive income is reclassified to the Statement of Profit and Loss account as a reclassification adjustment.

At initial recognition, an irrevocable election is made (on an instrument-by-instrument basis) to designate investments in equity instruments (other than held for trading purpose) at FVTOCI.

#### A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has evidence of a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated in an effective hedge relationship as a hedging instrument or not a financial guarantee.

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income and accumulated in the 'Gain/ (Loss) on Equity Instruments FVTOCI'. Where the asset is disposed of, the cumulative gain or loss previously accumulated in the 'Gain/ (Loss) on Equity Instruments FVTOCI' is directly reclassified to retained earnings.



For equity instruments measured at fair value through other comprehensive income, no impairments are recognised in the statement of profit and loss.

Dividends on these investments in equity instruments are recognised in the statement of profit and loss in investment income when the Company's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity; and the amount of the dividend can be measured reliably.

#### **Financial assets at Fair Value through Profit and Loss (FVTPL)**

Financial assets that do not meet the criteria of classifying as amortised cost or fair value through other comprehensive income described above, or that meet the criteria but the entity has chosen to designate as at FVTPL at initial recognition, are measured at FVTPL.

Investments in equity instruments are classified as at FVTPL, unless the Company designates an investment that is not held for trading at FVTOCI at initial recognition.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognised in the statement of profit and loss.

Dividend income on investments in equity instruments at FVTPL is recognised in the statement of profit and loss in investment income when the Company's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity; and the amount of the dividend can be measured reliably.

#### **Impairment of financial assets**

On initial recognition of the financial assets, a loss allowance for expected credit loss is recognised for debt instruments carried at amortised cost and FVTOCI. For debt instruments that are measured at FVTOCI, the loss allowance is recognised in the statement of profit and loss.

Expected credit losses of a financial instrument is measured in a way that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and

- reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

At each reporting date, the Company assesses whether the credit risk on a financial instrument has increased significantly since initial recognition.

When making the assessment, the Company compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increases in credit risk since initial recognition.

If, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. If, the credit risk on that financial instrument has increased significantly since initial recognition, the Company measures the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses.

For Trade Receivables and Contract Assets, the Company applies the simplified approach required by Ind AS 109, which requires expected life time losses to be recognized from initial recognition of the receivables.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date is recognised as an impairment gain or loss in the statement of profit and loss.

#### **Derecognition of financial assets**

The Company derecognises a financial asset on trade date only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Company neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Company recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognise the financial asset and

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also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset other than in its entirety (e.g. when the Company retains an option to repurchase part of a transferred asset), the Company allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognised and the sum of the consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in other comprehensive income is recognised in the statement of profit and loss. Cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair values of those parts.

### **Financial liabilities and equity instruments issued by the Company**

#### *Classification as debt or equity*

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

#### *Equity instruments*

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

#### *Compound instruments*

The component parts of compound instruments (convertible instruments) issued by the Company are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangement. At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for a similar non-convertible instrument. This amount is recorded as a liability on an amortised cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date. The equity component is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and included in equity, net of income tax effects, and is not subsequently remeasured.

### **Financial guarantee contract liabilities**

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, are subsequently measured at the higher of:

- the amount of loss allowance is determined by using expected credit loss model ; and
- the amount initially recognised less, where appropriate, cumulative amount of income recognised in accordance with the revenue recognition policies.

### *Financial liabilities*

Financial liabilities are classified as either financial liabilities 'at FVTPL' or 'other financial liabilities'.

### *Financial liabilities at FVTPL*

Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been acquired or incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and for which there is evidence of a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading may also be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the Companying is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind-AS 109 Financial Instruments permits the entire combined contract to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognised in the statement of profit and loss, except for the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability which is recognised in other comprehensive income.

The net gain or loss recognised in the statement of profit and loss incorporates any interest paid on the financial liability.

#### **Other financial liabilities**

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.

Other financial liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

#### **Offsetting financial instruments**

Financial assets and liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

### **P. Derivatives and hedge accounting**

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

The Company has a policy to designate certain derivatives as either:

- (a) hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge);

- (b) hedges of a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedge); or

- (c) hedges of a net investment in a foreign operation (net investment hedge).

The Company documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Company also documents the nature of the risk being hedged and how the Company will assess whether the hedging relationship meets the hedge effectiveness requirements (including its analysis of the sources of hedge ineffectiveness and how it determines the hedge ratio).

The full fair value of a hedging derivative is classified as a non-current asset or liability when the residual maturity of the derivative is more than 12 months and as a current asset or liability when the residual maturity of the derivative is less than 12 months.

#### **Fair value hedge**

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the statement of profit and loss, together with any changes in the fair value of the hedged item that are attributable to the hedged risk.

Hedge accounting is discontinued when the Company revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to the statement of profit and loss from that date.

#### **Cash flow hedges**

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit and loss, and is included in the '(Gain)/ Loss in Fair Value of Derivatives' line item.

Amounts previously recognised in other comprehensive income and accumulated in equity are reclassified to the statement of profit

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and loss in the periods when the hedged item affects the statement of profit and loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously recognised in other comprehensive income and accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability as a basis adjustment.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the statement of profit and loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in the statement of profit and loss.

### Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated under the heading of 'Foreign Currency Translation Reserve'. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit and loss.

Gains and losses on the hedging instrument relating to the effective portion of the hedge accumulated in the foreign currency translation reserve are reclassified to the statement of profit and loss on the disposal of the foreign operation.

### Q. Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and in hand, short-term deposits with an original maturity of three months or less and short term highly liquid investments.

For the purposes of the Cash Flow Statement, cash and cash equivalents is as defined above, net of outstanding bank overdrafts. In the balance sheet, bank overdrafts are shown within borrowings in current liabilities.

### R. Borrowing cost

Borrowing costs directly attributable to the acquisition, construction or production of qualifying

assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. The Company considers a period of twelve months or more as a substantial period of time.

Transaction costs in respect of long-term borrowings are amortised over the tenor of respective loans using effective interest method. All other borrowing costs are expensed in the period in which they are incurred.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

### S. Accounting for government grants

Government grants are recognized when there is reasonable assurance that we will comply with the conditions attached to them and that the grants will be received.

Government grants are recognised in the statement of profit and loss on a systematic basis over the periods in which the Company recognises as expenses the related costs for which the grants are intended to compensate. Government grants whose primary condition is that the Company should purchase, construct or otherwise acquire non-current assets are recognized in the balance sheet by setting up the grant as deferred income and its amortization is recognized in 'Other Income'.

Other government grants (grants related to income) are recognized as income over the periods necessary to match them with the costs for which they are intended to compensate, on a systematic basis. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of providing immediate financial support with no future related costs are recognized in the statement of profit and loss in the period in which they become receivable.

Grants related to income are presented under 'Other Income' or 'Other Operating Revenue' in the statement of profit and loss, except for grants received in the form of rebate or exemptions which are deducted in reporting the related expense.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

## T. Employee Benefits

### Retirement benefit and termination benefits

A defined contribution plan is a pension plan under which the Company pays fixed contributions into a separate entity. The Company has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement and medical plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of government bonds.

Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected in the balance sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to the statement of profit and loss. Past service cost is recognised in the statement of profit and loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income; and
- remeasurements

The Company presents the first two components of defined benefit costs in the statement of profit and loss in the line item employee benefits expense. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognised in the balance sheet represents the actual deficit or surplus in the Company's defined benefit

plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

A liability for a termination benefit is recognised at the earlier of when the entity can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

### Short-term and other long-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits such as annual leave and sick leave are measured at the present value of the estimated future cash outflows expected to be made by the Company in respect of services provided by employees up to the reporting date. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit retirement plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the statement of profit and loss in the period in which they arise. These obligations are valued annually by independent qualified actuaries.

## U. Employee Share-based Payments

Equity-settled share-based payments to employees are measured at the fair value of the options at the grant date.

The fair value of option at the grant date is expensed over the respective vesting period in which all of the specified vesting are to be satisfied with a corresponding increase in equity as "Employee Stock Options Account". In case of forfeiture

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of unvested option, portion of amount already expensed is reversed. In a situation where the vested option forfeited or expires unexercised, the related balance standing to the credit of the "Employee Stock Options Account" are transferred to the "Retained Earnings".

When the options are exercised, the Company issues new equity shares of the Company of ₹ 1/- each fully paid-up. The proceeds received and the related balance standing to credit of the Employee Stock Options Account, are credited to share capital (nominal value) and Securities Premium Account.

Share appreciation rights which are cash settled, are recognised as employee benefit expense over the relevant service period. The liability is fair valued at each reporting date and are presented as employee benefit obligations in the balance sheet.

### V. Income Taxes

Income tax expense represents the sum of the tax currently payable and deferred tax.

#### Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from 'profit before tax' as reported in the statement of profit and loss because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date.

Management periodically evaluates contingencies and positions taken in uncertain tax positions in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

#### Deferred tax

Deferred tax is recognised on differences between the carrying amounts of assets and liabilities in the balance sheet and the corresponding tax bases used in the computation of taxable profit.

Deferred tax liabilities are generally recognised for all taxable temporary differences.

Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible

temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Company intends to settle its current tax assets and liabilities on a net basis.

Minimum Alternative Tax (MAT) is recognized as an asset only when and to the extent there is convincing evidence that the Company will pay normal income tax during the specified period. In the year in which the MAT credit becomes eligible to be recognized as an asset, the said asset is created by way of credit to the statement of profit and loss and included in deferred tax assets. The Company reviews the same at each balance sheet date and writes down the carrying amount of MAT entitlement to the extent there is no longer convincing evidence to the effect that Company will pay normal income tax during the specified period.

#### Current and deferred tax for the period

Current and deferred tax are recognised in the statement of profit and loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively. Where current tax or

deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

#### **W. Revenue recognition**

Effective April 1, 2018, the Company has adopted Ind AS 115, Revenue from contracts with customers using the modified retrospective transition approach, which is applied to contracts that were not completed as of April 1, 2018. Accordingly, the comparatives have not been retrospectively adjusted.

The Company derives revenue principally from sale of hydrate, speciality alumina, aluminium and aluminium value added products, di-ammonium phosphate, copper, precious metals (gold and silver) and other materials.

The Company recognizes revenue when it satisfies a performance obligation in accordance with the provisions of contract with the customer. This is achieved when control of the product has been transferred to the customer, which is generally determined when title, ownership, risk of obsolescence and loss pass to the customer and the Company has the present right to payment, all of which occurs at a point in time upon shipment or delivery of the product. The Company considers shipping and handling activities as costs to fulfill the promise to transfer the related products and the customer payments for shipping and handling costs are recorded as a component of revenue.

In certain customer contracts, shipping and handling services are treated as a distinct separate performance obligation and the Company recognises revenue for such services when the performance obligation is completed.

The Company considers the terms of the contract in determining the transaction price. The transaction price is based upon the amount the Company expects to be entitled to in exchange for transferring of promised goods and services to the customer after deducting incentive programs, included but not limited to discounts, volume rebates etc.

For incentives offered to customers, the Company makes estimates related to customer performance and sales volume to determine the total amounts earned and to be recorded as deductions from "Revenue from contracts with customers". In making these estimates, the Company considers historical results that have a predictive value

of the amount that the Company expects to be entitled to for the transferred goods and services. If historical results have limited predictive value or the Company has limited experience with similar types of incentives, the estimate is made in such a manner, which ensures that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The actual amounts may differ from these estimates and are accounted for prospectively. No element of significant financing is deemed present as the sales are made with a credit term, which is consistent with market practice. The Company's obligation to repair or replace faulty products under the standard warranty terms is recognised as a cost with a corresponding provision.

For certain customer contracts, final prices are determined based on the underlying market index of commodity prices at a future date, for example prices on the London Metal Exchange Limited (LME) or London Bullion Markets Association (LBMA). In such contracts, the Company records revenue on a provisional basis considering current market price when control is transferred to the customer. At the end of each period, prior to final settlement date, adjustments are made to the provisional sale price based on movements in the underlying market index of commodity prices up to the date of final price determination. Such variable price movement is accounted as 'Other Operating Revenue'.

Revenue from irrevocable bill and hold/ holding certificate contracts is recognised when it is probable that delivery will be made, goods have been identified and kept separately, are ready for delivery in the present condition and the Company does not have the ability to use the product or to direct it to another customer. Under these arrangements, revenue is recognised once legal title has passed and control of the asset sold is transferred to the customer.

Export incentives and subsidies are recognized when there is reasonable assurance that the Group will comply with the conditions and the incentive will be received.

Claim on insurance companies, railway authorities and others, where quantum of accrual cannot be ascertained with reasonable certainty, are accounted for on acceptance basis.

Revenue excludes any taxes and duties collected on behalf of the government.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### X. Dividend and Interest Income

Dividend income from investments is recognised when the shareholder's right to receive payment has been established.

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

### Y. Exceptional items

Exceptional items include income or expense that are considered to be part of ordinary activities, however are of such significance and nature that separate disclosure enables the user of the financial statements to understand the impact in a more meaningful manner. Exceptional items are identified by virtue of either their size or nature so as to facilitate comparison with prior periods and to assess underlying trends in the financial performance of the Company.

### 1C. Measurement of fair value

#### a. Financial instruments

The estimated fair value of the Company's financial instruments is based on market prices and valuation techniques. Valuations are made with the objective to include relevant factors that market participants would consider in setting a price, and to apply accepted economic and financial methodologies for the pricing of financial instruments. References for less active markets are carefully reviewed to establish relevant and comparable data.

#### b. Marketable and non-marketable equity securities

Fair value for listed shares is based on quoted market prices as of the reporting date. Fair value for unlisted shares is calculated based on commonly accepted valuation techniques utilizing significant unobservable data, primarily cash flow based models.

#### c. Derivatives

Fair value of financial derivatives is estimated as the present value of future cash flows, calculated by reference to quoted price curves and exchange rates as of the balance sheet date. Options are valued using appropriate option pricing models and credit spreads are applied where deemed to be significant.

#### d. Embedded derivatives

Embedded derivatives that are separated from the host contract are valued by comparing the forward curve at contract inception to the forward curve as of the balance sheet date. Changes in the present value of the cash flows related to the embedded derivative are recognized in the balance sheet and in the income statement.

### 1D. Critical accounting judgment and key sources of estimation uncertainty

In preparing the financial statements in conformity with accounting principles generally accepted in India, management is required to make estimates and assumptions that affect reported amounts of assets and liabilities and the disclosure of contingent liabilities as at the date of the financial statements and the amounts of revenue and expenses during the reported period. Actual results could differ from those estimates. Any revision to such estimates is recognised in the period in which the same is determined.

The following paragraphs explains areas that are considered more critical, involving a higher degree of judgment and complexity.

#### a. Impairment of non-current assets

Ind AS 36 requires that the Company assesses conditions that could cause an asset or a Cash Generating Unit (CGU) to become impaired and to test recoverability of potentially impaired assets. These conditions include changes resulting from market and economic environment, including internal and external factors such as the Company's market capitalization, significant changes in the Company's planned use of the assets or a significant adverse change in the expected prices, sales volumes or raw material cost. The identification of CGUs involves judgment, including assessment of where active markets exist, and the level of interdependency of cash inflows. CGU is usually the individual plant, unless the asset or asset group is an integral part of a value chain where no independent prices for the intermediate products exist, a group of plants is combined and managed to serve a common market, or where circumstances otherwise indicate significant interdependencies.

In accordance with Ind AS 36, certain intangible assets are reviewed at least annually for impairment. If a loss in value is indicated, the recoverable amount is estimated as the higher of the CGU's fair value less cost to sell, or its value in use. Directly observable market prices rarely exist for the Company's assets, however, fair value



may be estimated based on recent transactions on comparable assets, internal models used by the Company for transactions involving the same type of assets or other relevant information. Calculation of value in use is a discounted cash flow calculation based on continued use of the assets in its present condition, excluding potential exploitation of improvement or expansion potential.

Determination of the recoverable amount involves management estimates on highly uncertain matters, such as commodity prices and their impact on markets and prices for upgraded products, development in demand, inflation, currency rate movements, input cost prices, operating expenses and tax and legal environment. The Company uses internal business plans, quoted market prices and the Company's best estimate of commodity prices, currency rates, discount rates and other relevant information. A detailed forecast is developed for a period of three to five years with projections thereafter.

**b. Employee retirement plans**

The Company provides both defined benefit employee retirement plans and defined contribution plans. Measurement of pension and other superannuation costs and obligations under such plans require numerous assumptions and estimates that can have a significant impact on the recognized costs and obligation, such as future salary level, discount rate, attrition rate and mortality.

The Company provides defined benefit plans to its employees. The discount rate is based on Government bond yield. Assumptions for salary increase in the remaining service period for active plan participants are based on expected salary increase in India. Changes in these assumptions can influence the net asset or liability for the plan as well as the pension cost. (Refer Note 43)

**c. Environmental liabilities and Asset Retirement Obligation (ARO)**

Estimation of environmental liabilities and ARO require interpretation of scientific and legal data, in addition to assumptions about probability and future costs. (Refer Note 46)

**d. Taxes**

The Company calculates income tax expense based on reported income. Deferred income tax expense is calculated based on the differences between the carrying value of assets and liabilities for financial reporting purposes and their respective tax basis that are considered temporary in nature.

Valuation of deferred tax assets is dependent on management's assessment of future recoverability of the deferred benefit. Expected recoverability may result from expected taxable income in the future, planned transactions or planned tax optimizing measures. Economic conditions may change and lead to a different conclusion regarding recoverability. (Refer Notes 25 and 37)

**e. Classification of leases**

The Company enters into leasing arrangements for various assets. The classification of the leasing arrangement as a finance lease or operating lease is based on an assessment of several factors, including, but not limited to, transfer of ownership of leased asset at end of lease term, lessee's option to purchase and estimated certainty of exercise of such option, proportion of lease term to the asset's economic life, proportion of present value of minimum lease payments to fair value of leased asset and extent of specialized nature of the leased asset. (Refer Notes 2 and 47)

**f. Useful lives of depreciable/ amortisable assets (tangible and intangible)**

Management reviews its estimate of the useful lives of depreciable/ amortisable assets at each reporting date, based on the expected utility of the assets. Uncertainties in these estimates relate to technical and economic obsolescence that may change the utility of certain software, IT equipment and other plant and equipment.

**g. Recoverability of advances/ receivables**

At each balance sheet date, based on discussions with the respective counter-parties and internal assessment of their credit worthiness, the management assesses the recoverability of outstanding receivables and advances. Such assessment requires significant management judgement based on financial position of the counter-parties, market information and other relevant factors.

**h. Fair value measurements**

The Company applies valuation techniques to determine the fair value of financial instruments (where active market quotes are not available) and non-financial assets. This involves developing estimates and assumptions consistent with the market participants to price the instrument. The Company's assumptions are based on observable data as far as possible, otherwise on the best information available. Estimated fair values may vary from the actual prices that would be achieved in an arm's length transaction at the reporting date. (Refer Note 49)

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### i. **Contingent assets and liabilities, provisions and uncertain tax positions**

There are various legal, direct and indirect tax matters and other obligations including environmental, mining, local and state levies, income tax holiday, availing input tax credits etc., which may impact the Company. Evaluation of uncertain liabilities and contingent liabilities and assets arising out of above matters require management judgment and assumptions, regarding the probability outflow or realization of economic resources and the timing and amount, or range of amounts, that may ultimately be determined. Such estimates may vary from the ultimate outcome as a result of differing interpretations of laws and facts, or application of relevant judicial precedents. (Refer Notes 25,45 and 46)

### j. **Inventory Measurement**

Measurement of bulk inventory quantities (such as coal, bauxite, etc.) lying at yards and work in progress of precious metals at smelter and refinery is material, complex and involves significant judgement and estimate resulting from measuring the surface area, dip measurement of materials in tanks/silos, etc. (Refer Note 11)

The Company performs physical counts of above inventory on a periodic basis using internal / external experts to perform volumetric surveys and assessments, basis which the estimate of quantity for these inventories is determined. The variations noted between book records and physical quantities of above inventories are evaluated and appropriately accounted in the books of accounts.

## 1E. **Recent Accounting Pronouncements:**

### **Amendments to Standards issued but not yet effective**

The Ministry of Corporate Affairs (MCA) has issued certain amendments in existing Accounting Standards during the year ended 31 March, 2019 which are effective from 01 April, 2019. The Company has assessed all these amendments and its impact on financial statement is explained below:

### **Appendix C, Uncertainty over Income Tax Treatments, to Ind AS 12, 'Income Taxes'**

The appendix explains how to recognize and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment. In particular, it discusses:

- how to determine the appropriate unit of account, and that each uncertain tax treatment should be considered separately or together as a group, depending on which approach better predicts the resolution of the uncertainty;
- that the entity should assume a tax authority will examine the uncertain tax treatments and have full knowledge of all related information, i.e. that detection risk should be ignored;
- that the entity should reflect the effect of the uncertainty in its income tax accounting when it is not probable that the tax authorities will accept the treatment;
- that the impact of the uncertainty should be measured using either the most likely amount or the expected value method, depending on which method better predicts the resolution of the uncertainty; and
- that the judgement and estimates made must be reassessed whenever circumstances have changed or there is new information that affects the judgement.

The Company is assessing its existing models and processes which it has developed to account for tax uncertainties against the specific guidance in appendix C to Ind AS 12 to consider the impact on income tax accounting in respect of its tax jurisdiction which is India.

### **Long-term Interests in Associates and Joint Ventures – Amendments to Ind AS 28, 'Investment in Associates and Joint Ventures'**

The amendment clarify the accounting for long-term interests in an associate or joint venture, which in substance form part of the net investment in the associate or joint venture, but to which equity accounting is not applied. Entities must account for such interests under Ind AS 109 'Financial Instruments' before applying the loss allocation and impairment requirements in Ind AS 28. Since the Company do not have such long-term interests in its associates or joint ventures, the amendments will not have any impact on its financial statements.

### **Prepayment Features with Negative Compensation – Amendments to Ind AS 109, 'Financial Instruments'**

The amendment made to Ind AS 109 enable entities to measure certain pre-payable financial assets (e.g. loans and debt securities which otherwise have to be measured as FVTPL) with negative compensation at amortised cost. To qualify for amortised cost measurement, the negative compensation must be

'reasonable compensation for early termination of the contract' and the asset must be held within a 'held to collect' business model. Since the Company do not have such financial instruments, the amendments will not have any impact on its financial statements.

#### **Plan Amendment, Curtailment or Settlement – Amendments to Ind AS 19, 'Employee Benefits'**

The amendments to Ind AS 19 clarify the accounting for defined benefit plan amendments, curtailments and settlements. It confirms that entities must:

- calculate the current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement by using the updated assumptions from the date of the change;
- any reduction in a surplus should be recognised immediately in profit or loss either as part of past service cost, or as a gain or loss on settlement. In other words, a reduction in a surplus must be recognised in profit or loss even if that surplus was not previously recognised because of the impact of the asset ceiling; and
- separately recognise any changes in the asset ceiling through other comprehensive income.

These amendments will apply to any future plan amendments, curtailments, or settlements of the Company on or after 1 April 2019.

#### **Ind AS 103, 'Business Combinations'**

The amendment clarifies that obtaining control of a business that is a joint operation, is a business combination achieved in stages. The acquirer should re-measure its previously held interest in the joint operation at fair value at the acquisition date.

These amendments will apply to future business combinations of the Company for which acquisition date is on or after 1 April 2019.

#### **Ind AS 111, 'Joint Arrangements'**

The amendment clarifies that the party obtaining joint control of a business that is a joint operation should not re-measure its previously held interest in the joint operation.

These amendments will apply to future transactions of the Company in which it obtains joint control of a business on or after 1 April 2019.

#### **Ind AS 23, 'Borrowing Costs'**

The amendments clarifies that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use or sale, it becomes part of general borrowings.

The Company's current practice is in line with this amendment and accordingly this amendment is not expected to have any material impact on its financial statements.

#### **Ind AS 12, 'Income Taxes'**

The amendment clarifies that the income tax consequences of dividends on financial instruments classified as equity should be recognised according to where the past transactions or events that generated distributable profits were recognised. These requirements apply to all income tax consequences of dividends. Previously, it was unclear whether the income tax consequences of dividends should be recognised in profit or loss, or in equity, and the scope of the existing guidance was ambiguous.

This amendment is not expected to have any material impact on the financial statements of the Company.

#### **Ind AS 116, Leases**

On 30 March 2019, the Ministry of Corporate Affairs (MCA) notified Ind AS 116, 'Leases' as part of the Companies (Indian Accounting Standards (Ind AS)) Amendment Rules, 2019. Ind AS 116 replaces existing standard Ind AS 17, Leases with effect from accounting periods beginning on or after 1 April 2019

The new standard introduces a single model of lease accounting and eliminates the classification of leases as either finance leases or operating leases for a lessee as was required under Ind AS 17. Ind AS 116 requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. For all leases except as noted above, a lessee is required to recognise a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments in its financial statement. Lessee will recognise depreciation of right of use assets and interest on lease liabilities in the statement of profit or loss. In the Cash Flow statement, operating cash flows will be higher as payment of the lease liability and related interest are to be classified within financing activities.

Requirements with regard to lessor accounting are substantially similar to accounting requirements contained in Ind AS 17. Accordingly, a lessor will continue to classify its leases as operating leases or finance leases, and account for those two types of leases differently.

The effective date for adoption of Ind AS 116 is financial year beginning on or after April 1, 2019. The standard permits two possible methods of transition:

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

- Fully retrospective- Retrospectively to each prior period presented applying Ind AS 8 Accounting Policies, Changes in Accounting Estimates and Errors.
- Modified retrospective- Retrospectively, with the cumulative effect of initially applying the Standard recognized at the date of initial application.

Under modified retrospective approach, the lessee records the lease liability as the present value of the remaining lease payments, discounted at the incremental borrowing rate and the right of use asset either as:

- Its carrying amount as if the standard had been applied since the commencement date, but discounted at lessee's incremental borrowing rate at the date of initial application or
- An amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments related to that lease recognized under

Ind AS 17 immediately before the date of initial application.

The Company is in the process of reviewing all its leasing arrangements in light of the new lease accounting rules. The Company will utilise the practical expedient available under Ind AS 116 and not reassess whether a contract is or contains a lease at the date of initial application. The Company also intends to use the exemptions provided by Ind AS 116 for short-term leases (less than a year) and leases for low value assets. The transition to the new lease accounting from the existing rules will be accomplished using the modified retrospective transition approach with no restatement of comparative information. The Company will elect certain available practical expedients on transition.

The Company is currently evaluating the impact this standard will have on its financial statements.

## 2. Property, Plant and Equipment

₹ in Crore

Particulars	ORIGINAL COST				DEPRECIATION				IMPAIRMENT			CARRYING VALUE		
	As at 01.04.2017	Additions	Disposal/ Adjustments	As at 31.03.2018	As at 01.04.2017	Additions	Disposal/ Adjustments	As at 31.03.2018	As at 01.04.2017	Recognised/ (Reversed)	Deduction/ Adjustments	As at 31.03.2018	As at 31.03.2018	As at 01.04.2017
Freehold Land	514.50	28.49	(1.15)	541.84	0.28	-	-	0.28	-	-	-	-	541.56	514.22
Buildings	7,584.01	155.39	2.00	7,741.40	1,057.98	286.82	(0.04)	1,344.76	59.26	-	-	59.26	6,337.38	6,466.77
Plant and Machinery	36,891.32	1,321.27	(105.05)	38,107.54	9,883.66	1,170.53	(65.49)	10,988.70	667.38	-	-	667.38	26,451.46	26,340.28
Office Equipment	164.39	12.55	(4.98)	171.96	118.67	14.94	(4.79)	128.82	0.52	-	-	0.52	42.62	45.19
Vehicles and Aircraft	391.61	21.21	(8.71)	404.11	167.57	21.03	(3.01)	185.59	0.23	-	-	0.23	218.29	223.81
Railway Sidings	488.79	-	-	488.79	93.37	27.83	-	121.20	16.65	-	-	16.65	350.94	378.77
Furniture and Fittings	119.00	8.77	(1.56)	126.21	87.07	6.07	(1.33)	91.81	0.64	-	-	0.64	33.76	31.29
Leased Plant & Machinery	49.98	-	-	49.98	32.61	2.47	-	35.08	-	-	-	-	14.90	17.37
Leased Furniture & Fixture	-	9.97	-	9.97	-	1.30	-	1.30	-	-	-	-	8.67	-
<b>Total</b>	<b>46,203.60</b>	<b>1,557.65</b>	<b>(119.45)</b>	<b>47,641.80</b>	<b>11,441.21</b>	<b>1,530.99</b>	<b>(74.66)</b>	<b>12,897.54</b>	<b>744.68</b>	<b>-</b>	<b>-</b>	<b>744.68</b>	<b>33,999.58</b>	<b>34,017.71</b>

₹ in Crore

Particulars	ORIGINAL COST				DEPRECIATION				IMPAIRMENT			CARRYING VALUE		
	As at 01.04.2018	Additions	Disposal/ Adjustments	As at 31.03.2019	As at 01.04.2018	Additions	Disposal/ Adjustments	As at 31.03.2019	As at 01.04.2018	Recognised/ (Reversed)	Deduction/ Adjustments	As at 31.03.2019	As at 31.03.2019	As at 01.04.2018
Freehold Land	541.84	37.14	-	578.98	0.28	3.47	-	3.75	-	-	-	-	575.23	541.56
Buildings	7,741.40	138.50	9.36	7,889.26	1,344.76	294.61	(0.28)	1,639.09	59.26	-	-	59.26	6,190.91	6,337.38
Plant and Machinery	38,107.54	568.88	(245.08)	38,431.34	10,988.70	1,207.02	(163.63)	12,032.09	667.38	-	(33.27)	634.11	25,765.14	26,451.46
Office Equipment	171.96	13.14	(5.96)	179.14	128.82	15.83	(5.47)	139.18	0.52	-	-	0.52	39.44	42.62
Vehicles and Aircraft	404.11	26.62	(10.28)	420.45	185.59	22.25	(6.89)	200.95	0.23	-	-	0.23	219.27	218.29
Railway Sidings	488.79	0.34	(0.11)	489.02	121.20	27.82	(0.07)	148.95	16.65	-	-	16.65	323.42	350.94
Furniture and Fittings	126.21	10.24	(8.66)	127.79	91.81	6.68	(7.72)	90.77	0.64	-	-	0.64	36.38	33.76
Leased Plant & Machinery	49.98	-	-	49.98	35.08	2.47	-	37.55	-	-	-	-	12.43	14.90
Leased Furniture & Fixture	9.97	-	-	9.97	1.30	1.94	-	3.24	-	-	-	-	6.73	8.67
<b>Total</b>	<b>47,641.80</b>	<b>794.86</b>	<b>(260.73)</b>	<b>48,175.93</b>	<b>12,897.54</b>	<b>1,582.09</b>	<b>(184.06)</b>	<b>14,295.57</b>	<b>744.68</b>	<b>-</b>	<b>(33.27)</b>	<b>711.41</b>	<b>33,168.95</b>	<b>33,999.58</b>

(a) Assets for which registration is pending

Freehold Land - Original Cost ₹ 30.87 Crore (as at 31/03/2018 ₹ 3.66 Crore). Carrying Value ₹ 29.99 Crore (as at 31/03/2018 ₹ 3.66 Crore).

(b) The Company's share in Jointly owned assets has been grouped together with the relevant class of Property, Plant and Equipment. The proportion of the Original Cost and Carrying value included in relevant class of assets are given below:

Freehold Land - Original Cost ₹ 51.56 Crore (as at 31/03/2018 ₹ 51.56 Crore). Carrying Value ₹ 51.56 Crore (as at 31/03/2018 ₹ 51.56 Crore).

Buildings - Original Cost ₹ 40.83 Crore (as at 31/03/2018 ₹ 41.29 Crore). Carrying Value ₹ 29.77 Crore (as at 31/03/2018 ₹ 30.78 Crore).

Plant and Machinery - Original Cost ₹ 41.24 Crore (as at 31/03/2018 ₹ 41.24 Crore). Carrying Value ₹ 1.71 Crore (as at 31/03/2018 ₹ 1.90 Crore).

Furniture and Fittings - Original Cost ₹ 3.87 Crore (as at 31/03/2018 ₹ 11.01 Crore). Carrying Value ₹ 0.26 Crore (as at 31/03/2018 ₹ 1.13 Crore).

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

Vehicles and Aircraft - Original Cost ₹ 0.16 Crore (as at 31/03/2018 ₹ 0.16 Crore). Carrying Value ₹ 0.07 Crore (as at 31/03/2018 ₹ 0.08 Crore).

Office Equipment - Original Cost ₹ 6.39 Crore (as at 31/03/2018 ₹ 9.75 Crore). Carrying Value ₹ 0.71 Crore (as at 31/03/2018 ₹ 1.02 Crore).

(c) Assets pledged and Hypothecated against borrowings:

i All the moveable and immoveable Property, Plant and Equipment of Mahan Aluminium, both present and future, carrying value ₹ 12,401.82 Crore (as at 31/03/2018 ₹ 12,798.52 Crore) are given as security towards first ranking charge against the rupee term loans from banks of ₹ 2,947.87 Crore (gross) (as at 31/03/2018 ₹ 2,947.87 Crore). All the moveable Property, Plant and Equipment of Mahan Aluminium, both present and future are given as first pari passu charge against the foreign currency term loan from bank of ₹ 434.42 Crore (gross) (as at 31/03/2018 ₹ 408.86 Crore).

ii All the moveable and immovable Property, Plant and Equipment of Aditya Aluminium both present and future, carrying value of ₹ 12,833.65 Crore (as at 31/03/2018 ₹ 13,226.12 Crore) are given as security towards charge against the term loan of ₹ 6,299.25 Crore (gross) (as at 31/03/2018 ₹ 7,874.06 Crore).

iii All moveable items of Property, Plant and Equipment (except moveable items of Mahan Aluminium, Aditya Aluminium, Kalwa Plant, Silvassa Plant, current assets of the Company) and certain immoveable properties of the Company are given as security towards Non-convertible debentures of ₹ 6,000 Crore (as at 31/03/2018 ₹ 6,000 Crore).

(d) For capital expenditures contracted but not incurred, Refer Note 45B.

(e) In respect of Property, Plant and Equipment taken under finance lease, refer to Note - 18A (d) for disclosure of future minimum lease payments and their present value.

(f) The carrying value of Capital Work in Progress (CWIP) as at 31/03/2019 is ₹ 947.00 Crore. This comprise of various routine projects and expansion spread over all units. Out of which major amounts are in Renukoot ₹ 185.45 Crore, Hirakud ₹ 125.37 Crore, Aditya ₹ 121.23 Crore, Dahej ₹ 97.85 Crore, Mouda ₹ 77.74 Crore and Mahan ₹ 64.39 Crore. Most of these routine projects will be capitalized during the year ending March 31, 2020. The carrying value of Capital Work in Progress (CWIP) as at 31/03/2018 was ₹ 736.25 Crore. This comprised of various routine projects and expansion spread over all units. Out of which major amounts were in Aditya ₹ 165.22 Crore, Mahan ₹ 56.42 Crore and Dahej ₹ 41.12 Crore.

During the current year, ₹ 8.93 Crore has been classified to held for sale from the CWIP.

(g) Items of Property, Plant and Equipment Useful Life (Years)

Buildings	30-60	
Plant and Machinery	15-40	
Office Equipment	3-6	
Vehicles and Aircraft	8-20	
Railway Sidings	15	
Furniture and Fittings	8-10	
Leased Plant and Machinery	5-25	(Over lease period)
Leased Furniture and Fixture	5	(Over lease period)
Freehold land used for mining	28	(Over minning lease period)

(h) Additions under various class of assets include grant related to Export Promotion Capital Goods (EPCG) of ₹ Nil (31/03/2018 ₹ 678.02 Crore).

(i) **Note on sale of Kollur unit.**

The Company has sold its Aluminium Foil manufacturing unit at Kollur, Telangana on slump sale basis through a Business Transfer Agreement dated 26th April, 2019 at a gross consideration of ₹ 28 Crore, subject to certain adjustments, basis the closing audited accounts of the unit. This transaction does not have any material impact on the financial statement of the Company.

- (j) The Property, Plant and Equipments residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

### 3. Investment Property

₹ in Crore

Particulars	ORIGINAL COST				DEPRECIATION				IMPAIRMENT			CARRYING VALUE		
	As at 01.04.2017	Addition	Disposal/ Adjustments	As at 31.03.2018	As at 01.04.2017	Addition	Disposal/ Adjustments	As at 31.03.2018	As at 01.04.2017	Recognised/ (Reversed)	Deduction/ Adjustments	As at 31.03.2018	As at 31.03.2018	As at 01.04.2017
Freehold Land	0.57	-	-	0.57	-	-	-	-	-	-	-	-	0.57	0.57
Buildings	12.37	-	-	12.37	3.69	0.23	-	3.91	-	-	-	-	8.46	8.69
<b>Total</b>	<b>12.94</b>	<b>-</b>	<b>-</b>	<b>12.94</b>	<b>3.69</b>	<b>0.23</b>	<b>-</b>	<b>3.91</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.03</b>	<b>9.26</b>

₹ in Crore

Particulars	ORIGINAL COST				DEPRECIATION				IMPAIRMENT			CARRYING VALUE		
	As at 01.04.2018	Addition	Disposal/ Adjustments	As at 31.03.2019	As at 01.04.2018	Addition	Disposal/ Adjustments	As at 31.03.2019	As at 01.04.2018	Recognised/ (Reversed)	Deduction/ Adjustments	As at 31.03.2019	As at 31.03.2019	As at 01.04.2018
Freehold Land	0.57	-	-	0.57	-	-	-	-	-	-	-	-	0.57	0.57
Buildings	12.37	-	-	12.37	3.91	0.23	-	4.14	-	-	-	-	8.23	8.46
<b>Total</b>	<b>12.94</b>	<b>-</b>	<b>-</b>	<b>12.94</b>	<b>3.91</b>	<b>0.23</b>	<b>-</b>	<b>4.14</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8.80</b>	<b>9.03</b>

Items of Investment Property	Useful Life (Years)
Freehold Land	NA
Buildings	60

₹ in Crore

	Year Ended 31.03.2019	Year Ended 31.03.2018
(a) Income and expenditure of Investment property:		
Rental income from investment property	5.86	1.90
Direct operating expenses (including repairs and maintenance) on properties generating rental income	(0.68)	(0.48)
Direct operating expenses (including repairs and maintenance) on properties not generating rental income	-	-

- (b) The Company has no contractual obligations to purchase, construct or develop investment properties or for repairs, maintenance and enhancements.

- (c) The fair value of the Company's Investment properties as at March 31, 2019 and as at March 31, 2018, have been arrived at on the basis of valuation carried out at the respective dates by an external, independent valuer registered with the authority which governs the valuer in India. The fair value measurement for all the investments properties has been categorised as Level 2 based on the inputs to the valuation technique used. Considering the type of the assets, market approach (sales comparable method) to estimate the fair value of the subject properties is adopted.

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Fair Value of Investment Properties:</b>	<b>Level 2</b>	<b>Level 2</b>
Freehold Land	39.81	39.81
Buildings	48.29	51.75
	<b>88.10</b>	<b>91.56</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### 4. Intangible Assets

₹ in Crore

Particulars	ORIGINAL COST				AMORTIZATION				IMPAIRMENT			CARRYING VALUE		
	As at 01.04.2017	Addition	Disposal/ Adjustments	As at 31.03.2018	As at 01.04.2017	Addition	Disposal/ Adjustments	As at 31.03.2018	As at 01.04.2017	Recognised/ (Reversed)	Deduction/ Adjustments	As at 31.03.2018	As at 31.03.2018	As at 01.04.2017
Mining rights (refer note c)	341.73	79.59	-	421.32	30.38	75.02	-	105.40	-	-	-	-	315.92	311.35
Computer Software	64.04	4.75	(0.77)	68.02	51.78	7.16	(0.77)	58.17	-	-	-	-	9.85	12.26
Technological Licenses	38.81	-	-	38.81	36.45	1.28	-	37.73	-	-	-	-	1.08	2.36
Rights to use assets	80.97	-	-	80.97	49.63	2.64	-	52.27	-	-	-	-	28.70	31.34
<b>Total</b>	<b>525.55</b>	<b>84.34</b>	<b>(0.77)</b>	<b>609.12</b>	<b>168.24</b>	<b>86.10</b>	<b>(0.77)</b>	<b>253.57</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>355.55</b>	<b>357.31</b>

₹ in Crore

Particulars	ORIGINAL COST				AMORTIZATION				IMPAIRMENT			CARRYING VALUE		
	As at 01.04.2018	Addition	Disposal/ Adjustments	As at 31.03.2019	As at 01.04.2018	Addition	Disposal/ Adjustments	As at 31.03.2019	As at 01.04.2018	Recognised/ (Reversed)	Deduction/ Adjustments	As at 31.03.2019	As at 31.03.2019	As at 01.04.2018
Mining rights (refer note c)	421.32	96.96	-	518.28	105.40	100.70	-	206.10	-	-	-	-	312.18	315.92
Computer Software	68.02	3.59	(0.23)	71.38	58.17	6.42	-	64.59	-	-	-	-	6.79	9.85
Technological Licenses	38.81	-	-	38.81	37.73	1.08	-	38.81	-	-	-	-	-	1.08
Rights to use assets	80.97	-	-	80.97	52.27	2.64	-	54.91	-	-	-	-	26.06	28.70
<b>Total</b>	<b>609.12</b>	<b>100.55</b>	<b>(0.23)</b>	<b>709.44</b>	<b>253.57</b>	<b>110.84</b>	<b>-</b>	<b>364.41</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>345.03</b>	<b>355.55</b>

(a) Items of Intangible Assets	Useful Life (Years)
Mining rights	11-41
Computer Software	3-6
Technological Licenses	4-5
Rights to use assets	5-35

- (b) Remaining amortisation period of mining rights ranges between 5-37 years.
- (c) Addition in Mining Rights includes ₹ 91.18 crore and amortization expense includes ₹ 87.52 Crore (31/03/2018, addition included ₹ 64.18 Crore, and amortization expense included ₹ 61.59 Crore) stripping activity assets.
- (d) The carrying value of Intangible Asset under Development as at 31/03/2019 is ₹ 34.82 Crore. This includes ₹ 34.39 crore pertaining to Enterprise Resource Planning System implementation. The carrying value of Intangible Asset under Development as at 31/03/2018 was ₹ 0.48 Crore.
- (e) The Intangible assets useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.



## 5. Investment in Subsidiaries

₹ in Crore

	Face Value	Numbers		Value As at	
	Per Unit	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
<b>Investment in Equity Shares (Fully Paid-Up) - (a) (b)</b>					
<b>Unquoted</b>					
A V Minerals (Netherlands) N.V.	€ 567.83	2,373,472	2,337,437	10,159.43	9,993.35
Dahej Harbour & Infrastructure Limited	₹ 10	50,000,000	50,000,000	50.00	50.00
East Coast Bauxite Mining Company Pvt Limited	₹ 10	7,400	7,400	0.01	0.01
Hindalco Almex Aerospace Limited	₹ 10	172,115,744	172,115,744	83.24	83.24
Lucknow Finance Company Limited	₹ 10	9,902,500	9,902,500	9.90	9.90
Minerals & Minerals Limited	₹ 10	50,000	50,000	0.17	0.17
Renuka Investments & Finance Limited	₹ 10	9,250,000	9,250,000	9.25	9.25
Renukeshwar Investments & Finance Limited	₹ 10	4,795,000	4,795,000	4.80	4.80
Suvas Holdings Limited	₹ 10	21,647,825	6,788,149	21.65	6.79
Utkal Alumina International Limited	₹ 10	6,251,482,818	6,251,482,818	6,361.75	6,361.75
				<b>16,700.20</b>	<b>16,519.26</b>
Other Equity Investment -					
(Fair Value of Financial Guarantee given for) - (c)					
Utkal Alumina International Limited	NA	NA	NA	74.41	74.41
Suvas Holdings Limited	NA	NA	NA	0.02	0.02
A V Minerals (Netherlands) N.V.	NA	NA	NA	3.24	3.24
				77.67	77.67
				<b>16,777.87</b>	<b>16,596.93</b>

- (a) Investments in subsidiaries have been carried at cost. None of the subsidiaries are listed on any stock exchange in India or outside India.
- (b) Refer Note - 57 to the Consolidated Financial Statements for information on principal place of business and the Company's ownership interest in the above subsidiaries.
- (c) Financial guarantees given to subsidiaries have been initially recognised at fair value and carried at cost until the investment in subsidiaries are derecognised or impaired. Also Refer Note 20A (a) and 27 (d).

## 6. Investments in Associates

₹ in Crore

	Face Value Per Unit	Numbers		Value	
		As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
<b>FVTOCI</b>					
<b>Investment in Equity Shares (Fully Paid-Up) - (a)</b>					
Unquoted					
Aditya Birla Science and Technology Company Private Limited	₹ 10	9,800,000	9,800,000	22.76	14.27
Aditya Birla Renewables Subsidiary Limited	₹ 10	5,746,000	-	5.75	-
				<b>28.51</b>	<b>14.27</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(a) Aggregate amount of investments is given below:

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>Aggregate cost of unquoted investments</b>	<b>15.55</b>	<b>9.80</b>

(b) Refer Note 57 to the Consolidated Financial Statements for information on principal place of business and the Company's ownership interest in the above Associates.

### 7A. Other Investments, Non-Current

	₹ in Crore				
	Face Value Per Unit	Numbers		Value As at	
		As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
<b>Equity instruments (Fully Paid-Up) at FVTOCI - (a)</b>					
<b>Quoted</b>					
National Aluminium Company Limited	₹ 5	18,385,327	18,385,327	101.94	122.17
Grasim Industries Limited	₹ 2	28,222,468	28,222,468	2,421.35	2,965.90
Ultra Tech Cement Limited	₹ 10	1,258,515	1,258,515	503.20	497.11
Aditya Birla Fashion & Retail Limited	₹ 10	44,982,142	44,982,142	991.18	678.56
Vodafone Idea Limited	₹ 10	228,340,226	228,340,226	416.72	1,733.10
Aditya Birla Capital Limited	₹ 10	39,511,455	39,511,455	384.05	576.67
				<b>4,818.44</b>	<b>6,573.51</b>
<b>Unquoted</b>					
Sai Wardha Power Generation Limited	₹ 10	2,830,352	2,830,352	2.83	2.83
Birla International Limited	CHF 100	2,500	2,500	5.97	3.43
Bharuch Dahej Railway Company Limited	₹ 10	13,530,000	13,530,000	25.75	17.90
				<b>34.55</b>	<b>24.16</b>
<b>Debt instruments at FVTOCI - (a)</b>					
<b>Unquoted</b>					
<b>Government Securities</b>					
6.83% Government of India Bond, 2039		2,000,000	2,000,000	18.36	18.14
<b>Debt instruments at FVTPL - (a)</b>					
<b>Unquoted</b>					
<b>Preference Shares</b>					
5.25% Redeemable Cumulative Preference Shares of Aditya Birla Health Services Limited	₹ 100	-	2,500,000	-	22.66
<b>Investments in Mutual Funds</b>					
Investments in Debt Schemes of Mutual Funds				44.85	-
				<b>4,916.20</b>	<b>6,638.47</b>

(a) Aggregate amount of investments and market value are given below:

Aggregate cost of quoted investments	500.65	500.65
Aggregate market value of quoted investments	4,818.44	6,573.51
Aggregate cost of unquoted investments	80.09	62.02

## 7B. Other Investments, Current

₹ in Crore

	Face Value Per Unit	Numbers		Value As at	
		As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
<b>Investments in Government securities at FVTOCI - (b)</b>					
<b>Unquoted</b>					
7.95% GOI FCI Special Bonds, 2026	₹ 100	513,000	513,000	5.21	5.12
6.65% GOI FCI Special Bonds, 2023	₹ 100	2,096,600	2,096,600	20.56	20.04
7.00% GOI FCI Special Bonds, 2022	₹ 100	3,039,500	3,039,500	30.33	29.34
6.20% GOI FCI Special Bonds, 2022	₹ 100	1,432,100	1,432,100	13.93	13.38
				<b>70.03</b>	<b>67.88</b>

### Investments in Debentures and Bonds at FVTPL

₹ in Crore

	Face Value Per Unit	Numbers		Value As at	
		As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
<b>Investment in Other Entities - (b) (c)</b>					
7.18% NCD of IRFC	₹ 1,000	1,192	1,192	0.12	0.12
8.10% NCD of IRFC	₹ 1,000	30,453	30,453	3.36	3.44
7.19% NCD NHB	₹ 1,000,000	50	50	5.13	5.21
8.60% NCD of LIC Housing Finance Limited	₹ 1,000,000	-	100	-	10.12
9.24% NCD of LIC Housing Finance Limited	₹ 1,000,000	-	500	-	50.87
9.44% NCD of LIC Housing Finance Limited	₹ 1,000,000	-	250	-	25.48
9.52% NCD of Jharkhand Road Projects Implementation Co. Ltd.	₹ 100,000	-	3,500	-	35.56
8.12% NCD of REC Limited	₹ 1,000	43,523	43,523	4.81	4.92
7.93% NCD of REC Limited	₹ 1,000	56,615	56,615	5.90	6.01
7.22% NCD of REC Limited	₹ 1,000	5,130	5,130	0.53	0.54
7.38% NCD of REC Limited	₹ 1,000	10,321	10,321	1.10	1.12
8.11% NCD of REC Limited	₹ 1,000,000	250	250	24.39	25.08
8.27% NCD of REC Limited	₹ 1,000,000	250	250	24.64	25.30
7.18% NCD of PFC	₹ 1,000,000	500	500	46.41	47.73
7.19% NCD of PFC	₹ 1,000	9,565	9,565	0.98	1.00
7.36% NCD of PFC	₹ 1,000	25,187	25,187	2.68	2.73
8.20% NCD of PFC	₹ 1,000	36,862	36,862	3.86	3.94
8.30% NCD of PFC	₹ 1,000	10,163	10,163	1.13	1.16
8.45% NCD of PFC	₹ 1,000,000	-	500	-	50.84
8.93% Power Grid Corporation-Bonds	₹ 1,000,000	-	100	-	10.39
7.77% NCD of PNB Housing Finance Ltd.	₹ 1,000,000	500	500	48.63	49.72
9% Sansar Trust Bonds	₹ 5,000,000	-	53	-	31.71
7.85% NCD of Tata Capital Financial Services Ltd	₹ 1,000,000	-	250	-	24.91
7.07% HUDCO Bonds	₹ 1,000,000	50	50	5.16	5.26
7.34% HUDCO Bonds	₹ 1,000	100,000	100,000	10.33	10.50
7.51% HUDCO Bonds	₹ 1,000	50,000	50,000	5.38	5.48
9.45% NCD HDFC Limited	₹ 1,000,000	-	250	-	25.47
9.65% NCD HDFC Limited	₹ 1,000,000	-	500	-	50.66
8.25% NCD of Bajaj Finance Ltd	₹ 1,000,000	-	500	-	50.10
7.77% NCD of Bajaj Finance Ltd	₹ 1,000,000	-	250	-	24.82
7.28% NHAI Bonds	₹ 1,000,000	50	50	5.35	5.46
8.63% NCD of IDFC Bank Ltd	₹ 1,000,000	250	250	25.03	25.26
				<b>224.92</b>	<b>620.91</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

	Face Value Per Unit	Numbers		Value As at	
		As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
<b>Investments in Mutual Funds at FVTPL - (a and b)</b>					
<b>Quoted</b>					
Investments in Debt Schemes of Mutual Funds				3,477.37	3,086.80
				<b>3,772.32</b>	<b>3,775.59</b>

- (a) Investments in Debt Schemes of Mutual Funds include ₹ 75.98 Crore (year ended 31.03.2018 ₹ 3.57 Crore) being deposit as margin money with counter parties for derivative transactions.
- (b) Aggregate amount of Quoted and Unquoted Investments and market value of Quoted Investments are given below:

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Aggregate cost of quoted investments	3,402.72	2,804.66
Aggregate market value of quoted investments	3,477.37	3,086.80
Aggregate cost of unquoted investments	<b>293.26</b>	<b>686.08</b>

- (c) NCD stands for Non Convertible Debentures

### 8A. Loans, Non-current

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
(Unsecured, Considered Good unless otherwise stated)		
Loans to Related Party - (a)	7.75	-
Loans to employees	9.88	5.88
	<b>17.63</b>	<b>5.88</b>

- (a) For related party transactions, Refer Note 44. - -

### 8B. Loans, Current

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
(Unsecured, Considered Good unless otherwise stated)		
Loans to Related Party - (a)	53.30	50.59
Loans to employees	4.68	3.97
Loans to others	0.07	0.01
	<b>58.05</b>	<b>54.57</b>

- (a) For related party transactions, Refer Note 44.

### 9A. Other Financial Assets, Non-current

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
(Unsecured, Considered Good unless otherwise stated)		
Derivative assets (Refer Note - 52)	95.99	107.41
Security deposits - (a)	139.20	136.84
Deposit with Others - (a) (b)	41.54	67.29
	<b>276.73</b>	<b>311.54</b>

- (a) Include balance of ₹ 0.24 Crore (31.03.2018 - ₹ 0.18 Crore) with Related parties. Refer Note 44 (I).
- (b) Include balance of ₹ 16.26 Crore (31.03.2018 - ₹ 44.71 Crore) with Related parties. Refer Note 44 (V).

## 9B. Other Financial Assets, Current

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
(Unsecured, considered good unless otherwise stated)		
Derivative assets (Refer Note - 52)	821.65	885.35
Derivatives matured pending realisation	17.79	-
Other financial assets at amortised cost		
Amounts recoverable from Related Parties (a)	-	0.02
Security deposits		
Unsecured, considered good	21.93	35.13
Considered doubtful	0.35	0.35
Allowance for doubtful amount	(0.35)	(0.35)
Deposits with Non Banking Financial Company (NBFC) with initial maturity more than 3 months	215.00	370.00
Accrued interest	27.94	40.00
Project expenses recoverable	-	11.32
Others		
Unsecured, considered good	30.34	31.42
Unsecured, considered doubtful	64.73	40.13
Allowance for doubtful amount	(64.73)	(40.13)
	<b>1,134.65</b>	<b>1,373.24</b>

(a) Related parties. Refer Note 44.

## 10A. Other Non-Current Assets

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
(Unsecured, Considered Good unless otherwise stated)		
Capital advances	116.21	86.22
Advance to supplier for goods and services	6.95	6.29
Prepaid expenses	6.48	6.98
Prepaid lease rent for leasehold lands	586.06	589.92
Others - (a)		
Unsecured considered good	446.28	172.08
Unsecured, considered doubtful	9.98	9.98
Allowance for doubtful advances	(9.98)	(9.98)
	<b>1,161.98</b>	<b>861.49</b>

(a) Mainly includes under protest payment made to various Statutory Authorities

## 10B. Other Current Assets

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
(Unsecured, Considered Good unless otherwise stated)		
Deposits with Government and Other Authorities	33.58	45.56
Advances to employees	9.98	12.08
Advance to supplier for goods and services	979.37	825.99
Prepaid expenses	32.40	33.15
Prepaid rent - leasehold land	14.41	13.95
Others		
Unsecured considered good - (a)	885.23	1,134.00
Unsecured considered doubtful	112.73	106.31
Allowance for doubtful advances	(112.73)	(106.31)
	<b>1,954.97</b>	<b>2,064.73</b>

(a) Mainly includes credit and claims receivable with indirect tax authorities.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### 11. Inventories

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	In Hand	In Transit	Total	In Hand	In Transit	Total
Raw Materials	1,310.15	3,011.00	4,321.15	1,479.46	2,636.78	4,116.24
Finished Goods	517.80	201.38	719.18	487.26	4.62	491.88
Work-in-Progress	5,262.02	77.78	5,339.80	5,136.21	49.29	5,185.50
Stores and Spares	519.76	26.11	545.87	520.37	33.14	553.51
Coal and Fuel	362.26	106.20	468.46	259.46	131.79	391.25
	<b>7,971.99</b>	<b>3,422.47</b>	<b>11,394.46</b>	<b>7,882.76</b>	<b>2,855.62</b>	<b>10,738.38</b>

- (a) Fair value hedges are mainly used to hedge the exposure to change in fair value of commodity price risks. The fair value adjustment remains part of the carrying value of inventory and taken to profit and loss when the inventory is sold.
- (b) Inventories are hypothecated to secure short-term borrowings, Refer Note - 18B (a).
- (c) Write downs of inventories (net of reversal) to net realizable value related to raw materials, work-in-progress and finished goods amounted to ₹ 184.14 Crore (31/03/2018 ₹ 19.93 Crore). These were recognized as expense during the year and included in 'cost of raw material consumed' and 'change in value of inventories of work-in-progress and finished goods' in statement of Profit and Loss.
- (d) Inventories include bulk materials of coal and bauxite lying at yards and precious metals of gold and silver lying at smelter and refinery aggregating to ₹ 1,730 Crore (as at 31/03/2018 ₹ 1,870 Crore).

### 12. Trade Receivables

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Trade Receivables:		
Secured, considered good	6.52	7.28
Unsecured, considered good	2,123.62	1,734.15
Unsecured, credit impaired	30.05	32.43
	<b>2,160.19</b>	<b>1,773.86</b>
Loss Allowances - (c)	(35.31)	(36.61)
	<b>2,124.88</b>	<b>1,737.25</b>

- (a) Trade receivables hypothecated against borrowings, Refer Note - 18B(a)
- (b) No trade or other receivable are due from directors or other officers of the Company either severally or jointly with any other person. Further, no trade or other receivable are due from firms or private companies respectively in which any director is a partner, or director or member.
- (c) Refer Note - 50 (C)
- (d) For related party transactions, Refer Note - 44.

### 13. Cash and Cash Equivalents

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Cash on hand	0.33	0.37
Cheques and drafts on hand - (a)	7.49	16.36
Balances with bank		
Current accounts	344.41	218.95
Deposit with Banks with less than 3 months initial maturity	0.05	8.13
Short term liquid investments in mutual funds	1,162.40	1,565.64
	<b>1,514.68</b>	<b>1,809.45</b>

- (a) Includes ₹ 0.04 Crore (as at 31/03/2018 ₹ 9.4 Crore) remittance in transit.
- (b) There is no repatriation restriction with regard to cash and cash equivalents at the end of reporting period and prior periods.

## 14. Bank Balances other than Cash and Cash Equivalents

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Balances with banks		
Earmarked balances - (a)	12.10	11.82
Deposits with initial maturity more than 3 months	53.09	0.08
	<b>65.19</b>	<b>11.90</b>

(a) Includes unclaimed dividend of ₹ 4.73 Crore (as at 31/03/2018 ₹ 4.87 Crore)

## 15A. Non-current Assets or Disposal Groups Classified as held for sale or as held for distribution to owners

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Non-current assets classified as held for sale - (a)	13.47	13.47
Assets of disposal group held for sale - (b)	80.86	61.52
	<b>94.33</b>	<b>74.99</b>

### (a) Non-current assets classified as held for sale or as held for distribution to owners\*

#### Investment in Joint Venture

Hydromine Global Minerals GMBH Limited	0.70	0.70
MNH Shakti Limited	12.77	12.77
	<b>13.47</b>	<b>13.47</b>

\*During the year subsidiaries Hindalco Guinea SARL and Mauda Energy Limited which were classified as Non current assets held for sale or as held for distribution to owners have been dissolved.

### (b) Assets of disposal group held for sale or as held for distribution to owners

Land and Building	24.61	24.65
Plant and Machinery	40.27	33.01
Others - (ii)	15.98	3.86
<b>Total</b>	<b>80.86</b>	<b>61.52</b>

- (i) The Company is in the process of disposing the above assets.
- (ii) Includes assets of Mahan Coal Limited and Tubed Coal Mines Limited, Joint Operations of the Company.
- (iii) Refer Note 57 to the Consolidated Financial Statements for information on principal place of business and the Company's ownership interest in the above Subsidiaries, Joint Ventures and Joint Operations.

## 15B. Liabilities Associated with Non-current Assets or Disposal Group Classified as Held For Sale or as held for distribution to owners

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Liabilities associated with assets held for sale	0.01	0.01
Liabilities associated with disposal group held for sale	0.02	0.02
	<b>0.03</b>	<b>0.03</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### 16. Share Capital

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Authorised</b>		
2,500,000,000 (as at 31.03.2018: 2,500,000,000) Equity Shares of ₹ 1/- each	250.00	250.00
25,000,000 (as at 31.03.2018: 25,000,000) Redeemable Cumulative Preference Shares of ₹ 2/- each	5.00	5.00
	<b>255.00</b>	<b>255.00</b>
<b>Issued</b>		
2,246,083,891 (as at 31.03.2018: 2,245,516,548) Equity Shares of ₹ 1/- each - (a)	224.61	224.55
	<b>224.61</b>	<b>224.55</b>
<b>Subscribed and Paid-up</b>		
2,246,076,494 (as at 31/03/2018: 2,245,509,151) Equity Shares of ₹ 1/- each fully paid-up	224.61	224.55
Less: Face Value of 546,249 (as at 31/03/2018: 546,249) Equity Shares forfeited	(0.05)	(0.05)
Add: Forfeited Shares (Amount originally Paid up)	0.02	0.02
	<b>224.58</b>	<b>224.52</b>
<b>Treasury Shares</b>		
Less: 16,316,130 (as at 31/03/2018: 16,316,130) Equity Shares. - (b)	(1.63)	(1.63)
Less: 5,558,727 (as at 31/03/2018: Nil ) Equity Shares. - (Refer Note 17 (b) (viii))	(0.56)	-
	<b>222.39</b>	<b>222.89</b>

- (a) Issued Share Capital as at 31/03/2019 includes 7,397 Equity Shares (as at 31/03/2018 7,397 Equity Shares) of ₹ 1/- each issued on Rights basis kept in abeyance due to legal case pending.
- (b) Treasury shares are held by Trident Trust which represents 16,316,130 equity shares of ₹ 1/- each fully paid-up of the Company issued, pursuant to a Scheme of Arrangement approved by the Hon'ble High Courts of Mumbai and of Allahabad, vide their Orders dated 31st October, 2002, and 18th November, 2002, respectively, to the Trident Trust, created wholly for the benefit of the Company and is being managed by trustees appointed by it. The tenure of the Trust is up to January 23, 2024.
- (c) Reconciliation of shares outstanding at the beginning and at the end of the reporting period:

	As at 31.03.2019		As at 31.03.2018	
	Numbers	₹ in Crore	Numbers	₹ in Crore
Equity shares outstanding at the beginning of the period	2,228,646,772	222.89	2,226,937,960	222.72
Equity shares allotted pursuant to exercise of Employee Stock Option Scheme (ESOS)	567,343	0.06	1,708,812	0.17
Equity shares purchased from market pursuant to Employee Stock Option Scheme (ESOS)	(5,558,727)	(0.56)	-	-
Equity shares outstanding at the end of the period	<b>2,223,655,388</b>	<b>222.39</b>	<b>2,228,646,772</b>	<b>222.89</b>

- (d) Rights, preferences and restrictions attached to Equity Shares:

The Company has one class of equity shares having a par value of ₹ 1/- per share. Each shareholder is eligible for one vote per share held. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amounts, in proportion to their shareholding.



(e) Details of shareholders holding more than 5% Equity Shares in the Company on reporting date:

	As at 31.03.2019		As at 31.03.2018	
	Number of Shared Held	Percentage of Holding*	Number of Shared Held	Percentage of Holding*
IGH Holdings Private Limited	349,963,487	15.58	349,963,487	15.59
Life Insurance Corporation of India and Its Associates	178,075,294	7.93	158,621,850	7.07
ICICI Prudential Retirement Fund	155,362,808	6.92	-	-
Morgan Guaranty Trust Company of New York	153,348,431	6.83	151,841,799	6.76
Turquoise Investment and Finance Private Limited	124,012,468	5.52	124,012,468	5.52

\* Percentage have been calculated on the basis of total number of shares outstanding (before adjusting shares held by Trident Trust and ESOP Trust. Refer footnote (b) above).

(f) Shares reserved for issue under options:

The Company has reserved equity shares for issue under the Employee Stock Option Schemes. (Refer Note 42 - Employee Share-based Payments for details of Employee Stock Option Schemes).

(g) The Company during the preceding 5 years:

- Has not allotted shares pursuant to contracts without payment received in cash.
- Has not issued shares by way of bonus shares.
- Has not bought back any shares.

(h) The Board of Directors of the Company has recommended final dividend of ₹ 1.20 per share aggregating to ₹ 269.46 Crore for the year ended 31<sup>st</sup> March 2019. Dividend distribution tax on proposed final dividend is ₹ 55.40 Crore.

## 17. Other Equity

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>Share Application Money pending Allotment</b>		
Balance at the beginning of the year	0.16	-
Add: Share Application Money received during the year	0.10	0.16
Less: Shares allotted during the year	(0.16)	-
Balance at the end of the year	<b>0.10</b>	<b>0.16</b>
	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>Reserves and Surplus</b>		
<b>Capital Reserve</b>	<b>144.54</b>	<b>144.54</b>
<b>Capital Redemption Reserve</b>	<b>101.57</b>	<b>101.57</b>
<b>Business Reconstruction Reserve</b>	<b>7,714.77</b>	<b>7,714.77</b>
	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>Securities Premium</b>		
Balance at the beginning of the year	8,197.17	8,169.92
Add: Premium on issue of shares under ESOS	9.11	27.25
Balance at the end of the year	<b>8,206.28</b>	<b>8,197.17</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Debenture Redemption Reserve</b>		
Balance at the beginning of the year	900.00	750.00
Add: Appropriation during the year	150.00	150.00
Balance at the end of the year	<b>1,050.00</b>	<b>900.00</b>

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Employee Stock Options</b>		
Balance at the beginning of the year	15.83	27.70
Add: Compensation for the Year (includes ₹ 0.18 Crore granted to employees of subsidiaries)	9.70	1.95
Less: Transferred to Securities Premium on exercise of Options	(4.30)	(13.82)
Balance at the end of the year	<b>21.23</b>	<b>15.83</b>

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Treasury Shares held by ESOP Trust</b>		
Balance at the beginning of the year	-	-
Add: Shares bought by the Trust during the year	(123.05)	-
Balance at the end of the year	<b>(123.05)</b>	-

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>General Reserve</b>	21,354.16	21,354.16

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Retained Earning</b>		
Balance at the beginning of the year	4,068.45	2,971.83
Profit for the year	1,205.43	1,436.49
Less: Transferred to Debenture Redemption Reserve	(150.00)	(150.00)
Less: Dividend on Equity Shares	(267.48)	(245.00)
Less: Dividend Distribution Tax - (a)	(39.88)	(46.17)
Add: Gain (loss) on Sale of Equity Instrument designated as FVTOCI during the year	-	61.05
Add: Actuarial gain (loss)	(2.27)	40.25
Balance at the end of the year	<b>4,814.25</b>	<b>4,068.45</b>

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Other Reserves</b>		
Items that will not be reclassified to Profit and Loss (Net of Income Tax Effect)		
Balance at the beginning of the year	6,083.44	5,763.66
Add: Other Comprehensive Income/ (Loss) for the Period	(1,735.02)	380.83
Less: Transferred to Retained Earning	-	61.05
	4,348.42	6,083.44
Items that will be reclassified to Profit and Loss (Net of Income Tax Effect)		
Balance at the beginning of the year	647.77	111.69
Add: Other Comprehensive Income for the Period	56.06	536.08
Less: Transferred to Non-Financial Assets	(0.80)	-
	703.03	647.77
Balance at the end of the year	<b>5,051.45</b>	<b>6,731.21</b>
	<b>48,335.30</b>	<b>49,227.85</b>

(a) Dividend Distribution Tax is net of credit ₹ 15.51 Crore (year ended 31/03/2018 ₹ 4.07 Crore) being dividend distribution tax paid by subsidiaries.

**(b) Descriptions of Other Equity**

**(i) Share application money pending allotment:**

Share application money pending allotment represents amount received from employees who has exercised employee stock options for which shares are pending allotment as on balance sheet date.

**(ii) Capital reserve:**

The Company has created capital reserve pursuant to past mergers and acquisitions.

**(iii) Capital redemption reserve:**

The Company has created capital redemption reserve as per the requirement of the Companies Act.

**(iv) Business reconstruction reserve:**

The Company had formulated a scheme of financial restructuring under sections 391 to 394 of the Companies Act 1956 ("the Scheme") between the Company and its equity shareholders approved by the High Court of judicature of Bombay to deal with various costs associated with its organic and inorganic growth plan. Pursuant to this, a separate reserve account titled as Business Reconstruction Reserve ("BRR") was created during the year 2008-09 by transferring balance standing to the credit of Securities Premium Account of the Company for adjustment of certain expenses as prescribed in the Scheme.

**(v) Securities premium account:**

Securities premium reserve is used to record the premium on issue of shares. The reserve is utilized in accordance with the provision of the Act.

**(vi) Debenture redemption reserve:**

The Company is required to create a debenture redemption reserve out of the profits which is available for payment of dividend, for the purpose of redemption of debentures.

**(vii) Employee stock options:**

The employee stock option account is used to recognize the grant date fair value of options /RSUs issued to employees under stock option schemes.

**(viii) Treasury Shares held by ESOP Trust**

The Company has created an "Hindalco Employee Welfare Trust"(Trust) for providing share-based payments to its employees (including its Subsidiaries' employees). The Company uses Trust as a vehicle for distributing shares to employees covered under Scheme. Trust buys shares of the Company from the market, for giving shares to employees.

Shares held by Trust are treated as Treasury shares. Equity instruments that are reacquired (Treasury shares) are recognised at cost and deducted from equity. No gain or loss is recognised in Statement of profit and loss on purchase, sale, issue or cancellation of Equity instruments. Share options whenever exercised, would be utilised from such treasury shares. Refer Note 42.

**(ix) General reserve:**

The Company has created this reserve by transferring certain amount out of the profit at the time of distribution of dividend in the past.

**(x) Other reserves**

**Gain (loss) on equity and debt instruments accounted as FVTOCI**

The Company has elected to recognize changes in the fair value of certain investments in other comprehensive income. These changes are accumulated within the FVTOCI equity investments reserve and FVTOCI debt investment reserve within equity.

**Cash Flow Hedging reserve:**

The Company uses hedging instruments as part of its risk management policy for commodity and foreign currency risk as described in Note 52. The Cash Flow hedging reserve is used to recognise the effective portion of gain or loss on designated hedging relationship.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### Cost of hedging reserve:

The Company designates the spot component of some of its derivative instruments in cash flow hedge relationship. The Company defers changes in the forward element of such instruments in the cost of hedging reserve. The deferred cost of hedging are included in the initial cost of the related hedged items when it is recognized or reclassified to the statement of profit or loss when the hedged item effects the statement of profit or loss.

### 18A. Borrowings, Non-current

₹ in Crore

Particulars	Non-current Portion		Current Maturities*		Total	
	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
<b>Secured</b>						
Debtures						
Secured Non Convertible Debtures - (a)	5,990.83	5,989.00	-	-	5,990.83	5,989.00
Term Loans						
From Banks						
Rupee Term Loans - (b)	9,186.66	10,776.09	-	-	9,186.66	10,776.09
Foreign Currency Term Loans - (c)	427.82	400.26	-	-	427.82	400.26
Finance Lease Obligation - (d)	27.70	32.72	5.35	5.36	33.05	38.08
	15,633.01	17,198.07	5.35	5.36	15,638.36	17,203.43
<b>Unsecured</b>						
Deferred Payment Liabilities	0.87	0.87	-	-	0.87	0.87
	15,633.88	17,198.94	5.35	5.36	15,639.23	17,204.30

\* Current maturities of non-current borrowings have been disclosed under "Other Financial Liabilities, Current".

#### (a) Debtures comprise of following:

₹ in Crore

	As at 31.03.2019		As at 31.03.2018		Redemption Date
	Gross	Carrying Value	Gross	Carrying Value	
15,000 9.60% Redeemable Non Convertible Debtures of ₹ 10 lac each	1,500.00	1,497.33	1,500.00	1,496.80	02/08/2022
15,000 9.55% Redeemable Non Convertible Debtures of ₹ 10 lac each	1,500.00	1,496.07	1,500.00	1,495.21	27/06/2022
30,000 9.55% Redeemable Non Convertible Debtures of ₹ 10 lac each	3,000.00	2,997.43	3,000.00	2,996.99	25/04/2022
	6,000.00	5,990.83	6,000.00	5,989.00	

All the above Debtures are secured by the moveable assets, both present and future (except moveable assets of Mahan Aluminium, Aditya Aluminium, Kalwa plant, Silvassa Plant, Current Assets of the Company) and certain immoveable properties of the Company.

#### (b) Rupee term loan from banks comprise of following:

₹ in Crore

	Note	Rate of Interest	As at 31.03.2019		As at 31.03.2018		End of tenure
			Gross	Carrying Value	Gross	Carrying Value	
Axis Bank	(i)	MCLR 3 Month	618.79	614.27	618.79	612.61	31/03/2030
State Bank of India	(i)	MCLR 3 Month + 10 bps	2,238.85	2,221.41	2,238.85	2,219.49	31/03/2030
ICICI Bank	(i)	MCLR 3 Month	90.23	90.23	90.23	90.23	31/03/2030
State Bank of India	(ii)	MCLR 3 Month + 10 bps	4,672.00	4,645.13	5,840.00	5,826.18	01/09/2030
Axis Bank and PNB Bank	(ii)	MCLR 3 Month	1,627.25	1,615.62	2,034.06	2,027.58	01/09/2030
			9,247.12	9,186.66	10,821.93	10,776.09	

- i. The term loans from banks of ₹ 2,947.87 Crore (gross) are secured by a first ranking charge/ mortgage/ security interest in respect of all the moveable fixed assets and all the immoveable properties of Mahan Aluminium Project, both present and future. ₹ 2,857.64 Crore (gross) is to be repaid in 16 quarterly installments commencing from June 2026. ₹ 90.23 Crore (gross) is to be repaid in 30 quarterly installments commencing from June 2020.
- ii. The term loan of 6,299.25 Crore (gross) is secured by a first ranking charge/ mortgage/security interest in respect of all the moveable fixed assets and all the immoveable properties of Aditya Aluminium Project both present and future. During the year, the Company has prepaid ₹ 1,574.81 Crore of loan from banks and covering period from May 2022 to February 2024. The remaining loan is to be repaid in 26 quarterly installments commencing from May 2024.

**(c) Foreign currency term loan from bank and Financial Institutions comprise of following:**

₹ in Crore

			As at 31.03.2019		As at 31.03.2018		
			Gross	Carrying Value	Gross	Carrying Value	End of tenure
Bank of Tokyo Mitsubishi (BTMU)	USD	LIBOR 3M + 135 bps	276.74	272.60	260.46	255.03	31/03/2022
Bank of Tokyo Mitsubishi (BTMU)	USD	LIBOR 3M + 135 bps	157.68	155.22	148.40	145.23	30/06/2022
			<b>434.42</b>	<b>427.82</b>	<b>408.86</b>	<b>400.26</b>	

Foreign currency term loan includes term loans from Bank of Tokyo Mitsubishi (BTMU) of USD 40 Millions and USD 22.79 Millions. BTMU loan is secured by a pari-passu first charge on all movable fixed assets of Mahan Aluminium, both present and future. The loans will be repaid in the single installment at the end of the tenure.

**(d) Finance Lease Obligations:**

In respect of finance lease obligations, future minimum lease payments and their present value are following:

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Gross Obligation	Present Value	Interest	Gross Obligation	Present Value	Interest
Not later than one year	8.21	5.35	2.86	8.59	5.36	3.23
Later than one year and not later than five years	27.60	20.20	7.40	29.72	20.60	9.12
Later than five years.	8.16	7.50	0.66	13.93	12.12	1.81
	<b>43.97</b>	<b>33.05</b>	<b>10.92</b>	<b>52.24</b>	<b>38.08</b>	<b>14.16</b>

The Company has entered into various finance lease arrangements mainly for plant and machinery, furniture and fixture for a term ranging from 5 to 25 years. The legal title to these items vests with their lessors. Some of the arrangements carries an option to the Company to purchase the underlying assets at a certain point of time at a nominal price and in other arrangements, ownership of the asset is transferred to the Company without any additional payment at end of the lease term. There are no restrictions imposed by lease arrangements except for in the arrangement of taking Ammonia storage facility on lease, wherein there was a lock-in period of initial 6 years. There are no sub-lease arrangements entered in to by the Company. Obligations under finance lease are secured against plant and machinery and furniture and fixture obtained under finance lease arrangements.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### (e) Net Debt Reconciliation

₹ in Crore

	Liabilities from financing activities			Total
	Non Current Borrowings	Current Borrowings	Finance Lease Obligations	
<b>Balance as at 31/03/2017*</b>	<b>23,412.30</b>	<b>4,238.07</b>	<b>32.55</b>	<b>27,682.92</b>
Cash Flows (Net)	(5,685.62)	(1,349.07)	(4.45)	(7,039.14)
Acquisition - finance leases	-	-	9.98	9.98
Foreign Exchange Adjustments	1.60	212.05	-	213.65
Fair Value Changes (Refer Note 27 (c))	(52.92)	-	-	(52.92)
Debt Issuance Costs and Amortisation (Net)	15.94	-	-	15.94
Interest Expense **	1,614.12	187.66	3.60	1,805.38
Interest Paid **	(1,608.96)	(184.48)	(3.60)	(1,797.04)
<b>Balance as at 31/03/2018*</b>	<b>17,696.46</b>	<b>3,104.23</b>	<b>38.08</b>	<b>20,838.77</b>
Cash Flows (Net)	(1,574.81)	946.99	(5.03)	(632.85)
Foreign Exchange Adjustments	25.56	(144.85)	-	(119.29)
Fair Value Changes (Refer Note 27 (c))	(50.27)	-	-	(50.27)
Debt Issuance Costs and Amortisation (Net)	39.48	-	-	39.48
Interest Expense **	1,413.87	180.85	3.23	1,597.95
Interest Paid **	(1,408.31)	(163.13)	(3.23)	(1,574.67)
<b>Balance as at 31/03/2019*</b>	<b>16,141.98</b>	<b>3,924.09</b>	<b>33.05</b>	<b>20,099.12</b>

\* Borrowings include Interest accrued on borrowings.

\*\* Interest expense and interest paid relates to borrowings and finance leases.

### 18B. Borrowings, Current

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Secured</b>		
Rupee Loans from Banks - (a)	107.78	37.95
<b>Unsecured</b>		
Rupee Loans from Banks	-	2.49
Foreign currency Loans from Indian Banks	597.30	1,917.75
Foreign currency Loans from Foreign Banks - (b)	2,404.17	1,134.67
Commercial Papers	785.72	-
Other Borrowings	0.13	0.10
	<b>3,787.32</b>	<b>3,055.01</b>
	<b>3,895.10</b>	<b>3,092.96</b>

- (a) Working Capital loan for Aluminium business, granted under the Consortium Lending Arrangement, are secured by a first pari-passu charge on entire stocks of raw materials, work-in-process, finished goods, consumable stores and spares and also book debts pertaining to the Company's Aluminium business, both present and future. Working Capital loan for the Copper business is secured by a first pari passu charge on stocks of raw materials, work-in-process, finished goods and consumable stores and spares and also book debts and other moveable assets of Copper business, both present and future.
- (b) Balance as at 31/03/2019 represents Buyers Credit from offshore branch whereas balance as at 31/03/2018 represents Packing Credit from Indian Branch.

## 19A. Trade Payables, Non-current

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Micro and Small Enterprises	-	-
Other than Micro and Small Enterprises	1.55	24.04
	<b>1.55</b>	<b>24.04</b>

## 19B. Trade Payable, Current

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Micro and Small Enterprises - (a)	14.32	4.66
Other than Micro and Small Enterprises - (b)	5,719.35	5,519.39
	<b>5,733.67</b>	<b>5,524.05</b>

- (a) Information related to Micro and Small Enterprises, as per the Micro, Small and Medium Enterprises Development Act, 2006 (MSME Development Act), are given below. The information given below have been determined to the extent such enterprises have been identified on the basis of information available with the Company:

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
(i) Principal amount outstanding	13.89	4.66
(ii) Interest on Principal amount due	0.04	-
(iii) Interest and Principal amount paid beyond appointment day	-	-
(iv) The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed date during the year) but without adding the amount of interest specified under MSME Development Act.	0.39	-
(v) The amount of interest accrued and remaining unpaid at the end of the year.	0.43	-
(vi) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the Small enterprise, for the purpose of disallowance as a deductible expenditure under Section 23 of MSME Development Act.	0.43	-

- (b) For details of trade payables to related parties Refer Note - 44

## 20A. Other Financial Liabilities, Non-current

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Derivative liabilities (Refer Note 52)	63.04	65.38
Financial Guarantee Contract liability - (a)	-	61.60
Liability for Capital Expenditure	3.79	7.33
Retention Amount Payable	3.46	4.57
Security and Other deposits	0.03	0.03
	<b>70.32</b>	<b>138.91</b>

- (a) Due to improvement in financial performance and credit rating of Utkal Alumina International Limited ("Utkal"), the requirement of providing the Company's financial guarantee towards Utkal's borrowing, has been withdrawn, leading to reversal of Financials Guarantee Contract Liability and recognition of other Income. (Refer Note - 27)

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### 20B. Other Financial Liabilities, Current

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Derivative liabilities (Refer Note - 52)	474.23	620.88
Application/Call money due for refund	-	0.31
Current maturities of finance lease obligations	5.35	5.36
Derivatives matured but not yet settled	1.41	4.34
Financial Guarantee Contract liabilities - (a)	-	1.45
Interest Accrued but not due	565.67	542.40
Liability for Capital Expenditure	715.63	792.16
Retention Amount Payable	85.24	79.38
Security and Other deposits	25.96	26.74
Unclaimed Dividends - (b)	4.73	4.87
Unclaimed matured debentures	-	0.02
Deferred operating lease obligations	2.30	1.72
Temporary book overdraft	4.67	-
	<b>1,885.19</b>	<b>2,079.63</b>

(a) Refer Note 20 A(a)

(b) This amount do not include any due and outstanding, to be credited to Investor Education and Protection Fund except ₹ 0.07 crore (as at 31/03/2018 ₹ 0.07 Crore) which is held in abeyance due to legal cases pending.

### 21A. Provisions, Non-current

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Provision for employee benefits	183.95	178.03
Provision for asset retirement obligations - (a)	91.65	86.61
Provision for environmental liability - (a)	5.13	6.13
Provision for enterprise social commitment - (a)	129.13	133.33
	<b>409.86</b>	<b>404.10</b>

(a) Refer Note - 46 - Provisions

### 21B. Provisions, Current

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Provision for employee benefits	233.86	216.83
Provision for environmental liabilities - (a)	66.91	12.80
Provision for enterprise social commitment - (a)	26.12	12.54
Provision for renewable power obligation - (a)	81.73	140.80
Provision for Legal cases - (a)	287.69	263.56
Other provisions - (a)	13.51	11.78
	<b>709.82</b>	<b>658.31</b>

(a) Refer Note - 46 - Provisions.



## 22. Deferred Tax Liabilities (Net)

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Deferred tax liabilities	6,634.61	6,432.41
Deferred tax assets	(4,454.93)	(4,510.23)
Deferred tax liability (net of deferred tax assets) - (a)	<b>2,179.68</b>	<b>1,922.18</b>

(a) Refer Note - 37 - Income Tax

## 23A. Other Non-current Liabilities

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Deferred Income (a)	614.98	636.00
Other liabilities	27.15	4.31
	<b>642.13</b>	<b>640.31</b>

(a) Represents deferred income in respect of grant related to Export Promotion Capital Goods (EPCG) of ₹ 614.98 Crore (as at 31/03/2018 ₹ 636.00 Crore).

## 23B. Other Current Liabilities

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Advance from customer (Refer Note - 26)	-	207.96
Customer refund liability - (a) (Refer Note - 26)	89.38	-
Statutory dues payable	455.01	406.58
Deferred income - (b)	21.01	21.01
Other liabilities	119.26	142.62
	<b>684.66</b>	<b>778.17</b>

(a) Customer refund liability are recognised for discount payable to customers.

(b) Represents deferred income in respect of grant related to Export Promotion Capital Goods (EPCG) of ₹ 21.01 crore (as at 31/03/2018 ₹ 21.01 crore).

## 24. Contract Liabilities

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Advance from Customer (Refer Note - 26)	126.38	-
	<b>126.38</b>	<b>-</b>

## 25. Income Tax Assets and Liabilities

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Non Current Tax Assets (Net)	281.80	1,242.79
Current Tax Assets	1,423.38	316.55
	<b>1,705.18</b>	<b>1,559.34</b>
Current Tax Liabilities (Net)	972.27	816.54
	<b>972.27</b>	<b>816.54</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

The Company is subject to tax assessments and ongoing proceedings, which are pending before various Tax Appellate Authorities. Management periodically evaluates the positions taken in tax returns with respect to such matters, including unresolved tax disputes, which involves interpretation of applicable tax regulations and judicial precedents. Current tax liability and tax asset balances are presented, after recognising as appropriate, provision for taxes payable and contingencies basis management's assessment of outcome of such ongoing proceedings and amounts that may become payable to the tax authorities. Considering the nature of such estimates and uncertainties involved, the amount of such provisions may change upon final resolution of the matters with tax authorities. Also Refer Note 1D

### 26. Revenue from Operations

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>Revenue from contracts with customers</b>		
Sale of products - (a)		
Domestic sales - (b) (c)	31,658.78	24,288.41
Export sales	13,393.45	18,724.75
	<b>45,052.23</b>	<b>43,013.16</b>
Sale of services - (d)	155.00	-
	<b>45,207.23</b>	<b>43,013.16</b>
<b>Other operating revenues - (a) and (e)</b>	541.93	432.88
	<b>45,749.16</b>	<b>43,446.04</b>
<b>Reconciliation of revenue recognised with contract price:</b>		
<b>Contract Price</b>	<b>45,915.08</b>	-
<b>Adjustments for:</b>		
Refund Liabilities and discounts	(538.05)	-
Hedging gain/ (loss)	(127.12)	-
Others - Provisionally priced contracts	(42.68)	-
<b>Revenue from Contracts with Customers</b>	<b>45,207.23</b>	-

- (a) Sales of Copper products and precious metals are accounted for provisionally, pending finalization of price and quantity. Variations are accounted for in the period of settlement. Final price receivable on sale of above products for which provisional price was not finalized are realigned at year end forward LME/LMBA rate and is being presented as part of other operating revenue (previous year presented under revenue from sale of products). Revenue from subsequent variation in price movement for year ended 31/03/2019 is ₹ 42.67 Crore (previous year ended 31/03/2018 ₹ 9.60 Crore), including subsequent variation in price movement from trading sales of ₹ 20.00 Crore (previous year ended 31/03/2018 ₹ Nil).
- (b) Includes sale of Di ammonium phosphate (DAP) including nutrient based subsidy of Phosphorus (P) & Potassium (K) ₹ 311.17 Crore (year ended 31/03/2018 ₹ 186.98 Crore).
- (c) Includes Excise duty ₹ Nil (year ended 31/03/2018 ₹ 636.89 Crore till 30/06/2017). Subsequent to introduction of Goods and Service Tax (GST) with effect from 1st July 2017, revenue is being reported excluding GST.
- (d) Sale of services represents freight and insurance on exports which are identified as separate performance obligation under Ind AS 115.
- (e) Includes Government Grant in the nature of sales related export Incentives and other benefits of ₹ 381.11 Crore (year ended 31/03/2018 ₹ 315.93 Crore).
- (f) **Impact on adoption of Ind AS 115:**  
The Company applied Ind AS 115 for the first time by using the modified retrospective method of adoption with the date of initial application of 1st April 2018. Under this method, the cumulative effect of initially applying Ind AS 115 is recognised as an adjustment to the opening balance of retained earnings as at 1st April 2018. Comparative prior period has not been adjusted.

Entities applying the modified retrospective method can elect to apply the revenue standard only to the contracts that are not completed as at the date of initial application (that is, they would ignore the effects of applying the revenue standard to contracts that were completed prior to the date of initial application).

The adoption of the new standard did not have a material impact as at 1st April 2018 for the revenue contracts that are not completed as at that date.

The following table presents the amounts by which each financial statement line item is affected in the current year ended 31st March 2019 by the application of Ind AS 115 as compared with the previous revenue recognition requirements. Advance from customer has been included as part of contractual liabilities and provision for discount payable to customer has been separately presented as refund liabilities under other current liabilities. Line items that were not affected by the changes have not been included.

₹ in Crore

Balance Sheet	31st March 2019 without adoption of Ind AS 115	Increase / (decrease)	31st March 2019 as reported
Current Liabilities			
Trade Payables	5,823.05	(89.38)	5,733.67
Other Current Liabilities	721.67	(37.00)	684.67
Contract Liabilities	-	126.38	126.38

Sale from services have been presented separately under Revenue from operations. These pertain to shipping and handling services identified as separate performance obligation.

(g) Refer Note 41 for disaggregated revenue information.

Applying the practical expedient as given in Ind AS 115, the Company has not disclosed the remaining performance obligations related disclosures for contracts where revenue recognized corresponds directly with value to the customer of the entity's performance completed to date.

## 27. Other Income

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
Interest Income [Refer Note - 49(A)(iii)]		
On Non-current Investments	1.37	1.37
On Current Investments	65.96	102.28
On Others - (a)	343.90	283.51
Dividend Income [Refer Note - 49(A)(iii)]		
On Non-current Investments - (b)	104.51	45.51
On Current Investments	0.01	0.02
Rent Income [Refer Note - 47]	12.89	12.09
Gain/ (Loss) on PPE and Intangibles sold/ discarded (Net)	(25.54)	(16.42)
Liabilities no longer required written back	39.96	54.78
Gain/ (loss) on sale of Financial Assets Measured at fair value through Profit and Loss (Net)	490.23	625.86
Gain/ (loss) on fair valuation of Financial Assets Measured at fair value through Profit and Loss (Net)	(208.45)	(216.32)
Other Non-Operating Income (Net) - (c) &(d)	115.19	55.14
	<b>940.03</b>	<b>947.82</b>

(a) Interest Income on others includes ₹ 257.40 Crore (year ended 31/03/2018 ₹ 197.80 Crore) of interest received from Income Tax Department.

(b) Dividend Income on long-term investments includes ₹ 75.46 Crore (year ended 31/03/2018 ₹ 20.00 Crore) of dividend received from subsidiary companies.

(c) Includes gain on modification of borrowings of ₹ 50.27 Crore (year ended 31/03/2018 ₹ 52.92 Crore) resulting from change in amount and timing of expected cash flow payments on term loans.

(d) Includes Gain on withdrawal of Financial Guarantee given to Subsidiary of ₹ 61.96 Crore (year ended 31/03/2018 ₹ Nil).

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### 28. Cost of Materials Consumed

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Copper Concentrate - (a)	17,692.34	18,104.67
Alumina	4,264.38	2,957.96
Bauxite	452.54	322.39
Caustic Soda	738.87	716.10
Calcined Petroleum Coke	1,758.40	1,398.80
Rock Phosphate	324.13	227.35
Anode	33.19	446.72
Others	1,982.99	1,240.05
	<b>27,246.84</b>	<b>25,414.04</b>

- (a) Purchase of copper concentrate is accounted for provisionally pending finalization of contents in the concentrate and price. Variations are accounted for in the period of settlement. Final price payable on purchase of copper concentrate for which provisional price and quantity were not finalized during the year are realigned based on forward LME and LBMA rate. Impact on cost from subsequent variation in price movement for year ended 31/03/2019 was ₹ (157.64) Crore (previous year ended 31/03/2018 ₹ 89.36 Crore).

### 29. Purchase of Stock-in-Trade

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Other Materials (a)	235.03	4.92
	<b>235.03</b>	<b>4.92</b>

- (a) Includes loss on realignment of ₹ 20.13 Crore for year ended 31/03/2019 (previous year ended 31/03/2018 ₹ Nil) based on forward LBMA/LME rates for provisionally priced trade purchases.

### 30. Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Opening Inventories		
Work-in-Progress	5,185.50	4,823.49
Finished Goods	491.88	489.36
	<b>5,677.38</b>	<b>5,312.85</b>
Less: Closing Inventories		
Work-in-Progress	5,339.80	5,185.50
Finished Goods	719.18	491.88
	<b>6,058.98</b>	<b>5,677.38</b>
Net Change	<b>(381.60)</b>	<b>(364.53)</b>
(Increase) Decrease of Excise Duty on Inventories	-	(54.70)
	<b>(381.60)</b>	<b>(419.23)</b>

Details of inventories under broad heads are given below:

₹ in Crore						
	Finished Goods		Work-in-Progress		Total	
	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018	As at 31.03.2019	As at 31.03.2018
Aluminium Business						
Alumina	44.70	40.24	356.81	320.33	401.51	360.57
Aluminium and Aluminium Products	476.76	213.57	887.53	869.80	1,364.29	1,083.37
Others - (a)	6.53	3.24	989.74	1,219.97	996.27	1,223.21
	<b>527.99</b>	<b>257.05</b>	<b>2,234.08</b>	<b>2,410.10</b>	<b>2,762.07</b>	<b>2,667.15</b>
Copper Business						
Copper and Copper Products	159.95	218.38	2,243.78	1,717.95	2,403.73	1,936.33
Precious Metals	8.80	8.36	855.80	1,051.57	864.60	1,059.93
Others	22.44	8.09	6.14	5.88	28.58	13.97
	<b>191.19</b>	<b>234.83</b>	<b>3,105.72</b>	<b>2,775.40</b>	<b>3,296.91</b>	<b>3,010.23</b>
	<b>719.18</b>	<b>491.88</b>	<b>5,339.80</b>	<b>5,185.50</b>	<b>6,058.98</b>	<b>5,677.38</b>

(a) Others include mainly inventories of coal, anode, caustic soda and other materials.

### 31. Employee Benefits Expenses

₹ in Crore		
	Year ended 31.03.2019	Year ended 31.03.2018
Salaries Wages and Bonus	1,614.06	1,552.24
Post-Employment Benefits		
Contribution to Provident Fund and other defined contribution funds (Refer Note - 43)	116.08	112.66
Gratuity and other defined benefit plans (Refer Note - 43)	67.61	66.14
Employee Share-based Payments (Refer Note - 42)		
Equity-settled Share-based Payment Transactions	9.52	1.95
Cash-settled Share-based Payment Expenses (Stock Appreciation Rights)	10.43	-
Employee Welfare	170.27	162.94
	<b>1,987.97</b>	<b>1,895.93</b>
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	6.26	1.28
	<b>1,981.71</b>	<b>1,894.65</b>

Note on impact of Hon'ble Supreme Court judgment on computation of provident fund contribution.

The Hon'ble Supreme Court of India ("SC") by their order dated February 28, 2019, in the case of Surya Roshani Limited v/s EPFO, set out the principles based on which allowances paid to the employees should be identified for inclusion in basic wages for the purposes of computation of Provident Fund contribution. Subsequently, a review petition against this decision has been filed and is pending before the SC for disposal.

The Company is awaiting the outcome of the review petition, and also directions from EPFO, if any, to assess any potential impact on the Company. Considering the above and uncertainty involved in the above matter, the Company has not made any adjustments in these Financial Statements and will continue to monitor the same.

### 32. Power and Fuel

₹ in Crore		
	Year ended 31.03.2019	Year ended 31.03.2018
Power and Fuel	6,936.97	6,030.11
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	0.03	-
	<b>6,936.94</b>	<b>6,030.11</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### 33. Finance Costs

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Interest Expenses on Financial Liabilities not at FVTPL - (a) and (d)	1,642.90	1,880.85
Other Finance Cost - (b)	23.11	26.14
Loss on Foreign Currency Transactions and Translation (Net) to the extent considered as adjustment to Interest Cost.	17.03	2.15
	<b>1,683.04</b>	<b>1,909.14</b>
Less: Transfer to Capital-Work-In-Progress - (c)	-	8.60
	<b>1,683.04</b>	<b>1,900.54</b>

- (a) Interest expenses include ₹ 1.41 Crore (year ended 31/03/2018 ₹ 21.39 Crore) paid to Income Tax Department.
- (b) Mainly includes unwinding of discount on Enterprise Social Commitment and Asset Retirement Obligation.
- (c) The Capitalisation rate used to determine the amount of borrowing costs to be capitalised is the weighted average rate interest rate applicable to the Company's general borrowings during the year ended 31/03/2018 was 6.3% p.a.
- (d) Includes difference between effective interest rate and contracted interest rate of ₹ 39.48 Crore (year ended 31/03/2018 ₹ 19.63 Crore) mainly from amortisation of debt issuance cost and modification of borrowings.

### 34. Depreciation and Amortisation

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Depreciation on Property, Plant and Equipment	1,582.09	1,530.99
Amortisation of Intangible Assets	110.84	86.10
Depreciation on Investment Properties	0.23	0.23
	<b>1,693.16</b>	<b>1,617.32</b>

### 35. Other Expenses

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Consumption of Stores and Spares	939.94	884.24
Repairs to Buildings	102.49	81.39
Repairs to Machinery	622.37	538.97
Equipment and Material Handling Expenses	432.52	420.08
Rates and Taxes	11.91	33.64
Rent [Refer Note 47]	90.94	83.41
Insurance	76.21	84.05
Payment to Auditors - (a)	3.95	3.47
Research and Development	26.83	22.06
Freight and Forwarding Expenses (Net) - (b)	872.25	774.42
Provision for Doubtful Loans, Advances and Debts (Net)	13.87	21.59
Bad Loans, Advances and Receivables Written-off/(Written-back) (Net)	2.43	2.74
Donation - (c)	17.00	10.94
Directors' Fees and Commission	4.87	6.34
Loss on Value of Non-Current Assets Held for Sale	-	1.08
(Gain)/Loss on Exchange Fluctuation	39.61	(23.73)
(Gain)/Loss in Fair Value of Derivatives	124.35	(117.16)
Cost of Own Manufactured Products Capitalized/Used	(60.31)	(29.03)
Premium on Coal Extraction	747.31	761.10
Miscellaneous Expenses - (d)	1,426.04	1201.08
	<b>5,494.58</b>	<b>4,760.68</b>
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	10.95	0.09
	<b>5,483.63</b>	<b>4,760.59</b>

(a) Details to Payment to Auditors are given below:

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Statutory Auditors:		
Statutory Audit Fees	2.33	2.25
Other Services	1.30	0.98
Reimbursement of Out-of-Pocket Expenses	0.15	0.14
Cost Auditors:		
Cost Audit Fee and Expenses	0.17	0.10
	<b>3.95</b>	<b>3.47</b>

- (b) Freight and forwarding expenses is net of freight subsidy of ₹ 19.74 Crore (year ended 31/03/2018 ₹ 21.48 Crore) on sale of DAP.
- (c) Donation includes ₹ 13.25 Crore (year ended 31/03/2018 of ₹ 6.75 Crore) paid to AB General Electoral Trust (erstwhile General Electoral Trust) as political donation.
- (d) Miscellaneous expenses include ₹ 0.04 (year ended 31/03/2018 ₹ Nil) paid to a firm of solicitors in which one of the Director of the Company is a partner.

### 36. Exceptional Income / (Expenses)

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Exceptional Income	-	61.25
Exceptional (Expenses)	-	(386.46)
	<b>-</b>	<b>(325.21)</b>

Details of Exceptional Income /(Expenses) as follows:

		₹ in Crore	
Nature	Brief Details	Year ended 31.03.2019	Year ended 31.03.2018
Legal Cases	Basis a Hon'ble Supreme Court judgment dated 13th October, 2017 and considering the prospective contribution required to be made to the District Mineral Fund (DMF) by the holder of a mining lease or a prospecting license-cum-mining lease in addition to the payment of royalty, an amount of ₹ 61.25 Crore had been written back during financial year 2017-18, which was provided/ paid in earlier years relating to period for which such levy was held invalid or not applicable.	-	61.25
	Based on the Hon'ble Supreme Court judgement dated 2nd August, 2017, in the matter of Common Cause V/s Union of India (to which the Company was not a party), provisional demands were raised on the Company for its bauxite mines. The Company had challenged the purported demand and obtained stay on the demands. As the matter was pending final determination and considering the implication of existing litigation, the Company had provided ₹ 219.69 Crore during the financial year 2017-18.	-	(219.69)
	Based on the Hon'ble Supreme Court judgment dated 15th September, 2017, in the matter of Transit Fee on forest produce (as applicable, amongst others, in the States of Uttar Pradesh and Madhya Pradesh), an amount of ₹ 139.35 Crore had been provided during the financial year 2017-18.	-	(139.35)
	Based on the Hon'ble Supreme Court judgment dated 22nd September, 2017, in the matter of proportionate reduction in input tax credit in case of sale in course of inter-state trade, commerce and branch transfer under the Gujarat Value Added Tax Act, 2003 to which the Company was not a party, an amount of ₹ 27.42 Crore related to earlier periods had been provided during the financial year 2017-18.	-	(27.42)
		<b>-</b>	<b>(325.21)</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### 37. Income Tax

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>(a) Income tax expenses recognised in Statement of Profit and Loss</b>		
Current Tax		
Current income tax Expenses for the year	374.80	490.36
Tax Adjustment for earlier years	-	(77.92)
	<b>374.80</b>	<b>412.44</b>
Deferred Tax		
Deferred Income Tax (benefits)/expenses for the year	605.01	870.25
MAT Credit Entitlement	(374.80)	(490.36)
	<b>230.21</b>	<b>379.89</b>
Total Income Tax Expenses recognised in Statement of Profit and Loss for the year	<b>605.01</b>	<b>792.33</b>
<b>(b) Reconciliation of estimated Income Tax Expenses at Indian Statutory Income Tax Rate to Income Tax Expenses reported in Statement of the Comprehensive Income</b>		
Profit before Income Taxes	1,810.44	2,228.82
Indian Statutory Income Tax Rate *	34.94%	34.61%
Estimated Income Tax Expenses	<b>632.64</b>	<b>771.35</b>
<b>Tax effect of adjustments to reconcile expected Income Tax expenses to reported Income Tax Expenses:</b>		
Income Exempt from Tax	(59.95)	(15.76)
Long-Term Capital (Gains)/Loss	2.21	(5.08)
Expenses not deductible in determining Taxable Profit	30.11	89.40
Impact of change in tax rate on Deferred Taxes	-	30.34
Tax Adjustment for earlier years	-	(77.92)
	<b>(27.63)</b>	<b>20.98</b>
<b>Income Tax Expenses recognised in the Statement of Profit and Loss</b>	<b>605.01</b>	<b>792.33</b>
*Applicable Indian statutory tax rate for the years ended 31/03/2019 is 34.944% and 31/03/2018 is 34.61%. Further, the Company is required to pay Minimum Alternate Tax u/s 115JB of Income Tax Act, 1961.		
<b>(c) Income Tax expenses recognised in OCI</b>		
Remeasurement of Defined Benefit Obligations	(1.24)	21.84
Change in Fair Value of Debt and Unquoted Equity Instruments designated at FVTOCI	(0.34)	(0.56)
Cash Flow Hedges and Others	28.87	289.34
	<b>27.29</b>	<b>310.62</b>
<b>(d) Deferred Tax Balances presented in the Balance Sheet are as follows:</b>		
Deferred Tax Assets		
Deferred Tax Assets	2,452.61	2,882.70
MAT Credit Entitlement	2,002.33	1,627.53
	<b>4,454.94</b>	<b>4,510.23</b>
Deferred Tax Liabilities		
Deferred Tax Liabilities	(6,634.62)	(6,432.41)
	<b>(6,634.62)</b>	<b>(6,432.41)</b>
Net Deferred Tax Assets/(Liabilities)	<b>(2,179.68)</b>	<b>(1,922.18)</b>



(e) Components and movement in Deferred Tax Assets and (Liabilities) as of and during the year ended.

₹ in Crore

	As at 01.04.2017	Recognised in the Statement of Profit and Loss	Recognised in Other Comprehensive Income	Deferred tax on basis adjustment	As at 31.03.2018
<b>Deferred Income Tax Assets</b>					
Provisions deductible for tax purposes in future period	259.29	90.32	-	-	349.61
Tax Losses/Benefits carry forwards, Net #	2,751.21	(515.79)	-	-	2,235.42
Retirement Benefits and Compensated Absences	90.65	(0.73)	(21.84)	-	68.08
Deferred Income	-	229.59	-	-	229.59
MAT Credit Entitlement	1,137.17	490.36	-	-	1,627.53
	4,238.32	293.75	(21.84)	-	4,510.23
<b>Deferred Income Tax Liabilities</b>					
PP&E Depreciation and Intangible Amortisation	(5,226.28)	(737.27)	-	-	(5,963.55)
Cash Flow Hedges	(57.54)	-	(289.34)	-	(346.88)
Fair Value Measurements of Financial Instruments	(176.30)	75.53	0.56	-	(100.21)
Others	(9.87)	(11.90)	-	-	(21.77)
	(5,469.99)	(673.64)	(288.78)	-	(6,432.41)
Net Deferred Tax Assets/(Liabilities)	<b>(1,231.67)</b>	<b>(379.89)</b>	<b>(310.62)</b>	<b>-</b>	<b>(1,922.18)</b>

₹ in Crore

	As at 01.04.2018	Recognised in the Statement of Profit and Loss	Recognised in Other Comprehensive Income	Deferred tax on basis adjustment	As at 31.03.2019
<b>Deferred Income Tax Assets</b>					
Provisions deductible for tax purposes in future period	349.61	17.04	-	-	366.65
Tax Losses/Benefits carryforwards, Net #	2,235.42	(442.84)	-	-	1,792.58
Retirement Benefits and Compensated Absences	68.08	1.81	1.24	-	71.13
Deferred Income	229.59	(7.34)	-	-	222.25
MAT Credit Entitlement	1,627.53	374.80	-	-	2,002.33
	4,510.23	(56.53)	1.24	-	4,454.94
<b>Deferred Income Tax Liabilities</b>					
PP&E Depreciation and Intangible Amortisation	(5,963.55)	(199.72)	-	-	(6,163.27)
Cash Flow Hedges	(346.88)	-	(29.29)	0.42	(375.75)
Fair Value Measurements of Financial Instruments	(100.21)	72.84	0.34	-	(27.03)
Others	(21.77)	(46.80)	-	-	(68.57)
	(6,432.41)	(173.68)	(28.95)	0.42	(6,634.62)
Net Deferred Tax Assets/(Liabilities)	<b>(1,922.18)</b>	<b>(230.21)</b>	<b>(27.71)</b>	<b>0.42</b>	<b>(2,179.68)</b>

# Tax Losses/Benefits carry forwards represents deferred income tax asset on unabsorbed depreciation carried forward under the Income Tax Act, for which there is no expiry period.

- (i) Deferred tax assets and deferred tax liabilities have been offset wherever the Company has a legally enforceable right to set-off current tax assets against current tax liabilities and where the deferred tax assets and deferred tax liabilities relates to income tax levied by the same taxation authorities.
- (ii) The Company has not recognised deferred tax assets on following long term capital losses as presently it is not probable of recovery.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore				
Description	AY*	Amount	Tax impact	Year of Expiry
Long Term Capital Loss	2011-12	25.98	6.05	AY 2019-20
Long Term Capital Loss	2012-13	80.55	18.77	AY 2020-21
Long Term Capital Loss	2013-14	38.26	8.91	AY 2021-22
Long Term Capital Loss	2015-16	29.28	6.82	AY 2023-24
Long Term Capital Loss	2016-17	33.54	7.81	AY 2024-25
Long Term Capital Loss	2017-18	900.72	209.83	AY 2025-26
		<b>1,108.33</b>	<b>258.20</b>	

\* Assessment Year (AY).

### 38. Other Comprehensive Income - Items that will not be reclassified to profit and loss

₹ in Crore		
	Year ended 31.03.2019	Year ended 31.03.2018
Actuarial Gain/(Loss) on Defined Benefit Obligations	(3.51)	62.08
Change in Fair Value of Investment in Associates as FVTOCI - (a)	8.49	(223.93)
Change in Fair Value of Equity Instruments as FVTOCI - (b)	(1,744.68)	543.71
Realized Gain/(Loss) on Equity Instruments as FVTOCI	-	61.05
Income Tax Effect on above	2.41	(21.84)
	<b>(1,737.29)</b>	<b>421.07</b>

(a) Refer Note - 6

(b) Refer Note - 7A

### 39. Other Comprehensive Income - Items that will be reclassified to profit and loss

₹ in Crore		
	Year ended 31.03.2019	Year ended 31.03.2018
Change in Fair Value of Debt Instruments designated as FVTOCI (a)	2.37	(1.56)
Cash Flow Hedges	307.20	465.41
Cost of Hedging	(223.38)	361.01
Income Tax Effect on above	(30.12)	(288.78)
	<b>56.07</b>	<b>536.08</b>

(a) Refer Note - 7A and 7B

### 40. Earnings per Share (EPS)

₹ in Crore		
	Year ended 31.03.2019	Year ended 31.03.2018
Basic EPS (₹)	5.41	6.45
Diluted EPS (₹)	5.41	6.45
Reconciliation of earnings used in calculating earnings per share		
Profit/(loss) for the period attributable to Equity Shareholders	1,205.43	1,436.49
Weighted average numbers of equity shares used as a denominator in the calculation of EPS:		
Weighted-average numbers of equity shares used as a denominator in the calculation of Basic EPS	2,227,573,655	2,227,789,728
Dilutive impact of Employee Stock Option Scheme	1,126,728	1,292,718
Weighted-average numbers of equity shares and potential equity shares used in the calculation of Diluted EPS	2,228,700,383	2,229,082,446
Face Value per Equity Share (₹)	1.00	1.00

Treasury shares are excluded from weighted-average numbers of equity shares used as a denominator in the calculation of EPS.

Stock options granted to the employees under various ESOP schemes are considered to be potential equity shares. They have been included in the determination of diluted earnings per share to the extent to which they are dilutive. The stock options have not been included in the determination of basic earnings per share. The details relating to stock options are under note 42.

## 41. Segment Reporting

The Company has identified Aluminium and Copper as its reportable segment basis how the chief operating decision maker (CODM) allocates resources and assess performance of the Company. No operating segments have been aggregated to form these reportable segments. Description of each of the reporting segments is as under:

- i. Aluminium Segment: This part of business manufactures and sells Hydrate and Alumina, and Aluminium and Aluminium Products.
- ii. Copper Segment: This part of business manufactures and sells Copper Cathode, Continuous Cast Copper Rods, Sulphuric Acid, DAP & Complexes, Gold, Silver and other precious metals.

The (CODM) primarily uses earnings before interest, tax, depreciation and amortisation (EBITDA) as performance measure to assess the performance of the operating segments. However, the CODM also receives information about the segment's revenues, segment assets and segment liabilities on regular basis.

### A. Segment Profit or Loss:

- (i) Segment's performance are measured based on Segment EBITDA. Segment EBITDA is defined as "Earnings from Continuing Operations before Finance Costs, Exceptional Items, Tax Expenses, Depreciation and Amortization, Impairment of Non-Current Assets, Investment income and Fair value Gains or Losses on Financial Assets but after allocation of Corporate Expenses". Segment EBITDA are as follows:

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>Segment Profit or Loss:</b>		
Aluminium	2,884.54	3,708.01
Copper	1,469.22	1,538.69
<b>Total Segment EBITDA</b>	<b>4,353.76</b>	<b>5,246.70</b>
<b>Segment EBITDA reconciles to Profit/ (Loss) before Tax as follows:</b>		
<b>Total Segment EBITDA</b>	4,353.76	5,246.70
Finance Costs	(1,683.04)	(1,900.54)
Depreciation and Amortization	(1,693.16)	(1,617.32)
Exceptional Items (Net)	-	(325.21)
Interest and Dividend Income	434.19	357.58
Fair value gain/ (loss) on financial assets/liabilities	281.78	409.54
Other Unallocated Income/(Expense) (Net)	116.91	58.07
<b>Profit/ (Loss) before Tax</b>	<b>1,810.44</b>	<b>2,228.82</b>

- (ii) Following amount are either included in the measure of segment profit or loss reviewed by the CODM or are regularly provided to the CODM:

	₹ in Crore			
	Year ended 31.03.2019		Year ended 31.03.2018	
	Aluminium	Copper	Aluminium	Copper
Interest Income - (a)	18.11	63.45	27.66	47.46
Depreciation and Amortization - (b)	1,503.29	167.92	1,444.81	152.63

- (a) Represents interest income from customers/ security deposits etc which are included in the measure of segment profit or loss.

- (b) Does not include in the measure of segment profit or loss but provided to the CODM.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### B. Segment Revenue:

- (i) The segment revenue is measured in the same way as in the Statement of Profit and Loss. Sales between operating segments are eliminated on consolidation. Segment Revenue and reconciliation of the same with total revenue as follows:

	Year ended 31.03.2019			Year ended 31.03.2018		
	Total Segment Revenue	Inter-segment Revenue	Revenue from Operations	Total Segment Revenue	Inter-segment Revenue	Revenue from Operations
Aluminium	23,616.28	5.40	23,610.88	21,072.59	1.18	21,071.41
Copper	22,155.41	17.13	22,138.28	22,382.38	7.75	22,374.63
<b>Total</b>	<b>45,771.69</b>	<b>22.53</b>	<b>45,749.16</b>	<b>43,454.97</b>	<b>8.93</b>	<b>43,446.04</b>

₹ in Crore

- (ii) During the year, there is no revenue from a single customer which is more than 10% of the Company's total revenue.
- (iii) The amount of its revenue from external customers analysed by the country, in which customers are located, are given below:

	Year ended	
	31.03.2019	31.03.2018
<b>India</b>	31,877.64	24,437.44
<b>Outside India</b>		
China	1,645.90	4,358.75
Korea	2,450.64	3,639.53
USA	1,124.15	2,058.96
Others	8,650.83	8,951.36
	<b>45,749.16</b>	<b>43,446.04</b>

₹ in Crore

- (iv) The Company recognises revenue at a point in time.

### C. Segment Assets:

Segment assets are measured in the same way as in the financial statements. These assets are allocated based on the operations of the segment and the physical location of the asset. However, certain assets like investments, loans, assets classified as held for sale, current and deferred tax assets etc. are not considered to be segment assets as they are managed at corporate level. Further, corporate administrative assets are not allocated to individual segments as they are also managed at corporate level and these are not linked to any specific segment.

- (i) Segment Assets and Reconciliation of the same with Total Assets are as under:

	Year ended	
	31.03.2019	31.03.2018
Aluminium	42,204.53	42,312.75
Copper	9,847.93	9,224.86
Total Segment Assets	52,052.46	51,537.61
Investments (Non-current and Current)	26,657.30	28,590.90
Investment Property	8.80	9.03
Loans	75.68	60.45
Assets classified as Held for Sale	94.33	74.99
Other Corporate Assets	2,613.66	2,455.93
<b>Total Assets</b>	<b>81,502.23</b>	<b>82,728.91</b>

₹ in Crore

During the year ended 31/03/2019, capital expenditure relating to Aluminium and Copper segments are ₹ 911.75 Crore and ₹ 205.98 Crore, respectively (year ended 31/03/2018 ₹ 1,388.07 Crore and ₹ 236.50 Crore, respectively).

- (ii) The total of non-current assets excluding financial assets and deferred tax assets analysed by the country in which assets are located are given below:

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
India	35,948.38	37,205.17
Outside India	-	-
	<b>35,948.38</b>	<b>37,205.17</b>

#### D. Segment Liabilities:

Segment liabilities are measured in the same way as in the financial statements. These liabilities are allocated based on the operations of the segment. In measurement of Aluminium and Copper segment's liabilities, items like borrowings, current and deferred tax liabilities, liabilities associated with assets classified as held for sale etc. are not considered to be segment liabilities as they are managed at corporate level. Further, corporate administrative liabilities are not allocated to individual segments as they also managed at corporate levels and does not linked to any specific segment.

Segment liabilities and reconciliation of the same with Total Liabilities are as under:

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Aluminium	5,361.71	5,680.49
Copper	4,389.01	3,979.93
Total Segment Liabilities	9,750.72	9,660.42
Borrowings (Non-Current and Current, including Current Maturity)	19,534.33	20,297.26
Deferred Tax Liabilities (Net)	2,179.68	1,922.18
Current Tax Liabilities (Net)	972.27	816.54
Liabilities classified as Held for Sale	0.03	0.03
Other Corporate Liabilities	507.51	581.74
<b>Total Liabilities</b>	<b>32,944.54</b>	<b>33,278.17</b>

## 42. Employee Share-based Payments

The Company has formulated employee share-based payment schemes with objective to attract and retain talent and align the interest of employees with the Company as well as to motivate them to contribute to its growth and profitability. The Company views employee stock options as instruments that would enable the employees to share the value they create for the Company in the years to come. At present, following employee share-based payment schemes are in operation, details of which are given below:

### (I) Employee Stock Option Scheme 2006 ("ESOS 2006"):

The shareholders of the Company has approved on 23/01/2007 an Employee Stock Option Scheme 2006 ("ESOS 2006"), under which the Company may grant up to 3,475,000 stock options to its permanent employees in the management cadre, whether working in India or out of India, including Managing and the Whole Time Directors of the Company, in one or more tranches. The ESOS 2006 is administrated by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee"). Each stock option, when exercised, would be converted into one fully paid-up equity share of ₹ 1/- each of the Company. The stock options will vest in 4 equal annual installments after completion of one year of service from the date of grant. The exercise price shall be average price of the equity shares of the Company in the immediate preceding seven day period on the date prior to the date on which the ESOS compensation committee finalises the specific numbers of Options to be granted to the employees discounted by such percentage not exceeding 30 % (thirty percent) to be determined by ESOS Compensation Committee in the best interest of the various stake holders in the prevailing market conditions. The maximum period of exercise is 5 years from the date of vesting and these stock options do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/ expired stock options are also available for grant. Further, on 23/09/2011 the ESOS 2006 has been partially modified and by which the Company may grant 6,475,000 stock options to its eligible employees.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

Under the ESOS 2006, till 31/03/2019 the Committee has granted 4,328,159 stock options (31/03/2018: 4,328,159 stock options) to its eligible employees out of which 1,819,941 stock options (31/03/2018: 1,819,941 stock options) has been forfeited/ expired and are available for grant as per term of the Scheme.

A summary of movement of the stock options and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2019		Year ended 31.03.2018	
	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	868,701	118.69	1,002,139	118.65
Granted during the year	-	-	-	-
Forfeited during the year	-	-	-	-
Exercised during the year	(52,330)	118.35	(133,438)	118.35
Expired during the year	-	-	-	-
Outstanding at year end	<b>816,371</b>	<b>118.71</b>	<b>868,701</b>	<b>118.69</b>
Vested and Exercisable at year end	816,371	118.71	868,701	118.69

₹ in Crore

Under ESOS 2006, as at 31/03/2019 the range of exercise prices for stock options outstanding was ₹ 118.35 to ₹ 118.73 (31/03/2018: ₹ 118.35 to ₹ 118.73) whereas the weighted average remaining contractual life of the stock options outstanding was 1.96 years (31/03/2018: 2.83 years).

### (II) Employee Stock Option Scheme 2013 (“ESOS 2013”):

The shareholders of the Company has approved on 10/09/2013 an Employee Stock Option Scheme 2013 (“ESOS 2013”), under which the Company may grant up to 5,462,000 Options (comprising of Stock Options and/ or Restricted Stock Units (RSU)) to the permanent employees in the management cadre and Managing and Whole time Directors of the Company and its subsidiary companies in India and abroad, in one or more tranches. The ESOS 2013 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company (“the Committee”). The stock options exercise price would be determined by the Committee, whereas the RSUs exercise price shall be the face value of the equity shares of the Company as at the date of grant of RSUs. Each stock option and each RSU entitles the holders to apply for and be allotted one fully paid-up equity share of ₹ 1/- each of the Company upon payment of exercise price during exercise period. The stock options will vest in 4 equal annual installments after completion of one year of the services from the date of grant, whereas RSU will vest upon completion of three years of services from the date of grant. The maximum period of exercise is 5 years from the date of vesting and these stock option/ RSU do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/ expired stock options and RSUs are also available for grant.

In terms of ESOS 2013, till 31/03/2019 the Committee has granted 2,250,754 stock options and 2,252,254 RSUs (31/03/2018: 2,250,754 stock options and 2,252,254 RSUs) to the eligible employees of the Company and some of its subsidiary companies. Further, 2,31,224 stock options and 2,48,954 RSUs (31/03/2018: 2,31,224 stock options and 2,48,954 RSUs) has been forfeited/ expired and are available for grant as per term of the Scheme.

A summary of movement of stock options and RSUs and weighted average exercise price (WAEP) is given below:

	As at 31.03.2019				As at 31.03.2018			
	Stock Options		RSUs		Stock Options		RSUs	
	Number	WAEP	Number	WAEP	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	968,665	119.45	460,555	1.00	1,953,262	119.91	1,046,945	1.00
Granted during the year	-	-	-	-	-	-	-	-
Re-instated during the year	-	-	-	-	8,772	151.30	-	-
Forfeited during the year	-	-	-	-	(4,385)	119.45	-	-
Exercised during the year	(367,395)	115.45	(147,618)	1.00	(988,984)	120.64	(586,390)	1.00
Expired during the year	-	-	-	-	-	-	-	-
Outstanding at year end	<b>601,270</b>	<b>121.89</b>	<b>312,937</b>	<b>1.00</b>	<b>968,665</b>	<b>119.45</b>	<b>460,555</b>	<b>1.00</b>
Vested and Exercisable at year end	515,759	119.43	235,955	1.00	837,045	118.51	272,239	1.00

Under ESOS 2013, the range of exercise prices for stock options outstanding as at 31/03/2019 was ₹ 73.60 to ₹ 167.15 (31/03/2018: ₹ 73.60 to ₹ 167.15) whereas exercise price in case of RSUs was ₹ 1.00 (31/03/2018: ₹ 1.00). The weighted average remaining contractual life for the stock options and RSUs outstanding as at 31/03/2019 was 2.78 years and 3.69 years, respectively (31/03/2018: 3.96 years and 4.68 years, respectively).

### (III) Employee Stock Option Scheme 2018 (“ESOS 2018”):

The shareholders of the Company has approved on 21/09/2018 an Employee Stock Option Scheme 2018 (“ESOS 2018”), formulated by the company, under which the Company may grant not more than 13,957,302 [Stock Options and Restricted Stock Units(‘RSU’)] to its permanent employees of the Company in management cadre including Managing and the Wholetime Director of the Company and its subsidiary companies in India and abroad, in one or more tranches. The ESOS 2018 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company (“the Committee”) and the Hindalco Employees Welfare Trust (“Trust”). The Stock options exercise price would be determined by the Committee whereas the RSU exercise price shall be the face value of the equity shares of the company as at the date of grant of RSUs. Each stock option and each RSU entitles the holders to apply for and be allotted one fully paid-up equity share of ₹ 1/- each of the Company upon payment of exercise price during the exercise period. The stock options will vest in 4 equal annual installments after completion of one year of the services from the date of grant, whereas RSU will vest upon completion of three years of services from the date of grant. The maximum period of exercise is 5 years from the date of vesting and these stock options/RSUs do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/expired stock options and RSUs are also available for grant.

In terms of ESOS 2018, till 31/03/2019 the Committee has granted 4,299,563 stock options and 1,276,137 RSUs (31/03/2018: Nil stock options and Nil RSUs) to the eligible employees of the Company and some of its subsidiary companies. A summary of movement of stock options and RSUs and weighted average exercise price (WAEP) is given below:

₹ in Crore

	Year ended 31.03.2019			
	Stock Options		RSUs	
	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	-	-	-	-
Granted during the year	4,299,563	218.75	1,276,137	1.00
Forfeited during the year	-	-	-	-
Exercised during the year	-	-	-	-
Expired during the year	-	-	-	-
Outstanding at year end	<b>4,299,563</b>	<b>218.75</b>	<b>1,276,137</b>	<b>1.00</b>
Vested and Exercisable at year end	-	-	-	-

Under ESOS 2018, the range of exercise prices for stock options outstanding as at 31/03/2019 was ₹ 205.45 to ₹ 218.80 whereas exercise price in case of RSUs was ₹ 1. The weighted average remaining contractual life for the stock options and RSUs outstanding as at 31/03/2019 was 7.20 years and 7.76 years respectively.

The fair values at grant date of stock options granted during the year ended 31/03/2019 was ₹ 83.28 to ₹ 115.23 and fair values in case of RSUs was ₹ 198.57 to ₹ 208.86, respectively. The fair valuation has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk free rate of interest. The assumptions used for fair valuation of awards are given below:

	As at 31.03.2019			
	Tranche I		Tranche II	
	Stock Option	RSU	Stock Option	RSU
Grant date	10/12/2018	10/12/2018	26/03/2019	26/03/2019
Exercise price (₹)	218.80	1.00	205.45	1.00
Expected terms of options granted (years)	4.43 years - 7.43 years	8 years	4.43 years - 7.43 years	8 years
Share price on grant date (₹)	218.80	218.80	208.50	208.50
Expected volatility (%)	37.48%	37.48%	36.99%	36.99%
Expected dividend (%)	0.58%	0.58%	0.58%	0.58%
Risk free interest rate (%)	7.36 % - 7.51%	7.57%	6.91% - 7.38%	7.50%

The expected volatility was determined based on the historical share price volatility over the past period depending on life of the options granted which is indicative of future periods and which may not necessarily be the actual outcome.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### (IV) Stock Appreciation Rights ('SAR'):

The Company had granted 956,522 Share Appreciation Rights ("SAR 2013 ") to its eligible employee to be vested in 4 equal annual installments after completion of one year of the service from the date of grant (i.e. 09/10/2013). The SAR 2013 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company ("the Committee"). The SAR 2013 have performance linked vesting conditions which are decided by the committee and are cash settled. The options shall lapse in case of performance linked vesting conditions are not met. The Exercise price of the SAR is Rs 118.73. The SAR can be exercised within 3 years from the date of vesting or within 6 years from the date of grant, whichever is earlier.

A summary of movement of SAR and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2019		Year ended 31.03.2018	
	Number	WAEP	Number	WAEP
Outstanding at beginning of the year	956,522	118.73	956,522	118.73
Granted during the year	-	-	-	-
Forfeited during the year	-	-	-	-
Exercised during the year	(478,261)	118.73	-	-
Expired during the year	-	-	-	-
Outstanding at year end	478,261	118.73	956,522	118.73
Vested and Exercisable at year end	478,261	118.73	956,522	118.73

₹ in Crore

The fair values per SAR as at 31/03/2019 was ₹ 90.15 (31/03/2018 ₹ 99.09 - ₹ 106.29). The fair value has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk free rate of interest. The assumptions used for fair valuation are given below:

	Year ended 31.03.2019	Year ended 31.03.2018
Grant date	9-Oct-13	9-Oct-13
Valuation Date	31-Mar-19	31-Mar-18
Exercise price (₹)	118.73	118.73
Expected volatility (%)	36.88%	29.31%
Expected dividend (%)	0.58%	0.51%
Risk Free interest rate (%)	6.17%	6.24%-6.70%

The weighted average remaining contractual life for the SAR as at 31/03/2019 is 0.53 years (31/03/2018 - 1.03 years)

#### Effect of Employee Share-Based Payment transactions on Profit or Loss for the period and on financial position:

For the year ended 31/03/2019, the Company recognised total expenses of ₹ 19.95 Crore (31/03/2018 ₹ 1.95 Crore) related to equity-settled and cash-settled share based transactions. During the year ended 31/03/2019, the Company has allotted 567,343 fully paid-up equity share of ₹ 1/- each of the Company (31/03/2018 1,708,812) on exercise of equity settled options for which the Company has realised ₹ 4.87 Crore (31/03/2018 ₹ 13.57 Crore) as exercise prices. The weighted average share price at the date of exercise of options was ₹ 222.60 per share (31/03/2018 ₹ 243.95 per share).

The Company has received ₹ 0.18 Crore, from Utkal Alumina International Limited and Hindalco - Almex Aerospace Limited (Subsidiaries) towards the grant of 88,676 Stock Options and 43,261 RSUs under ESOS 2018.

### 43. Disclosure as required by Indian Accounting Standard (Ind AS) 19 on Employee Benefits

#### A. Defined Benefit Plans:

Defined benefit plans expose the Company to actuarial risks such as: Interest Rate Risk, Salary Risk and Demographic Risk.

- Interest Rate Risk: The defined benefit obligation calculated uses a discount rate based on government bonds. If the bond yield falls, the defined benefit obligation will tend to increase.



- ii. Salary risk: Higher than expected increases in salary will increase the defined benefit obligation.
- iii. Demographic risk: This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends on the combination of salary increase, discount rate and vesting criteria. It is important not to overstate withdrawals because in the financial analysis the retirement benefit of a short career employee typically costs less per year as compared to a long service employee.

**(I) Gratuity Plans**

The Company has various schemes (funded/unfunded) for payment of gratuity to all eligible employees calculated at specified number of days (ranging from 15 days to 1 month) of last drawn salary depending upon the tenure of service for each year of completed service subject to minimum service of five years payable at the time of separation upon superannuation or on exit otherwise. These defined benefit gratuity plans are governed by Payment of Gratuity Act, 1972.

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(a) Change in Defined Benefit Obligations (DBO)</b>		
DBO at the beginning of the year	895.24	842.36
Current service cost	56.99	52.25
Interest Cost on the DBO	65.49	57.33
Actuarial (gain)/ loss experience	(5.79)	(26.85)
Actuarial (gain)/ loss demographics assumption	-	(17.82)
Actuarial (gain)/ loss financial assumption	-	34.55
Benefits paid directly by Company	(21.49)	(25.40)
Benefits paid from plan assets	(28.66)	(21.18)
DBO at the end of the year	<b>961.78</b>	<b>895.24</b>
		₹ in Crore
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(b) Change in Fair Value of Plan Assets:</b>		
Fair Value of Plan Assets at the beginning of the year	724.44	610.45
Interest Income on plan assets	54.87	43.45
Employer's contributions	42.93	41.63
Return on plan assets greater/(lesser) than discount rate	(8.99)	50.09
Benefits Paid	(28.66)	(21.18)
Fair Value of Plan Assets at the end of the year	<b>784.59</b>	<b>724.44</b>
		₹ in Crore
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(c) Development of Net Balance Sheet Position:</b>		
DBO, funded	(880.12)	(819.77)
Fair Value of Plan Assets	784.59	724.44
Funded Status{surplus/(deficit)}	(95.53)	(95.33)
DBO, unfunded	(81.66)	(75.47)
Net defined benefit asset/(liability) recognised in the Balance Sheet	<b>(177.19)</b>	<b>(170.80)</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(d) Reconciliation of Net Balance Sheet Position:</b>		
Net Defined benefit asset/(Liability)at beginning of the year	(170.80)	(231.91)
Service cost	(56.99)	(52.25)
Net Interest on net defined benefit liability/(asset)	(10.62)	(13.89)
Amount recognised in OCI	(3.20)	60.22
Employer's contributions	42.93	41.63
Benefit paid directly by Company	21.49	25.40
Net Defined benefit asset/(Liability)at the end of the year	<b>(177.19)</b>	<b>(170.80)</b>
		₹ in Crore
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(e) Expense recognised during the year</b>		
Current Service cost	56.99	52.25
Net Interest on net defined benefit liability/(asset)	10.62	13.89
Net Gratuity Cost	<b>67.61</b>	<b>66.14</b>
		₹ in Crore
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(f) Other Comprehensive Income(OCI):</b>		
Actuarial (gain)/loss due to DBO experience	(5.79)	(26.86)
Actuarial (gain)/loss due to DBO assumption changes	-	16.73
Actuarial (gain)/loss arising during the period	(5.79)	(10.13)
Return on Plan Assets(greater)/less than discount rate	8.99	(50.09)
Actuarial (gain)/loss recognised in OCI	<b>3.20</b>	<b>(60.22)</b>
		₹ in Crore
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(g) Defined Benefit Costs:</b>		
Service Cost	56.99	52.25
Net Interest on net defined benefit liability/(asset)	10.62	13.89
Actuarial (gain)/loss recognised in OCI	3.20	(60.22)
Defined Benefit Cost	<b>70.81</b>	<b>5.92</b>
		₹ in Crore
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(h) Principal Actuarial Assumptions:</b>		
Discount rate (based on the market yields available on Government bonds at the accounting date with a term that matches that of the liabilities)	7.5%	7.5%
Salary escalation rate	8.0%	8.0%
Weighted average duration of the defined benefit obligation	9 years	8 years
Mortality Rate	Indian Assured Lives Mortality 2006-08 Ultimate	
		₹ in Crore
	Year ended 31.03.2019	Year ended 31.03.2018
<b>(i) Current portion of DBO - (Refer Note - 21B)</b>	(4.77)	(4.12)
<b>Non-current portion of DBO (Refer Note - 21A)</b>	(172.42)	(166.68)
	<b>(177.19)</b>	<b>(170.80)</b>

**(j) Sensitivity analysis**

Sensitivity analysis are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be co-related. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the defined benefit liability recognised in the balance sheet.

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>Discount Rate</b>		
Discount rate as at end of the year		
Effect on DBO due to 1% increase in discount rate	(72.75)	(66.86)
Effect on DBO due to 1% decrease in discount rate	90.00	76.25
<b>Salary Escalation Rate</b>		
Salary Escalation Rate as at end of the year		
Effect on DBO due to 1% increase in salary escalation rate	82.18	75.31
Effect on DBO due to 1% decrease in salary escalation rate	(73.10)	(67.18)

**(k) Methodology for Defined Benefit Obligation:**

The Projected Unit Credit (PUC) actuarial method has been used to assess the plan's liabilities, including those related to death-in-service and incapacity benefits.

Under PUC method a projected accrued benefit is calculated at the beginning of the year and again at the end of the year for each benefit that will accrue for all active members of the plan. The projected accrued benefit is based on the plan's accrual formula and upon service as of the beginning or end of the year, but using a member's final compensation, projected to the age at which the employee is assumed to leave active service. The plan liability is the actuarial present value of the projected accrued benefits for active members.

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>(l) The Expected Maturity Analysis of Undiscounted Gratuity is as follows:</b>		
Within 1 year	56.281	48.19
From 1 year to 2 Year	55.52	78.93
From 2 year to 3 Year	75.09	82.44
From 3 year to 4 Year	75.96	86.24
From 4 year to 5 Year	75.29	90.63
From 5 year to 10 Year	389.88	531.37

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>(m) Plan assets information:</b>		
<b>Major categories of Plan Assets are as under:</b>		
Cash & Bank balances	2.01%	2.43%
Scheme of insurance - Conventional product	0.23%	0.24%
Scheme of insurance - ULIP product	97.76%	97.33%
	<b>100.00%</b>	<b>100.00%</b>

**(n) Expected Contributions to post employment benefit plan of Gratuity for the year ending 31st March, 2020 are ₹ 60.15 Crore.**

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### II Other Defined Benefit and contribution Plans:

#### (a) Pension

The Company contributes a certain percentage of salary for all eligible employees in the managerial cadre towards Superannuation Funds with option to put certain portion in National Pension Scheme (NPS) and/or in funds managed by approved trusts of by Life Insurance Corporation of India. Junior Pension Plan provided to certain employees is in the nature of defined benefit plan which provides an annuity in the form of pension amount at retirement. The amount charged to statement of the Profit and Loss during the year is ₹ 21.87 Crore (year ended 31/03/2018 ₹ 23.40 Crore). Amount of actuarial (gain)/ loss recognised in Other Comprehensive Income during the year is ₹ -0.20 Crore (year ended 31/03/2018 ₹ -0.41 Crore).

#### (b) Post Retirement Medical Benefit:

The Company provides post retirement medical benefit to its certain employees. The scheme involves reimbursement of expenses towards medical treatment of self and dependents. The amount charged to the statement Profit and Loss during the year is ₹ 0.33 Crore (year ended 31/03/2018 ₹ 0.41 Crore) and amount of actuarial (gain)/ loss recognised in Other Comprehensive Income during the year is ₹ 0.51 Crore (year ended 31/03/2018 ₹ -1.45 Crore).

#### (c) Leave Obligation:

The leave obligation cover the Company's liability for earned leave. The entire amount of the provision of ₹ 222.85 Crore (year ended 31/03/2018 ₹ 211.57 Crore) is presented as current, since the company does not have an unconditional right to defer settlement for these obligations.

#### (d) Provident Fund:

The Company contributes towards Provident Fund managed either by approved trusts or by the Central Government which is debited to the Statement of Profit and Loss. In respect of provident fund management by the approved trust, the Company has an obligation to fund any shortfall on the yield of the trust's investments over the administered interest rates on an annual basis. The Company also contributes to Coal Mines Provident Fund (CMPF) in respect of employees working in coal mines. The amount debited to Statement of Profit and Loss during the year was ₹ 94.21 Crore (year ended 31/03/2018 ₹ 89.26 Crore). Based on actuarial valuation, the Company has recognised obligation of ₹ 8.50 Crore as at 31/03/2019 (year ended 31/03/2018 ₹ 7.78 Crore) towards shortfall on the yield of the trust's investments over the administered interest rates.

Assumption use in determining the present value obligation of the interest rate guarantee under the Deterministic Approach:

	As at 31.03.2019	As at 31.03.2018
Discount rate	7.50%	7.50%
Expected EPFO (Employees' Provident Fund Organisation) Return	8.65% for the first year & 8.60% thereafter	8.55%

### 44. Related Party Transactions

The following transactions were carried out with the Related Parties in the ordinary course of business:

#### (I) Subsidiaries, Associates and Joint Ventures

	₹ in Crore					
	31.03.2019			31.03.2018		
	Subsidiaries	Associates *	Joint Ventures	Subsidiaries	Associates *	Joint Ventures
<b>1 Sales and Conversion</b>	<b>35.36</b>	-	-	<b>30.32</b>	-	-
(a) Hindalco - Almex Aerospace Limited	34.49	-	-	30.03	-	-
(b) Novelis Inc. and its Subsidiaries	0.87	-	-	0.19	-	-
(c) Utkal Alumina International Limited	-	-	-	0.10	-	-

₹ in Crore

	31.03.2019			31.03.2018		
	Subsidiaries	Associates *	Joint Ventures	Subsidiaries	Associates *	Joint Ventures
<b>2 Services rendered</b>	<b>0.47</b>	<b>-</b>	<b>-</b>	<b>0.95</b>	<b>0.03</b>	<b>-</b>
(a) Vodafone Idea Limited (Formerly, Idea Cellular Limited)	-	-	-	-	0.03	-
(b) Dahej Harbour & Infrastructure Limited	0.39	-	-	0.33	-	-
(c) Utkal Alumina International Limited	0.08	-	-	0.62	-	-
<b>3 Interest and Dividend received during the year</b>						
<b>Interest received</b>	<b>0.24</b>	<b>3.52</b>	<b>-</b>	<b>1.82</b>	<b>4.37</b>	<b>-</b>
(a) Vodafone Idea Limited (Formerly, Idea Cellular Limited)	-	-	-	-	0.92	-
(b) Aditya Birla Science & Technology Company Private Limited	-	3.52	-	-	3.45	-
(c) Hindalco - Almex Aerospace Limited	0.10	-	-	0.19	-	-
(d) Suvas Holdings Limited	0.14	-	-	-	-	-
(e) Utkal Alumina International Limited	-	-	-	1.63	-	-
Dividend received	75.46	-	-	20.00	-	-
(a) Dahej Harbour & Infrastructure Limited	35.00	-	-	20.00	-	-
(b) Lucknow Finance Company Limited	3.96	-	-	-	-	-
(c) Renuka Investments & Finance Limited	24.51	-	-	-	-	-
(d) Renukeshwar Investments & Finance Limited	11.99	-	-	-	-	-
<b>4 Interest paid</b>	<b>19.17</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
(a) Utkal Alumina International Limited	19.17	-	-	-	-	-
<b>5 Purchase of Materials, Capital Equipment and Others</b>	<b>4,114.14</b>	<b>5.26</b>	<b>-</b>	<b>3,010.87</b>	<b>-</b>	<b>-</b>
(a) Hindalco - Almex Aerospace Limited	1.16	-	-	1.85	-	-
(b) Minerals & Minerals Limited	44.48	-	-	43.20	-	-
(c) Novelis Inc. and its Subsidiaries	4.56	-	-	3.80	-	-
(d) Utkal Alumina International Limited	4,063.94	-	-	2,962.02	-	-
(e) Aditya Birla Renewables Subsidiary Limited	-	5.26	-	-	-	-
<b>6 Services received</b>	<b>41.43</b>	<b>14.50</b>	<b>-</b>	<b>41.71</b>	<b>17.12</b>	<b>-</b>
(a) Vodafone Idea Limited (Formerly, Idea Cellular Limited)	-	-	-	-	3.89	-
(b) Aditya Birla Science & Technology Company Private Limited	-	14.50	-	-	13.23	-
(c) Dahej Harbour & Infrastructure Limited	40.16	-	-	39.04	-	-
(d) Lucknow Finance Company Limited	0.57	-	-	0.56	-	-
(e) Novelis Inc. and its Subsidiaries	0.26	-	-	1.74	-	-
(f) Renuka Investments & Finance Limited	0.44	-	-	0.33	-	-
(g) Utkal Alumina International Limited	-	-	-	0.04	-	-
<b>7 Investments, Deposits, Loans and Advances made during the year</b>						
<b>Deposits, Loans and Advances made during the Year</b>	<b>10.51</b>	<b>-</b>	<b>-</b>	<b>100.00</b>	<b>-</b>	<b>-</b>
(a) Suvas Holdings Limited	10.51	-	-	-	-	-
(b) Utkal Alumina International Limited	-	-	-	-	100.00	-
<b>Investments Made during the Year</b>	<b>180.94</b>	<b>5.75</b>	<b>-</b>	<b>2,474.63</b>	<b>-</b>	<b>-</b>
(a) AV Minerals (Netherlands) N.V.	166.08	-	-	192.35	-	-
(b) Suvas Holdings Limited	14.86	-	-	2.56	-	-
(c) Utkal Alumina International Limited	-	-	-	2,279.72	-	-
(d) Aditya Birla Renewables Subsidiary Limited	-	5.75	-	-	-	-

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

	31.03.2019			31.03.2018		
	Subsidiaries	Associates *	Joint Ventures	Subsidiaries	Associates *	Joint Ventures
<b>8 Investments, Deposits, Loans and Advances made returned back during the year by</b>						
<b>Deposits, Loans and Advances Returned back during the Year</b>	-	-	-	100.00	4.90	-
(a) Aditya Birla Science & Technology Company Private Limited	-	-	-	-	4.90	-
(b) Utkal Alumina International Limited	-	-	-	100.00	-	-
<b>9 Investments, Deposits, Loans and Advances obtained during the year from</b>						
<b>Deposits, Loans and Advances obtained during the year from</b>	800.00	-	-	-	-	-
(a) Utkal Alumina International Limited	800.00	-	-	-	-	-
<b>10 Investments, Deposits, Loans and Advances repaid during the year to</b>						
<b>Deposits, Loans and Advances repaid during the year to</b>	800.00	-	-	-	-	-
(a) Utkal Alumina International Limited	800.00	-	-	-	-	-
<b>11 Guarantees and Collateral Securities given</b>	-	-	-	2.71	-	-
(a) Suvas Holdings Limited	-	-	-	2.71	-	-
<b>12 Guarantees and Collateral Securities released during the year</b>	4,865.12	-	-	178.37	-	-
(a) Suvas Holdings Limited	12.62	-	-	-	-	-
(b) Utkal Alumina International Limited	4,852.50	-	-	-	-	-
(c) Hindalco Do Brasil Industria e Comercio de Alumina Ltda.	-	-	-	178.37	-	-
<b>13 Licence and Lease agreements</b>	0.01	-	-	0.01	-	-
(a) Dahej Harbour & Infrastructure Limited	0.01	-	-	0.01	-	-
<b>14 Recovery of ESOP Expenses</b>	0.18	-	-	-	-	-
(a) Hindalco - Almex Aerospace Limited	0.00	-	-	-	-	-
(b) Utkal Alumina International Limited	0.18	-	-	-	-	-
<b>15 Outstanding balances #</b>						
<b>(i) Receivables</b>	8.61	-	0.03	10.15	-	0.03
(a) Hydromine Global Minerals GMBH Limited (Consolidated)	-	-	0.03	-	-	0.03
(b) East Coast Bauxite Mining Company Pvt. Limited	0.02	-	-	0.02	-	-
(c) Hindalco - Almex Aerospace Limited	0.01	-	-	2.38	-	-
(d) Minerals & Minerals Limited	8.41	-	-	7.29	-	-
(e) Novelis Inc. and its Subsidiaries	-	-	-	0.09	-	-
(f) Tubed Coal Mines Limited	-	-	-	0.15	-	-
(g) Utkal Alumina International Limited	0.17	-	-	0.22	-	-
<b>(ii) Payables</b>	325.73	1.33	-	406.87	0.26	-
(a) Aditya Birla Science & Technology Company Private Limited	-	-	-	-	0.26	-
(b) Dahej Harbour & Infrastructure Limited	6.51	-	-	0.34	-	-
(c) Novelis Inc. and its Subsidiaries	2.58	-	-	1.47	-	-
(d) Utkal Alumina International Limited	316.64	-	-	405.06	-	-
(e) Aditya Birla Renewables Subsidiary Limited	-	1.33	-	-	-	-

₹ in Crore

	31.03.2019			31.03.2018		
	Subsidiaries	Associates *	Joint Ventures	Subsidiaries	Associates *	Joint Ventures
<b>(iii) Deposits, Loans and Advances (Given)</b>	<b>10.70</b>	<b>50.59</b>	<b>-</b>	<b>0.18</b>	<b>50.59</b>	<b>-</b>
(a) Aditya Birla Science & Technology Company Private Limited	-	50.59	-	-	50.59	-
(b) Lucknow Finance Company Limited	0.18	-	-	0.18	-	-
(c) Suvas Holdings Limited	10.52	-	-	-	-	-
<b>(iv) Guarantees and Collateral Securities given</b>	<b>4.50</b>	<b>-</b>	<b>-</b>	<b>4,869.62</b>	<b>-</b>	<b>-</b>
(a) Dahej Harbour & Infrastructure Limited	4.50	-	-	4.50	-	-
(b) Suvas Holdings Limited	-	-	-	12.62	-	-
(c) Utkal Alumina International Limited	-	-	-	4,852.50	-	-
<b>(v) Investments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

For details of investment in Subsidiaries, Joint Ventures and Associates. (Refer Notes 5, 6 and 15A)

# all outstanding balances are unsecured and are payable in cash.

\* The Company discontinued the accounting of its investment in Vodafone Idea Limited ( Formerly, Idea Cellular Limited) as "Investment in Associates" effective 31st March, 2018 as it no longer has significant influence over Vodafone Idea Limited ( Formerly, Idea Cellular Limited).

## (II) Trusts

### Contribution to Trusts:

- Hindalco Employee's Gratuity Fund, Kolkata
- Hindalco Employee's Gratuity Fund, Renukoot
- Hindalco Employee's Provident Fund Institution, Renukoot
- Hindalco Superannuation Scheme, Renukoot
- Hindalco Industries Limited Employees' Provident Fund II
- Hindalco Industries Limited Senior Management Staff Pension Fund II

For details of contributions to the above Trusts and schemes, Refer Note 43

- Hindalco Jan Seva Trust ₹ 0.75 Crore ( as on 31/03/2018 ₹ 0.75 Crore).
- Copper Jan Seva Trust ₹ 5.77 Crore ( as on 31/03/2018 ₹ 5.26 Crore).

### Outstanding balances:

#### Receivable

- Hindalco Jan Seva Trust ₹ 1.42 Crore (as on 31/03/2018 ₹ 0.99 Crore).

#### Payable

- Copper Jan Seva Trust ₹ 4.05 Crore (as on 31/03/2018 ₹ 3.65 Crore).

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>(III) Key Managerial Personnel</b>		
Managerial Remuneration		
(a) Mr. D. Bhattacharya - Vice Chairman*	4.04	6.93
(b) Mr. Satish Pai - Managing Director **	28.72	20.97
(c) Mr. Praveen Maheshwari -Whole time Director & Chief Financial Officer **	4.27	4.08

\* Includes Pension of ₹ 4.02 Crore (Year ended 31/03/2018 ₹ 4.02 Crore), and reimbursement for medical expenses of ₹ 0.02 Crore (Year ended 31/03/2018 ₹ 0.02 Crore) for past services.

\*\* Excludes amortisation of fair value of employee share based payments under IndAS 102 and provision for gratuity and leave encashment recognised on the basis of actuarial valuation as separate figures are not available.

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### (IV) Directors' Remuneration

(a) Mr. Kumar Mangalam Birla	3.64	5.19
(b) Smt. Rajashree Birla	0.14	0.08
(c) Mr D. Bhattacharya	0.13	0.12
(d) Mr. A. K. Agarwala	0.15	0.14
(e) Mr. M. M. Bhagat	0.20	0.20
(f) Mr. K. N. Bhandari	0.22	0.20
(g) Mr. Y. P. Dandiwala	0.15	0.15
(h) Mr. Ram Charan	0.07	0.09
(i) Mr Girish Dave	0.10	0.10
(j) Mr. Jagdish Khattar (Resigned w.e.f. May 2018)	-	0.07
(k) Ms. Alka Bharucha	0.07	-
	<b>4.87</b>	<b>6.34</b>

(V) The Company is one of the promoter members of Aditya Birla Management Corporation Private Limited (ABMCPL), a Company limited by guarantee which has been formed to provide common facilities and resources to its members, with a view to optimize the benefits of specialization and minimize cost for each member. The Company is one of the participants in the common pool and shares the expenses incurred by ABMCPL, which is accounted for under appropriate heads. The share of expenses charged by ABMCPL during the year is ₹ 399.55 Crore (year ended 31/03/2018 ₹ 326.66 Crore) and net outstanding payable balance as at 31/03/2019 is ₹ 32.11 Crore (as at 31/03/2018 ₹ 71.58 Crore). The outstanding deposit with ABMCPL as at 31/03/2019 is ₹ 16.26 Crore (as at 31/03/2018 ₹ 44.71 Crore).

## 45. Contingent Liabilities and Commitments

### A. Contingent Liabilities

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>(a) Claims against Company not acknowledged as Debt:</b>		
Following demands are disputed by the Company and are not provided for:		
(i) Demand for Stamp Duty by Collector (Stamp), Kanpur, Uttar Pradesh (U.P.) on merger of Copper Business of IndoGulf Corporation with the Company. The matter is pending before the Hon'ble High Court of Allahabad. The Company believes that there is no substantive/computation provision for levy/calculation of stamp duty within the provisions of Uttar Pradesh Stamp Act on scheme of arrangement under the Companies Act, 1956, approved by the Court. Moreover, the properties in question are located in the State of Gujarat and, thus, the Collector (Stamp), Kanpur, has no territorial jurisdiction to make such a demand. Further, the Company has already paid the stamp duty for the same in 2003-04 which has been accepted as per the provisions of the Bombay Stamp Act, 1958. Previously, the enforcement of demand of ₹ 252.96 Crore was disclosed as contingent liability, instead of disclosing the amount for which the company believed to be contingently liable.	20.00	20.00
(ii) Demand towards drawal of energy during peak hours by Uttar Pradesh Power Corporation Limited (UPPCL)/ Purvanchal Vidyut Vitran Nigam Limited (PVVNL). The dispute relates to the agreement entered with UPPCL for the period 2009-14. Demand was raised by UPPCL for drawl of banked energy during peak hours. The Hon'ble Supreme Court has stayed the demand and the matter is pending with Appellate Tribunal for Electricity (APTEL).	80.81	80.81
(iii) Retrospective Revision of Water Rates by UP Jal Vidyut Nigam Limited. Writ petition pending with Lucknow Bench of Allahabad High Court. The demand for arrears stayed.	4.08	4.08



₹ in Crore

	As at 31.03.2019	As at 31.03.2018
(iv) Demand for Entry Tax relating to valuation dispute. Appeals have been filed with Additional CCT, Sambalpur.	28.05	28.05
(v) Interest demand on withholding of 50% payment of Entry tax. Appeal is pending before Hon'ble High Court of Odisha and stay has been granted.	27.56	27.56
(vi) Transit Fees on Coal (U.P. and M.P). Contingency is w.r.t. transit fee on coal through BPC and Railway (other than through road transport) and bauxite. On the basis of Supreme Court order Transit fess on Coal transport through road has been provided for.	-	68.65
(vii) Cess on Coal by Shaktinagar Special Area Development Authority. The matter is pending before Nine Judges Bench of the Hon'ble Supreme Court.	-	3.98
(viii) Revision of surface rent on land by Government of Jharkhand. The matter is pending before the Hon'ble Supreme Court.	-	41.30
(ix) Demand for environment tax on royalty and development tax by the Collector, Chhatisgarh. The matter is pending before the Hon'ble Supreme Court.	-	11.29
(x) Demand from State and Central Sales Tax authorities for various years. At different levels of appeal.	19.96	19.96
(xi) Disallowances of Cenvat Credit on inputs & Capital goods & short payment of excise on additional consideration received from recipient of deemed exporter. Matters are pending with CESTAT.	25.80	25.77
(xii) Disallowances of Service Tax credit on Input services at Various locations. These matters are pending with CESTAT authorities.	131.53	110.73
(xiii) Demand for recovery of cenvat credit availed on service tax paid on Goods Transport Agency (outward charges). The matter is pending with Commissioner (Appeals), Vadodara & Commissioner, Bharuch.	7.22	7.22
(xiv) Water Tariff revision demand for previous years. The matter is pending in the Hon'ble High Court of Karnataka.	8.14	8.14
(xv) Green Cess Provision Under Electricity Act Year-2012-13 to Year 2017-18. The matter is Pending at Hon'ble Supreme Court.	10.52	9.12
(xvi) Other Contingent Liabilities in respect of Excise, Customs, Sales Tax etc. each being for less than ₹ 1 Crore. The demands are in dispute at various legal forums .	13.49	13.54
(xvii) Transitional Credit of cess. Writ Petition filed before Odisha and MP High Court.	27.11	-
(xviii) Penalty For Unauthorised Disposal Of Anode Butts. The matter is pending with Odisha High Court.	13.77	-
	<b>418.04</b>	<b>480.20</b>

It is not practicable for the Company to estimate the timings of cash outflows, if any, in respect of the above matters, pending resolution of the respective proceedings.

**(b) Other money for which Company is contingently liable**

(i) Customs Duty on Raw Materials imported under Advance License, against which export obligation is to be fulfilled.	10.09	10.28
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## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### B. Commitments

		₹ in Crore	
		As at 31.03.2019	As at 31.03.2018
(a)	Estimated amount of contracts remaining to be executed on capital account and not provided for (net of advances)	615.30	339.59
(b)	The Company has given the following undertakings in connection with the loan of Utkal Aluminium International Limited (UAIL), a wholly owned subsidiary:		
(i)	To hold minimum 51% equity shares in UAIL.		
(ii)	To ensure to meet the Financial Covenants, except Fixed Asset Coverage Ratio, as provided in the loan agreements.		
(c)	Other Commitment for purchase of goods and Services (Net of Advance)	1,354.61	989.04

### 46. Provisions

The details of other provisions and its movement included in Note 21A and Note 21B are as under:

								₹ in Crore
Particulars	Assets Retirement Obligations	Environmental Liability	Enterprise Social Commitment	Legal Cases	Renewable Power Obligation	Others	Total	
<b>Balance as at 31 March 2017</b>	<b>82.14</b>	<b>18.29</b>	<b>142.49</b>	-	<b>394.27</b>	<b>34.56</b>	<b>671.75</b>	
Provision made during the year	-	0.42	-	337.67	149.88	-	487.97	
Reclassified	-	-	-	-	-	-	-	
Provision utilised during the year	(0.19)	(0.42)	(5.17)	(74.11)	(403.35)	(22.78)	(506.02)	
Provision reversed during the year	-	-	-	-	-	-	-	
Unwinding of discount	4.66	0.64	8.55	-	-	-	13.85	
<b>Balance as at 31 March 2018</b>	<b>86.61</b>	<b>18.93</b>	<b>145.87</b>	<b>263.56</b>	<b>140.80</b>	<b>11.78</b>	<b>667.55</b>	
Provision made during the year	3.00	59.86	5.27	-	159.20	9.29	236.62	
Reclassified	-	-	-	24.13	1.38	-	25.51	
Provision utilised during the year	(2.24)	(7.37)	(4.65)	-	(219.63)	(0.09)	(233.98)	
Provision reversed during the year	-	-	-	-	(0.02)	(7.47)	(7.49)	
Unwinding of discount	4.28	0.62	8.76	-	-	-	13.66	
<b>Balance as at 31 March 2019</b>	<b>91.65</b>	<b>72.04</b>	<b>155.25</b>	<b>287.69</b>	<b>81.73</b>	<b>13.51</b>	<b>701.87</b>	
						As at 31.03.2019	As at 31.03.2018	
Non-current Portion						225.91	226.07	
Current Portion						475.96	441.48	
						<b>701.87</b>	<b>667.55</b>	

The Company has made provisions towards asset retirement, environmental, social, legal and other obligations at various locations involving considerable uncertainties towards amount and timing of outflow of economic resources. The provisions are discounted over the management expected timing of related cash flows.

### 47. Operating Leases

The Company has entered into various leasing arrangements under operating lease:

#### As a Lessee

- (a) The Company has entered in operating leases for land, material handling facilities, storage, rental premise contracts under both cancellable and non cancellable in nature. The rent for cancellable and non-cancellable operating leases included in the Statement of Profit and Loss for the year is ₹ 90.94 Crore (Year ended 31/03/2018 ₹ 83.41 Crore).

₹ in Crore

Details of future minimum lease payments	As at 31.03.2019	As at 31.03.2018
Future aggregate minimum lease payment under Non-cancellable Operating Leases:		
No later than 1 year	18.18	9.85
Later than 1 yr and no later than 5 yrs	47.27	40.67
Later than 5 years	21.98	55.19
	<b>87.43</b>	<b>105.71</b>

(b) Operating Lease as Lessor

The Company has entered into operating leases for certain of its premises. All of these leases are cancellable in nature (Refer Note 27).

#### 48. Offsetting Financial Liabilities and Financial Assets

Financial instruments subject to offsetting , enforceable master netting arrangement and similar arrangements.

₹ in Crore

As at 31.03.2019	Effects on Balance sheet			Related amounts not offset		
	Gross amount	Gross amount set off in the balance sheet	Net amount presented in the balance sheet	Amounts subject to master netting	Financial Instrument collateral	Net Amount
Financial Assets						
Derivatives	957.18	(39.54)	917.64	-	-	917.64
Cash and cash equivalents	1,514.68	-	1,514.68	-	-	1,514.68
Trade Receivables	2,124.88	-	2,124.88	-	-	2,124.88
Other financial assets	493.74	-	493.74	-	-	493.74
	<b>5,090.48</b>	<b>(39.54)</b>	<b>5,050.94</b>	<b>-</b>	<b>-</b>	<b>5,050.94</b>
Financial Liabilities						
Derivatives	576.81	(39.54)	537.27	-	(75.98)	461.29
Trade Payables	5,735.22	-	5,735.22	-	-	5,735.22
Other financial Liabilities	1,418.24	-	1,418.24	-	-	1,418.24
	<b>7,730.27</b>	<b>(39.54)</b>	<b>7,690.73</b>	<b>-</b>	<b>(75.98)</b>	<b>7,614.75</b>

₹ in Crore

As at 31.03.2018	Effects on Balance sheet			Related amounts not offset		
	Gross amount	Gross amount set off in the balance sheet	Net amount presented in the balance sheet	Amounts subject to master netting	Financial Instrument collateral	Net Amount
Financial Assets						
Derivatives	1,015.18	(22.42)	992.76	-	-	992.76
Cash and cash equivalents	1,809.45	-	1,809.45	-	-	1,809.45
Trade Receivables	1,737.25	-	1,737.25	-	-	1,737.25
Other financial assets	692.02	-	692.02	-	-	692.02
	<b>5,253.90</b>	<b>(22.42)</b>	<b>5,231.48</b>	<b>-</b>	<b>-</b>	<b>5,231.48</b>
Financial Liabilities						
Derivatives	708.68	(22.42)	686.26	-	(3.57)	682.69
Trade Payables	5,548.09	-	5,548.09	-	-	5,548.09
Other financial Liabilities	1,532.28	-	1,532.28	-	-	1,532.28
	<b>7,789.05</b>	<b>(22.42)</b>	<b>7,766.63</b>	<b>-</b>	<b>(3.57)</b>	<b>7,763.06</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### 49. Financial Instruments : Fair Value Measurement

#### A. Accounting classifications fair values

(i) Following table shows the carrying amounts and fair values of Financial Assets and Financial Liabilities:

	₹ in Crore					
	As at 31.03.2019			As at 31.03.2018		
	Amortised Cost	FVTOCI	FVTPL	Amortised Cost	FVTOCI	FVTPL
<b>Financial Assets:</b>						
<b>Investments in Associate</b>						
Unquoted Instruments	-	28.51	-	-	14.27	-
<b>Investments in Equity Instruments</b>						
Quoted Equity Instruments	-	4,818.44	-	-	6,573.51	-
Unquoted Equity Instruments	-	34.55	-	-	24.16	-
<b>Investments in Preference Shares</b>						
	-	-	-	-	-	22.66
<b>Investments in Debt Instruments</b>						
Mutual Funds	-	-	3,522.22	-	-	3,086.80
Bonds and Debentures	-	-	224.92	-	-	620.91
Government Securities	-	88.39	-	-	86.02	-
Derivatives	-	-	917.64	-	-	992.76
<b>Cash and Cash Equivalents</b>						
Cash and Bank	352.28	-	-	243.81	-	-
Liquid Mutual Funds	-	-	1,162.40	-	-	1,565.64
<b>Bank Balances other than cash &amp; cash equivalents</b>	<b>65.19</b>	<b>-</b>	<b>-</b>	<b>11.90</b>	<b>-</b>	<b>-</b>
<b>Trade receivables</b>	<b>2,124.88</b>	<b>-</b>	<b>-</b>	<b>1,737.25</b>	<b>-</b>	<b>-</b>
<b>Loans</b>	<b>75.68</b>	<b>-</b>	<b>-</b>	<b>60.45</b>	<b>-</b>	<b>-</b>
<b>Other financial assets</b>	<b>493.74</b>	<b>-</b>	<b>-</b>	<b>692.02</b>	<b>-</b>	<b>-</b>
	<b>3,111.77</b>	<b>4,969.89</b>	<b>5,827.18</b>	<b>2,745.43</b>	<b>6,697.96</b>	<b>6,288.77</b>

	₹ in Crore			
	As at 31.03.2019		As at 31.03.2018	
	Amortised Cost	FVTPL	Amortised Cost	FVTPL
<b>Financial Liabilities:</b>				
<b>Borrowings</b>				
Non convertible debentures (NCDs)	5,990.83	-	5,989.00	-
Long term Borrowings	9,643.05	-	11,209.94	-
Short term Borrowings	3,895.10	-	3,092.96	-
Derivatives	-	537.27	-	686.26
Trade Payables	5,735.22	-	5,548.09	-
Other financial Liabilities	1,418.24	-	1,532.28	-
	<b>26,682.44</b>	<b>537.27</b>	<b>27,372.27</b>	<b>686.26</b>

The Company had acquired certain equity instruments for purpose of holding for a longer duration and not for the purpose of selling in near term for short term profit. Such instruments have been categorized as FVTOCI.

**(ii) Fair value disclosure of Financial Assets and Financial Liabilities measured at amortised cost:**

₹ in Crore

	As at 31.03.2019		As at 31.03.2018	
	Carrying value	Fair Value	Carrying value	Fair Value
<b>Borrowings</b>				
Non convertible debentures (NCDs)	5,990.83	6,662.38	5,989.00	6,799.59
Long term Borrowings *	9,614.48	9,730.93	11,176.35	11,261.63
	<b>15,605.31</b>	<b>16,393.31</b>	<b>17,165.35</b>	<b>18,061.22</b>

₹ in Crore

	As at 31.03.2019		As at 31.03.2018	
	Carrying value Borrowings	Fair Value	Carrying value	Fair Value
<b>Financial Assets</b>				
Loans	17.63	17.63	5.88	5.88
Deposits	180.74	180.74	204.13	204.13
	<b>198.37</b>	<b>198.37</b>	<b>210.01</b>	<b>210.01</b>

\* Carrying amount includes current portion of long term borrowing shown under other current financial liabilities (Refer Note 20B) but excludes finance lease obligation and deferred payment liabilities.

**Note 1**

Fair values for current financial assets and financial liabilities have not been disclosed because their carrying amount are a reasonable approximation of their fair values.

**(iii) Finance income and finance cost by instrument category wise classification**

₹ in Crore

	Year ended 31.03.2019			Year ended 31.03.2018		
	Amortised Cost	FVTOCI	FVTPL	Amortised Cost	FVTOCI	FVTPL
<b>Income</b>						
Interest Income *	118.53	6.18	29.12	92.85	6.18	90.33
Dividend Income **	-	29.05	0.01	-	25.51	0.02
	<b>118.53</b>	<b>35.23</b>	<b>29.13</b>	<b>92.85</b>	<b>31.69</b>	<b>90.35</b>
<b>Expense</b>						
Interest Expense ***	1,651.84	-	-	1,827.74	-	-
	<b>1,651.84</b>	<b>-</b>	<b>-</b>	<b>1,827.74</b>	<b>-</b>	<b>-</b>

\* The above amount of interest income does not include interest received from Income Tax Department of ₹ 257.40 Crore and ₹ 197.80 Crore for the year ended 31/03/2019 and 31/03/2018, respectively.

\*\* Dividend from Subsidiaries not included above for the year ended 31/03/2019 and 31/03/2018 is ₹ 75.46 Crore and ₹ 20.00 Crore, respectively.

\*\*\* The above amount of interest expense does not include interest pertaining to taxation and others finance costs of ₹ 31.20 Crore and ₹ 72.80 Crore for the year ended 31/03/2019 and 31/03/2018, respectively.

For amortised cost and FVTOCI instruments, interest expense is recognised at effective interest rate.

**(iv) Derecognition of Investments in Equity Instruments designated at FVTOCI**

₹ in Crore

	As at 31.03.2019				As at 31.03.2018			
	Fair value		Dividend Income		Fair value		Dividend Income	
Investments in Equity Instruments	on date of derecognition	Cumulative gain or loss on disposal during the period	On Investments derecognised during the period	On Investments held at the reporting date	on date of derecognition	Cumulative gain or loss on disposal during the period	On Investments derecognised during the period	On Investments held at the reporting date
Quoted Equity Instruments	-	-	-	-	87.24	61.01	-	25.43
Unquoted Equity Instruments	-	-	-	-	0.14	0.04	-	0.08
	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>87.38</b>	<b>61.05</b>	<b>-</b>	<b>25.51</b>

During the previous year ended 31st March, 2018, the Company sold investment in certain equity instruments measured at FVTOCI in line with its treasury management policy.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### B. Fair Value Hierarchy

The following table shows the details of financial assets and financial liabilities including their levels in the fair value hierarchy:

#### (i) Financial assets and financial liabilities measured as fair value - recurring fair value measurements:

₹ in Crore						
Financial Assets	As at 31.03.2019			As at 31.03.2018		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
<b>Investments in Associates</b>						
Unquoted Instruments	-	-	28.51	-	-	14.27
	-	-	<b>28.51</b>	-	-	<b>14.27</b>
<b>Investments in Equity Instruments</b>						
Quoted Equity Instruments	4,818.44	-	-	6,573.51	-	-
Unquoted Equity Instruments	-	-	34.55	-	-	24.16
	<b>4,818.44</b>	-	<b>34.55</b>	<b>6,573.51</b>	-	<b>24.16</b>
<b>Investment in Preference Shares</b>						
	-	-	-	-	-	<b>22.66</b>
<b>Investments in Debt Instruments</b>						
Mutual Funds	3,477.37	44.85	-	3,086.80	-	-
Bonds and Debentures	5.16	179.95	39.81	-	375.08	245.83
Government Securities	-	44.13	44.26	-	62.76	23.26
	<b>3,482.53</b>	<b>268.93</b>	<b>84.07</b>	<b>3,086.80</b>	<b>437.84</b>	<b>269.09</b>
<b>Derivatives</b>						
	-	<b>917.64</b>	-	-	<b>992.76</b>	-
<b>Cash and Cash Equivalents</b>						
Liquid Mutual Funds	1,162.40	-	-	1,565.64	-	-
	1,162.40	-	-	1,565.64	-	-
	<b>9,463.37</b>	<b>1,186.57</b>	<b>147.13</b>	<b>11,225.95</b>	<b>1,430.60</b>	<b>330.18</b>
<b>Financial Liabilities:</b>						
Derivatives	-	537.27	-	-	686.26	-
	-	<b>537.27</b>	-	-	<b>686.26</b>	-

#### (ii) Fair value disclosure of Financial Assets and Financial Liabilities measured at amortised cost:

₹ in Crore						
Financial Liabilities	As at 31.03.2019			As at 31.03.2018		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
<b>Financial Liabilities</b>						
Long Term Borrowings	-	16,393.31	-	-	18,061.22	-
	-	<b>16,393.31</b>	-	-	<b>18,061.22</b>	-

₹ in Crore						
Financial Assets:	As at 31.03.2019			As at 31.03.2018		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
<b>Financial Assets:</b>						
Loans and Advances, non-current	-	-	17.63	-	-	5.88
Deposits, non-current	-	-	180.74	-	-	204.13
	-	-	<b>198.37</b>	-	-	<b>210.01</b>

Fair values for current financial assets and financial liabilities have not been disclosed because their carrying amount are a reasonable approximation of their fair values.

**Level 1:** Hierarchy includes financial instruments valued using quoted market prices. Listed equity instruments and traded debt instruments which are traded in the stock exchanges are valued using the closing price at the reporting date. Mutual funds are valued using the closing NAV.

**Level 2:** Hierarchy includes financial instruments that are not traded in active market. This includes over the counter (OTC) derivatives, close ended mutual funds and debt instruments valued using observable market data such as yield etc. of similar instruments traded in active market. All derivatives are reported at discounted values hence are included in level 2. Borrowings have been fair valued using credit adjusted interest rate prevailing on the reporting date.

**Level 3:** If one or more significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity instruments and certain debt instruments which are valued using assumptions from market participants.

**(iii) Disclosure of changes in level 3 items for the period ended 31.03.2019 and 31.03.2018 respectively**

₹ in Crore

	Unquoted Associates	Unquoted Equity Instruments	Unquoted Debt Instruments	Total
<b>As at 31/03/2017</b>	<b>11.00</b>	<b>23.59</b>	<b>349.39</b>	<b>383.98</b>
Acquisitions	-	-	24.91	24.91
Sale	-	(0.14)	(252.44)	(252.58)
Gain/(losses) recognised in Profit or loss	-	-	1.84	1.84
Gain/(losses) recognised in OCI	3.27	0.71	-	3.98
Transfer from Level 1 and 2	-	-	168.05	168.05
Transfer to Level 1 and 2	-	-	-	-
<b>As at 31/03/2018</b>	<b>14.27</b>	<b>24.16</b>	<b>291.75</b>	<b>330.18</b>
Acquisitions	5.75	-	-	5.75
Sale	-	-	(136.43)	(136.43)
Gain/(losses) recognised in Profit or loss	-	-	1.93	1.93
Gain/(losses) recognised in OCI	8.49	10.39	-	18.88
Transfer from Level 1 and 2	-	-	61.76	61.76
Transfer to Level 1 and 2	-	-	(134.94)	(134.94)
<b>As at 31/03/2019</b>	<b>28.51</b>	<b>34.55</b>	<b>84.07</b>	<b>147.13</b>
Unrealised Gain/(loss) recognised in profit and loss relating to assets and liabilities held at the end of reporting period:				
<b>31/03/2019</b>	-	-	<b>1.50</b>	<b>1.50</b>
<b>31/03/2018</b>	-	-	<b>(3.46)</b>	<b>(3.46)</b>

Transfers from level 1 and 2 to level 3 and out of level 3 for unquoted debt instruments is based on unavailability/availability of market observable inputs as on the reporting date. The Company's policy is to recognise transfers into and transfers out of fair value hierarchy levels as at the end of the reporting period.

**(iv) Sensitivity analysis of Level-3 Instruments:**

₹ in Crore

	Unquoted Associates	Unquoted Equity Instruments		Unquoted Debt Instruments		
	Impact on Statement of Profit and Loss	Impact on OCI	Impact on Statement of Profit and Loss	Impact on OCI	Impact on Statement of Profit and Loss	Impact on OCI
<b>Increase in Yield by 0.5%</b>						
<b>31/03/2019</b>	-	-	-	-	<b>(0.55)</b>	<b>(0.46)</b>
<b>31/03/2018</b>	-	-	-	-	<b>(2.58)</b>	<b>(0.69)</b>
Increase in Price to Book Multiple by 10%						
<b>31/03/2019</b>	-	<b>0.49</b>	-	<b>5.91</b>	-	-
<b>31/03/2018</b>	-	<b>0.31</b>	-	<b>3.40</b>	-	-

Sensitivity with decrease in yield and Price Book Multiplier by 0.5% and 10% will have equal and opposite impact in financial statement.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

### (v) Valuation techniques used for valuation of instruments categorised as level 3

For valuation of investments in equity shares and associates which are unquoted, peer comparison has been performed wherever available. Valuation has been primarily done by considering the net worth of the Company and price to book multiple to arrive at the fair value. In cases where income approach was feasible valuation has been arrived using the earnings capitalisation method. For inputs that are not observable for these instruments, certain assumptions are made based on available information. The most significant of these assumptions are the discount rate and credit spreads used in the valuation process.

For valuation of investments in debt securities categorised as level 3, market polls which represent indicative yields are used as assumptions by market participants when pricing the asset.

There were no significant inter-relationships between unobservable inputs that materially affect fair values.

## 50. Financial Instruments : Financial Risk Management

The Company's activities exposes it to various risks such as market risk, liquidity risk and credit risk. This section explains the risks, which the Company is exposed to and how it manages those risks.

### A. Market Risk

#### (i) Market Risk : Commodity Price Risk

Hindalco's India Operations consist of two businesses – Copper Business and Aluminium Business. The Copper Business works under a "Custom Smelting" model wherein the focus is to improve the processing margin. The timing mis-match risk between the input and output price, which is linked to the same international pricing benchmark, is eliminated through use of derivatives. This off-set hedge model (through use of derivatives) is used to manage the timing mis-match risk for both Commodity (Copper and Precious Metals) and Currency Risk (primarily, USD/INR). The Copper Business also has a portion of View Based exposure for both Commodity and Currency, beyond the above timing mis-match risk. Lower Copper Prices, Stronger USD/INR exchange rate and Higher "Other Input" Prices (eg. Coal, furnace oil, natural gas etc) are the major price risks that adversely impact the business. Here, the Company may use derivative instruments, wherever available, to manage these pricing risks. A variety of factors, including the risk appetite of the business and price view, are considered while taking Hedging Decisions. Such View based hedges are usually done for the next 1-8 quarters.

The Aluminium Business is a vertically integrated business model wherein the input and output pricing risks are independent of each other, i.e. – are on different pricing benchmarks, if any. Here, the Company may use derivative instruments, wherever available, to manage its pricing risks for both input and output products. Lower Aluminium Prices, Stronger USD/INR exchange rate and Higher Input Prices (e.g. Alumina, Furnance Oil) are the major price risks that adversely impact the Business. Hedging decisions are based on a variety of factors, including risk appetite of the business and price View. Such Hedge decisions are usually done for the next 1-12 quarters.

#### Embedded Derivatives

Copper concentrate is purchased on future pricing model based on month's average LME (in case of copper)/ LBMA (in case of gold and silver). Since, the value of the concentrate changes with response to change in commodity pricing indices, embedded derivatives (ED) is identified and segregated in the contract. The ED so segregated, is treated like commodity derivative and qualify for hedge accounting. These derivatives are put into a Fair Value hedge relationship with respect to inventory.



- (a) The table below summaries gain/(loss) impact of increase/decrease in the commodity price on the company's equity and profit for the year:

₹ in Crore

Commodity Risk	Increase in Price	Year ended 31.03.2019		Year ended 31.03.2018	
		Gain/ (Loss) in Statement of Profit and Loss	Gain/ (Loss) in Other Components of Equity	Gain/ (Loss) in Statement of Profit and Loss	Gain/ (Loss) in Other Components of Equity
Aluminium	10%	(0.34)	(179.84)	(0.17)	(441.06)
Copper	10%	(384.64)	(2.30)	(261.76)	(7.62)
Gold	10%	154.02	(222.03)	(21.18)	(70.74)
Silver	10%	(1.82)	(10.31)	(3.27)	(18.81)
Furnace Oil	10%	1.54	6.84	-	-
Coal	10%	0.01	2.99	-	-

Decrease in prices by 10% will have equal and opposite impact in financial statements.

**(ii) Market Risk : Foreign Currency Risk**

Exchange rate movements, particularly the United States Dollar (USD) and Euro (EUR) against Indian Rupee (INR), have an impact on our operating results. In addition to the foreign exchange inflow from exports, the commodity prices in the domestic market are derived based on the landed cost of imports in India where LME prices and USD/INR exchange rate are the main factors. In case of conversion business, the objective is to match the exchange rate of outflows and related inflows through derivative financial instruments. With respect to Aluminium business where costs are predominantly in INR, the strengthening of INR against USD adversely affects the profitability of the business and benefits when INR depreciates against USD. The company enters into various foreign exchange contracts to protect profitability. The Company also enters into various foreign exchange contracts to mitigate the risk arising out of foreign currency exchange rate movement in foreign currency contracts executed with foreign suppliers to procure capital items for its project activities.

- (a) The Company's net exposure to foreign currency risk at the end of the reporting period expressed in ₹, is given below:

₹ in Crore

	31.03.2019	31.03.2018
USD	524.75	499.93
EUR	-	58.73
GBP	2.11	2.50
SEK	0.04	0.04
NOK	0.99	1.03
SGD	-	0.14
CAD	0.39	0.63
AUD	0.85	0.49
CHF	0.90	0.98
JPY	0.40	0.55
AED	0.01	0.01
	<b>530.44</b>	<b>565.03</b>

Assets and liabilities that are naturally hedged against future are excluded for the purpose of above disclosure.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

- (b) The table below summaries gain/(loss) impact on of increase/decrease in the exchange rates on the company's equity and profit for the year:

₹ in Crore

Currency Risk	Increase in Rate/Price	Year ended 31.03.2019		Year ended 31.03.2018	
		Gain/ (Loss) in Statement of Profit and Loss	Gain/ (Loss) in Other Components of Equity	Gain/ (Loss) in Statement of Profit and Loss	Gain/ (Loss) in Other Components of Equity
USD	10%	10.29	(922.23)	(33.81)	(1,147.37)
EUR	10%	4.53	3.60	1.78	-
GBP	10%	(0.20)	-	(0.23)	-
SEK	10%	-	-	-	-
NOK	10%	(0.06)	-	(0.07)	-
SGD	10%	-	-	(0.01)	-
CAD	10%	(0.03)	-	(0.04)	-
AUD	10%	(0.06)	-	(0.02)	-
CHF	10%	(0.06)	-	(0.06)	-
JPY	10%	(0.03)	-	(0.04)	-
AED	10%	-	-	-	-

Decrease in prices by 10% will have equal and opposite impact in financial statements.

### (iii) Market Risk: Equity Securities Price Risk

The Company's exposure to equity securities price risk arises from movement in market price of related securities classified either as FVTOCI or FVTPL. The Company manages the price risk through diversified portfolio.

The table below summaries gain/(loss) impact on of increase/decrease in the equity share price on the company's equity and profit for the year:

₹ in Crore

Other Price Risk	Increase Rate/Price	Year ended 31.03.2019		Year ended 31.03.2018	
		Gain/ (Loss) in Statement of Profit and Loss	Gain/ (Loss) in Other Components of Equity	Gain/ (Loss) in Statement of Profit and Loss	Gain/ (Loss) in Other Components of Equity
Investment in Equity Securities	10%	-	481.85	-	657.35

Decrease in prices by 10% will have equal and opposite impact in financial statements.

### (iv) Market Risk: Interest Rate Risk

The Company is exposed to interest rate risk on financial liabilities such as borrowings, both short-term and long-term. It maintains a balance of fixed and floating interest rate borrowings and the proportion is determined by current market interest rates, projected debt servicing capability and view on future interest rates. Such interest rate risk is actively evaluated and interest rate swap is taken whenever considered necessary.

The Company is also exposed to interest rate risk on its financial assets that include fixed deposits, bonds, debentures, commercial papers, other mutual funds and liquid investments comprising mainly mutual funds (which are part of cash and cash equivalents). Since, majority of these are generally for short durations, the Company believes it has limited interest rate risk.

- (a) The table below summaries gain/(loss) impact on of increase/decrease in the interest rates on the company's equity and profit for the year:

₹ in Crore

Interest Rate Risk	Increase in Rate	Year ended 31.03.2019		Year ended 31.03.2018	
		Gain/ (Loss) in Statement of Profit and Loss	Gain/ (Loss) in Other Components of Equity	Gain/ (Loss) in Statement of Profit and Loss	Gain/ (Loss) in Other Components of Equity
Interest rate on floating rate borrowings	50 bps	(39.96)	-	(37.42)	-

Decrease in rates by 50 bps will have equal and opposite impact in financial statements.

## B. Liquidity Risk

The Company determines its liquidity requirements in the short, medium and long term. This is done by drawing up cash forecast for short and medium term requirements and strategic financing plans for long term needs.

The Company manages its liquidity risk in a manner so as to meet its normal financial obligations without any significant delay or stress. Such risk is managed through ensuring operational cash flow while at the same time maintaining adequate cash and cash equivalents position. The management has arranged for diversified funding sources and adopted a policy of managing assets with liquidity in mind and monitoring future cash flows and liquidity on a regular basis. Surplus funds not immediately required are invested in certain financial assets (including mutual funds) which provide flexibility to liquidate at short notice and are included in current investments and cash equivalents. Besides, it generally has certain undrawn credit facilities which can be accessed as and when required, which are reviewed periodically.

The Company has developed appropriate internal control systems and contingency plans for managing liquidity risk. This incorporates an assessment of expected cash flows and availability of alternative sources for additional funding, if required.

### (i) Financing Arrangement

The Company had access to the following undrawn borrowing facilities at the end of the reporting period:

	As at 31.03.2019	As at 31.03.2018
Bank Overdraft and other facilities	1,680.50	1,679.50

Undrawn limit has been calculated based on the available drawing power and sanctioned amount at each reporting date.

### (ii) Maturity Analysis

The company's financial liabilities into relevant maturity groupings based on their contractual maturities for all non-derivative financial liabilities and net settled derivative financial instruments. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

	Less than 1 Year	1 year to 2 Years	2 years to 5 Years	More than 5 years	Total	Carrying Value
<b>Contractual maturities of financial liabilities as at 31/03/2019</b>						
<b>Non Derivatives</b>						
Borrowings*	4,384.90	1,375.30	9,957.67	11,974.10	27,691.97	19,501.28
Obligations under finance lease	8.21	7.77	19.83	8.16	43.97	33.05
Trade payables	5,733.67	0.79	0.76	-	5,735.22	5,735.22
Other financial liabilities	1,405.61	3.46	3.79	0.03	1,412.89	1,412.89
	11,532.39	1,387.32	9,982.05	11,982.29	34,884.05	26,682.44
<b>Derivatives (net settled)</b>						
Commodity Forwards/Swaps	59.58	-	-	-	59.58	59.58
Fx currency forwards	46.06	1.35	0.01	-	47.42	47.42
Fx Swaps	368.59	61.68	-	-	430.27	430.27
	474.23	63.03	0.01	-	537.27	537.27

	Less than 1 Year	1 year to 2 years	2 Years to 5 Years	More than 5 years	Total	Carrying Value
<b>Contractual maturities of financial liabilities as at 31/03/2018</b>						
<b>Non Derivatives</b>						
Borrowings*	4,560.03	1,456.97	11,537.07	13,413.78	30,967.85	20,359.08
Obligations under finance lease	8.43	8.04	21.84	13.93	52.24	38.08
Trade payables	5,524.05	0.59	1.05	22.40	5,548.09	5,548.09
Other financial liabilities **	1,451.94	11.58	0.32	0.03	1,463.87	1,463.87
Finance Guarantee ***	16.42	-	-	2,435.18	2,451.60	-
	11,560.87	1,477.18	11,560.28	15,885.32	40,483.65	27,409.12

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

Contractual maturities of financial liabilities as at 31/03/2018						₹ in Crore	
	Less than 1 Year	1 year to 2 years	2 Years to 5 Years	More than 5 years	Total	Carrying Value	
Derivatives (net settled)							
Commodity Forwards/Swaps	427.67	32.12	0.51	-	460.30	460.30	
Fx currency forwards	1.89	-	-	-	1.89	1.89	
Fx Swaps	191.32	32.75	-	-	224.07	224.07	
	<b>620.88</b>	<b>64.87</b>	<b>0.51</b>	<b>-</b>	<b>686.26</b>	<b>686.26</b>	

\* Includes Principal and interest payments, short term borrowings, current portion of debt and excludes unamortised fees.

\*\* Excludes financial guarantee liability contract which has been fair valued.

\*\*\* Guarantee given for loans as at 31/03/2018 ₹ 4,865.12 Crore has been reported to the extent of loan amount outstanding 31/03/2018 ₹ 2,435.18 Crore. Guarantees related to loans have been withdrawn during the year ended 31/03/2019.

### (C) Credit Risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligation.

Credit risk arises from cash and cash equivalents, contractual cash flows of debt investments, favourable derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to customers including outstanding receivables.

Credit risk is managed on an entity level basis. The Company has adopted a policy of dealing only with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating risk of financial loss from defaults. The Company invests only in those instruments issued by high rated banks/ institutions and government agencies. The Company assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. The Company's investments in debt instruments and certain loans are considered to have low credit risk. The credit ratings of the investments are monitored for credit deterioration.

For some trade receivables the Company obtains security in the form of guarantees, deed of undertaking or letters of credit which can be called upon if the counterparty is in default under the terms of the agreement.

The Company periodically monitors the recoverability and credit risks of its other financial assets including security deposits and other receivables. The Company evaluates 12 month expected credit losses for all the financial assets for which credit risk has not increased. In case credit risk has increased significantly, the Company considers life time expected credit losses for the purpose of impairment provisioning.

The Company has used a practical expedient by computing the expected credit loss allowance for trade receivables based on a provision matrix. The provision matrix takes into account historical credit loss experience and adjusted for forward-looking information. The expected credit loss allowance is based on the ageing of the days for which the receivables are due and the expected loss rates as given in the provision matrix. The provision matrix at the end of the reporting period is as follows:

#### (i) Summary of trade receivables and provision with ageing as at 31.03.2019

Particulars	Past due						Total
	Not due	1 to 30 days	31 to 60 days	61 to 120 days	121 to 180 days	Over 180 days	
Gross carrying amount - Domestic	1,380.09	94.40	59.20	31.86	53.09	155.21	1,773.85
Gross carrying amount - Export	340.47	40.95	4.06	-	-	0.86	386.34
Expected loss rate	0.05%	0.62%	3.46%	3.14%	0.19%	0.17%	0.24%
Expected credit loss provision	0.86	0.84	2.19	1.00	0.10	0.27	5.26
Loss allowance - Credit impaired - Export	-	-	-	-	-	0.79	0.79
Loss allowance - Credit impaired - Domestic	-	-	-	-	-	29.26	29.26
Total Provision	0.86	0.84	2.19	1.00	0.10	30.32	35.31
<b>Carrying amount of trade receivables (net of impairment)</b>	<b>1,719.70</b>	<b>134.51</b>	<b>61.07</b>	<b>30.86</b>	<b>52.99</b>	<b>125.75</b>	<b>2,124.88</b>

**(ii) Summary of trade receivables and provision with ageing as at 31.03.2018**

₹ in Crore

Particulars	Past due						Total
	Not due	1 to 30 days	31 to 60 days	61 to 120 days	121 to 180 days	Over 180 days	
Gross carrying amount - Domestic	1,108.71	57.02	45.17	39.52	87.63	100.88	1,438.94
Gross carrying amount - Export	287.30	44.85	1.37	0.47	0.04	0.88	334.91
Expected loss rate	0.01%	0.47%	1.46%	2.15%	0.26%	1.73%	0.24%
Expected credit loss provision	0.16	0.48	0.68	0.86	0.23	1.76	4.17
Loss allowance - Credit impaired - Export	-	-	-	-	-	5.42	5.42
Loss allowance - Credit impaired - Domestic	-	-	-	-	-	27.01	27.01
Total Provision	0.16	0.48	0.68	0.86	0.23	34.20	36.61
<b>Carrying amount of trade receivables (net of impairment)</b>	<b>1,395.85</b>	<b>101.39</b>	<b>45.86</b>	<b>39.13</b>	<b>87.44</b>	<b>67.58</b>	<b>1,737.25</b>

**(iii) Reconciliation of Provision**

₹ in Crore

<b>Loss allowance as at 31.03.2017</b>	<b>40.12</b>
changes in loss allowance	(3.51)
<b>Loss allowance as at 31.03.2018</b>	<b>36.61</b>
changes in loss allowance	(1.30)
<b>Loss allowance as at 31.03.2019</b>	<b>35.31</b>

Of the trade receivables balance as at 31/03/2019, ₹ 345.54 Crore (as at 31/03/2018, ₹ 185.10 Crore) is due from a single customer being the Company's largest customer. There are no other customers who represent more than 10% of the total balance of trade receivables.

Financial assets at FVTPL and at FVTOCI:

The Company is also exposed to credit risks in relation to financial assets that are measured at FVTPL or at FVTOCI. The maximum exposure at the end of the reporting period is the carrying amount of these assets.

**51. Capital Management**

The Company's objective to manage its capital is to ensure continuity of business while at the same time provide reasonable returns to its various stakeholders, but keep associated costs under control. In order to achieve this, requirement of capital is reviewed periodically with reference to operating and business plans that take into account capital expenditure and strategic investments. Apart from internal accrual, sourcing of capital is done through judicious combination of equity and borrowing, both short term and long term. Net debt (total borrowings less current investments and cash & cash equivalents) to equity ratio is used to monitor capital. No changes were made to the objectives, policies or processes for managing capital during the years ended March 31, 2019 and March 31, 2018.

	As at 31.03.2019	As at 31.03.2018
Debt Equity Ratio	0.40	0.41

As at March 31, 2019 and March 31, 2018, the Company was in compliance with all of its debt covenants for borrowings.

**52. Derivative Financial Instruments:**

The Company uses derivative financial instruments such as forwards, futures, swaps, options etc. to hedge its risks associated with foreign exchange fluctuation. Risks associated with fluctuation in the price of the products (copper, aluminium, coal, furnace oil and precious metals) are minimized by undertaking appropriate derivative instruments. Derivatives embedded in other contracts are treated as separate derivatives when their risks and characteristics are not closely related to their host contracts. In some cases, the embedded derivatives may be designated in a hedge relationship. The fair values of all such derivative financial instruments are recognized as assets or liabilities at the balance sheet date.

The Company also applies hedge accounting using certain foreign currency non-derivative monetary items which are used as hedging instruments for hedging foreign exchange risk.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(A) The Asset and Liability position of various outstanding derivative financial instruments is given below:

		₹ in Crore					
Nature of Risk being Hedged	As at 31.03.2019			As at 31.03.2018			
	Liability	Asset	Net Fair Value	Liability	Asset	Net Fair Value	
<b>Current</b>							
<b>Cash flow hedges</b>							
Commodity contracts	Price Risk Component	(4.67)	439.95	435.28	(317.55)	64.86	(252.69)
Foreign currency contracts	Exchange rate movement risk	(410.52)	340.71	(69.81)	(192.79)	812.31	619.52
<b>Fair Value Hedge</b>							
Embedded Derivatives*	Risk of change in Fair Value of unpriced inventory	(248.60)	6.11	(242.49)	(4.64)	154.52	149.88
<b>Non-designated hedges</b>							
Commodity contracts		(54.91)	40.30	(14.61)	(110.12)	3.09	(107.03)
Foreign currency contracts		(4.13)	0.69	(3.44)	(0.42)	5.09	4.67
<b>Total</b>		<b>(722.83)</b>	<b>827.76</b>	<b>104.93</b>	<b>(625.52)</b>	<b>1,039.87</b>	<b>414.35</b>
<b>Non - current</b>							
<b>Cash flow hedges</b>							
Commodity contracts	Price Risk Component	-	30.23	30.23	(32.62)	65.06	32.44
Foreign currency contracts	Exchange rate movement risk	(62.60)	65.76	3.16	(32.76)	42.31	9.55
<b>Non-designated hedges</b>							
Commodity contracts		-	-	-	-	-	-
Foreign currency contracts		(0.44)	-	(0.44)	-	0.04	0.04
<b>Total</b>		<b>(63.04)</b>	<b>95.99</b>	<b>32.95</b>	<b>(65.38)</b>	<b>107.41</b>	<b>42.03</b>
<b>Grand Total</b>		<b>(785.87)</b>	<b>923.75</b>	<b>137.88</b>	<b>(690.90)</b>	<b>1,147.28</b>	<b>456.38</b>

\* Fair Value of ₹ (242.49) Crore (31/03/2018 ₹ 149.88 Crore) is classified as part of Trade Payables.

The maturity profile for Commodity and Forex Exchange Forwards and Swaps ranges from April 2019 to March 2021. Hedge Ratio of 1:1 is used by the Company.

Derivative assets are part of other financial assets included in note 9A & 9B. Derivative liabilities are part of other financial liabilities included in note 20A & 20B.

(B) Outstanding position and fair value of various foreign exchange derivative financial instruments:

		₹ in Crore					
Currency Pair	As at 31.03.2019			As at 31.03.2018			
	Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)	Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)	
<b>Foreign currency forwards</b>							
<b>Cash flow hedges</b>							
Sell	USD_INR	74.18	656.78	88.49	71.30	866.07	360.00
Buy	USD_INR	71.65	124.57	(24.36)	-	-	-
Buy	EUR_INR	82.72	9.75	(1.15)	-	-	-
<b>Total</b>				<b>62.98</b>			<b>360.00</b>
<b>Non-Designated</b>							
Buy	AUD_INR	-	-	-	50.40	0.03	-
Buy	EUR_INR	84.86	6.13	(1.45)	80.06	10.63	1.48
Buy	GBP_INR	95.49	0.01	(0.02)	90.00	0.11	0.05
Buy	USD_INR	69.25	30.62	1.07	65.43	122.80	0.86
Sell	USD_INR	69.92	129.65	(3.48)	65.98	120.11	2.32
<b>Total</b>				<b>(3.88)</b>			<b>4.71</b>
<b>Foreign currency swaps</b>							
<b>Cash flow hedges</b>							
Sell	USD_INR	63.69	588.81	(129.63)	63.96	938.04	269.07
<b>Total</b>				<b>(129.63)</b>			<b>269.07</b>

(C) Outstanding position and fair value of various foreign exchange non-derivative financial instruments used as hedging instruments:

₹ in Crore

Currency Pair	As at 31.03.2019			As at 31.03.2018		
	Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)	Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)
<b>Foreign currency monetary items</b>						
<b>Cash flow hedges</b>						
Debt	USD_INR	71.87	433.83	113.99	64.52	468.77 (30.86)
Liability for Copper Concentrate	USD_INR	69.91	350.17	24.58	64.75	413.08 (14.49)
<b>Total</b>			<b>138.57</b>			<b>(45.35)</b>

(D) Outstanding position and fair value of various commodity derivative financial instruments

(i) Outstanding position and fair value of various commodity derivative financial instruments as at 31st March, 2019:

₹ in Crore

	Currency	Average Price/ Unit	Quantity	Unit	Notional value (in millions)	Fair Value Gain/(Loss) (₹ Crore)	
<b>Commodity Futures/Forwards/Swaps</b>							
<b>Cash Flow Hedge</b>							
Aluminium	Sell	USD	2,224.09	208,600	MT	463.95 382.92	
Copper	Sell	USD	6,493.34	800	MT	5.19 0.03	
Gold	Sell	INR	3,279,046	6,843	KGS	22,438.51 65.64	
Silver	Sell	USD	16.06	1,513,065	TOZ	24.30 8.25	
Furnace Oil	Buy	USD	341.20	50,000	MT	17.06 12.46	
Coal	Buy	USD	81.00	90,000	MT	7.29 (3.79)	
<b>Total</b>						<b>465.51</b>	
<b>Non Designated hedges</b>							
Aluminium	Buy	USD	1,881.27	33,725	MT	63.45 4.42	
Aluminium	Sell	USD	1,987.75	33,725	MT	67.04 20.39	
Copper	Buy	USD	6,358.94	7,075	MT	44.99 6.33	
Copper	Sell	USD	6,510.95	12,625	MT	82.20 1.96	
Gold	Buy	INR	3,288,031	4,474	KGS	14,710.65 (51.23)	
Silver	Buy	USD	15.43	217,134	TOZ	3.35 (0.33)	
Silver	Sell	USD	15.55	69,015	TOZ	1.07 0.13	
Furnace Oil	Buy	USD	363.67	9,998	MT	3.64 3.66	
Furnace Oil	Sell	USD	417.39	9,998	MT	4.17 0.06	
<b>Total</b>						<b>(14.61)</b>	
<b>Embedded derivatives</b>							
<b>Fair Value Hedge</b>							
	Copper	Sell	USD	6,105.30	121,896	MT	755.00 (245.71)
	Gold	Sell	USD	1,306.69	33,123	TOZ	43.28 2.32
	Silver	Sell	USD	15.56	351,099	TOZ	5.46 0.90
<b>Total</b>						<b>(242.49)</b>	

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

(ii) Outstanding position and fair value of various commodity derivative financial instruments as at 31st March, 2018:

₹ in Crore							
		Currency	Average Price/ Unit	Quantity	Unit	Notional value in millions	Fair Value Gain/(Loss) ₹ in Crore
<b>Commodity</b>							
<b>Futures/Forwards/Swaps</b>							
<b>Cash Flow Hedge</b>							
Aluminium	Sell	USD	1,966.54	524,000	MT	1,030.47	(212.36)
Copper	Sell	USD	7,269.67	2,700	MT	19.63	8.86
Gold	Sell	USD	1,303.21	126,148	TOZ	164.40	(24.07)
Silver	Sell	USD	17.03	2,713,922	TOZ	46.21	7.32
<b>Total</b>							<b>(220.25)</b>
<b>Non Designated hedges</b>							
Aluminium	Buy	USD	2,074.44	60,550	MT	125.61	(32.81)
Aluminium	Sell	USD	1,853.83	60,450	MT	112.06	(54.01)
Copper	Buy	USD	6,776.31	22,150	MT	150.10	(12.37)
Copper	Sell	USD	6,575.51	4,175	MT	27.45	(3.05)
Gold	Buy	USD	1,328.29	101,194	TOZ	134.42	(1.84)
Gold	Sell	USD	1,314.30	81,373	TOZ	106.95	(5.71)
Silver	Buy	USD	16.40	553,630	TOZ	9.08	(0.14)
Silver	Sell	USD	16.72	553,630	TOZ	9.25	1.25
Furnace Oil	Buy	USD	277.33	3,000	MT	0.83	1.83
Furnace Oil	Sell	USD	361.51	3,000	MT	1.08	(0.18)
<b>Total</b>							<b>(107.03)</b>
<b>Embedded derivatives</b>							
<b>Fair Value Hedge</b>							
Copper	Sell	USD	6,916.84	110,063	MT	761.29	150.14
Gold	Sell	USD	1,326.24	57,285	TOZ	75.97	(0.74)
Silver	Sell	USD	16.56	466,348	TOZ	7.72	0.48
<b>Total</b>							<b>149.88</b>

(E) Details of amount held in OCI and the period during which these are going to be released and affecting Statement of Profit & Loss:

₹ in Crore						
	As at 31.03.2019			As at 31.03.2018		
	Closing Value in Hedging Reserve	Release		Closing Value in Hedging Reserve	Release	
		In less than 12 Months	After 12 Months		In less than 12 Months	After 12 Months
	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)
<b>Cash Flow Hedges</b>						
<b>Commodity Forwards/Futures/Swaps</b>						
Aluminium	382.76	357.06	25.70	(210.83)	(270.25)	59.42
Copper	0.03	0.03	-	8.85	8.85	-
Gold	0.18	0.18	-	(23.88)	(23.88)	-
Silver	8.23	8.23	-	7.33	7.47	(0.14)
Furnace Oil	12.26	12.26	-	-	-	-
Coal	(3.78)	(3.78)	-	-	-	-
	<b>399.68</b>	<b>373.98</b>	<b>25.70</b>	<b>(218.53)</b>	<b>(277.81)</b>	<b>59.28</b>



₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Closing Value in Hedging Reserve	Release		Closing Value in Hedging Reserve	Release	
		In less than 12 Months	After 12 Months		In less than 12 Months	After 12 Months
	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)
<b>Cash Flow Hedges</b>						
<b>Non-Derivative Financial Instruments</b>						
Debt	113.99	113.99	-	(30.86)	(30.86)	-
Liability for Copper Concentrate	19.54	19.54	-	(9.58)	(9.58)	-
<b>Foreign currency Forwards</b>						
USD_INR	89.01	23.26	65.75	360.53	317.69	42.84
EUR_INR	(1.15)	(0.24)	(0.91)	-	-	-
<b>Foreign currency Swaps</b>						
USD_INR	(317.46)	(252.44)	(65.02)	(103.94)	(23.59)	(80.35)
	(96.07)	(95.89)	(0.18)	216.15	253.66	(37.51)
	303.61	278.09	25.52	(2.38)	(24.15)	21.77
Deferred Tax on above	(106.09)	(97.18)	(8.91)	0.84	8.44	(7.60)
<b>Total</b>	<b>197.52</b>	<b>180.91</b>	<b>16.61</b>	<b>(1.54)</b>	<b>(15.71)</b>	<b>14.17</b>

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Closing Value in Hedging Reserve	Release		Closing Value in Hedging Reserve	Release	
		In less than 12 Months	After 12 Months		In less than 12 Months	After 12 Months
	Gain/(Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)	Gain/ (Loss)
<b>Cost of Hedging Reserve</b>						
<b>Foreign currency Swaps</b>						
USD_INR	771.61	615.19	156.42	994.99	360.97	634.02
Deferred Tax on above	(269.63)	(214.97)	(54.66)	(347.68)	(126.14)	(221.54)
<b>Total</b>	<b>501.98</b>	<b>400.22</b>	<b>101.76</b>	<b>647.31</b>	<b>234.83</b>	<b>412.48</b>

(F) Gain/(loss) recognized in OCI and recycled:

**i. Amount of gain/(loss) recognized in Hedging Reserve and recycled during the year 2018-19:**

₹ in Crore

	Recycled					
	Opening Balance	Amount recognised	Net Amount to P&L	Net Amount added to Non-Financial Assets	Total Amount recycled	Closing Balance before tax
<b>Cash Flow Hedges</b>						
Commodity	(218.53)	781.13	161.71	1.21	162.92	399.68
Forex	216.15	(983.70)	(671.48)	-	(671.48)	(96.07)
<b>Total</b>	<b>(2.38)</b>	<b>(202.57)</b>	<b>(509.77)</b>	<b>1.21</b>	<b>(508.56)</b>	<b>303.61</b>
<b>Deferred Tax on above</b>	<b>0.84</b>	<b>70.78</b>	<b>178.12</b>	<b>(0.41)</b>	<b>177.71</b>	<b>(106.09)</b>

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

₹ in Crore

	Recycled					Closing Balance before tax
	Opening Balance	Amount recognised	Net Amount to P&L	Net Amount added to Non-Financial Assets	Total Amount recycled	
<b>Cost of Hedging Reserve</b>						
Commodity	-	(41.15)	(41.15)	-	(41.15)	-
Forex	994.99	200.42	423.80	-	423.80	771.61
<b>Total</b>	<b>994.99</b>	<b>159.27</b>	<b>382.65</b>	<b>-</b>	<b>382.65</b>	<b>771.61</b>
<b>Deferred Tax on above</b>	<b>(347.68)</b>	<b>(55.67)</b>	<b>(133.72)</b>	<b>-</b>	<b>(133.72)</b>	<b>(269.63)</b>

ii. Amount of gain/(loss) recognized in Hedging Reserve and recycled during the year 2017-18:

₹ in Crore

	Recycled					Closing Balance before tax
	Opening Balance	Amount recognised	Net Amount to P&L	Net Amount added to Non-Financial Assets	Total Amount recycled	
<b>Cash Flow Hedges</b>						
Commodity	(1,190.74)	(312.30)	(1,284.51)	-	(1,284.51)	(218.53)
Forex	722.95	294.34	801.14	-	801.14	216.15
<b>Total</b>	<b>(467.79)</b>	<b>(17.96)</b>	<b>(483.37)</b>	<b>-</b>	<b>(483.37)</b>	<b>(2.38)</b>
<b>Deferred Tax on above</b>	<b>161.90</b>	<b>6.23</b>	<b>167.29</b>	<b>-</b>	<b>167.29</b>	<b>0.84</b>

₹ in Crore

	Recycled					Closing Balance before tax
	Opening Balance	Amount recognised	Net Amount to P&L	Net Amount added to Non-Financial Assets	Total Amount recycled	
<b>Cost of Hedging</b>						
Forex	633.97	361.02	-	-	-	994.99
<b>Deferred Tax on above</b>	<b>(219.40)</b>	<b>(128.28)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(347.68)</b>

(G) Amount of gain/ (loss) recycled from Hedging Reserve and reference of the line item in Statement of Profit and Loss where those amounts are included:

₹ in Crore

Note No.	Note Description	Nature of Products	Year Ended 31.03.2019	Year Ended 31.03.2018
26	Revenue From Operations	Aluminium Products	231.85	(617.49)
26	Revenue From Operations	Copper and Copper Products	(399.56)	200.44
26	Revenue From Operations	Precious Metals	40.59	(66.32)
			<b>(127.12)</b>	<b>(483.37)</b>

(H) The adjustment as part of the carrying value of inventories arising on account of fair value hedges is as follows:

₹ in Crore

Inventory Type	Year Ended 31.03.2019	Year Ended 31.03.2018
Copper	251.79	(148.61)
Gold	(2.41)	0.89
Silver	(0.92)	(0.49)
	<b>248.46</b>	<b>(148.21)</b>

- (l) The Company's hedging policy only allows for effective hedge relationships to be established. The effectiveness portion of hedge is recognised in OCI, while ineffective portion of hedge is recognised immediately in the Statement of Profit and Loss. The Company uses hypothetical derivative method to assess effectiveness. Ineffectiveness may arise on account of differences in critical terms and credit risk of the hedging instrument and the hedged item.

The amount of gain/ (loss) recognised in the Statement of Profit and Loss on account of hedge ineffectiveness for cash flow hedges for the period ended March 31, 2019 and March 31, 2018 is ₹ (35.82) Crore and ₹ (20.78) Crore, respectively which forms part of Gain/Loss on fair value of derivatives under note 35.

### 53. Additional Information

- A. As per Section 135 of Companies Act 2015, a Corporate Social Responsibility Committee has been formed. As per the provisions of Companies Act 2013, amount not less than ₹ 29.97 Crore (Year ended 31/03/2018 ₹ 26.7 Crore) should have been incurred during the year under CSR. The Company has incurred expenses amounting to ₹ 34.14 Crore (Year ended 31/03/2018 ₹ 31.09 Crore), in line with the CSR policy which is in conformity with the activities specified in Schedule VII of the Companies Act 2013.
- B. Details of loans given, investment made and guarantee given covered under section 186(4) of the Companies Act. 2013:
- Details of investments made have been given as part of Note '5' Investments in Subsidiary, Note '6' Investments in Associates and Note '7A and 7B' Other Investments.
  - Loans and Financial Guarantees given below:

			₹ in Crore	
Name of the Company	Relationship	Nature of Transaction	As at 31.03.2019	As at 31.03.2018
<b>Details of Loans</b>				
Aditya Birla Science and Technology Company Private Limited	Associate	Loan	50.59	50.59
Suvas Holding Limited	Subsidiary	Loan	10.51	-
<b>Details of Guarantee</b>				
Suvas Holdings Limited	Subsidiary	Financial Guarantee	-	12.62
Utkal Alumina International Limited	Subsidiary	Financial Guarantee	-	4,852.50
Dahej Harbour and Infrastructure Limited	Subsidiary	Performance Guarantee	4.50	4.50

- Disclosure relating to amount outstanding at year end and maximum outstanding during the year of loans and advances, in nature of loan, required under SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, are given below:

					₹ in Crore	
Name of the Company	As at 31.03.2019	Maximum outstanding during 2018-19	As at 31.03.2018	Maximum outstanding during 2017-18		
<b>Associate:</b>						
Aditya Birla Science and Technology Company Private Limited	50.59	50.59	50.59	55.49		
Suvas Holding Limited	10.51	10.51	-	-		

- C. Note on acquisition of Aleris Corporation (Aleris).  
On 26<sup>th</sup> July, 2018, Novelis Inc.(Novelis), a wholly owned subsidiary of the Company, has signed a definitive agreement to acquire Aleris Corporation (Aleris), a global supplier of rolled aluminum products, for approximately US\$ 2.58 billion including assumption of debt. As part of the acquisition, the Company, through its subsidiary Novelis, will acquire 13 manufacturing facilities of Aleris across North America, Asia and Europe. The acquisition is subject to customary closing conditions and regulatory approvals.

## NOTES FORMING PART OF THE STANDALONE FINANCIAL STATEMENTS

D. There was an incident in Red Mud (Bauxite Residue) storage area connected to the Alumina plant situated at Muri, Jharkhand, on April 9, 2019. The incident involved a spillage in the red mud cake storage area. The operations of the plant remain suspended following the incident. The unit is in the business of producing and supplying Aluminium Hydrate primarily to Aluminium smelters of the Company for captive consumption. The incident is not expected to have any material impact on the company's financial performance.

54. During the financial year ended March 31, 2019, the Company has reclassified/ regrouped certain comparatives in order to conform with current year's presentation. The following reclassification/ regrouping do not have material impact in the Financial Statements.

The key reclassification / regrouping included the following :

- (i) Consumption of Furnace oil amounting to ₹ 29.18 Crore has been reclassified from Raw Material Consumption to Power and Fuel.
- (ii) Certain gains / losses on account of foreign exchange fluctuations are reclassified from various heads to Other expense in Gain/(loss) on Exchange Fluctuation amounting to ₹ 22.25 Crore.

As per our report annexed.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**

Partner

Membership Number: 105869

**For and on behalf of the Board of Hindalco Industries Limited**

**Praveen Kumar Maheshwari**

Whole-time Director &

Chief Financial Officer

DIN-00174361

**Anil Malik**

Company Secretary

**Satish Pai**

Managing Director

DIN-06646758

**M M Bhagat**

Director

DIN-00006245

Place : Mumbai

Dated : May 16, 2019

# INDEPENDENT AUDITOR'S REPORT

## To the Members of Hindalco Industries Limited

### Report on the Audit of the Consolidated Financial Statements

#### Opinion

1. We have audited the accompanying consolidated financial statements of Hindalco Industries Limited (hereinafter referred to as the "Holding Company") and its subsidiaries (Holding Company and its subsidiaries together referred to as "the Group"), its joint ventures and associate companies (refer Note 57 to the attached consolidated financial statements), which comprise the consolidated balance sheet as at March 31, 2019 and the consolidated statement of profit and loss, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information prepared based on the relevant records (hereinafter referred to as "the consolidated financial statements").
2. In our opinion and to the best of our information and according to the explanations given to us, the aforesaid consolidated financial statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the consolidated state of affairs of the Group, its joint ventures and associate companies as at March 31, 2019, of consolidated total comprehensive income (comprising of profit and other comprehensive loss), consolidated changes in equity and its consolidated cash flows for the year then ended.

#### Basis for opinion

3. We conducted our audit in accordance with the Standards on Auditing (SAs) specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group, its joint ventures and associate companies in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in India in terms of the Code of Ethics issued by ICAI and the relevant provisions of the Act, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in sub-paragraphs 16 and 18 of the Other matters paragraph below, other than the unaudited financial statements/ financial information as certified by the management and referred to in sub-paragraph 17 of the Other matters paragraph below, is sufficient and appropriate to provide a basis for our opinion.

#### Key audit matters

4. Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

#### Key audit matters

##### A. Measurement of inventory quantities of coal, bauxite and work in progress consisting of precious metals

Refer Notes 4(g) and 16 (e) to the consolidated financial statements.

Of the Holding Company's ₹ 11,394.46 crores of inventory as at March 31, 2019, ₹ 1,730 crores of inventory comprised of coal, bauxite and work in progress consisting of precious metals.

This was determined a key audit matter, as the measurement of these inventory quantities lying at the Holding Company's yards, smelter and refinery is complex and involves significant judgement and estimate resulting from measuring the surface area, dip measurement of materials in tanks/silos, etc.

#### How our audit addressed the key audit matters

Our audit procedures relating to the measurement of inventory quantities of coal, bauxite and work in progress of precious metals included the following:

- Understanding and evaluating the design and operating effectiveness of controls over physical count and measurement of such inventory;
- Evaluation of competency and capabilities of management's experts;
- Physically observing inventory measurement and count procedures carried out by management using experts, to ensure its appropriateness and completeness; and
- Obtaining and inspecting, inventory measurement and physical count results for such inventories, including assessing and evaluating the results of analysis performed by management in respect of differences between book and physical quantities.

## INDEPENDENT AUDITOR'S REPORT

Key audit matters	How our audit addressed the key audit matters
<p>The Holding Company uses internal and external experts, as applicable to perform volumetric surveys and assessments, basis which the quantity for these inventories is estimated.</p>	<p>Based on the above procedures performed, we did not identify any material exceptions in the measurement of inventory quantities of coal, bauxite and work in progress inventories consisting of precious metals.</p>
<p><b>B. Provisions recognised and contingencies disclosed with regard to certain legal and tax matters</b></p> <p>Refer Notes 4(f), 13, 15, 28, 51, and 52 to the consolidated financial statements.</p> <p>As at March 31, 2019, the Holding Company has paid deposits under protest, recognised provisions and disclosed contingent liabilities towards various legal and tax matters. There are number of legal, direct and indirect tax cases against the Holding Company, including environmental, mining, local and state levies, income tax holidays, availing of input tax credits etc.</p> <p>This is a key audit matter, as evaluation of these matters requires management judgement and estimation, interpretation of laws and regulations and application of relevant judicial precedents to determine the probability of outflow of economic resources for recognising provisions and making related disclosures in the financial statements.</p>	<p>Our audit procedures relating to provisions recognised and contingencies disclosed regarding certain legal and tax matters included the following:</p> <ul style="list-style-type: none"> <li>• Understanding and evaluating the design and operating effectiveness of controls over the recognition, measurement, presentation and disclosures made in the financial statements in respect of these matters;</li> <li>• Obtaining details of legal and tax matters, inspecting the supporting documents to evaluate management's assessment of probability of outcome and the magnitude of potential loss, and testing related provisions and disclosures in the financial statements;</li> <li>• Reviewing orders and other communication from regulatory authorities and management responses thereto;</li> <li>• Reviewing management expert's legal advice and opinion as applicable, obtained by the Holding Company's management for evaluating certain legal matters and evaluating competence and capabilities of the experts; and</li> <li>• Using auditor's experts for assistance in evaluating certain significant and complex direct and indirect tax matters.</li> </ul> <p>Based on the above procedures performed, we did not identify any material exceptions in the provision recognised and contingent liabilities disclosed in the financial statements with regard to such legal and tax matters.</p>
<p><b>C. Accounting of derivatives and hedging transactions</b></p> <p>Refer Notes 2 II(Q), 12, 26 and 55 to the consolidated financial statements.</p> <p>Holding Company's financial performance is significantly impacted by fluctuations in prices of aluminium, copper, gold, silver, furnace oil, coal, foreign exchange rates and interest rates. The Holding Company takes a structured approach to the identification, quantification and hedging of such risks by using various derivatives (e.g. forwards, swaps, futures and embedded derivatives) in commodities and/or foreign currencies. These hedges are designated as either cash flow or fair value hedges, and in certain cases remains non-designated.</p>	<p>Our audit procedures related to accounting of derivative and hedging transactions included the following:</p> <ul style="list-style-type: none"> <li>• Understanding and evaluating the design and operating effectiveness of controls over accounting of derivative and hedging transactions;</li> <li>• Testing qualifying criteria for hedge accounting in accordance with Ind AS 109, including: <ul style="list-style-type: none"> <li>√ Understanding the risk management objectives and strategies for different types of hedging programs;</li> <li>√ Evaluating that the hedging relationship consists only of eligible hedging instruments and hedged items;</li> </ul> </li> </ul>

Key audit matters	How our audit addressed the key audit matters
<p>As at March 31, 2019, the carrying value of the Holding Company's derivatives included derivative assets amounting to ₹ 935.43 crores and derivative liabilities of ₹ 537.27 crores.</p> <p>Derivative and hedge accounting is considered a key audit matter, because of its significance to the financial statements, the volume, nature and types of hedging relationships, including complexity involved in the application of hedge accounting principles in accordance with Ind AS 109, Financial Instruments.</p>	<p>√ Using auditor's expert for assistance in verifying hedge effectiveness requirements of Ind AS 109, including the economic relationship between the hedged item and the hedging instrument.</p> <ul style="list-style-type: none"> <li>• Evaluating competence and capabilities of the auditor's experts;</li> <li>• Testing appropriateness of hedge accounting to qualified hedge relationships i.e. cash flow and fair value hedges;</li> <li>• Testing related presentation and disclosures in the financial statements.</li> </ul> <p>Based on the above procedures performed, we did not identify any material exceptions in the amounts, presentation and disclosures made in the financial statements relating to accounting of derivatives and hedging transactions.</p>
<p><b>D. Assessment of indication of impairment and the recoverable amount (RA) of certain Cash Generating Units (CGUs) within the Aluminium segment</b></p>	<p>Our audit procedures related to assessment of indication of impairment and RA of these CGUs included the following:</p> <ul style="list-style-type: none"> <li>• Understanding and evaluating the design and operating effectiveness of controls over identification and assessment of any potential impairment, including determining the carrying amount and RA of the CGUs;</li> <li>• Using auditor's experts for testing appropriateness of the method and model used for determining RA, mathematical accuracy of the models' calculations and evaluating reasonableness of key assumptions used in future cash flow projections such as future metal prices, foreign exchange rates, discount rate, input costs and rate of growth over the estimation period;</li> <li>• Evaluating competence and capabilities of the auditor's experts;</li> <li>• Performing sensitivity analysis over key assumptions to corroborate that RA is within a reasonable range; and</li> <li>• Testing related presentation and disclosures in the financial statements.</li> </ul> <p>Based on the above procedures performed, we did not note any material exceptions in the management's assessment of the indication of impairment and conclusion that the RA of these CGUs within the Aluminium segment were not lower than their respective carrying amounts.</p>

## INDEPENDENT AUDITOR'S REPORT

5. The following information related to Key Audit Matter was included in the Memorandum of Work Performed dated May 15, 2019 issued by other auditor, whose audit report contained an unmodified audit opinion on the consolidated financial information of Novelis Inc. ("Novelis"), a subsidiary of the Holding Company, which has been reproduced by us as under:

Key audit matter	How the other auditor addressed the key audit matter
<b>Goodwill impairment assessment</b>	
<p>The Company's consolidated goodwill balance was INR 18,579 crores (USD 2.6 Billion) at March 31, 2019. The Company conducts an impairment test as of the last day of March each year, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired. Potential impairment is identified by comparing the recoverable value of a cash generating units to its carrying value. The Company estimates the recoverable value based on fair value less cost to sell approach. The determination of recoverable value using the income and market approaches requires the use of estimates and assumptions related to selection of multiples and control premium for the market approach and sales volumes and prices, costs to produce, capital spending and discount rate for the income approach.</p> <p>Significant judgment is required by management when developing the fair value measurement of the cash generating units, which in turn led to significant auditor judgment, significant audit effort, and a high degree of auditor subjectivity in performing procedures to evaluate management's significant assumptions, including multiples, control premium for the market approach and sales volumes and prices, costs to produce, capital spending, and the discount rate for the income approach. Also, we involved professionals with specialized skill and knowledge to assist them.</p> <p>Refer Notes 13 and 40 in the consolidated financial information of Novelis.*</p>	<p>Our procedures included, among others:</p> <p>We tested the effectiveness of controls relating to management's goodwill impairment assessment, including controls over the valuation of the Company's cash generating units.</p> <p>Testing management's process for developing the fair value of the cash generating unit, evaluating the appropriateness of the discounted cash flow model used in the income approach, and evaluating the reasonableness of significant assumptions used by management in the income and market approaches.</p> <p>We evaluated the assumptions related to sales volumes and prices, costs to produce, and capital spending by considering the past performance of the cash generating units to forecasts, and whether they were consistent with evidence obtained both from external sources and in other areas of the audit.</p> <p>We utilised professionals with specialized skill and knowledge to assist in evaluating the appropriateness of the Company's discounted cash flow models, assessing the reasonableness of the discount rate and selection of multiples, developing an independent estimate of the control premium and comparing our independent estimate of the control premium to management's estimate.</p> <p>As a result of our procedures performed, no misstatements were noted.</p>

\* These notes are included in Note 4(b) and 8 of the consolidated financial statements.

6. The following information related to Key audit matter was included in the Memorandum of Work Performed dated May 2, 2019 along with audit report dated April 30, 2019 containing an unmodified audit opinion on the financial statements of Utkal Alumina International Limited ("Utkal"), a subsidiary of the Holding Company, issued by an independent firm of Chartered Accountants, which has been reproduced by us as under:

Key audit matter	How the other auditor addressed the key audit matter
<b>Valuation of deferred tax assets, including recognised MAT credit</b>	
<p>The Company has significant amount of deferred tax assets, mainly resulting from net brought forward losses as per Income Tax Act. The valuation of deferred tax assets is significant to the audit because the risk exists that future taxable profits will not be sufficient to fully recover the deferred tax assets. Management supports the recoverability of the deferred tax assets mainly with income projections which contain estimates of and tax strategies for future taxable income.</p> <p>Refer Notes 7 &amp; 33* of Utkal's financial statements.</p>	<p>Our audit procedures included:</p> <ul style="list-style-type: none"> <li>• evaluating the Management's determination of the estimated manner in which the deferred tax asset would be utilised by comparing the Management's assessment to business plans and profit forecasts based on our knowledge of the business and the industry in which company operates;</li> <li>• critically assessing whether profit forecasts are reasonable in relation to historical trends, current year performance and future plans; and</li> </ul>



Key audit matter	How the other auditor addressed the key audit matter
	<ul style="list-style-type: none"> <li>• using our own tax team to assist us in assessing the appropriateness of the level of deferred taxes recognised in the balance sheet.</li> </ul> <p>We assessed the adequacy of the income tax disclosures in the financial statements, setting out the basis of the deferred tax balance and the level of estimation involved.</p> <p>We found that the assumptions and estimates were within the acceptable range and that the disclosures are proportionate.</p>

\* These notes are included in Notes 14 and 44 of the consolidated financial statements.

### Other information

7. The Holding Company's Board of Directors is responsible for the other information. The other information comprise the information included in the annual report, but does not include the consolidated financial statements and our auditor's report there on. The annual report is expected to be made available to us after the date of this auditor's report.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

When we read the annual report, if we conclude that there is a material misstatement therein, we are required to communicate the matter to those charged with governance and take appropriate action as applicable under the relevant laws and regulations.

### Responsibilities of management and those charged with governance for the consolidated financial statements

8. The Holding Company's Board of Directors is responsible for the preparation and presentation of these consolidated financial statements in term of the requirements of the Act that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows, and changes in equity of the Group including its joint ventures and associate companies in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under section 133 of the Act. The respective Board of Directors of the companies included in the Group and of its joint ventures and associate companies are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for

safeguarding the assets of the Group and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring accuracy and completeness of the accounting records, relevant to the preparation and presentation of the consolidated financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which have been used for the purpose of preparation of the consolidated financial statements by the Directors of the Holding Company, as aforesaid.

9. In preparing the consolidated financial statements, the respective Board of Directors of the companies included in the Group and of its joint ventures and associate companies are responsible for assessing the ability of the Group and of its joint ventures and associate companies to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

10. The respective Board of Directors of the companies included in the Group and of its joint ventures and associate companies are responsible for overseeing the financial reporting process of the Group and of its joint ventures and associate companies.

### Auditor's responsibilities for the audit of the consolidated financial statements

11. Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if,

## INDEPENDENT AUDITOR'S REPORT

individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

12. As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Holding Company has adequate internal financial controls with reference to financial statements in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the Group and its joint ventures and associate companies to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group and its joint ventures and associate companies to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the

consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group and its joint ventures and associate companies to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the audit of the financial statements of such entities included in the consolidated financial statements of which we are the independent auditors. For the other entities included in the consolidated financial statements, which have been audited by other auditors, such other auditors remain responsible for the direction, supervision and performance of the audits carried out by them. We remain solely responsible for our audit opinion.
13. We communicate with those charged with governance of the Holding Company and such other entities included in the consolidated financial statements of which we are the independent auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
  14. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.
  15. From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

### Other matters

16. We did not audit the financial statements of eight subsidiaries and consolidated financial information of one subsidiary whose financial statements/ financial information reflect total assets of ₹ 87,870.03 crores and

net assets of ₹ 25,550.71 crores as at March 31, 2019, total revenue of ₹ 88,404.76 crores, total comprehensive income (comprising of profit and other comprehensive loss) of ₹ 3,692.05 crores and net cash inflows amounting to ₹ 1,379.75 crores for the year ended on that date, as considered in the consolidated financial statements. The consolidated financial statements also include the Group's share of total comprehensive income (comprising of profit and other comprehensive income) of ₹ 0.60 crore for the year ended March 31, 2019 as considered in the consolidated financial statements, in respect of one joint venture and two associate companies, whose financial statements have not been audited by us. These financial statements/ financial information have been audited by other auditors whose reports have been furnished to us, and our opinion on the consolidated financial statements insofar as it relates to the amounts and disclosures included in respect of these subsidiaries, joint venture and associate companies and our report in terms of sub-section (3) of Section 143 of the Act including report on Other Information insofar as it relates to the aforesaid subsidiaries, joint venture and associate companies, is based solely on the reports of the other auditors.

17. We did not audit the financial statements of one subsidiary, whose financial information reflect total assets of ₹\* and net assets of ₹\* as at March 31, 2019, total revenue of ₹ Nil, total comprehensive income (comprising of profit and other comprehensive income) of ₹\* and net cash outflows amounting to ₹\* for the year ended on that date, as considered in the consolidated financial statements. This financial information is unaudited and has been furnished to us by the Management, and our opinion on the consolidated financial statements insofar as it relates to the amounts and disclosures included in respect of this subsidiary and our report in terms of sub-section (3) of Section 143 of the Act including report on Other Information insofar as it relates to the aforesaid subsidiary is based solely on such unaudited financial information. In our opinion and according to the information and explanations given to us by the Holding Company's Management, these financial statements are not material to the Group.
- \*represents figures below the rounding convention used in this report

18. The financial statements of one subsidiary located outside India, included in the consolidated financial statements, which constitute total assets of ₹ 319.62 crores and net assets of ₹ 144.86 crores as at March 31, 2019, total revenue of ₹ 342.39 crores, total comprehensive loss (comprising of loss and other comprehensive loss) of ₹ 192.43 crores and

net cash outflows amounting to ₹ 7.54 crores for the year then ended, have been prepared in accordance with accounting principles generally accepted in its respective country and have been audited by other auditor under generally accepted auditing standards applicable in its country. The Holding Company's management has converted the financial statements of such subsidiary located outside India from the accounting principles generally accepted in their respective country to the accounting principles generally accepted in India. We have audited these conversion adjustments made by the Holding Company's management. Our opinion in so far as it relates to the balances and affairs of such subsidiary located outside India, including other information, is based on the report of other auditor and the conversion adjustments prepared by the management of the Holding Company and audited by us.

19. In case of one joint venture, the financial information for the year ended March 31, 2019 is not available. The investment in this company is carried at ₹ 0.70 crore. In the absence of aforementioned financial information, the Group's share of total comprehensive income of this joint venture for the year ended March 31, 2019 has not been provided in the consolidated financial statements.

Our opinion on the consolidated financial statements, and our report on other legal and regulatory requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors and the financial information certified by the Management.

#### Report on other legal and regulatory requirements

20. As required by Section 143(3) of the Act, we report, to the extent applicable, that:
- We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid consolidated financial statements.
  - In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidated financial statements have been kept so far as it appears from our examination of those books and the reports of the other auditors.
  - The consolidated balance sheet, the consolidated statement of profit and loss, the consolidated statement of changes in equity and the consolidated statement of cash flows dealt with by this Report are in agreement with the relevant books of account and records maintained for the purpose of preparation of the consolidated financial statements.

## INDEPENDENT AUDITOR'S REPORT

- (d) In our opinion, the aforesaid consolidated financial statements comply with the Accounting Standards specified under Section 133 of the Act.
- (e) On the basis of the written representations received from the directors of the Holding Company as on March 31, 2019 taken on record by the Board of Directors of the Holding Company and the reports of the statutory auditors of its subsidiary companies, joint venture and associate companies incorporated in India, none of the directors of the Group companies, its joint venture and associate companies incorporated in India is disqualified as on March 31, 2019 from being appointed as a director in terms of Section 164(2) of the Act.
- (f) With respect to the adequacy of internal financial controls with reference to financial statements of the Group and the operating effectiveness of such controls, refer to our separate report in **"Annexure A"**.
- (g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditor's) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:
- i. The consolidated financial statements disclose the impact, if any, of pending litigations on the consolidated financial position of the Group, its joint venture and associate companies—Refer Notes 51 and 28 to the consolidated financial statements.
  - ii. Provision has been made in the consolidated financial statements, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts as at March 31, 2019—Refer Notes 26, 27 and 28 to the consolidated financial statements in respect of such items as it relates to the Group, its joint venture and associate companies.
  - iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Holding Company and its subsidiary companies, joint venture and associate companies incorporated in India, except amount of ₹ 0.07 crore.
  - iv. The reporting on disclosures relating to Specified Bank Notes is not applicable to the Group for the year ended March 31, 2019.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**  
Partner  
Membership Number: 105869

Mumbai  
May 16, 2019

# ANNEXURE A TO INDEPENDENT AUDITOR'S REPORT

Referred to in paragraph 20 (f) of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the consolidated financial statements for the year ended March 31, 2019

## Report on the internal financial controls under clause (i) of Sub-section 3 of Section 143 of the Act

1. In conjunction with our audit of the consolidated financial statements of the Holding Company as of and for the year ended March 31, 2019, we have audited the internal financial controls with reference to financial statements of Hindalco Industries Limited (hereinafter referred to as "the Holding Company") and its subsidiary companies, its joint ventures and associate companies, which are companies incorporated in India, as of that date.

### Management's responsibility for internal financial controls

2. The respective Board of Directors of the Holding company, its subsidiary companies, its joint ventures and associate companies, to whom reporting under clause (i) of sub section 3 of Section 143 of the Act in respect of the adequacy of the internal financial controls with reference to financial statements is applicable, which are companies incorporated in India, are responsible for establishing and maintaining internal financial controls based on, "internal control over financial reporting criteria established by the Holding Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India (ICAI)". These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the respective company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

### Auditor's responsibility

3. Our responsibility is to express an opinion on the Holding Company's internal financial controls with reference to financial statements based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") issued by the ICAI and the Standards on Auditing deemed to be prescribed under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, both applicable to an audit of internal financial controls and both issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls with reference to financial

statements was established and maintained and if such controls operated effectively in all material respects.

4. Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system with reference to financial statements and their operating effectiveness. Our audit of internal financial controls with reference to financial statements included obtaining an understanding of internal financial controls with reference to financial statements, 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. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.
5. We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in the Other matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the Holding Company's internal financial controls system with reference to financial statements.

### Meaning of internal financial controls over financial reporting

6. A company's internal financial control with reference to financial statements 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 financial control with reference to financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

### Inherent limitations of internal financial controls with reference to financial statements

7. Because of the inherent limitations of internal financial controls with reference to financial statements, including

## ANNEXURE A TO INDEPENDENT AUDITOR'S REPORT

**Referred to in paragraph 20 (f) of the Independent Auditor's Report of even date to the members of Hindalco Industries Limited on the consolidated financial statements for the year ended March 31, 2019**

the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls with reference to financial statements to future periods are subject to the risk that the internal financial control with reference to financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### Opinion

8. In our opinion, the Holding Company, its subsidiary companies, its joint venture and associate companies, which are companies incorporated in India, have, in all material respects, an adequate internal financial controls system with reference to financial statements and such internal financial controls with reference to financial statements were operating effectively as at March 31, 2019, based on the internal control over financial reporting criteria established by the Holding Company considering the essential components of internal control stated in the Guidance Note on Audit

of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

### Other matters

9. Our aforesaid reports under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls over financial reporting insofar as it relates to six subsidiary companies, one joint venture and two associate companies, which are companies incorporated in India, is based on the corresponding reports of the auditors of such companies incorporated in India. Our opinion is not modified in respect of this matter.

### For Price Waterhouse & Co Chartered Accountants LLP

Firm Registration Number: 304026E/ E-300009

### Sumit Seth

Partner

Membership Number: 105869

Mumbai

May 16, 2019

# CONSOLIDATED BALANCE SHEET

as at March 31, 2019

₹ in Crore

	Note	As At 31.03.2019	As At 31.03.2018
<b>ASSETS</b>			
<b>Non-Current Assets</b>			
Property, Plant and Equipment	'6'	64,184.93	63,886.59
Capital Work-in-Progress	'6'	3,974.63	1,982.98
Investment Property	'7'	23.15	23.72
Goodwill	'8'	18,574.61	17,829.44
Other Intangible Assets	'9'	3,076.53	3,348.68
Intangible Assets under Development	'9'	122.48	79.96
Investments Accounted for using Equity Method	'57'	21.04	14.69
Financial Assets:			
Non-Current Investments	'10'	5,135.66	6,863.14
Loans	'11'	72.53	77.48
Other Financial Assets	'12'	360.88	408.18
Non-Current Tax Assets (Net)	'13'	284.51	1,246.04
Deferred Tax Assets (Net)	'14'	802.94	813.45
Other Non-Current Assets	'15'	2,004.30	1,289.67
		<b>98,638.19</b>	<b>97,864.02</b>
<b>Current Assets</b>			
Inventories	'16'	22,193.79	21,631.39
Financial Assets:			
Current Investments	'17'	3,855.31	3,903.48
Trade Receivables	'18'	11,459.76	9,959.81
Cash and Cash Equivalents	'19'	9,118.74	8,044.94
Bank balances other than Cash and Cash Equivalents	'20'	667.82	12.82
Loans	'11'	57.74	57.95
Other Financial Assets	'12'	1,994.69	2,857.50
Current Tax Assets (Net)	'13'	1,440.84	331.21
Other Current Assets	'15'	3,075.61	3,055.27
		53,864.30	49,854.37
Assets or Disposal Group Classified as Held for Sale or Held for Distribution to Owners	'21'	129.20	108.88
		<b>53,993.50</b>	<b>49,963.25</b>
		<b>152,631.69</b>	<b>147,827.27</b>
<b>EQUITY AND LIABILITIES</b>			
<b>EQUITY</b>			
Equity Share Capital	'22'	222.39	222.89
Other Equity	'23'	57,279.34	54,628.88
		<b>57,501.73</b>	<b>54,851.77</b>
<b>Non-Controlling Interest</b>			
		9.48	8.64
		<b>57,511.21</b>	<b>54,860.41</b>

# CONSOLIDATED BALANCE SHEET

as at March 31, 2019

₹ in Crore

	Note	As At 31.03.2019	As At 31.03.2018
<b>LIABILITIES</b>			
<b>Non-Current Liabilities</b>			
Financial Liabilities:			
Non-Current Borrowings	'24'	48,031.61	47,874.26
Trade Payables	'25'		
(I) Total Outstanding Dues of Micro and Small Enterprises		-	-
(II) Total Outstanding Dues other than Micro and Small Enterprises		1.55	24.04
Other Non-Current Financial Liabilities	'26'	179.46	183.39
Provisions	'28'	7,440.11	7,081.05
Deferred Tax Liabilities (Net)	'14'	4,453.47	3,867.21
Other Non-Current Liabilities	'30'	1,275.35	1,176.24
		<b>61,381.55</b>	<b>60,206.19</b>
<b>Current Liabilities</b>			
Financial Liabilities:			
Current Borrowings	'31'	4,225.73	3,398.16
Trade Payables	'25'		
(I) Total Outstanding Dues of Micro and Small Enterprises		15.12	5.16
(II) Total Outstanding Dues other than Micro and Small Enterprises		20,707.73	20,399.64
Other Current Financial Liabilities	'27'	4,092.14	4,570.63
Provisions	'28'	1,978.08	1,872.44
Current Tax Liabilities (Net)	'13'	1,312.71	1,193.24
Contract Liabilities	'29'	176.62	-
Other Current Liabilities	'30'	1,230.77	1,321.37
		<b>33,738.90</b>	<b>32,760.64</b>
Liability Associated with Disposal Group Classified as Held for Sale or Held for Distribution to Owners	'21'	0.03	0.03
		<b>33,738.93</b>	<b>32,760.67</b>
		<b>95,120.48</b>	<b>92,966.86</b>
		<b>152,631.69</b>	<b>147,827.27</b>
Basis of Preparation and Significant Accounting Policies	'2'		

The accompanying Notes are an integral part of the Consolidated Financial Statements.

This is the Consolidated Balance Sheet referred in our report of even date.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**  
Partner  
Membership Number: 105869

**For and on behalf of the Board of Hindalco Industries Limited**

**Praveen Kumar Maheshwari**  
Whole-time Director &  
Chief Financial Officer  
DIN-00174361

**Anil Malik**  
Company Secretary

**Satish Pai**  
Managing Director  
DIN-06646758

**M M Bhagat**  
Director  
DIN-00006245

Place : Mumbai  
Dated : May 16, 2019



# CONSOLIDATED STATEMENT OF PROFIT AND LOSS

for the year ended March 31, 2019

₹ in Crore

	Note	Year ended 31.03.2019	Year ended 31.03.2018
<b>INCOME</b>			
Revenue from Operations	'32'	130,542.25	115,819.70
Other Income	'33'	1,127.11	1,104.57
Total Income		<b>131,669.36</b>	<b>116,924.27</b>
<b>EXPENSES</b>			
Cost of Materials Consumed	'34'	78,068.62	70,872.29
Purchases of Stock-in-Trade	'35'	235.03	4.92
Changes in Inventories of Finished Goods and Work-in-Progress	'36'	385.65	(1,991.42)
Excise Duty on Sales		-	636.90
Employee Benefits Expenses	'37'	9,043.09	8,644.78
Power and Fuel	'38'	9,618.20	8,614.11
Finance Costs	'39'	3,778.04	3,910.73
Depreciation and Amortization	'40'	4,776.98	4,506.24
Impairment Loss/(Reversal), (Net)	'41'	(10.75)	100.25
Other Expenses	'42'	17,691.89	15,117.50
Total Expenses		<b>123,586.75</b>	<b>110,416.30</b>
Profit/ (Loss) before Share in Profit/ (Loss) in Equity Accounted Investments, Exceptional Items and Tax		8,082.61	6,507.97
Share in Profit/ (Loss) in Equity Accounted Investments (Net of Tax)	'57'	0.49	(125.09)
Profit/ (Loss) before Exceptional Items and Tax		8,083.10	6,382.88
Exceptional Items (Net)	'43'	-	1,774.16
Profit/ (Loss) before Tax		8,083.10	8,157.04
Income Tax Expenses:	'44'		
Current Tax		1,910.41	1,664.17
Deferred Tax		677.68	410.00
Profit/ (Loss) for the year		<b>5,495.01</b>	<b>6,082.87</b>
<b>Other Comprehensive Income:</b>	'45'		
<b>Items that will not be reclassified to Profit and Loss</b>			
Actuarial Gain/ (Loss) on Defined Benefit Obligations		(160.86)	105.79
Change in Fair Value of Financial Instruments designated as FVTOCI		(1,776.01)	580.60
Share in Equity Accounted Investments		0.15	0.06
Income Tax effect		50.46	(96.77)
<b>Items that will be reclassified to Profit and Loss</b>			
Change in Fair Value of Debt Instruments designated as FVTOCI		2.37	(1.56)
Cash Flow Hedges		(349.46)	1,471.17
Foreign Currency Translation Reserve		(325.05)	1,427.04
Income Tax effect		92.48	(494.91)
Other Comprehensive Income/ (Loss) for the year (Net of Tax)		<b>(2,465.92)</b>	<b>2,991.42</b>
Total Comprehensive Income for the year		<b>3,029.09</b>	<b>9,074.29</b>

## CONSOLIDATED STATEMENT OF PROFIT AND LOSS

for the year ended March 31, 2019

₹ in Crore

	Note	Year ended 31.03.2019	Year ended 31.03.2018
<b>Profit/ (Loss) attributable to:</b>			
Owners of the Company		5,495.67	6,082.92
Non-Controlling Interests		(0.66)	(0.05)
<b>Other Comprehensive Income/ (Loss) attributable to:</b>			
Owners of the Company		(2,465.92)	2,991.42
Non-Controlling Interests		-	-
<b>Total Comprehensive Income/ (Loss) attributable to:</b>			
Owners of the Company		3,029.75	9,074.34
Non-Controlling Interests		(0.66)	(0.05)
<b>Earnings/ (Loss) per Share:</b>			
	'46'		
Basic (₹)		24.67	27.30
Diluted (₹)		24.66	27.29
<b>Basis of Preparation and Significant Accounting Policies</b>			
	'2'		

The accompanying Notes are an integral part of the Consolidated Financial Statements.  
This is the Consolidated Statement of Profit and Loss referred in our report of even date.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**

Partner

Membership Number: 105869

**For and on behalf of the Board of Hindalco Industries Limited**

**Praveen Kumar Maheshwari**

Whole-time Director &

Chief Financial Officer

DIN-00174361

**Anil Malik**

Company Secretary

**Satish Pai**

Managing Director

DIN-06646758

**M M Bhagat**

Director

DIN-00006245

Place : Mumbai

Dated : May 16, 2019

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended March 31, 2019

## A. Equity Share Capital

	₹ in Crore
Note	Amount
Balance as at April 01, 2017	222.72
Changes in Equity Share Capital	0.17
Balance as at March, 31, 2018	222.89
Changes in Equity Share Capital	(0.50)
Balance as at March, 31, 2019	222.39

## B. Other Equity

	₹ in Crore																		
	Share Application Money pending Allotment	Equity Component of Other Financial Instruments	Reserve and Surplus					Other Reserves					Total Other Equity						
			Capital Reserve	Capital Redemption Reserve	Capital Securities Redemption Reserve	Debt Redemption Reserve	Employees Stock Options Outstanding	Treasury Shares held by ESOP Trust	Special Reserve	Business Reconstruction Reserve (BRR)	General Reserve	Retained Earnings		Gain/(Loss) on Equity Instruments FVTOCI	Gain/(Loss) on Debt Instruments FVTOCI	Effective portion of Cash Flow Hedge	Cost of Hedging Reserve	Foreign Currency Translation Reserve	Attributable to Owners of the Company
<b>Balance as at April 01, 2017</b>	-	3.78	147.36	103.67	9,014.63	758.34	36.20	15.47	5,799.30	21,370.72	4,524.49	4,244.69	3.00	(477.34)	414.57	(122.80)	45,836.08	6.23	45,842.31
Profit/(Loss) for the period	-	-	-	-	-	-	-	-	-	6,082.92	-	-	-	-	-	-	6,082.92	(0.05)	6,082.87
Other Comprehensive Income for the period	-	-	-	-	-	-	-	-	-	3.95	585.69	585.69	(1.00)	743.01	232.73	1,427.04	2,991.42	-	2,991.42
<b>Total Comprehensive Income for the period</b>	-	-	-	-	-	-	-	-	-	6,086.87	585.69	585.69	(1.00)	743.01	232.73	1,427.04	9,074.34	(0.05)	9,074.29
Issue of Equity Share Capital	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	2.46	2.62
Share in Equity Accounted Investments	-	-	-	-	(844.71)	(8.34)	(8.50)	-	-	(1.07)	862.62	-	-	-	-	-	-	-	-
Employee share-based transactions	-	-	-	-	27.25	-	(13.81)	-	-	-	-	-	-	-	-	-	13.44	-	13.44
Employee Share Options Expenses	-	-	-	-	-	-	1.94	-	-	-	-	-	-	-	-	-	1.94	-	1.94
Dividend Paid (including Dividend Distribution Tax)	-	-	-	-	-	-	-	-	-	(293.76)	-	-	-	-	-	-	(293.76)	-	(293.76)
Transfer from Retained Earnings	-	-	-	-	-	150.00	-	-	-	(151.65)	-	-	-	-	-	-	-	-	-
Transfer to Non-Financial Assets	-	-	-	-	-	-	-	1.65	-	-	-	-	-	(7.05)	-	-	(7.05)	-	(7.05)
Realised gain/loss on Equity FVTOCI transferred to retained earnings	-	-	-	-	-	-	-	-	-	66.29	(66.29)	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	3.73	-	-	3.73	-	3.73
<b>Balance as at March 31, 2018</b>	<b>23</b>	<b>0.16</b>	<b>147.36</b>	<b>103.67</b>	<b>8,197.17</b>	<b>900.00</b>	<b>15.83</b>	<b>17.12</b>	<b>5,799.30</b>	<b>21,369.65</b>	<b>11,094.86</b>	<b>4,764.09</b>	<b>2.00</b>	<b>262.35</b>	<b>647.30</b>	<b>1,304.24</b>	<b>54,628.88</b>	<b>8.64</b>	<b>54,637.52</b>
Profit/(Loss) for the period	-	-	-	-	-	-	-	-	-	5,495.67	-	-	-	-	-	-	5,495.67	(0.66)	5,495.01
Other Comprehensive Income for the period	-	-	-	-	-	-	-	-	-	(113.30)	(1,772.96)	(1,772.96)	1.54	(110.83)	(145.32)	(325.05)	(2,465.92)	-	(2,465.92)
<b>Total Comprehensive Income for the period</b>	-	-	-	-	-	-	-	-	-	5,382.37	(1,772.96)	(1,772.96)	1.54	(110.83)	(145.32)	(325.05)	3,029.75	(0.66)	3,029.09
Issue of Equity Share Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.08	1.08
Share Application Money Received during the year	-	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	-	0.10
Shares Acquired by the Trust	-	-	-	-	-	-	(123.04)	-	-	-	-	-	-	-	-	-	(123.04)	-	(123.04)
Employee share-based transactions	-	(0.15)	-	-	9.11	-	(4.30)	-	-	-	-	-	-	-	-	-	4.66	-	4.66

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended March 31, 2019

## B. Other Equity

₹ in Crore

Note	Share Equity		Reserve and Surplus							Other Reserves					Total Other Equity					
	Application Money pending Allotment	Component of Other Financial Instruments	Capital Reserve	Capital Redemption Reserve	Capital Securities Redemption Account	Debt Redemption Reserve	Debt Redemption Reserve	Employees Stock Options Outstanding	Employees Stock Options Outstanding	Treasury Shares held by ESOP Trust	Business Reconstruction Reserve (BRR)	General Reserve Earnings	Gain/(Loss) on Equity Instruments FYTOCI	Gain/(Loss) on Debt Instruments FYTOCI		Effective portion of Cash Flow Hedge	Cost of Hedging Reserve	Foreign Currency Translation Reserve	Attributable to Owners of the Company	Attributable to Non Controlling Interests
Employee Share Options Expenses	-	-	-	-	-	-	-	9.70	-	-	-	-	-	-	-	-	9.70	-	9.70	
Dividend Paid (including Dividend Distribution Tax)	-	-	-	-	-	-	-	-	-	-	-	(322.87)	-	-	-	-	(322.87)	-	(322.87)	
Transfer from Retained Earnings	-	-	-	-	-	150.00	-	-	-	2.10	-	-	-	-	-	-	-	-	-	
Transfer to Non-Financial Assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.14	-	29.14	-	29.14	
Transfer to/from foreign currency transition reserve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.30	-	19.30	-	19.30	
Change in ownership interest in subsidiaries	-	-	-	-	-	-	-	-	-	-	-	3.72	-	-	-	-	3.72	0.42	4.14	
<b>Balance as at March 31, 2019</b>	<b>0.11</b>	<b>3.78</b>	<b>147.36</b>	<b>103.67</b>	<b>8,206.28</b>	<b>1,050.00</b>	<b>21.23</b>	<b>(123.04)</b>	<b>19.22</b>	<b>5,799.30</b>	<b>21,369.65</b>	<b>16,005.98</b>	<b>2,991.13</b>	<b>3.54</b>	<b>199.96</b>	<b>501.98</b>	<b>979.19</b>	<b>57,279.34</b>	<b>9.48</b>	<b>57,288.82</b>

Basis of Preparation and Significant Accounting Policies '2

The accompanying Notes are an integral part of the Consolidated Financial Statements. This is the Consolidated Statement of Changes in Equity referred in our report of even date.

**For Price Waterhouse & Co Chartered Accountants LLP**

Firm Registration Number: 304026E/ E-300009

**For and on behalf of the Board of Hindalco Industries Limited**

**Sumit Seth**

Partner

Membership Number: 105869

**Praveen Kumar Maheshwari**

Whole-time Director &

Chief Financial Officer

DIN-00174361

**Satish Pai**

Managing Director

DIN-06646758

**Anil Malik**

Company Secretary

**M M Bhagat**

Director

DIN-00006245

Place : Mumbai

Dated : May 16, 2019

# CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended March 31, 2019

₹ in Crore

	Note	Year ended 31.03.2019	Year ended 31.03.2018
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>			
Profit/ (Loss) before Exceptional Items and Tax		8,083.10	8,157.04
Adjustment for :			
Finance Costs	'39'	3,778.04	3,910.73
Depreciation and Amortization	'40'	4,776.98	4,506.24
Impairment Loss/ (Reversal) (Net)	'41'	(10.75)	100.25
Equity Settled Share-based Payment		9.70	1.94
Provisions made/ (written back) (Net)		(19.01)	(16.75)
Share in (Profit)/ Loss in Equity Accounted Investments (Net of Tax)	'57'	(0.49)	125.09
Unrealised Foreign Exchange (Gain)/ Loss (Net)		(18.10)	(7.58)
(Gain)/ Loss on Derivative transactions (Net)		(58.32)	(101.89)
(Gain)/ Loss on Assets Held for Sale (Net)	'42'	-	0.89
(Gain)/ Loss on Sale of Fixed Assets (Net)	'33'	67.06	65.15
Interest Income	'33'	(543.02)	(441.75)
Dividend Income	'33'	(45.28)	(41.13)
(Gains)/ losses on Investments measured at Fair Value through Profit and Loss (Net)	'33'	(323.26)	(414.89)
Realised Hedging (Gain)/ Loss (Net)		(71.06)	361.74
Exceptional (Income)/ Expenses (Net)		-	(2,087.56)
Other Non-operating (Income)/ Expenses (Net)		(71.22)	(25.09)
Operating Profit before Working Capital Changes		15,554.37	14,092.43
Changes in Working Capital:			
(Increase)/ Decrease in Inventories (Net)		(9.10)	(2,979.63)
(Increase)/ Decrease in Trade and other Receivables (Net)		(1,461.14)	(465.02)
Increase/ (Decrease) in Trade and other Payables (Net)		(216.29)	2,173.02
Cash generation from Operation before Tax		13,867.84	12,820.80
(Payment)/ Refund of Income Tax (Net)		(1,888.32)	(1,923.12)
<b>Net Cash Generated/ (Used) - Operating Activities</b>		<b>11,979.52</b>	<b>10,897.68</b>
<b>B. CASH FLOW FROM INVESTMENT ACTIVITIES</b>			
Payments to acquire Property, Plant and Equipment and Intangible Assets		(6,005.34)	(3,000.75)
Proceeds from disposal of Property, Plant and Equipment and Intangible Assets		33.44	45.06
Net cash inflow on disposal of Subsidiaries		-	2,053.15
Investment in equity accounted investees		(5.75)	-
(Purchase)/ Sale of Other Investments (Net)		(307.83)	5,558.00
Loans given/ (received back) (Net)		93.56	(132.51)
Interest Received		508.26	461.67
Dividend Received		32.01	41.13
<b>Net Cash Generated/ (Used) - Investing Activities</b>		<b>(5,651.65)</b>	<b>5,025.75</b>

# CONSOLIDATED STATEMENT OF CASH FLOWS

for the year ended March 31, 2019

₹ in Crore

	Note	Year ended 31.03.2019	Year ended 31.03.2018
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>			
Proceeds from issue of shares		6.05	16.19
Treasury shares acquired by ESOP Trust		(123.60)	-
Redemption of Debenture		(3.00)	(3.00)
Proceeds from Long-term Borrowings		6.95	6.55
Pre-payment of Long-term Borrowings		(1,574.81)	(7,965.34)
Repayment of Long-term Borrowings including payment of finance lease liability		(844.96)	(1,185.83)
Proceeds from/ (Repayment of) Current Borrowings (Net)		971.51	(3,138.64)
Finance Cost Paid		(3,576.59)	(3,848.57)
Dividend Paid (including Dividend Distribution Tax)		(322.87)	(293.76)
<b>Net Cash Generated/ (Used) - Financing Activities</b>		<b>(5,461.32)</b>	<b>(16,412.40)</b>
<b>Net Increase/ (Decrease) in Cash and Cash Equivalents</b>		<b>866.55</b>	<b>(488.97)</b>
Add : Opening Cash and Cash Equivalents		8,040.50	8,221.95
Add : Effect of exchange variation on Cash and Cash Equivalents		192.46	307.52
<b>Closing Cash and Cash Equivalents</b>		<b>9,099.51</b>	<b>8,040.50</b>
<b>Reconciliation of Closing Cash and Cash Equivalents with Balance Sheet:</b>			
Cash and Cash Equivalents as per Balance Sheet	'19'	<b>9,118.74</b>	<b>8,044.94</b>
Less: Fair Value adjustments in Liquid Investments		(19.23)	(4.44)
Cash and Cash Equivalents as per Cash Flow Statement		<b>9,099.51</b>	<b>8,040.50</b>
<b>Basis of Preparation and Significant Accounting Policies</b>	'2'		
<b>Supplemental Information</b>			
Non cash transactions from Investing and Financing activities:			
Acquisition of Property, Plant and Equipment (PPE) by means of Finance Lease		-	9.98
Acquisition of Property, Plant and Equipment (PPE) by means of Government Grant		-	678.02
Novation and Restructuring of Long-term Borrowings		-	237.50
Refer Note 58 on Disposal of Subsidiary and Note 57 on Investment in Associate, for non-cash transactions.			

The accompanying Notes are an integral part of the Consolidated Financial Statements. This is the Consolidated Statement of Cash Flow referred in our report of even date.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**  
Partner  
Membership Number: 105869

**For and on behalf of the Board of Hindalco Industries Limited**

**Praveen Kumar Maheshwari**  
Whole-time Director &  
Chief Financial Officer  
DIN-00174361

**Anil Malik**  
Company Secretary

**Satish Pai**  
Managing Director  
DIN-06646758

**M M Bhagat**  
Director  
DIN-00006245

Place : Mumbai  
Dated : May 16, 2019

# NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

## 1. Company Overview

Hindalco Industries Limited ("the Company/ Parent") was incorporated in India in the year 1958 having its registered office at Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road, Andheri (East), Mumbai - 400093.

The Company has two main stream of business Aluminium and Copper.

In Aluminium, the Company caters to the entire value chain starting from mining of bauxite and coal through production of value added products for various application.

The Company along with its subsidiaries has manufacturing operations in eleven countries including India spread over four continents North America, South America, Asia and Europe. Apart from primary aluminium, the Company produces aluminium sheet, extrusion and light gauge products for use in packaging market which includes beverage and food, can and foil products as well as for use in automotive, electronics, architecture, transportation and industrial product markets.

The Company also has one of the largest single location Copper smelting facility in India.

The equity shares of the Company are listed on the Indian Stock Exchanges (National Stock Exchange & Bombay Stock Exchange) and GDRs are listed on the Luxemburg Stock Exchange.

## 2. Basis of Preparation and Significant Accounting Policies

### I. Basis of Preparation

The Consolidated Financial Statements ("the financial statements") relate to the Company and its subsidiaries (collectively "the Group") and certain unstructured entities consolidated by the Group and its interest in associates and joint ventures. The consolidated financial statements comply in all material aspects with Indian Accounting Standards ("Ind-AS") as prescribed under section 133 of the Companies Act 2013 ("the Act"), as notified under the Companies (Indian Accounting Standards) Rules, 2015, (including subsequent amendments) and other accounting principles generally accepted in India.

The Group's consolidated financial statements for the year ended March 31, 2019 have been approved by the Board of Directors of the Company in their meeting held on May 16, 2019.

The financial statements have been prepared under the historical cost convention on accrual basis except

for following assets and liabilities which have been measured at fair value:

- Financial instruments - Measured at fair value;
- Assets held for sale - Measured at fair value less cost to sell;
- Plan assets under defined benefit plans - Measured at fair value; and
- Employee share-based payments - Measured at fair value

In addition, the carrying values of recognised assets and liabilities designated as hedged items in fair value hedges that would otherwise be carried at cost are adjusted to record changes in the fair values attributable to the risks that are being hedged in effective hedge relationship.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in the financial statements is determined on such a basis, except for employee share-based payment, leasing transactions and measurements that have some similarities to fair value but are not fair value, such as net realisable value in Inventories or value in use in Impairment of Assets. The basis of fair valuation of these items are given as part of their respective accounting policies.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Group can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

- Level 3 inputs are unobservable inputs for the asset or liability.

The Group has applied the following Accounting Standards and its amendments for the first time for annual reporting period commencing April 1, 2018:

- Ind AS 115, Revenue from Contracts with Customers
- Amendment to Ind AS 20, Accounting for Government Grant and Disclosure of Government Assistance
- Appendix B, Foreign Currency Transactions and Advance Consideration to Ind AS 21, The Effects of Change in Foreign Exchange Rates
- Amendment to Ind AS 12, Income Taxes
- Amendment to Ind AS 40, Investment Property
- Amendment to Ind AS 28, Investments in Associates and Joint Ventures and Ind AS 112, Disclosure of Interest in Other Entities.

The Group had to change its accounting policies and accounting following the adoption of Ind AS 115. Most of the other amendments listed above did not have any impact on the amounts recognized in prior periods and are not expected to significantly affect the current and future period.

In preparing the financial statements in conformity with Ind-AS requires management to make estimates and assumptions that affect reported amounts of assets and liabilities and the disclosure of contingent liabilities as at the date of the financial statements and the amounts of revenue and expenses during the reported period. Actual results could differ from those estimates. Any revision to such estimates is recognised in the period in which the same is determined.

The consolidated financial statements are presented in Indian Rupees (INR/₹) which is also the Parent's Functional Currency and all values are rounded to nearest crore with two decimal except when otherwise stated.

### II. Significant Accounting Policies:

#### A. Principles of Consolidation

##### *Subsidiaries*

Subsidiaries are the entities (including structured entities) over which the Group has control. The Group controls an entity when the group is exposed to or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the relevant activities of the entity. Consolidation of subsidiary begins when the Group obtains control over the subsidiary and

ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains the control until the date the Group ceases to control the subsidiary.

The Group combines the financial statements of the parent and its subsidiaries line by line adding together like items of assets, liabilities, equity, income and expenses. Intra-group transactions, balances and unrealised profits on transactions between group companies are eliminated in full. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred assets. Appropriate adjustments for deferred taxes are made for temporary differences that arise from the elimination of unrealised profits and losses from intra-group transactions or undistributed earnings of Group's entity included in consolidated profit and loss, if any.

The consolidated financial statements are prepared using uniform accounting policies for like transactions and other events in similar circumstances. If a member of the Group uses accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustments are made to that group member's financial statements to ensure conformity with the Group's accounting policies. The financial statements of all entities used for the purpose of consolidation are drawn up to the same reporting date as that of the parent company. When the end of the reporting period of the parent is different from that of a subsidiary, the subsidiary prepares additional financial information as of the same date as the financial statements of the parent to enable the parent to consolidate the financial information of the subsidiary, unless it is impractical to do so.

Non-controlling interest in the profit / loss and equity of the subsidiaries are shown separately in the consolidated statement of profit and loss and the consolidated balance sheet, respectively.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. This results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised within equity.

In case the Group ceases to consolidate a subsidiary because of a loss of control, any retained interest in the entity is remeasured to its fair value. This fair value



becomes the initial carrying amount for the purpose of subsequently accounting for the retained interest as an associate, joint venture or financial assets. When the Group loses control over a subsidiary, it derecognises the assets, including goodwill, and liabilities of the subsidiary, carrying amount of any non-controlling interests, cumulative translation differences recorded in equity and recognise resulting difference between the fair value of the investment retained and the consideration received and total of amount derecognised as gain or loss attributable to the Parent. In addition, amounts, if any, previously recognised in other comprehensive income in relation to that entity are reclassified to profit or loss as would be required if the parent had directly disposed of the related assets or liabilities.

#### *Interest in Associates and Joint Ventures*

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies, generally accompanying a shareholding between 20% and 50% of the voting rights.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The Group's interest in its associates or joint ventures are accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. Under equity method, the investment in an associate or a joint venture is initially recognised at cost and adjusted thereafter to recognise the changes in the Group's share of net assets of the associate or joint venture since the acquisition date. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as Goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment is recognised in equity as Capital Reserve in the period in which the investment is acquired.

The consolidated statement of profit and loss reflects the Group's share of the results of operations of the associate or joint venture. Any change in other comprehensive

income (OCI) is presented as part of the Group's OCI. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of that changes, when applicable, in the consolidated statement of changes in equity. Unrealised gains or losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

When the Group's share of losses of an associate or a joint venture equals or exceeds its interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture. If the associate or joint venture subsequently reports profits, the group resumes recognising its share of those profits only after its share of the profit equals the share of losses not recognised.

At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognises the impairment loss in statement of profit and loss. Any reversal of that impairment loss is recognised to the extent that the recoverable amount of the investment subsequently increases. Goodwill relating to associate or joint venture is included in the carrying amount of the investment and is not tested for impairment individually.

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate.

If ownership interest in an associate or a joint venture is reduced but significant influence or joint control is retained, the Group continues to use the equity method, and only proportionate share of the amount previously recognised in other comprehensive income are reclassified to consolidated statement of profit and loss where appropriate.

When the Group classified its investments, or a portion thereof, in associate or joint venture as held for sale, it discontinues the use of the equity method in relation to the portion that is classified as held for sale. Any retained portion of an investment in an associate or a joint venture that has not been classified as held for sale

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

continues to be accounted for using the equity method. The Group discontinues the use of the equity method at the time of disposal when the disposal results in the Group losing significant influence over the associate or joint venture.

Upon loss of significant influence over the associate or joint venture, the group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture and the fair value of retained investment and proceeds from disposal is recognised in the consolidated statement of profit and loss.

### B. Business Combination

Business combinations are accounted for using the acquisition method. The consideration transferred in a business combination comprises the fair values of the assets transferred, liabilities incurred to the former owners of the acquired business, equity interests issued by the Group and fair value of any assets or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred.

At the acquisition date, the identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values. However, certain assets and liabilities i.e. deferred tax assets or liabilities, assets or liabilities related to employee benefit arrangements, liabilities or equity instruments related to share-based payment arrangements and assets or disposal groups that are classified as held for sale, acquired or assumed in a business combination are measured as per the applicable Ind-AS.

The Group recognises any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

The excess of the sum of the consideration transferred the amount of any non-controlling interests in the acquired entity and the acquisition-date fair value of any previous equity interest in the acquired entity over the acquisition-date fair value of the net identifiable assets acquired is recognised as goodwill. Any gain on a bargain purchase is recognised in other comprehensive income and accumulated in equity as Capital Reserve if there exists clear evidence of the underlying reasons for classifying the business combination as resulting in a bargain purchase, otherwise the gain is recognised directly in equity as Capital Reserve.

Any contingent consideration is measured at fair value at the date of acquisition. If an obligation to pay

contingent consideration that meets the definition of a financial instrument is classified as equity, then it is not remeasured subsequently and settlement is accounted for within equity. Other contingent consideration is remeasured at fair value at each reporting date and changes in the fair value of contingent consideration are recognised in profit or loss.

When a business combination is achieved in stages, any previously held equity interest in the acquiree is remeasured at its acquisition-date fair value and the resulting gain or loss, if any, is recognised in the consolidated statement of profit and loss or other comprehensive income, as appropriate.

Where it is not possible to complete the determination of fair values by the end of the reporting period in which the combination occurs, a provisional assessment of fair values is made and any adjustments required to those provisional values, and the corresponding adjustments to goodwill, are finalised within 12 months of the acquisition date.

### C. Interest in Joint Operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

When a Group entity undertakes its activities under joint operations, the Group as a joint operator recognises in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly;
- its liabilities, including its share of any liabilities incurred jointly;
- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the Ind-ASs applicable to the particular assets, liabilities, revenues and expenses.

When a Group entity transacts with a joint operation in which a group entity is a joint operator (such as a sale or contribution of assets), the Group is considered to

be conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognised in the financial statements only to the extent of other parties' interests in the joint operation.

When a group entity transacts with a joint operation in which a group entity is a joint operator (such as a purchase of assets), the Group does not recognise its share of the gains and losses until it resells those assets to a third party.

#### **D. Property, Plant and Equipment**

Property, plant and equipment held for use in the production or/and supply of goods or services, or for administrative purposes, are stated in the consolidated balance sheet at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

The initial cost at cash price equivalence of property, plant and equipment acquired comprises its purchase price, including import duties and non-refundable purchase taxes, any directly attributable costs of bringing the assets to its working condition and location and present value of any obligatory decommissioning costs for its intended use. Cost may also include effective portion on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment recycled from hedge reserve as basis adjustment.

In case of self-constructed assets, cost includes the costs of all materials used in construction, direct labour, allocation of overheads, directly attributable borrowing costs and effective portion of cash flow hedges of foreign currency recycled from the hedge reserve as basis adjustment.

Subsequent expenditure on major maintenance or repairs includes the cost of the replacement of parts of assets and overhaul costs. Where an asset or part of an asset is replaced and it is probable that future economic benefits associated with the item will be available to the Group, the expenditure is capitalised and the carrying amount of the item replaced is derecognised. Similarly, overhaul costs associated with major maintenance are capitalised and depreciated over their useful lives where it is probable that future economic benefits will be available and any remaining carrying amounts of the cost of previous overhauls are derecognised. All other costs are expensed as incurred.

##### *Capital work-in-progress*

Capital work-in-progress assets in the course of construction for production or/and supply of goods or services or administrative purposes, or for purposes

not yet determined, are carried at cost, less any recognised impairment loss. At the point when an asset is operating at management's intended use, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset are capitalised where the asset is available for use but incapable of operating at normal levels until a period of commissioning has been completed.

##### *Depreciation*

Depreciation is charged so as to write off the cost or value of assets, over their estimated useful lives or, in the case of leased assets (including leasehold improvements), over the lease term if shorter. The lease period is considered by excluding any lease renewals options, unless the renewals are reasonably certain. Depreciation is recorded using the straight line basis. The estimated useful lives and residual values are reviewed at each year end, with the effect of any changes in estimate accounted for on a prospective basis. Each component of an item of property, plant and equipment with a cost that is significant in relation to the total cost of that item is depreciated separately if its useful life differs from the others components of the asset.

The useful life of the items of Property, Plant and Equipment estimated by the management for the current and comparative period are in line with the useful life as per Schedule II of the Companies Act, 2013.

Depreciation commences when the assets are ready for their intended use. Depreciated assets in property and accumulated depreciation accounts are retained fully until they are removed from service.

##### *Disposal of assets*

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between net disposal proceeds and the carrying amount of the asset and is recognised in the consolidated statement of profit and loss.

#### **E. Investment Property**

Investment properties held to earn rentals or for capital appreciation or both are stated in the consolidated balance sheet at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Any gain or loss on disposal of investment property is determined as the difference between net disposal proceeds and the carrying amount of the property and is recognised in the consolidated

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

statement of profit and loss. Transfer to, or from, investment property is at the carrying amount of the property.

### F. Intangible Assets (Other than goodwill)

#### *Intangible assets acquired separately*

Intangible assets acquired are reported at cost less accumulated amortization and accumulated impairment losses. Amortization is charged on a straight line basis over their estimated useful lives other than Mining Rights. The estimated useful life and amortization method are reviewed at the end of each annual reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

#### *Internally-generated intangible assets*

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if all of the following have been demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset is recognised. Where no internally-generated intangible asset can be recognized, development expenditure is charged to the consolidated statement of profit and loss in the period in which it is incurred.

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately.

#### *Intangible assets acquired in a business combination*

Identified intangible assets acquired in a business combination and recognised separately from goodwill

are initially recognised at their fair values at the acquisition date.

Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately.

#### *Mining Reserves, Resources and Rights*

Mineral reserves, resources and rights (together mining rights) which can be reasonably valued, are recognised in the assessment of fair values on acquisition. Exploitable mineral rights are amortised using the unit of production basis over the commercially recoverable reserves. Mineral resources are included in amortisation calculations where there is a high degree of confidence that they will be extracted in an economic manner. Commercially recoverable reserves are proved and probable reserves. Changes in the commercial recoverable reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

#### *Derecognition of intangible assets*

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset are recognised in the consolidated statement of profit and loss when the asset is derecognised.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment annually, and whenever there is an indication that the asset may be impaired.

### G. Stripping cost

Stripping costs incurred during the mining production phase are allocated between cost of inventory produced and the existing mine asset. The stripping ratio, as approved by the regulatory authority, for the life of the mine is obtained by dividing the estimated quantity of overburden by the estimated quantity of mineable coal / bauxite reserve to be extracted over the life of the mine. This ratio is periodically reviewed and changes, if any, are accounted for prospectively.

Stripping costs are allocated and included as a component of the mine asset when they represent significantly improved access to ore provided all the following conditions are met:

- it is probable that the future economic benefit associated with the stripping activity will be realised;

- the component of the ore body for which access has been improved can be identified; and
- the costs relating to the stripping activity associated with the improved access can be reliably measured.

The overburden removal costs are included in Mining Rights under Intangible assets and amortised based on stripping ratio on the quantity of coal / bauxite excavated.

#### H. Non-Current assets (or disposal groups) held for sale

Non-Current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such asset (or disposal group) and its sale is highly probable. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-Current assets (and disposal groups) classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

#### I. Goodwill

Goodwill arising on acquisition is carried at cost as established at the date of acquisition of the business less accumulated impairment losses, if any.

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units expected to benefit from the synergies of the combination.

Cash-generating units to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit. An impairment loss recognised for goodwill is not reversed in a subsequent period.

On disposal of a subsidiary the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

The Group's policy for goodwill arising on the acquisition of an associate is described above.

#### J. Impairment

##### *Impairment of tangible and intangible assets excluding Goodwill*

At the end of each reporting period, the Group reviews the carrying amounts of its tangible, intangible and other non-financial assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in the consolidated statement of profit and loss.

Non-financial assets (other than Goodwill) that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period. Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately in the consolidated statement of profit and loss.

Refer accounting policy on "Goodwill" for impairment of goodwill.

#### K. Foreign Currency Transactions and Translation

Transactions in foreign currencies are recorded by the group entities at their respective functional currency

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at the exchange rates prevailing at the date of the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currency are translated to the functional currency at the exchange rates prevailing at the reporting date.

Exchange differences arising on settlement or translation of monetary items are recognised in the consolidated statement of profit and loss with the exception of the following:

- exchange differences on foreign currency borrowings relating to qualifying assets under construction are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- exchange differences on transactions entered into in order to hedge certain foreign currency risks (see below for hedge accounting policies); and
- exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognised initially in other comprehensive income and reclassified from equity to the consolidated statement of profit and loss on repayment of the monetary items.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates at the date of initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of gain or loss on change in fair value of the item (i.e. translation differences on items whose fair value gain or loss is recognised in OCI or profit or loss are also recognised in OCI or profit or loss, respectively).

For the purposes of presenting consolidated financial statements, the assets, liabilities and equity (except retained earnings) of foreign operations are translated into Indian Rupees at the rate of exchange prevailing at the reporting date and their income and expenses are translated at the exchange rates prevailing at the date of transactions. For practical reason, the Group uses an average rate to translate income and expense items, if the average rate approximates the exchange rates at the dates of the transactions. The exchange differences arising on translation for consolidation are recognised in other comprehensive income and accumulated in equity. Accumulated exchange differences arising from

translation and attributable to non-controlling interests are allocated to, and recognised as part of, non-controlling interests in the consolidated balance sheet.

On the disposal of a foreign operation all of the exchange differences accumulated in OCI relating to that particular foreign operation attributable to the owners of the Group is recognised in the consolidated statement of profit and loss.

In addition, in relation to a partial disposal of a subsidiary that includes a foreign operation that does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognised in the consolidated statement of profit and loss. For partial disposals of investment in associates or joint arrangements that do not result in the Group losing significant influence or joint control, the proportionate share of the accumulated exchange differences is recognised in the consolidated statement of profit and loss.

Any goodwill and fair value adjustments arising in business combinations or acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the exchange rates prevailing at the reporting date and resulting exchange differences are recognised in other comprehensive income.

### L. Provisions and Contingencies

Provisions are recognized when there is a present obligation (legal or constructive) as a result of a past event and it is probable ("more likely than not") that it is required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the estimated cash flows to settle the present obligation, its carrying amount is the present value of those cash flows. The discount rate used is a pre-tax rate that reflects current market assessments of the time value of money in that jurisdiction and the risks specific to the liability.

#### *Onerous contracts*

Present obligations arising under onerous contracts are recognised and measured as provisions. An onerous contract is considered to exist when a contract under which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received from it.

### *Restructurings*

A restructuring provision is recognised when there is a detailed formal plan for the restructuring which has raised a valid expectation in those affected. The measurement of a restructuring provision includes only the direct expenditures arising from the restructuring.

### *Contingent liabilities acquired in a business combination*

Contingent liabilities acquired in a business combination are initially measured at fair value at the acquisition date. At the end of subsequent reporting periods, such contingent liabilities are measured at the higher of the amount that would be recognised in accordance with Ind-AS 37 and the amount initially recognised less cumulative amortisation recognised in accordance with Ind AS 115 - Revenue from contracts with customers.

### *Restoration, rehabilitation and decommissioning*

Close-down and restoration costs are provided for in the accounting period when the obligation arising from the related disturbance occurs, based on the net present value of the estimated future costs of restoration to be incurred during the life of the mining operation and post closure. Provisions for close-down and restoration costs do not include any additional obligations which are expected to arise from future disturbance.

The initial close-down and restoration provision is capitalised. Subsequent movements in the close-down and restoration provisions for ongoing operations, including those resulting from new disturbance related to expansions or other activities qualifying for capitalisation, updated cost estimates, changes to the estimated lives of operations, changes to the timing of closure activities and revisions to discount rates are also capitalised within "Property, plant and equipment".

### *Environmental liabilities*

Environment liabilities are recognised when the group becomes obliged, legally or constructively to rectify environmental damage or perform remediation work.

### *Litigation*

Provision relating to legal, tax and other matters is recognised once it has been established that the group has a present obligation based on consideration of the information which becomes available up to the date on which the consolidated financial statements of the Group are finalised and may in some cases entail seeking expert advice in making the determination on whether there is a present obligation.

### *Contingent Liabilities and Assets*

A contingent liability is a possible obligation that arises from a past event, with the resolution of the contingency

dependent on uncertain future events, or a present obligation where no outflow is probable. Material contingent liabilities are disclosed in the consolidated financial statements unless the possibility of an outflow of economic resources is remote. Contingent assets are not recognized in the consolidated financial statements.

## **M. Leases**

Leases are classified as finance leases whenever the terms of the lease transfers substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

### *The Group as lesser*

Amounts due from lessee under finance leases are recorded as receivables at the amount of net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

Rental income from operating leases is recognised on a straight-line basis over the term of the relevant lease, unless the receipts are structured to increase in line with an inflation price index or another systematic basis which is more representative of the time pattern in which economic benefits from the leased asset is diminished. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised on a straight-line basis over the lease term.

### *The Group as lessee*

Assets held under finance leases are initially recognised at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lesser is included in the consolidated balance sheet as a finance lease obligation.

Lease payments are apportioned between finance charges and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly to the consolidated statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Group's general policy on borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

Operating lease payments are recognised as an expense on a straight-line basis over the lease term, unless the payments are structured to increase in line with an inflation price index or another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating

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leases are recognised as an expense in the period in which they are incurred.

In the event that lease incentives are received to enter into operating leases, such incentives are recognised as a liability. The aggregate benefit of incentives is recognised as a reduction of rental expense on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

### N. Inventories

Inventories are stated at the lower of cost and net realizable value. The cost of finished goods and work in progress includes raw materials, direct labour, other direct costs and related production overheads. Costs of inventories include the transfer from equity any gains/losses on qualifying cash flow hedges for foreign currency purchases of raw materials.

The Inventories are measured at Fair Value only in those cases where the Inventories are designated into a fair value hedge relationship.

Cost is determined using the weighted average cost basis. However, the same cost basis is applied to all inventories of a particular class. Inventories of stores and spare parts are valued at weighted average cost basis after providing for cost of obsolescence and other anticipated losses, wherever considered necessary.

Materials and other supplies held for use in the production of inventories (finished goods, work-in-progress) are not written down below the cost if the finished products in which they will be used are expected to sell at or above cost.

Net realizable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

### O. Trade Receivable

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. If collection is expected to be collected within a period of 12 months or less from the reporting date (or in the normal operating cycle of the business if longer), they are classified as current assets otherwise as Non-Current assets.

Trade receivables which are subject to a factoring arrangement without recourse are derecognized from the consolidated balance sheet. Under this arrangement, the Group transfers relevant receivables to the factor in exchange for cash and does not retain late payment and credit risk. The Group therefore

de-recognise the transferred assets in their entirety in its consolidated balance sheet. The Group considers the held to collect and sell business model to remain appropriate for such trade receivables and hence measures such trade receivables at fair value through other comprehensive income.

Trade receivables are measured at their transaction price unless it contains a significant financing component (or when the entity applies the practical expedient) or pricing adjustments embedded in the contract.

Trade receivables which arise from contracts where the sale price is provisional and revenue model have the character of a commodity derivative are measured at fair value. The fair value is measured at forward rate and subsequent changes are recognised as other operating revenue.

### P. Financial Instruments

All financial assets are recognised on trade date when the purchase of a financial asset is under a contract whose term requires delivery of the financial asset within the timeframe established by the market concerned. Financial assets are initially measured at fair value, plus transaction costs, except for those financial assets which are classified as at fair value through profit or loss (FVTPL) at inception. All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value.

#### *Classification of financial assets*

Financial assets are classified as 'equity instrument' if it is a non-derivative and meets the definition of 'equity' for the issuer (under Ind-AS 32 - Financial Instruments: Presentation). All other non-derivative financial assets are 'debt instruments'.

#### *Financial assets at amortised cost and the effective interest method*

Debt instruments are measured at amortised cost if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the instrument give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments meeting these criteria are subsequently measured at amortised cost using the effective interest method less any impairment, with interest recognised on an effective yield basis in investment income.



The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating interest over the relevant period. The effective interest rate is the rate that exactly discounts the estimated future cash receipts (including all fees on points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the debt instrument, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

The Group may irrevocably elect at initial recognition to classify a debt instrument that meets the amortised cost criteria above as at FVTPL if that designation eliminates or significantly reduces an accounting mismatch had the financial asset been measured at amortised cost.

*Financial assets at fair value through other comprehensive income (FVTOCI)*

Debt instruments are measured at FVTOCI if both of the following conditions are met:

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows and selling assets; and
- the contractual terms of the instrument give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments meeting these criteria are subsequently measured at fair value with any gains or losses arising on remeasurement recognised in other comprehensive income, except for impairment gains or losses and foreign exchange gains or losses. Interest calculated using the effective interest method is recognised in the Consolidated statement of profit and loss as investment income. When the debt instrument is derecognised the cumulative gain or loss previously recognised in other comprehensive income is reclassified to the Consolidated statement of profit and loss as a reclassification adjustment.

At initial recognition, an irrevocable election is made (on an instrument-by-instrument basis) to designate investments in equity instruments other than held for trading purpose at FVTOCI.

A financial asset is held for trading if:

- it has been acquired principally for the purpose of selling it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has evidence of a recent actual pattern of short-term profit-taking; or

- it is a derivative that is not designated and effective as a hedging instrument or a financial guarantee.

Investments in equity instruments at FVTOCI are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognised in other comprehensive income. Where the asset is disposed of, the cumulative gain or loss previously accumulated in the investments revaluation reserve is directly reclassified to retained earnings.

For equity instruments measured at fair value through other comprehensive income no impairments are recognised in the Consolidated statement of profit and loss.

Dividends on these investments in equity instruments are recognised in the Consolidated statement of profit and loss in investment income when the Group's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity; and the amount of the dividend can be measured reliably.

*Financial assets at fair value through profit and loss (FVTPL)*

Financial assets that do not meet the criteria of classifying as amortised cost or fair value through other comprehensive income described above, or that meet the criteria but the entity has chosen to designate as at FVTPL at initial recognition, are measured at FVTPL.

Investments in equity instruments are classified as at FVTPL, unless the Group designates an investment that is not held for trading at FVTOCI at initial recognition.

Financial assets at FVTPL are subsequently measured at fair value, with any gains or losses arising on remeasurement recognised in the Consolidated statement of profit and loss.

Dividend income on investments in equity instruments at FVTPL is recognised in the Consolidated statement of profit and loss in investment income when the Group's right to receive the dividends is established, it is probable that the economic benefits associated with the dividend will flow to the entity, and the amount of the dividend can be measured reliably.

*Impairment of financial assets*

On initial recognition of the financial assets, a loss allowance for expected credit loss is recognised for debt instruments at amortised cost and FVTOCI. For debt instruments that are measured at FVTOCI, the loss allowance is recognised in the Consolidated statement of profit and loss.

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Expected credit losses of a financial instrument is measured in a way that reflects:

- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and
- reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition.

When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and consider reasonable and supportable information, that is available without undue cost or effort, that is indicative of significant increases in credit risk since initial recognition.

If, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses. If, the credit risk on that financial instrument has increased significantly since initial recognition, the Group measures the loss allowance for a financial instrument at an amount equal to the lifetime expected credit losses.

For Trade Receivables and Contract Assets, the Group applies the simplified approach required by Ind AS 109, which requires expected life time losses to be recognized from initial recognition of the receivables.

The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date is recognised as an impairment gain or loss in the Consolidated statement of profit and loss.

### *Derecognition of financial assets*

The Group derecognises a financial asset on trade date only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains

substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset other than in its entirety (e.g. when the Group retains an option to repurchase part of a transferred asset), the Group allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognised and the sum of the consideration received for the part no longer recognised and any cumulative gain or loss allocated to it that had been recognised in other comprehensive income is recognised in the Consolidated statement of profit and loss. A cumulative gain or loss that had been recognised in other comprehensive income is allocated between the part that continues to be recognised and the part that is no longer recognised on the basis of the relative fair values of those parts.

### *Financial liabilities and equity instruments issued by the Group*

#### **Classification as debt or equity**

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

#### **Equity instruments**

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs.

#### **Compound instruments**

The component parts of compound instruments (convertible instruments) issued by the Group are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangement. At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for a similar non-convertible instrument. This amount is recorded as a liability on an amortised cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date. The equity component is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognised and included in equity, net of income tax effects, and is not subsequently remeasured.

**Financial guarantee contract liabilities**

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, are

- the amount of the obligation under the contract, as determined in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets; and
- the amount initially recognised less, where appropriate, cumulative amortisation recognised in accordance with the revenue recognition policies.

**Financial liabilities**

Financial liabilities are classified as either financial liabilities 'at FVTPL' or 'other financial liabilities'.

**Financial liabilities at FVTPL**

Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or it is designated as at FVTPL.

A financial liability is classified as held for trading if:

- it has been acquired or incurred principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and for which there is evidence of a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading may also be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Ind-AS 109 Financial Instruments permits the entire combined contract to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement

recognised in the Consolidated statement of profit and loss, except for the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability which is recognised in other comprehensive income.

The net gain or loss recognised in the Consolidated statement of profit and loss incorporates any interest paid on the financial liability.

**Other financial liabilities**

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.

Other financial liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

**Offsetting financial instruments**

Financial assets and liabilities are offset and the net amount reported in the Consolidated balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

**Q. Derivatives and Hedge Accounting**

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

The Group designates certain derivatives as either:

- hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge);
- hedges of a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedge); or
- hedges of a net investment in a foreign operation (net investment hedge).

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The Group documents at the inception of the transaction the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions. The Group also documents the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including its analysis of the sources of hedge ineffectiveness and how it determines the hedge ratio).

The full fair value of a hedging derivative is classified as a Non-Current asset or liability when the residual maturity of the derivative is more than 12 months and as a current asset or liability when the residual maturity of the derivative is less than 12 months.

### *Fair value hedge*

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the Consolidated statement of profit and loss, together with any changes in the fair value of the hedged item that are attributable to the hedged risk.

Hedge accounting is discontinued when the Group revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised to the Consolidated statement of profit and loss from that date.

### *Cash flow hedges*

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income and accumulated under the heading cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in the Consolidated statement of profit and loss, and is included in the 'other gains and losses' line item.

Amounts previously recognised in other comprehensive income and accumulated in equity are reclassified to the Consolidated statement of profit and loss in the periods when the hedged item affects the Consolidated statement of profit and loss, in the same line as the recognised hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously recognised in other comprehensive income and accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised,

or when it no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the Consolidated statement of profit and loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in the Consolidated statement of profit and loss.

### *Hedges of net investments in foreign operations*

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and accumulated under the heading of foreign currency translation reserve. The gain or loss relating to the ineffective portion is recognised immediately in the Consolidated statement of profit and loss.

Gains and losses on the hedging instrument relating to the effective portion of the hedge accumulated in the foreign currency translation reserve are reclassified to the Consolidated statement of profit and loss on the disposal of the foreign operation.

## **R. Cash and Cash Equivalents**

Cash and cash equivalents comprise cash at bank and in hand, short-term deposits and highly liquid investments with an original maturity of three months or less which are readily convertible in cash and subject to insignificant risk of change in value.

For the purposes of the consolidated statement of cash flow, cash and cash equivalents is as defined above, net of outstanding bank overdrafts. In the consolidated balance sheet, bank overdrafts are shown within borrowings in current liabilities.

## **S. Borrowing cost**

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. The Group considers a period of twelve months or more as a substantial period of time.

Transaction cost in respect of long-term borrowings are amortised over the tenure of respective loans using effective interest method. All other borrowing costs are recognised in the consolidated statement of profit and loss in the period in which they are incurred.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

## T. Accounting for Government Grants

Government grants are recognized when there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in the consolidated statement of profit and loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Government grants whose primary condition is that the Group should purchase, construct or otherwise acquire Non-Current assets are recognized in the consolidated balance sheet by setting up the grant as deferred income and its amortization is recognised in other income.

Other government grants (grants related to income) are recognized as income over the periods necessary to match them with the costs for which they are intended to compensate, on a systematic basis. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of providing immediate financial support with no future related costs are recognized in the Consolidated statement of profit and loss in the period in which they become receivable.

Grants related to income are presented under other income or other operating revenue in the Consolidated statement of profit and loss except for grants received in the form of rebate or exemptions which are deducted in reporting the related expense.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

Emission allowances are initially recognised as an intangible asset measured at fair value when the Group is granted the allowances and able to exercise control with a corresponding recognition of a grant at the same amount under deferred income. As carbon dioxide is emitted, the corresponding tons of emission allowances initially recognised under deferred income is reclassified and recognized in the Consolidated statement of profit and loss.

Emission allowances are not amortised as their carrying value equals their residual value and therefore the depreciable basis zero, as their value is constant until delivery to the authorities. Emission allowances are subject to impairment test.

The provision for the liability to deliver allowances is recognised based on actual emission. The provision is

measured at the carrying amount of allowances to the extent that the provision will be settled using allowances on hand with any excess emission being measured at the market value of the allowances at the period end. The group records the expense in the Consolidated statement of profit and loss under other expenses.

When the emission allowances for the carbon dioxide emitted are delivered to the authorities, the intangible asset as well as the corresponding provision are derecognized from the Consolidated balance sheet without any effect on the Consolidated statement of profit and loss.

## U. Employee Benefits

### *Retirement benefit, medical costs and termination benefits*

A defined contribution plan is a pension plan under which the group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Payments to defined contribution retirement benefit plans are recognised as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement and medical plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of government bonds. In countries where there is a deep market in high-quality corporate bonds, the market rate on those bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation are used.

Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected in the Consolidated balance sheet with a charge or credit recognised in other comprehensive income in the period in which they occur. Remeasurement recognised in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to the Consolidated statement of profit and loss. Past service cost is recognised in the Consolidated statement of profit and loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit

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liability or asset. Defined benefit costs are categorised as follows:

- service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements);
- net interest expense or income; and
- remeasurement.

The Group presents the first two components of defined benefit costs in the Consolidated statement of profit and loss in the line item employee benefits expense. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognised in the Consolidated balance sheet represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

A liability for a termination benefit is recognised at the earlier of when the Group can no longer withdraw the offer of the termination benefit and when the entity recognises any related restructuring costs. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

### *Short-term and other long-term employee benefits*

A liability is recognised for benefits accruing to employees in respect of wages and salaries in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Liabilities recognised in respect of short-term employee benefits are measured at the undiscounted amount of the benefits expected to be paid in exchange for the related service.

Liabilities recognised in respect of other long-term employee benefits such as annual leave and sick leave are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit retirement plans. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to the

Consolidated statement of profit and loss in the period in which they arise. These obligations are valued annually by independent qualified actuaries.

### **V. Employee Share-based Payments**

Equity-settled share-based payments to employees are measured at the fair value of options at the grant date.

The fair value of options at the grant is expensed over the respective vesting period in which all of the specified vesting conditions are to be satisfied with a corresponding increase in equity as "Employee Stock Options Outstanding". In case of forfeiture of unvested option, portion of amount already expensed is reversed. In a situation where the vested options are forfeited or expires unexercised, the related balance standing to the credit of the "Employee Stock Options Outstanding" are transferred to the "Retained Earnings".

When the options are exercised, the Company issues new equity shares of the Company of ₹ 1/- each fully paid-up. The proceeds received and the related balance standing to credit of the Employee Stock Options Account is credited to share capital (nominal value) and Securities Premium Account.

Share appreciation rights which are cash settled, are recognised as employee benefit expense over the relevant service period. The liability is fair valued at each reporting date and are presented as employee benefit obligations in the consolidated balance sheet.

### **W. Income Taxes**

Income tax expense represents the sum of the tax currently payable and deferred tax.

#### *Current tax*

The tax currently payable is based on taxable profit for the year. Taxable profit differs from 'profit before tax' as reported in the Consolidated statement of profit and loss because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Group's entities operate and generate taxable income using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Management periodically evaluates contingencies and positions taken on uncertain positions in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

### *Deferred tax*

Deferred tax is recognised on differences between the carrying amounts of assets and liabilities in the consolidated balance sheet and the corresponding tax bases used in the computation of taxable profit. Where the local currency is not the functional currency, deferred tax is recognised on temporary difference arising from exchange rate changes between the closing rate and the historical purchase price of non-monetary assets translated at the exchange rate at the date of purchase if those non-monetary assets have tax consequences.

Deferred tax liabilities are generally recognised for all taxable temporary differences. Deferred tax assets are generally recognised for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint arrangements, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future. Generally, the group is unable to control the reversal of the temporary difference for associates.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

Minimum Alternative Tax (MAT) is recognized as an asset only when and to the extent there is convincing evidence that the Group will pay normal income tax during the specified period. In the year in which the MAT credit becomes eligible to be recognized as an asset, the said asset is created by way of credit to the consolidated statement of profit and loss and included in deferred tax assets. The Group reviews the same at each balance sheet date and writes down the carrying amount of MAT entitlement to the extent there is no longer convincing evidence to the effect that Group will pay normal income tax during the specified period.

### *Current and deferred tax for the year*

Current and deferred tax are recognised in the Consolidated statement of profit and loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

## **X. Revenue Recognition**

Effective April 1, 2018, the Group has adopted Ind AS 115, Revenue from contracts with customers using the modified retrospective transition approach, which is applied to contracts that were not completed as of April 1, 2018. Accordingly, the comparatives have not been retrospectively adjusted.

The Group derives revenue principally from sale of hydrate, speciality alumina, aluminium and aluminium value added products, di-ammonium phosphate, copper, precious metals (gold & silver) and other materials.

The Group recognizes revenue when it satisfies a performance obligation in accordance with the provisions of contract with the customer. This is achieved when control of the product has been transferred to the customer, which is generally determined when title, ownership, risk of obsolescence and loss pass to the customer and the Group has the present right to payment, all of which occurs at a point in time upon shipment or delivery of the product. The Group considers shipping and handling activities as costs to fulfil the promise to transfer the related products and

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the customer payments for shipping and handling costs are recorded as a component of revenue.

In certain customer contracts, shipping and handling services are treated as a distinct separate performance obligation and the Group recognises revenue for such services when the performance obligation is completed.

The Group considers the terms of the contract in determining the transaction price. The transaction price is based upon the amount the Group expects to be entitled to in exchange for transferring of promised goods and services to the customer after deducting incentive programs, included but not limited to discounts, volume rebates etc.

For incentives offered to customers, the Group makes estimates related to customer performance and sales volume to determine the total amounts earned and to be recorded as deductions from "Revenue from contracts with customers". In making these estimates, the Group considers historical results that have a predictive value of the amount that the Group expects to be entitled to for the transferred goods and services. If historical results have limited predictive value or the Group has limited experience with similar types of incentives, the estimate is made in such a manner, which ensures that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The actual amounts may differ from these estimates and are accounted for prospectively. No element of significant financing is deemed present as the sales are made with a credit term, which is consistent with market practice. The Group's obligation to repair or replace faulty products under the standard warranty terms is recognised as a cost with a corresponding provision.

For certain customer contracts, final prices are determined based on the underlying market index of commodity prices at a future date, for example prices on the London Metal Exchange Limited (LME) or London Bullion Markets Association (LBMA). In such contracts, the Group records revenue on a provisional basis considering current market price when control is transferred to the customer. At the end of each period, prior to final settlement date, adjustments are made to the provisional sale price based on movements in the underlying market index of commodity prices up to the date of final price determination. Such variable price movement is accounted as other operating revenue.

Revenue from irrevocable bill and hold/ holding certificate contracts is recognised when it is probable that delivery will be made, goods have been identified and kept separately, are ready for delivery in the present condition and usual payment terms for such contracts applies. Under these arrangements, revenue

is recognised once legal title has passed and all significant risks and rewards of ownership of the asset sold are transferred to the customer.

Export incentives and subsidies are recognized when there is reasonable assurance that the Group will comply with the conditions and the incentive will be received.

Claim on insurance companies, railway authorities and others, where quantum of accrual cannot be ascertained with reasonable certainty, are accounted for on acceptance basis.

Revenue excludes any taxes and duties collected on behalf of the government.

### Y. Dividend and Interest Income

Dividend income from investments is recognised when the Group's right to receive payment has been established.

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

### Z. Exceptional Items

Exceptional items include income or expense that are considered to be part of ordinary activities, however are of such significance and nature that separate disclosure enables the user of the financial statements to understand the impact in a more meaningful manner. Exceptional items are identified by virtue of either their size or nature so as to facilitate comparison with prior periods and to assess underlying trends in the financial performance of the Group.

## 3. Measurement of fair value

### A. Financial Instruments

The estimated fair value of the Group's financial instruments is based on market prices and valuation techniques. Valuations are made with the objective to include relevant factors that market participants would consider in setting a price, and to apply accepted economic and financial methodologies for the pricing of financial instruments. References for less active markets are carefully reviewed to establish relevant and comparable data.

### B. Marketable and non-marketable Equity Securities

Fair value for listed shares is based on quoted market prices as of the reporting date. Fair value for unlisted



shares is calculated based on commonly accepted valuation techniques utilizing significant unobservable data, primarily cash flow based models.

### C. Derivatives

Fair value of financial derivatives is estimated as the present value of future cash flows, calculated by reference to quoted price curves and exchange rates as of the balance sheet date. Options are valued using appropriate option pricing models and credit spreads are applied where deemed to be significant.

### D. Embedded Derivatives

Embedded derivatives that are separated from the host contract are valued by comparing the forward curve at contract inception to the forward curve as of the balance sheet date. Changes in the present value of the cash flows related to the embedded derivative are recognized in the Consolidated Balance Sheet and in the Consolidated Statement of Profit and Loss.

## 4. Critical accounting judgment and key sources of estimation uncertainty

In preparing the financial statements in conformity with accounting principles generally accepted in India, management is required to make estimates and assumptions that affect reported amounts of assets and liabilities and the disclosure of contingent liabilities as at the date of the financial statements and the amounts of revenue and expenses during the reported period. Actual results could differ from those estimates. Any revision to such estimates is recognised in the period in which the same is determined.

The following paragraphs explain areas that are considered more critical, involving a higher degree of judgment and complexity.

#### (a) Joint Arrangements

We invest in certain joint ventures and consortiums which are accounted for as joint arrangements. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. When a group entity undertakes its activities under joint operations, the Group as a joint operator recognizes assets, liabilities, income and expenses in relation to its interest in a joint operation. (refer Note 57)

#### (b) Impairment of Goodwill

Goodwill represents the excess of the purchase price over the fair value of the identifiable net assets

of acquired companies. Goodwill is not amortized; instead, it is tested for impairment at least annually. The recoverable amount is determined based on value in use or fair value less cost to sell calculations which require the use of assumptions as directly observable market prices are generally not exist for the Group's assets. However, fair value may be estimated based on recent transactions on comparable assets, internal models used by the Group for transactions involving the same type of assets or other relevant information. Calculation of value in use is a discounted cash flow calculation based on continued use of the assets in its present condition, excluding potential exploitation of improvement or expansion potential. (refer Note 8)

#### (c) Impairment of Non-Current Assets

Ind AS 36 requires that the Group assesses conditions that could cause an asset or a Cash Generating Unit (CGU) to become impaired and to test recoverability of potentially impaired assets. These conditions include changes resulting from market and economic environment, including internal and external factors such as the Group's market capitalization, significant changes in the Group's planned use of the assets or a significant adverse change in the expected prices, sales volumes or raw material cost. The identification of CGUs involves judgment, including assessment of where active markets exist, and the level of interdependency of cash inflows. CGU is usually the individual plant, unless the asset or asset group is an integral part of a value chain where no independent prices for the intermediate products exist, a group of plants is combined and managed to serve a common market, or where circumstances otherwise indicate significant interdependencies.

In accordance with Ind-AS 36, certain intangible assets are reviewed at least annually for impairment. If a loss in value is indicated, the recoverable amount is estimated as the higher of the CGU's fair value less cost to sell, or its value in use. Directly observable market prices rarely exist for the Group's assets, however, fair value may be estimated based on recent transactions on comparable assets, internal models used by the Group for transactions involving the same type of assets or other relevant information. Calculation of value in use is a discounted cash flow calculation based on continued use of the assets in its present condition, excluding potential exploitation of improvement or expansion potential.

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Determination of the recoverable amount involves management estimates on highly uncertain matters, such as commodity prices and their impact on markets and prices for upgraded products, development in demand, inflation, operating expenses and tax and legal environment. The Group uses internal business plans, quoted market prices and the Group's best estimate of commodity prices, currency rates, discount rates and other relevant information. A detailed forecast is developed for a period of three to five years with projections thereafter.

### (d) Taxes

The Group calculates income tax expense based on reported income. Deferred income tax expense is calculated based on the differences between the carrying value of assets and liabilities for financial reporting purposes and their respective tax basis that are considered temporary in nature. Valuation of deferred tax assets is dependent on management's assessment of future recoverability of the deferred benefit. Expected recoverability may result from expected taxable income in the future, planned transactions or planned tax optimizing measures. Economic conditions may change and lead to a different conclusion regarding recoverability. (refer Note 13 and 14)

### (e) Fair Value Measurements

The Group applies valuation techniques to determine the fair value of financial instruments (where active market quotes are not available) and non-financial assets. This involves developing estimates and assumptions consistent with the market participants to price the instrument. The Group's assumptions are based on observable data as far as possible, otherwise on the best information available. Estimated fair values may vary from the actual prices that would be achieved in an arm's length transaction at the reporting date.

### (f) Contingent Assets and Liabilities, Provisions and Uncertain Tax Positions

There are various legal, direct and indirect tax matters and other obligations including environmental, mining, local and state levies, income tax holiday, availing input tax credits etc., which may impact the Group. Evaluation of uncertain liabilities and contingent liabilities and assets arising out of above matters require management judgment and assumptions, regarding the probability of outflow or realization of economic resources and the timing and amount, or range of amounts, that may ultimately

be determined. Such estimates may vary from the ultimate outcome as a result of differing interpretations of laws and facts, or application of relevant judicial precedents.

### (g) Inventory Measurement

Measurement of bulk inventory quantities (such as coal, bauxite, etc.) lying at yards and work in progress of precious metals at smelter and refinery is material, complex and involves significant judgement and estimate resulting from measuring the surface area, dip measurement of materials in tanks/silos, etc.

The Group performs physical counts of above inventory on a periodic basis using internal / external experts to perform volumetric surveys and assessments, basis which the estimate of quantity for these inventories is determined. The variations noted between book records and physical quantities of above inventories are evaluated and appropriately accounted in the books of accounts.

## 5. Recent Accounting Pronouncements

The Ministry of Corporate Affairs (MCA) has issued certain amendments in existing Accounting Standards during the year ended March 31, 2019 which are effective from April 01, 2019. The Group has assessed all these amendments and its impact on financial statement is explained below:

### (a) Appendix C, Uncertainty over Income Tax Treatments, to Ind AS 12, 'Income Taxes'

The appendix explains how to recognize and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment. In particular, it discusses:

- how to determine the appropriate unit of account, and that each uncertain tax treatment should be considered separately or together as a group, depending on which approach better predicts the resolution of the uncertainty;
- that the entity should assume a tax authority will examine the uncertain tax treatments and have full knowledge of all related information, i.e. that detection risk should be ignored;
- that the entity should reflect the effect of the uncertainty in its income tax accounting when it is not probable that the tax authorities will accept the treatment;
- that the impact of the uncertainty should be measured using either the most likely amount or the expected value method, depending on

which method better predicts the resolution of the uncertainty; and

- that the judgment and estimates made must be reassessed whenever circumstances have changed or there is new information that affects the judgment.

The Group is assessing its existing models and processes which it has developed to account for tax uncertainties against the specific guidance in appendix C to Ind AS 12 to consider the impact on income tax accounting in respect of its various tax jurisdictions.

- (b) Long-term Interests in Associates and Joint Ventures – Amendments to Ind AS 28, 'Investment in Associates and Joint Ventures'

The amendment clarify the accounting for long-term interests in an associate or joint venture, which in substance form part of the net investment in the associate or joint venture, but to which equity accounting is not applied. Entities must account for such interests under Ind AS 109 'Financial Instruments' before applying the loss allocation and impairment requirements in Ind AS 28. Since the Group do not have such long-term interests in its associates or joint ventures, the amendments will not have any impact on its financial statements.

- (c) Prepayment Features with Negative Compensation – Amendments to Ind AS 109, 'Financial Instruments'

The amendment made to Ind AS 109 enable entities to measure certain prepayable financial assets (e.g. loans and debt securities which otherwise have to be measured as FVTPL) with negative compensation at amortised cost. To qualify for amortised cost measurement, the negative compensation must be 'reasonable compensation for early termination of the contract' and the asset must be held within a 'held to collect' business model. Since the Group do not have such financial instruments, the amendments will not have any impact on its financial statements.

- (d) Plan Amendment, Curtailment or Settlement – Amendments to Ind AS 19, 'Employee Benefits'

The amendments to Ind AS 19 clarify the accounting for defined benefit plan amendments, curtailments and settlements. It confirms that entities must:

- calculate the current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or

settlement by using the updated assumptions from the date of the change;

- any reduction in a surplus should be recognised immediately in profit or loss either as part of past service cost, or as a gain or loss on settlement. In other words, a reduction in a surplus must be recognised in profit or loss even if that surplus was not previously recognised because of the impact of the asset ceiling; and
- separately recognise any changes in the asset ceiling through other comprehensive income.

These amendments will apply to any future plan amendments, curtailments, or settlements of the Group on or after April 1, 2019.

- (e) Ind AS 103, 'Business Combinations'

The amendment clarifies that obtaining control of a business that is a joint operation, is a business combination achieved in stages. The acquirer should re-measure its previously held interest in the joint operation at fair value at the acquisition date.

These amendments will apply to future business combinations of the Group for which acquisition date is on or after April 1, 2019.

- (f) Ind AS 111, 'Joint Arrangements'

The amendment clarifies that the party obtaining joint control of a business that is a joint operation should not remeasure its previously held interest in the joint operation.

These amendments will apply to future transactions of the Group in which it obtains joint control of a business on or after April 1, 2019.

- (g) Ind AS 23, 'Borrowing Costs'

The amendments clarifies that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use or sale, it becomes part of general borrowings.

The Group's current practice is in line with this amendment and accordingly this amendment is not expected to have any material impact on its consolidated financial statements.

- (h) Ind AS 12, 'Income Taxes'

The amendment clarifies that the income tax consequences of dividends on financial instruments classified as equity should be

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recognised according to where the past transactions or events that generated distributable profits were recognised. These requirements apply to all income tax consequences of dividends. Previously, it was unclear whether the income tax consequences of dividends should be recognised in profit or loss, or in equity, and the scope of the existing guidance was ambiguous.

This amendment is not expected to have any material impact on its consolidated financial statements.

### (i) Ind AS 116, 'Leases'

On March 30, 2019, the Ministry of Corporate Affairs (MCA) notified Ind AS 116, 'Leases' as part of the Companies (Indian Accounting Standards (Ind AS)) Amendment Rules, 2019. Ind AS 116 replaces existing standard Ind AS 17, Leases with effect from accounting periods beginning on or after April 1, 2019.

The new standard introduces a single model of lease accounting and eliminates the classification of leases as either finance leases or operating leases for a lessee as was required under Ind AS 17. Ind AS 116 requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. For all leases except as noted above, a lessee is required to recognise a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments in its consolidated financial statement. Lessee will recognise depreciation of right of use assets and interest on lease liabilities in the consolidated statement of profit and loss. In the consolidated cash flow statement, operating cash flows will be higher as payment of the lease liability and related interest are to be classified within financing activities.

Requirements with regard to lessor accounting are substantially similar to accounting requirements contained in Ind AS 17. Accordingly, a lessor will continue to classify its leases as operating leases or finance leases, and to account for those two types of leases differently.

The effective date for adoption of Ind AS 116 is financial year beginning on or after April 1, 2019. The standard permits two possible methods of transition:

- Fully retrospective- Retrospectively to each prior period presented applying Ind AS 8 Accounting Policies, Changes in Accounting Estimates and Errors.
- Modified retrospective- Retrospectively, with the cumulative effect of initially applying the Standard recognized at the date of initial application.

Under modified retrospective approach, the lessee records the lease liability as the present value of the remaining lease payments, discounted at the incremental borrowing rate and the right of use asset either as:

- Its carrying amount as if the standard had been applied since the commencement date, but discounted at lessee's incremental borrowing rate at the date of initial application, or
- An amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments related to that lease recognized under Ind AS 17 immediately before the date of initial application.

The Group is in the process of reviewing all its leasing arrangements in light of the new lease accounting rules in Ind AS 116. The Group will utilise the practical expedient available under Ind AS 116 and not reassess whether a contract is or contains a lease at the date of initial application. The Group also intends to use the exemptions provided by Ind AS 116 for short-term leases (less than 12 months) and leases for low value assets. The transition to the new lease accounting from the existing rules will be accomplished using the modified retrospective transition approach with no restatement of comparative information. The Group will elect certain available practical expedients on transition.

The Group is currently evaluating the impact this standard will have on its consolidated financial statements.

## 6. Property, Plant and Equipment and Capital Work-in-Progress

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Cost	103,240.45	99,422.29
Less: Accumulated Depreciation and Impairment	(39,055.52)	(35,535.70)
<b>Net carrying amount</b>	<b>64,184.93</b>	<b>63,886.59</b>
Capital Work-in-Progress - (j)	3,974.63	1,982.98
	<b>68,159.56</b>	<b>65,869.57</b>

₹ in Crore

	Freehold Land	Leasehold Improvements	Buildings	Plant and Machinery	Vehicles and Aircraft	Furniture and Fixtures	Railway Siding	Office Equipments	Total
<b>Cost</b>									
<b>As at April 01, 2017</b>	<b>1,879.38</b>	<b>311.74</b>	<b>18,091.35</b>	<b>73,697.22</b>	<b>584.17</b>	<b>1,026.35</b>	<b>488.86</b>	<b>555.19</b>	<b>96,634.26</b>
Additions	823.52	0.06	572.40	3,352.77	52.40	94.98	-	40.64	4,936.77
Deduction/ Adjustments	(318.97)	-	(699.00)	(2,863.42)	(16.98)	(105.39)	-	(9.60)	(4,013.36)
Exchange differences	82.90	2.36	350.33	1,326.43	7.91	81.03	-	13.66	1,864.62
<b>As at April 01, 2018</b>	<b>2,466.83</b>	<b>314.16</b>	<b>18,315.08</b>	<b>75,513.00</b>	<b>627.50</b>	<b>1,096.97</b>	<b>488.86</b>	<b>599.89</b>	<b>99,422.29</b>
Additions	158.02	-	627.03	3,135.27	44.47	87.11	0.34	37.88	4,090.12
Deduction/ Adjustments	(30.03)	-	(82.37)	(1,163.31)	(27.77)	(29.34)	(0.11)	(30.37)	(1,363.30)
Exchange differences	10.60	8.73	271.40	784.90	6.73	(7.73)	-	16.71	1,091.34
<b>As at March 31, 2019</b>	<b>2,605.42</b>	<b>322.89</b>	<b>19,131.14</b>	<b>78,269.86</b>	<b>650.93</b>	<b>1,147.01</b>	<b>489.09</b>	<b>624.11</b>	<b>103,240.45</b>
<b>Accumulated Depreciation and Impairment</b>									
<b>As at April 01, 2017</b>	<b>157.01</b>	<b>87.81</b>	<b>4,497.55</b>	<b>26,401.78</b>	<b>292.86</b>	<b>711.72</b>	<b>110.09</b>	<b>424.29</b>	<b>32,683.11</b>
Depreciation for the year	-	8.80	727.75	3,018.20	46.20	74.20	27.82	56.70	3,959.67
Impairment	-	-	-	64.58	-	-	-	-	64.58
Deduction/ Adjustments	-	-	(230.32)	(1,760.39)	(8.67)	(89.23)	-	(8.89)	(2,097.50)
Exchange differences	(4.57)	0.95	162.39	696.34	4.94	55.30	-	10.49	925.84
<b>As at April 01, 2018</b>	<b>152.44</b>	<b>97.56</b>	<b>5,157.37</b>	<b>28,420.51</b>	<b>335.33</b>	<b>751.99</b>	<b>137.91</b>	<b>482.59</b>	<b>35,535.70</b>
Depreciation for the year	3.47	2.92	794.45	3,194.48	48.81	78.96	27.82	50.06	4,200.97
Impairment / (Reversal)	-	-	-	(10.75)	-	-	-	-	(10.75)
Deduction/ Adjustments	(0.80)	-	(85.92)	(1,008.81)	(22.80)	(27.71)	(0.06)	(28.26)	(1,174.36)
Exchange differences	6.63	4.43	97.77	382.28	5.15	(6.56)	-	14.26	503.96
<b>As at March 31, 2019</b>	<b>161.74</b>	<b>104.91</b>	<b>5,963.67</b>	<b>30,977.71</b>	<b>366.49</b>	<b>796.68</b>	<b>165.67</b>	<b>518.65</b>	<b>39,055.52</b>
<b>Net carrying amount</b>									
<b>As at March 31, 2018</b>	<b>2,314.39</b>	<b>216.60</b>	<b>13,157.71</b>	<b>47,092.49</b>	<b>292.17</b>	<b>344.98</b>	<b>350.95</b>	<b>117.30</b>	<b>63,886.59</b>
<b>As at March 31, 2019</b>	<b>2,443.68</b>	<b>217.98</b>	<b>13,167.47</b>	<b>47,292.15</b>	<b>284.44</b>	<b>350.33</b>	<b>323.42</b>	<b>105.46</b>	<b>64,184.93</b>
Useful life (Years)	Indefinite*	7 - 99	3 - 60	2 - 40	2 - 25	3 - 10	15	2 - 25	

\*Freehold land used for mining is depreciated over 28 years.

- (a) Additions include grant related to Export Promotion Capital Goods (EPCG) of ₹ Nil (31/03/2018: ₹ 678.02 crore).
- (b) Cost, accumulated depreciation and impairment and net carrying amount of assets under finance lease included above in respective class of assets are given below. These assets are depreciated over their respective lease period or the useful life of the asset, whichever is lower.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

₹ in Crore

	Building		Plant and Machinery		Furniture and Fixtures		Vehicles	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018	31.03.2019	31.03.2018	31.03.2019	31.03.2018
Cost	4.12	75.55	108.37	538.55	39.42	9.98	1.85	-
Accumulated Depreciation	(0.80)	(61.97)	(93.74)	(461.32)	(16.91)	(1.30)	(1.58)	-
<b>Net carrying amount</b>	<b>3.32</b>	<b>13.58</b>	<b>14.63</b>	<b>77.23</b>	<b>22.51</b>	<b>8.68</b>	<b>0.27</b>	-

- (c) During the year ended March 31, 2019, Novelis Inc, a subsidiary of the Company, has acquired real and personal property that was initially leased from Constellium for ₹ 1,722.71 crore at their Sierre rolling facility, Switzerland. As a result of aforementioned transaction, Novelis de-recognized assets held under finance lease worth gross block and accumulated depreciation of ₹ 481.88 crore and ₹ 396.91 crore respectively. Acquisition of said assets resulted in net increase to the gross block of fixed assets by ₹ 1,240.84 crore.
- (d) Group's share in jointly owned assets has been grouped together with the relevant class of property, plant and equipment. The cost and net carrying amounts included in relevant class of assets are given below:

₹ in Crore

	Cost		Net carrying amount	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
Freehold Land	51.56	51.56	51.56	51.56
Buildings	40.83	41.29	29.77	30.78
Plant and Machinery	41.24	41.24	1.71	1.90
Furniture and Fixtures	3.87	11.01	0.50	1.13
Vehicles and Aircraft	0.16	0.16	0.07	0.08
Office Equipment	6.39	9.75	0.71	1.02

- (e) The Company has sold its Aluminium Foil manufacturing unit at Kollur, Telangana on slump sale basis to Mundhra Alufoil Private Limited through a Business Transfer Agreement dated April 26, 2019 at a Gross consideration of ₹ 28 Crores, subject to certain adjustments basis the closing audited accounts of the unit. This transaction does not have any material impact on the Consolidated Financial Statements.
- (f) For assets pledged and Hypothecated against borrowings, refer Note 24.
- (g) For impairment charges or reversal, refer Note 41.
- (h) For capital expenditures contracted but not incurred, refer to Note 52 (a).
- (i) In respect of future minimum lease payments and their present value of Property, Plant and Equipment taken under finance lease, refer to Note - 24 (g).
- (j) Capital Work in Progress (CWIP) comprise of various routine projects and expansion spread over across the Group.

### 7. Investment Property

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Cost	34.29	34.29
Less: Accumulated Depreciation and Impairment	(11.14)	(10.57)
<b>Net carrying amount</b>	<b>23.15</b>	<b>23.72</b>

₹ in Crore

	Freehold Land	Buildings	Total
<b>Cost</b>			
<b>As at April 01, 2017</b>	<b>0.59</b>	<b>33.70</b>	<b>34.29</b>
Additions	-	-	-
Deduction/ Adjustments	-	-	-
<b>As at April 01, 2018</b>	<b>0.59</b>	<b>33.70</b>	<b>34.29</b>
Additions	-	-	-
Deduction/ Adjustments	-	-	-
<b>As at March 31, 2019</b>	<b>0.59</b>	<b>33.70</b>	<b>34.29</b>
<b>Accumulated Depreciation and Impairment</b>			
<b>As at April 01, 2017</b>	-	<b>10.00</b>	<b>10.00</b>
Depreciation for the year	-	0.57	0.57
<b>As at April 01, 2018</b>	-	<b>10.57</b>	<b>10.57</b>
Depreciation for the year	-	0.57	0.57
<b>As at March 31, 2019</b>	-	<b>11.14</b>	<b>11.14</b>
<b>Net carrying amount</b>			
<b>As at March 31, 2018</b>	<b>0.59</b>	<b>23.13</b>	<b>23.72</b>
<b>As at March 31, 2019</b>	<b>0.59</b>	<b>22.56</b>	<b>23.15</b>
<b>Useful life (Years)</b>	Indefinite	60	

(a) Amount recognised in profit and loss for investment properties are as under:

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
Rental Income	5.86	5.84
Less: Direct operating expenses, including repair and maintenance, on properties generating rental income	(0.68)	(0.84)
<b>Profit or loss from investment properties before depreciation</b>	<b>5.18</b>	<b>5.00</b>
Less: Depreciation	(0.57)	(0.57)
<b>Profit/(Loss) from Investment Properties</b>	<b>4.61</b>	<b>4.43</b>

- (b) All of the Investment Properties of the Group are held under freehold interest.
- (c) The Group has no contractual obligations to purchase, construct or develop investment properties or for repairs, maintenance and enhancements.
- (d) The fair value of the Group's investment properties as at March 31, 2019 and March 31, 2018 have been arrived on the basis of valuation carried out at the respective dates by an external, independent valuer registered with the authority which governs the valuers in India. The fair value measurement for all the investments properties has been categorised as level 2 fair value based on the inputs to the valuation technique used. Considering the type of the assets, market approach (sales comparable method) to estimate the fair value of the subject properties is adopted.
- i. Fair value of investment properties given below:

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Freehold Land	42.08	42.03
Buildings	95.98	99.44

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

ii. Fair value hierarchy of Investment properties given below:

	As at 31.03.2019		As at 31.03.2018	
	Level 1	Level 2	Level 1	Level 2
Freehold land	-	42.08	-	42.03
Buildings	-	95.98	-	99.44

₹ in Crore

### 8. Goodwill

	As at 31.03.2019	As at 31.03.2018
Cost	18,574.61	17,829.44
Less: Accumulated Impairment	-	-
<b>Net carrying amount</b>	<b>18,574.61</b>	<b>17,829.44</b>

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Cost	Accumulated Impairment	Net carrying amount	Cost	Accumulated Impairment	Net carrying amount
Opening - As at April 01	17,829.44	-	17,829.44	17,134.96	-	17,134.96
Additions - (a)	-	-	-	382.43	-	382.43
Deduction/ Adjustments - (a)	-	-	-	(274.17)	-	(274.17)
Exchange differences	745.17	-	745.17	586.22	-	586.22
Closing - As at March 31	<b>18,574.61</b>	<b>-</b>	<b>18,574.61</b>	<b>17,829.44</b>	<b>-</b>	<b>17,829.44</b>

(₹ Crore)

(a) During the year ended March 31, 2018 Goodwill attributable to 100% of Ulsan Aluminium Limited's (UAL) assets was derecognized due to loss of control of subsidiary. For remaining 50.1% of stake retained in UAL, which is accounted as business combination, additional goodwill was recognized as 'Additions' as shown above. (refer Note 58)

#### (b) Impairment testing of goodwill

Goodwill acquired in business combinations has been allocated to following cash generating units (CGU) of Aluminium and Novelis segment. However, there were no goodwill acquired with regard to Copper segment.

	As at 31.03.2019	As at 31.03.2018
<b>Aluminium segment</b>		
Utkal Alumina International Limited (Utkal)	110.27	110.27
Minerals and Minerals Limited (M&M)	0.12	0.12
<b>Novelis segment</b>		
Novelis - North America	7,389.84	6,955.10
Novelis - Europe	7,277.11	7,127.99
Novelis - South America	2,531.65	2,382.72
Novelis - North Asia	1,265.62	1,253.24
	<b>18,574.61</b>	<b>17,829.44</b>

₹ in Crore

Goodwill is not amortized, instead, it is tested for impairment annually or more frequently if indicators of impairment exist. The recoverable amount of a cash generating unit (CGU) is determined based on value-in-use or fair value less cost to sell calculations which require the use of certain assumptions. The calculations use cash flow projections based on financial budgets approved by management covering three to five years period depending upon segment/ CGU's financial budgeting process. Cash flow beyond these financial budget period are extrapolated using the estimated growth rates.



The key assumptions used in the estimation of the recoverable amount of CGU's are set out below. The values assigned to the key assumptions represent management's assessment of future trends in the relevant industries and have been based on historical data from both external and internal sources.

	Aluminium segment		Novelis segment	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
Discount rate (i)	11.22%	12.75%	9.00%	9.00%
Terminal growth rate (ii)	3.73%	5.00%	2.25%	2.00%

- i. For Novelis segment, the recoverable amount is determined based on fair value less cost to sell and the projected cash flows are discounted to the present value using a post tax weighted average cost of capital (discount rate). For Aluminium segment, the recoverable amount is determined based on value in use and the projected cash flows are discounted to the present value using pre tax weighted average cost of capital (discount rate). The discount rate 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.
- ii. The Group use's specific revenue growth assumptions for each cash generating unit based on history and economic conditions.

As a result of goodwill impairment test for the year ended March 31, 2019 and year ended March 31, 2018, no goodwill impairment was identified as the recoverable value of the CGUs to whom goodwill was allocated exceeded their respective carrying amounts at all the periods reported above.

### (c) Impact of possible changes in key assumptions

Goodwill in the Consolidated Financial Statements primarily consists of goodwill in Novelis segment, wherein goodwill has been allocated in four CGUs. The recoverable amount of each of these four CGU would equal its carrying amount if the key assumptions were to change as follows:

	As at 31.03.2019		As at 31.03.2018	
	From	To	From	To
<b>i. Long-term growth rate (%)</b>				
Novelis - North America	2.25%	*	2.00%	*
Novelis - Europe	2.25%	0.98%	2.00%	1.50%
Novelis - South America	2.25%	*	2.00%	*
Novelis - North Asia	2.25%	*	2.00%	*
<b>ii. Post-tax discount rate</b>				
Novelis - North America	9.00%	*	9.00%	*
Novelis - Europe	9.00%	9.93%	9.00%	9.37%
Novelis - South America	9.00%	*	9.00%	*
Novelis - North Asia	9.00%	*	9.00%	*

\* Management believes that no reasonably possible change in any of the above key assumptions (including assumptions related to Goodwill of Utkal) would cause the recoverable amount to fall below the carrying value of any of the CGU having allocated goodwill.

## 9. Other Intangible Assets and Intangible Assets under Development

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Cost	8,292.37	7,808.07
Less: Accumulated Amortisation and Impairment	(5,215.84)	(4,459.39)
<b>Net carrying amount</b>	<b>3,076.53</b>	<b>3,348.68</b>
Intangible Assets under Development	122.48	79.96
	<b>3,199.01</b>	<b>3,428.64</b>

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₹ in Crore

	Trade name	Technology and software	Customer related intangible assets	Mining rights	Right to use	Carbon Emission Rights	Total
<b>Cost</b>							
<b>As at April 01, 2017</b>	<b>949.97</b>	<b>2,863.39</b>	<b>2,868.55</b>	<b>458.77</b>	<b>80.98</b>	<b>160.77</b>	<b>7,382.43</b>
Additions	-	47.97	-	124.03	-	63.43	235.43
Deduction/ Adjustments	-	(12.65)	-	-	-	-	(12.65)
Exchange differences	3.65	103.06	98.03	(3.16)	-	1.28	202.86
<b>As at April 01, 2018</b>	<b>953.62</b>	<b>3,001.77</b>	<b>2,966.58</b>	<b>579.64</b>	<b>80.98</b>	<b>225.48</b>	<b>7,808.07</b>
Additions	-	124.51	-	97.41	-	154.28	376.20
Deduction/ Adjustments	-	(18.91)	-	-	-	(168.91)	(187.82)
Exchange differences	57.87	108.83	121.14	(6.16)	-	14.24	295.92
<b>As at March 31, 2019</b>	<b>1,011.49</b>	<b>3,216.20</b>	<b>3,087.72</b>	<b>670.89</b>	<b>80.98</b>	<b>225.09</b>	<b>8,292.37</b>
<b>Accumulated Amortisation and Impairment</b>							
<b>As at April 01, 2017</b>	<b>482.77</b>	<b>1,780.83</b>	<b>1,410.68</b>	<b>82.11</b>	<b>49.64</b>	<b>-</b>	<b>3,806.03</b>
Amortisation for the year	45.89	259.36	145.71	92.39	2.65	-	546.00
Deduction/ Adjustments	-	(12.41)	-	-	-	-	(12.41)
Exchange differences	2.28	68.58	51.14	(2.23)	-	-	119.77
<b>As at April 01, 2018</b>	<b>530.94</b>	<b>2,096.36</b>	<b>1,607.53</b>	<b>172.27</b>	<b>52.29</b>	<b>-</b>	<b>4,459.39</b>
Amortisation for the year	49.76	262.45	157.01	103.58	2.64	-	575.44
Deduction/ Adjustments	-	-	-	-	-	-	-
Exchange differences	30.94	92.49	63.07	(5.49)	-	-	181.01
<b>As at March 31, 2019</b>	<b>611.64</b>	<b>2,451.30</b>	<b>1,827.61</b>	<b>270.36</b>	<b>54.93</b>	<b>-</b>	<b>5,215.84</b>
<b>Net carrying amount</b>							
<b>As at March 31, 2018</b>	<b>422.68</b>	<b>905.41</b>	<b>1,359.05</b>	<b>407.37</b>	<b>28.69</b>	<b>225.48</b>	<b>3,348.68</b>
<b>As at March 31, 2019</b>	<b>399.85</b>	<b>764.90</b>	<b>1,260.11</b>	<b>400.53</b>	<b>26.05</b>	<b>225.09</b>	<b>3,076.53</b>
Useful life (Years)	3 - 20	3 - 10.6	20	11 - 50	5 - 35		
Remaining useful life (Years)	8.05	2.91	8.05	5 - 37			

- (a) Trademarks and customer related intangible assets were established in purchase accounting during acquisition of Novelis Inc. by the Company, whereas Technology and software mainly related to products we license and internally developed software.
- (b) For impairment charges or reversal on above Intangible assets and intangible assets under development, refer Note 41.

## 10. Non-Current Investments

(Fully paid-up unless otherwise stated)

₹ in Crore					
	Face value per Unit	Numbers - As at		Value - As at	
		31.03.2019	31.03.2018	31.03.2019	31.03.2018
<b>Quoted Investments</b>					
Investment in Equity Instruments at FVTOCI					
National Aluminium Company Limited	₹ 5	47,618,555	47,618,555	264.04	316.42
Grasim Industries Limited	₹ 2	28,464,653	28,464,653	2,442.12	2,991.35
Ultra Tech Cement Limited	₹ 10	1,258,515	1,258,515	503.20	497.11
Vodafone Idea Limited - (b)	₹ 10	228,340,226	228,340,226	416.72	1,733.10
Aditya Birla Fashion and Retail Limited	₹ 10	44,982,142	44,982,142	991.18	678.56
Gujarat Narmada Valley Fertilizers & Chemicals Limited	₹ 10	100	100	*	*
Gujarat State Fertilizers & Chemicals Limited	₹ 2	500	500	0.01	0.01
Southern Petrochemical Industries Limited	₹ 10	100	100	*	*
Madras Fertilizer Limited	₹ 10	100	100	*	*
Rashtriya Chemicals and Fertilizers Limited	₹ 10	100	100	*	*
Aditya Birla Capital Limited	₹ 10	39,850,514	39,850,514	387.35	581.62
				<b>5,004.62</b>	<b>6,798.17</b>
<b>Unquoted Investments</b>					
Investment in Equity Instruments at FVTOCI					
Sai Wardha Power Generation Limited	₹ 10	2,830,352	2,830,352	2.83	2.83
Birla International Limited	CHF 100	2,500	2,500	5.97	3.43
Bharuch-Dahej Railway Company Limited	₹ 10	13,530,000	13,530,000	25.75	17.90
Birla Management Centre Services Limited	₹ 10	9,500	7,000	9.72	0.01
				<b>44.27</b>	<b>24.17</b>
Investment in Preference Shares at FVTPL					
Aditya Birla Health Services Limited - 5.25% Redeemable Cumulative	₹ 100	2,500,000	2,500,000	23.57	22.66
Birla Management Centre Services Limited - 9% Redeemable Cumulative	₹ 10	300	300	*	*
				<b>23.57</b>	<b>22.66</b>
Investment in Government Securities at FVTOCI					
6.83% Government of India Bond, 2039	-	2,000,000	2,000,000	18.36	18.14
				<b>18.36</b>	<b>18.14</b>
Investment in Mutual Funds at FVTPL					
Investments in Debt Schemes of Mutual Funds				44.84	-
				<b>44.84</b>	-
				<b>131.04</b>	<b>64.97</b>
				<b>5,135.66</b>	<b>6,863.14</b>

\* Amounts below ₹ 50,000

(a) Aggregate amount of quoted and unquoted investments, market value of quoted investments and aggregate amount of impairment in value of Investments are given below:

Aggregate cost of quoted investments	564.42	539.42
Aggregate market value of quoted investments	5,004.62	6,798.17
Aggregate cost of unquoted investments	82.66	62.02

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

- (b) Effective March 31, 2018, the Company has discontinued the accounting of its investment in Vodafone Idea Limited ("VIL") [formerly known as Idea Cellular Limited ("ICL")] as 'Investment in Associates' as it no longer has significant influence over VIL. Accordingly, the Company has designated its investment in VIL as 'Fair Value through Other Comprehensive Income (FVTOCI)'.

### 11. Loans

(Unsecured, considered good unless otherwise stated)

	₹ in Crore			
	As at 31.03.2019		As at 31.03.2018	
	Current	Non-Current	Current	Non-Current
Security Deposits	58.36	-	66.64	-
Loan to Related Parties - (refer Note 59)	-	50.59	-	50.59
Loan to Employees	12.57	7.07	9.01	7.03
Loan to Others	1.60	0.08	1.83	0.33
	<b>72.53</b>	<b>57.74</b>	<b>77.48</b>	<b>57.95</b>

### 12. Other Financial Assets

(Unsecured, considered good unless otherwise stated)

	₹ in Crore			
	As at 31.03.2019		As at 31.03.2018	
	Current	Non-Current	Current	Non-Current
Derivative Assets - (refer Note 55)	107.41	1,307.32	118.23	1,923.16
Security Deposits				
Unsecured, considered good	141.93	22.37	139.43	35.56
Unsecured, considered doubtful	-	0.35	-	0.35
Less : Allowance for doubtful amount	-	(0.35)	-	(0.35)
Other Deposits *	111.54	215.00	150.52	370.00
Accrued Interests	-	43.99	-	40.87
Project expenditure recoverable from the Government	-	-	-	11.32
Other Receivables				
Unsecured, considered good	-	406.01	-	476.59
Unsecured, considered doubtful	-	64.73	-	40.13
Less : Allowance for doubtful amount	-	(64.73)	-	(40.13)
	<b>360.88</b>	<b>1,994.69</b>	<b>408.18</b>	<b>2,857.50</b>

\* Non-current portion includes restricted earmarked balances with banks of ₹ 68.35 crore (31/03/2018: ₹ 82.55 crore)

### 13. Current Tax

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
	<b>A. Current Tax Assets (Net)</b>	
Non-Current Tax Assets (Net)	284.51	1,246.04
Current Tax Assets (Net)	1,440.84	331.21
	<b>1,725.35</b>	<b>1,577.25</b>
<b>B. Current Tax Liabilities (Net)</b>		
Current Tax Liabilities	1,312.71	1,193.24
	<b>1,312.71</b>	<b>1,193.24</b>

The Group is subject to tax assessments and ongoing proceedings, which are pending before various Tax Authorities. Management periodically evaluates the positions taken in tax returns with respect to such matters, including unresolved tax disputes, which involves interpretation of applicable tax regulations and judicial precedents. Current tax liability and tax asset balances are presented, after recognising as appropriate, provision for taxes payable and contingencies basis Management's assessment of outcome of such ongoing proceedings and amounts that may become payable to the tax authorities. Considering the nature of such estimates and uncertainties involved, the amount of such provisions may change upon final resolution of the matters with tax authorities. Also refer Note 4.

## 14. Deferred Tax Balances

### A. Deferred Tax Assets (Net)

	As at 31.03.2019	As at 31.03.2018
Deferred Tax Assets	2,935.66	1,810.39
Deferred Tax Liabilities	2,132.72	996.94
	<b>802.94</b>	<b>813.45</b>

Major components of Deferred Tax Assets (Net) arising on account of temporary timing differences and movement thereof are given below:

	As at 01.04.2017	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	As at 31.03.2018
<b>Deferred Tax Assets</b>						
Provisions not currently deductible for tax purposes	973.76	205.53	(79.96)	-	6.51	1,105.84
Depreciation and Amortization Expenses	85.5	(15.32)	-	-	9.40	79.58
Tax (losses)/benefit carry forwards, net	348.07	(21.15)	-	-	55.59	382.51
Inventory valuation reserves	24.10	51.09	-	-	(16.27)	58.92
Cash flow hedges	147.02	-	(146.11)	-	(0.91)	(0.00)
MAT Credit entitlement	-	0.01	-	-	-	0.01
Fair value measurements of financial instruments	-	(0.67)	3.99	-	-	3.32
Trade name	96.71	(6.37)	-	-	0.31	90.65
Other temporary differences	73.45	14.89	-	-	1.22	89.56
	<b>1,748.61</b>	<b>228.01</b>	<b>(222.08)</b>	<b>-</b>	<b>55.85</b>	<b>1,810.39</b>
<b>Deferred Tax Liabilities</b>						
Depreciation and Amortization Expenses	376.62	(14.97)	-	-	51.84	413.49
Inventory valuation reserves	188.47	43.30	-	-	1.18	232.95
Cash Flow Hedges	-	-	60.01	-	0.61	60.62
Other temporary differences	237.02	40.00	-	-	12.86	289.88
	<b>802.11</b>	<b>68.33</b>	<b>60.01</b>	<b>-</b>	<b>66.49</b>	<b>996.94</b>
	<b>946.50</b>	<b>159.68</b>	<b>(282.09)</b>	<b>-</b>	<b>(10.64)</b>	<b>813.45</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

₹ in Crore

	As at 01.04.2018	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	As at 31.03.2019
<b>Deferred Tax Assets</b>						
Provisions not currently deductible for tax purposes	1,105.84	(107.03)	46.34	-	11.93	1,057.08
Depreciation and Amortization Expenses	79.58	(28.72)	-	-	0.15	51.01
Tax (losses)/benefit carry forwards, net	382.51	777.64	-	-	9.66	1,169.81
Inventory valuation reserves	58.92	(25.87)	-	-	-	33.05
Cash Flow Hedges	-	-	57.53	-	(0.56)	56.97
Retirement Benefits and Compensated Absences	-	1.45	(0.13)	-	-	1.32
MAT Credit entitlement	0.01	402.14	-	-	-	402.15
Fair value measurements of financial instruments	3.32	0.53	1.88	-	-	5.73
Trade name	90.65	7.59	-	-	5.59	103.83
Other temporary differences	89.56	(40.33)	-	-	5.48	54.71
	<b>1,810.39</b>	<b>987.40</b>	<b>105.62</b>	<b>-</b>	<b>32.25</b>	<b>2,935.66</b>
<b>Deferred Tax Liabilities</b>						
Depreciation and Amortization Expenses	413.49	1,259.11	-	-	10.54	1,683.14
Inventory valuation reserves	232.95	(45.09)	-	-	(32.13)	155.73
Fair value measurements of financial instruments	-	5.37	-	-	-	5.37
Cash Flow Hedges	60.62	-	(65.04)	-	4.42	-
Other temporary differences	289.88	5.60	-	-	(7.00)	288.48
	<b>996.94</b>	<b>1,224.99</b>	<b>(65.04)</b>	<b>-</b>	<b>(24.17)</b>	<b>2,132.72</b>
	<b>813.45</b>	<b>(237.59)</b>	<b>170.66</b>	<b>-</b>	<b>56.42</b>	<b>802.94</b>

Net deferred tax assets includes ₹ 34.45 crore pertaining to Utkal Alumina International Limited including MAT Credit entitlement of ₹ 401.75 Crore.

### B. Deferred Tax Liabilities (Net)

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Deferred Tax Liabilities	9,849.41	9,408.66
Deferred Tax Assets	5,395.94	5,541.45
	<b>4,453.47</b>	<b>3,867.21</b>

Major components of Deferred Tax Liabilities (Net) arising on account of temporary timing differences and movement therein are given below:

	₹ in Crore					
	As at 01.04.2017	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	As at 31.03.2018
<b>Deferred Tax Liabilities</b>						
Depreciation and Amortization Expenses	7,562.05	339.74	-	-	5.12	7,906.91
Inventory Valuation Reserves	355.24	(50.82)	-	-	0.87	305.29
Exchange Differences on Foreign Operations	609.13	20.30	-	-	2.60	632.03
Fair value measurements of financial instruments	180.07	(76.35)	(1.66)	-	-	102.06
MAT Credit Entitlement	(0.01)	0.01	-	-	-	-
Deferred tax on Undistributed earnings	97.01	(97.01)	-	-	-	-
Cash Flow Hedges	57.54	-	289.34	-	-	346.88
Other Temporary Differences	100.23	14.88	-	-	0.38	115.49
	<b>8,961.26</b>	<b>150.75</b>	<b>287.68</b>	<b>-</b>	<b>8.97</b>	<b>9,408.66</b>
<b>Deferred Tax Assets</b>						
Tax (losses)/ benefits carry forward	3,325.88	(695.53)	-	-	0.42	2,630.77
Retirement Benefits and Compensated Absences	90.82	(0.73)	(21.91)	-	0.07	68.25
Provisions currently not deductible	1,406.02	(422.73)	-	-	(0.73)	982.56
MAT credit entitlement	1,140.46	487.07	-	-	-	1,627.53
Depreciation and Amortization Expenses	19.44	(16.60)	-	-	(0.09)	2.75
Other Temporary Differences	-	229.59	-	-	-	229.59
	<b>5,982.62</b>	<b>(418.93)</b>	<b>(21.91)</b>	<b>-</b>	<b>(0.33)</b>	<b>5,541.45</b>
	<b>2,978.64</b>	<b>569.68</b>	<b>309.59</b>	<b>-</b>	<b>9.30</b>	<b>3,867.21</b>

	₹ in Crore					
	As at 01.04.2018	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in  Equity	Exchange Differences	As at 31.03.2019
<b>Deferred Tax Liabilities</b>						
Depreciation and Amortization Expenses	7,906.91	27.05	-	-	122.67	8,056.63
Inventory Valuation Reserves	305.29	97.83	-	-	18.10	421.22
Exchange Differences on Foreign Operations	632.03	129.97	-	-	38.19	800.19
Fair value measurements of financial instruments	102.06	(73.22)	(0.34)	-	0.01	28.51
Deferred tax on Undistributed earnings	-	6.36	-	-	-	6.36
Cash Flow Hedges	346.88	-	28.87	-	-	375.75
Other Temporary Differences	115.49	39.33	-	-	5.93	160.75
	<b>9,408.66</b>	<b>227.32</b>	<b>28.53</b>	<b>-</b>	<b>184.90</b>	<b>9,849.41</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

	₹ in Crore					
	As at 01.04.2018	Recognised in Statement of Profit and Loss	Recognised in OCI	Recognised directly in Equity	Exchange Differences	As at 31.03.2019
<b>Deferred Tax Assets</b>						
Tax (losses)/ benefits carry forward	2,630.77	(777.67)	-	-	28.10	1,881.20
Retirement Benefits and Compensated Absences	68.25	1.83	0.81	-	-	70.89
Cash Flow Hedges	-	-	-	0.42	-	0.42
Provisions currently not deductible	982.56	196.18	-	-	37.75	1,216.49
MAT credit entitlement	1,627.53	374.80	-	-	-	2,002.33
Depreciation and Amortization Expenses	2.75	(0.57)	-	-	0.17	2.35
Other Temporary Differences	229.59	(7.34)	-	-	0.01	222.26
	<b>5,541.45</b>	<b>(212.77)</b>	<b>0.81</b>	<b>0.42</b>	<b>66.03</b>	<b>5,395.94</b>
	<b>3,867.21</b>	<b>440.09</b>	<b>27.72</b>	<b>-0.42</b>	<b>118.87</b>	<b>4,453.47</b>

### C. Unrecognised Deferred Taxes

- (a) As at March 31, 2019 the Group had cumulative earnings in respect of certain subsidiaries of approximately ₹ 19,462.39 crore (31/03/2018: ₹ 19,870.93 crore) for which the Group has not provided deferred tax liability as the Group believe that the reversal of such temporary difference is not probable in the foreseeable future.
- (b) The following Deferred Tax Assets have not been recognised at the reporting date as it is not probable of recovery.

#### Unexpiring

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
i. Unabsorbed Depreciation and other expenses not deductible for tax	519.94	4,342.07
ii. Tax losses carry forwards	55.64	42.15
iii. Unused tax credits	495.45	444.41

#### Expiring

i. Carried forward Tax losses	3,691.03	4,077.50
Period of expiry	FY 2027 - 2039	FY 2018 - 2037
ii. Unused tax credits	388.18	332.52
Period of expiry	FY 2020 - 2033	FY 2018 - 2033
iii. Tax losses on long term capital gains carry forward	258.71	264.57
Period of expiry	FY 2019 - 2025	FY 2018 - 2026

Deferred tax assets and deferred tax liabilities have been offset wherever the Group has a legally enforceable right to set-off current tax assets against current tax liabilities and where the deferred tax assets and deferred tax liabilities relate to income tax levied by the same taxation authority. The Company has not recognised deferred tax on temporary differences relating to depreciation which originate and reverse during the tax holiday period.



## 15. Other Assets

(Unsecured, considered good unless otherwise stated)

₹ in Crore

	As at 31.03.2019		As at 31.03.2018	
	Non-Current	Current	Non-Current	Current
Capital Advance	549.81	-	208.85	-
Trade Advances and Deposits	21.89	1,038.61	26.64	877.66
Prepaid Expenses	109.15	473.97	108.30	421.60
Prepaid lease rent for leasehold lands	682.11	15.83	687.16	15.59
Deposits with Government authorities	-	33.58	-	45.56
Others - (a)				
Unsecured, considered good	641.34	1,513.62	258.72	1,694.86
Unsecured, considered doubtful	9.98	112.73	9.98	106.31
Less : Allowance for doubtful amount	(9.98)	(112.73)	(9.98)	(106.31)
	<b>2,004.30</b>	<b>3,075.61</b>	<b>1,289.67</b>	<b>3,055.27</b>

(a) Primarily include unutilised tax credits and claims with indirect tax authorities.

## 16. Inventories

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Raw Materials	5,855.88	5,529.94
Work-in-Process	10,748.12	10,620.22
Finished Goods	3,303.67	3,326.77
Stores and Spares	1,749.67	1,702.13
Coal and Fuel	536.35	452.13
Packing Materials	0.10	0.20
	<b>22,193.79</b>	<b>21,631.39</b>

(a) Above inventories include goods in transit of ₹ 3,682.06 crore (31/03/2018: ₹ 3,057.55 crore).

(b) For Inventories hypothecated against secure short-term borrowings, refer Note 31.

(c) Fair value hedges are mainly used to hedge the exposure to change in fair value of commodity price risks. The fair value adjustment remains part of the carrying value of inventory and taken to profit and loss when the inventory is sold.

(d) The Group write downs inventories (net of reversal) to net realizable value amounted to ₹ 155.35 crore (31/03/2018: ₹ 24.56 crore). These were recognized as expense and included in 'Cost of Material Consumed' and 'Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade' in the Consolidated Statement of Profit and Loss.

(e) Inventories of the Company includes bulk material of coal and bauxite lying at yards and precious metals of gold and silver lying at smelter and refinery aggregating to ₹ 1,730 Crore (31/03/2018: ₹ 1,870 Crore).

## 17. Current Investments

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Investment in Debentures and Bonds at FVTPL	224.92	620.90
Investment in Government Securities at FVTOCI	70.03	67.89
Investment in Debt Schemes of Mutual Funds at FVTPL	3,560.36	3,214.69
	<b>3,855.31</b>	<b>3,903.48</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

- (a) Aggregate amount of quoted and unquoted investments, market value of quoted investments and aggregate amount of impairment in value of Investments are given below:

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Aggregate cost of quoted investments	3,460.81	2,905.28
Aggregate market value of quoted investments	3,541.28	3,198.05
Aggregate cost of unquoted investments	312.20	702.71

### 18. Trade Receivables

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Trade Receivables		
Secured, considered good	20.96	20.91
Unsecured, considered good	11,444.06	9,943.08
Unsecured, credit impaired	82.97	82.44
	<b>11,547.99</b>	<b>10,046.43</b>
Loss Allowances - (b)	(88.23)	(86.62)
	<b>11,459.76</b>	<b>9,959.81</b>

- (a) No trade or other receivable are due from directors or other officers of the Company either severally or jointly with any other person. Further no trade or other receivable are due from firms or private companies respectively in which any director is a partner, or director or member.
- (b) Loss allowances includes additional provision of ₹ 5.26 crore (31/03/2018: ₹ 4.18 crore) made on account of expected credit loss on Trade Receivables.

### 19. Cash and Cash Equivalents

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Balance with Banks:		
Deposits with initial maturity of less than three months	1,764.09	1,185.92
Current Accounts	5,170.24	5,183.68
Cheques and drafts on hand - (a)	7.49	16.36
Cash on hand	0.35	0.39
Short term liquid investments in mutual funds	2,176.57	1,658.59
	<b>9,118.74</b>	<b>8,044.94</b>

- (a) Includes ₹ 0.04 crore (31/03/2018: ₹ 9.4 crore ) remittance in transit.
- (b) There is no repatriation restriction with regard to cash and cash equivalents as the end of reporting period and prior periods.

### 20. Bank balances other than Cash and Cash Equivalents

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Earmarked balances with banks - (a)	12.10	11.83
Deposits with banks initial maturity more than 3 months	655.72	0.99
	<b>667.82</b>	<b>12.82</b>

- (a) Includes unclaimed dividend of ₹ 4.73 crore(31/03/2018: ₹ 4.87 crore)

## 21. Assets or Disposal Group Classified as Held for Sale

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
A Assets or Disposal Group Classified as Held for Sale		
Non-Current Assets classified as held for sale - (refer Note 57 E)	13.47	13.47
Assets of Disposal Group classified as held for sale - (refer Note 57 C)	115.73	95.41
	<b>129.20</b>	<b>108.88</b>
B Liabilities Associated with Disposal Group Classified as Held for Sale or Held for Distribution to Owners		
Liabilities associated with assets held for sale - (refer Note 57 E)	0.01	0.01
Liabilities associated with Disposal Group classified as held for Sale - (refer Note 57 C)	0.02	0.02
	<b>0.03</b>	<b>0.03</b>
C Details of Assets and Liabilities of Disposal Group classified as held for sale are given below:		
(a) Assets or Disposal Group Classified as Held for Sale or as Held for Distribution to Owners		
Freehold Land	24.61	24.65
Plant and Equipment	75.13	42.60
Other Assets	15.99	28.16
	<b>115.73</b>	<b>95.41</b>
The Group is in the process of disposing the above assets.		
(b) Liabilities of Disposal Group classified as held for sale:		
Liabilities associated with disposal group held for sale	0.02	0.02
<b>Total Liabilities</b>	<b>0.02</b>	<b>0.02</b>

## 22. Equity Share Capital

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
<b>Authorized:</b>		
2,500,000,000 (31.03.2018: 2,500,000,000) Equity Shares of ₹ 1/- each	250.00	250.00
25,000,000 (31.03.2018: 25,000,000) Redeemable Cumulative Preference Shares of ₹ 2/- each	5.00	5.00
	<b>255.00</b>	<b>255.00</b>
<b>Issued:</b>		
2,246,083,891 (as at 31.03.2018: 2,245,516,548) Equity Shares of ₹ 1/- each - (a)	224.61	224.55
	<b>224.61</b>	<b>224.55</b>
<b>Subscribed and Paid-up:</b>		
2,246,076,494 (as at 31.03.2018: 2,245,509,151) Equity Shares of ₹ 1/- each fully paid-up	224.61	224.55
Less: Face value of 546,249 (31.03.2018: 546,249) Equity Shares forfeited	0.05	0.05
	<b>224.56</b>	<b>224.50</b>
Add: Forfeited Shares (Amount originally Paid-up)	0.02	0.02
	<b>224.58</b>	<b>224.52</b>
Less: 16,316,130 (31.03.2018: 16,316,130) Equity Shares held as Treasury Shares - (b)	1.63	1.63
Less: 5,558,727 (31.03.2018: Nil) Equity Shares held as Treasury Shares by ESOP Trust - (refer Note 23 (a) (vii))	0.56	-
	<b>222.39</b>	<b>222.89</b>

(a) Issued Equity Share Capital includes 7,397 Equity Shares (31.03.2018: 7,397) of ₹ 1/- each issued on Rights basis kept in abeyance due to legal case pending.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

- (b) Treasury shares are held by Trident Trust which represents 16,316,130 equity shares of ₹ 1/- each fully paid-up of the Company issued, pursuant to a Scheme of Arrangement approved by the Hon'ble High Courts of Mumbai and of Allahabad, vide their Orders dated October 31, 2002, and 18th November, 2002, respectively, to the Trident Trust, created wholly for the benefit of the Company and is being managed by trustees appointed by it. The tenure of the Trust is up to January 23, 2024.

- (c) Reconciliation of shares outstanding at the beginning and at the end of the reporting period:

	Year ended 31.03.2019		Year ended 31.03.2018	
	Numbers	₹ in Crore	Numbers	₹ in Crore
Equity Shares outstanding at the beginning of the period	2,228,646,772	222.89	2,226,937,960	222.72
Equity Shares allotted pursuant to exercise of ESOS	567,343	0.06	1,708,812	0.17
Equity shares purchased from market pursuant to ESOS	(5,558,727)	(0.56)	-	-
Equity Shares outstanding at the end of the period	<b>2,223,655,388</b>	<b>222.39</b>	<b>2,228,646,772</b>	<b>222.89</b>

- (d) The Company has one class of equity shares having a par value of ₹ 1/- per share. Each shareholder is eligible for one vote per share held. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amounts, in proportion to their shareholding.

- (e) Details of shareholders holding more than 5% Equity Shares in the Company on reporting date:

	As at 31.03.2019		As at 31.03.2018	
	Numbers of Shares held	Percentage of Holding *	Numbers of Shares held	Percentage of Holding *
IGH Holdings Private Limited	349,963,487	15.58%	349,963,487	15.59%
Turquoise Investment and Finance Private Limited	124,012,468	5.52%	124,012,468	5.52%
ICICI Prudential Retirement Fund	155,362,808	6.92%	-	-
Morgan Guaranty Trust Company of New York	153,348,431	6.83%	151,820,799	6.76%
Life Insurance Corporation of India and its Associates	178,075,294	7.93%	158,621,850	7.07%

\* Percentage have been calculated on the basis of total number of shares outstanding (before adjusting treasury shares. Refer footnote (b) above).

- (f) Shares reserved for issue under options:

The Company has reserved equity shares for issue under the Employee Stock Option Schemes. (refer Note 47)

- (g) The Company during the preceding 5 years:

- Has not allotted shares pursuant to contracts without payment received in cash.
- Has not issued shares by way of bonus shares.
- Has not bought back any shares.

- (h) The Board of Directors of the Company has recommended final dividend of ₹ 1.20 per share aggregating to ₹ 269.46 crore for the year ended March 31, 2019. Dividend distribution tax on proposed final dividend is ₹ 54.86 crore.

## 23. Other Equity

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Share Application Money pending Allotment	0.11	0.16
Equity Component of Other Financial Instruments	3.78	3.78
Reserve and Surplus:		
Capital Reserve	147.36	147.36
Capital Redemption Reserve	103.67	103.67
Securities Premium Account	8,206.28	8,197.17
Debenture Redemption Reserve	1,050.00	900.00
Employees Stock Options Outstanding	21.23	15.83
Treasury Shares held by ESOP Trust	(123.04)	-
Special Reserve	19.22	17.12
Business Reconstruction Reserve	5,799.30	5,799.30
General Reserve	21,369.65	21,369.65
Retained Earnings	16,005.98	11,094.86
	<b>52,599.65</b>	<b>47,644.96</b>
Other Reserves:		
Gain/ (Loss) on Equity Instruments Fair Value through OCI	2,991.13	4,764.09
Gain/ (Loss) on Debt Instruments Fair Value through OCI	3.54	2.00
Effective portion of Cash Flow Hedge	199.96	262.35
Cost of Hedging Reserve	501.98	647.30
Foreign Currency Translation Reserve	979.19	1,304.24
	<b>4,675.80</b>	<b>6,979.98</b>
	<b>57,279.34</b>	<b>54,628.88</b>

(a) Brief description of items of other equity are given below:

**i. Share Application Money pending Allotment**

Share application money pending allotment represents amount received from employees who has exercised Employee Stock Option Scheme (ESOS) for which shares are pending allotment as on balance sheet date.

**ii. Capital Reserve**

The Group has created capital reserve pursuant to past mergers and acquisitions.

**iii. Capital Redemption Reserve**

The Group has created capital redemption reserve as per the requirement of the Companies Act.

**iv. Securities Premium Account**

Securities premium reserve is used to record the premium on issue of shares. The reserve is utilized in accordance with the provision of the Act.

**v. Debenture Redemption Reserve**

The Group is required to create a debenture redemption reserve out of the profits which is available for payment of dividend, for the purpose of redemption of debentures.

**vi. Employees Stock Options Outstanding**

The employee stock option account is used to recognize the grant date fair value of options issued to employees under stock option schemes.

**vii. Treasury Shares held by ESOP Trust**

The Company has created an "Hindalco Employee Welfare Trust" (Trust) for providing share-based payments to its employees (including its Subsidiaries employees). The Company uses Trust as a vehicle for distributing shares to employees covered under Scheme. Trust buys shares of the Company from the market, for giving shares to employees.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

Shares held by Trust are treated as Treasury shares. Equity instruments that are reacquired (treasury shares) are recognised at cost and deducted from equity. No gain or loss is recognised in the Consolidated Statement of Profit and Loss on purchase, sale, issue or cancellation of Equity instruments. Share options whenever exercised, would be utilised from these treasury shares.

### viii. Special Reserve

Certain subsidiaries of the Group are registered as non-banking financial company and as per requirement of Section 45-IC of the Reserve Bank of India Act, 1934 every non-banking financial company shall create a reserve fund and transfer therein a sum not less than twenty per cent of its net profit every year as disclosed in the profit and loss account and before any dividend is declared.

### ix. Business Reconstruction Reserve

The Company had formulated a scheme of financial restructuring under sections 391 to 394 of the Companies Act 1956 ("the Scheme") between the Company and its equity shareholders approved by the High Court of judicature of Bombay to deal with various costs associated with its organic and inorganic growth plan. Pursuant to this, a separate reserve account titled as Business Reconstruction Reserve ("BRR") was created during the year 2008-09 by transferring balance standing to the credit of Securities Premium Account of the Company for adjustment of certain expenses as prescribed in the Scheme.

Accordingly, the Company had transferred ₹ 8,647.37 crore from Securities Premium Account to BRR and till March 31, 2018, ₹ 2,848.07 crore have been adjusted by the Company against BRR. During the year ended March 31, 2019, no expenses adjusted against BRR (31/03/2018: ₹ Nil).

### x. General Reserve

The Group has created this reserve by transferring certain amount out of the profit at the time of distribution of dividend.

### xi. Retained Earnings

Amount of retained earnings represents accumulated profit and losses of the Group as on reporting date. Such profits and losses are after adjustment of payment of dividend, transfer to any reserves as statutorily required and adjustment for realised gain/loss on derecognition of equity instruments measured at FVTOCI.

### xii. Gain (loss) on equity and debt instruments accounted as FVTOCI

The Group has elected to recognize changes in the fair value of certain investments in other comprehensive income. These changes are accumulated within the FVTOCI equity investments reserve and FVTOCI debt investment reserve within equity.

### xiii. Effective portion of Cash Flow Hedge

The Group uses hedging instruments as part of its risk management policy for commodity and foreign currency risk as described in note no 55.

### xiv. Cost of Hedging Reserve

The Group designates the spot component of cross currency interest rate swap as hedging instruments in cash flow hedge relationship. The Group defers changes in the forward element of cross currency interest rate swap in the cost of hedging reserve. The deferred cost of hedging are included in the initial cost of the related hedged items when it is recognized or reclassified to the consolidated statement of profit or loss when the hedged item effects the consolidated statement of profit and loss.

### xv. Foreign Currency Translation Reserve

Foreign Currency Translation reserve includes all resulting exchange differences arising from (a) translating the assets and liabilities of the Group's foreign operations into Indian Rupees using exchange rates prevailing at the end of each reporting period and (b) translating income and expense items of the foreign operations at the average exchange rates for the period.

(b) Movement of each item of other equity is presented in Consolidated Statement of Changes in Equity (SOCE).

## 24. Non-Current Borrowings

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Non-Current Portion	Current Maturities *	Total	Non-Current Portion	Current Maturities *	Total
<b>Secured</b>						
Debentures - (a)	5,990.83	-	5,990.83	5,989.00	-	5,989.00
Term Loans:						
From Banks						
Rupee Term Loans - (b)	11,588.47	-	11,588.47	13,208.85	0.87	13,209.72
Foreign Currency Term Loans - (c)	12,248.85	128.00	12,376.85	10,973.59	732.40	11,705.99
Finance Lease obligations - (g)	38.67	12.15	50.82	76.66	58.50	135.16
	<b>29,866.82</b>	<b>140.15</b>	<b>30,006.97</b>	<b>30,248.10</b>	<b>791.77</b>	<b>31,039.87</b>
<b>Unsecured</b>						
Senior Notes - (d)	18,113.57	-	18,113.57	17,013.58	-	17,013.58
Term Loans:						
From Banks						
Foreign Currency Term Loans - (e)	5.11	1.21	6.32	611.71	9.83	621.54
Deferred Payment Liabilities - (f)	46.11	16.31	62.42	0.87	-	0.87
	<b>18,164.79</b>	<b>17.52</b>	<b>18,182.31</b>	<b>17,626.16</b>	<b>9.83</b>	<b>17,635.99</b>
	<b>48,031.61</b>	<b>157.67</b>	<b>48,189.28</b>	<b>47,874.26</b>	<b>801.60</b>	<b>48,675.86</b>

\* Current maturities of long-term debt and finance lease obligations disclosed under the head "Other Financial Liabilities (Current)"

### (a) Debentures comprise of following:

₹ in Crore

Redemption	Date	As at 31.03.2019		As at 31.03.2018	
		Gross Amount	Carrying Value	Gross Amount	Carrying Value
30,000 9.55% Redeemable Non Convertible Debentures of ₹ 10 lakhs each	25-04-2022	3,000.00	2,997.43	3,000.00	2,996.99
15,000 9.55% Redeemable Non Convertible Debentures of ₹ 10 lakhs each	27-06-2022	1,500.00	1,496.07	1,500.00	1,495.21
15,000 9.60% Redeemable Non Convertible Debentures of ₹ 10 lakhs each	02-08-2022	1,500.00	1,497.33	1,500.00	1,496.80
		<b>6,000.00</b>	<b>5,990.83</b>	<b>6,000.00</b>	<b>5,989.00</b>

All the above Debentures are secured by all the moveable both present and future (except moveable assets of Mahan Aluminium Project, Aditya Aluminium Project, Kalwa plant, Silvassa Plant and Current Assets) and certain immoveable properties of the Company.

### (b) Secured Rupee Term Loans from Banks comprise of following:

- The term loans from banks of ₹ 2,947.87 crore (carrying value: ₹ 2,925.91 crore) are secured by a first ranking charge/ mortgage/ security interest in respect of all the moveable fixed assets and all the immoveable properties of Mahan Aluminium Project, both present and future. ₹ 2,857.64 crore (carrying value: ₹ 2,835.68 crore) is to be repaid in 16 quarterly installments commencing from June 2026. ₹ 90.23 crore is to be repaid in 30 quarterly installments commencing from June 2020. The rate of interest of this loan is based on MCLR 3 Months plus spread of 0.10%.
- The term loan of 6,299.25 crore (carrying value: ₹ 6,260.75 crore) is secured by a first ranking charge/ mortgage/ security interest in respect of all the moveable and immovable fixed assets of Aditya Aluminium Project both present and future. During the year, the Company has prepaid ₹ 1,574.81 crore of loan from banks and covering period from May 2022 to February 2024. The loan is to be repaid in 26 quarterly installments commencing from May 2024. The rate of interest of this term loan is based on MCLR 3 Months plus spread of 0.10%.
- The term loan of Group's subsidiary Utkal Alumina International Limited (Utkal) of ₹ 2,424 crore (carrying value ₹ 2,401.81 crore), is secured by (a) first ranking pari passu mortgage/ Security Interest in respect of all the

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immovable properties (excluding the forest land and land surrendered for rehabilitation and resettlement colony) (b) first ranking charge on movable assets (including movable machinery, machinery spares, tools and accessories) both present and future, pertaining to the project (c) second charge on the current assets of Utkal (excluding cash, cash equivalents and investments) both present and future.

This term loans are repayable in 60 quarterly installments as per the agreed repayment schedule commenced from December 31, 2015. During the year ended March 31, 2018, Utkal has prepaid all instalments of the loan due up to June & September 30, 2025 to respective banks. The balance principal would be paid as per remaining schedule in quarterly installments up to September 30, 2030.

The rate of interest of this rupee term loans is based on SBI MCLR 3 months with spread of 0.10% /Axis Bank MCLR 3 months.

### (c) Secured Foreign Currency Term Loan from Banks comprise of following:

#### i. Foreign currency term loan from Bank of Tokyo Mitsubishi (BTMU)

Foreign currency term loan includes term loan from Bank of Tokyo Mitsubishi (BTMU) of USD 40 million (gross ₹ 276.74 crore, carrying value ₹ 272.60 crore) and USD 22.79 million (gross ₹ 157.68 crore, carrying value ₹ 155.22 crore). BTMU loan is secured by a pari-passu first charge on all movable fixed assets of Mahan Aluminium Project, both present and future. Both BTMU loans have a bullet repayment to be made at the end of the tenor which is March 31, 2022 and June 30, 2022, respectively. The interest rate of this BTMU loans is LIBOR with spread of 1.35%.

#### ii. 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, 2019, there is USD 0.20 million (₹ 1.42 crores) of BNDES loans due within one year. The interest rate on the BNDS loans is 7.05%.

#### iii. Floating rate Term Loan facility

The senior secured credit facilities of Novelis Inc. consists of a) USD 1.8 billion five-year secured term loan credit facility (Term Loan Facility) and (ii) a USD 1 billion (₹ 6,918.50 crores) five-year asset based loan facility (ABL Revolver). The interest rate of this floating rate term loan facility is 4.45%.

The senior secured credit facilities contain various affirmative covenants, including covenants with respect to Novelis Inc. (Novelis) 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 its obligations. The senior secured credit facilities also include various customary negative covenants and events of default, including limitations on Novelis's 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 Novelis'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 USD 100 million (or, in the case of the Term loan Facility, under the ABL Revolver regardless of the amount outstanding). Substantially all of Novelis's assets are pledged as collateral under the senior secured credit facilities.

As of March 31, 2019, the facility was 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 had a provision that allowed the facility to be increased by an additional USD 500 million to USD 1 billion (₹ 3,459.25 crores to ₹ 6,918.50 crores), subject to lenders providing commitments for the increase.

#### iv. Term Loan Facility for the proposed Aleris acquisition

In the second quarter of fiscal 2019, Novelis signed a definitive agreement to acquire Aleris, a global supplier of rolled aluminum products for USD 2.6 billion (₹ 17,988.1 crores), including the assumption of debt. In November 2018, Novelis amended the existing Term Loan Facility to, among other things, allow the incurrence of the financing



contemplated to close the proposed Aleris acquisition, which is subject to customary closing conditions and approvals. Novelis also secured financing by entering into a commitment letter with certain financial institutions, which was subsequently superseded by the agreements detailed below:

In December 2018, Novelis entered into an amendment (the "Term Loan Increase Joinder Amendment") to its existing Term Loan Facility, which provides for the commitments of certain financial institutions to provide, subject to customary closing conditions (including the concurrent closing of the Aleris acquisition), up to USD 775 million of incremental term loans under existing term loan credit agreement for purposes of funding a portion of the consideration payable in connection with the proposed Aleris acquisition. The incremental term loans, once borrowed, will be subject to the same voluntary and mandatory prepayment provisions, events of default and affirmative and negative covenants as the existing loans under the Term Loan Facility (as amended by the November 2018 amendments), will mature in five years from the borrowing date of the incremental loans), will be subject to 0.25% quarterly amortization payments and will accrue interest at LIBOR (as defined in the Term Loan Facility) plus 1.75%. The incremental term loans will be guaranteed by AV Metals Inc., Novelis Inc. and certain other subsidiaries (including subsidiaries of Aleris following closing of the proposed acquisition) and secured on a pari passu basis with Novelis's existing term loans by security interests in substantially all of the assets of Novelis and the guarantors, subject to the existing intercreditor agreement.

The existing loans under our Term Loan Facility mature on June 2, 2022, and are subject to 0.25% quarterly amortization payments. The loans under the Term Loan Facility accrue interest at LIBOR plus 1.85%.

The existing Term Loan Facility in Novelis 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 Novelis's election without penalty or premium. The Term Loan Facility allows for additional term loans to be issued in an amount not to exceed USD 300 million (₹ 2,075.55 crores) (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.

**(d) Unsecured Senior Notes comprise of following:**

On August 29, 2016, Novelis Corporation, an indirect wholly owned subsidiary of Novelis Inc., issued USD 1.15 billion (₹ 7,956.28 crores) 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. The interest rate on the 2024 Notes senior notes is 6.25% and are due in August 2024.

On September 14, 2016, Novelis Corporation issued USD 1.5 billion (₹ 10,377.75 crores) 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 interest rate on the 2026 Notes is 5.875% and are due in September 2026.

**(e) Unsecured Foreign Currency Term Loan from Banks comprise of following:**

**Korean Bank Loans**

As of March 31, 2019, Novelis Korea had USD 0.9 million (KRW 1 billion) (₹ 6.32 crores) of outstanding long-term loans with various banks due within one year. All these loan carries variable interest rates of 1.75%.

**(f) Deferred Payment Liabilities**

Deferred payment liabilities include Sales tax deferral liability in the Company of ₹ 0.87 crore and Deferred Purchase Payments on Acquisition of AluInfra Asset at Novelis. On July 23, 2018, Novelis Switzerland, an indirectly wholly owned subsidiary of Novelis Inc. acquired real and personal property from Constellium Valais SA for USD 249 million (₹ 1,736.55 crores). Out of total purchase price, USD 8.9 million (₹ 61.55 crores) is to be paid over a period of 5 years through July 2023. This facility carries interest rates of 7.5%.

**(g) Finance Lease Obligations**

The Group has entered into various finance lease arrangements mainly for plant and equipment, furniture and fixture for a term ranging from 5 to 25 years. The legal title to these items vests with their lessors. Some of the arrangements carries an option to the Group to purchase the underlying equipment at a certain point of time at a nominal price and in other arrangements, ownership of the asset is transferred to the Group without any additional payment at end of the

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lease term. There are no restrictions imposed by lease arrangements except for in the arrangement of taking Ammonia storage facility on lease, wherein there was a lock-in period of initial 6 years. There are no sub-lease arrangements entered in to by the Group. Obligations under finance lease are secured against respective assets obtained under finance lease arrangements.

The Group's finance lease obligations, future minimum lease payments and their present value are following:

	₹ in Crore			
	Minimum lease payments		Present Value of lease liabilities	
	31.03.2019	31.03.2018	31.03.2019	31.03.2018
Not later than 1 year	16.32	66.33	12.15	58.50
Later than 1 year and not later than 5 years	36.60	72.74	31.17	64.56
Later than 5 years	10.13	16.14	7.50	12.10
<b>Total minimum lease payments</b>	<b>63.05</b>	<b>155.21</b>	<b>50.82</b>	<b>135.16</b>
Less: Amount representing finance charges	(12.23)	(20.05)	-	-
<b>Present value of minimum lease payment payments</b>	<b>50.82</b>	<b>135.16</b>	<b>50.82</b>	<b>135.16</b>

During the year ended March 31, 2019, the company acquired real and personal property that was initially leased from Constellium at Sierre rolling facility, Switzerland. This transaction resulted in decrease in finance lease liabilities by ₹ 80.19 crore (USD 11.59 Million). (refer Note 6 (c))

### (h) Net Debt Reconciliation

	₹ in Crore				
	Liabilities from financing activities			Financial Assets used for hedging financial liabilities	Total
	Non Current Borrowings	Current Borrowings	Finance Lease Obligations		
<b>Balance as at April 01, 2017</b>	<b>57,987.27</b>	<b>6,605.25</b>	<b>179.69</b>	<b>2.42</b>	<b>64,774.63</b>
Cash Flows (Net)	(8,194.76)	(4,027.32)	(61.18)	-	(12,283.26)
Acquisition - finance leases	-	-	9.98	-	9.98
Changes arising from obtaining or losing control of subsidiaries or other business	-	33.49	-	-	33.49
Foreign Exchange Adjustments	127.35	324.93	3.07	-	455.35
Fair Value Changes - (refer Note 33 (c))	(65.50)	-	-	(0.08)	(65.58)
Debt Issuance Costs and Amortisation (Net)	23.92	-	-	-	23.92
Interest Expense *	3,124.60	530.28	11.76	-	3,666.64
Interest Paid *	(3,032.25)	(618.88)	(8.16)	0.08	(3,659.21)
Other Changes/Reclassification	(595.25)	561.69	-	-	(33.56)
<b>Balance as at April 01, 2018</b>	<b>49,375.38</b>	<b>3,409.44</b>	<b>135.16</b>	<b>2.42</b>	<b>52,922.40</b>
Cash Flows (Net)	(2,319.72)	971.50	(93.09)	-	(1,441.31)
Acquisition - finance leases	-	-	6.10	-	6.10
Foreign Exchange Adjustments	1,631.02	(87.09)	2.65	(0.14)	1,546.44
Fair Value Changes - (refer Note 33 (c))	(75.39)	-	-	-	(75.39)
Debt Issuance Costs and Amortisation (Net)	54.90	-	-	-	54.90
Interest Expense *	3,305.47	264.97	5.92	0.12	3,576.48
Interest Paid *	(3,158.63)	(248.35)	(5.92)	-	(3,412.90)
Other Changes/Reclassification	183.53	(55.75)	-	(0.08)	127.70
<b>Balance as at March 31, 2019</b>	<b>48,996.56</b>	<b>4,254.72</b>	<b>50.82</b>	<b>2.32</b>	<b>53,304.42</b>

\* Interest expenses and interest paid relates to borrowings and finance leases.

## 25. Trade Payables

₹ in Crore

	As at 31.03.2019		As at 31.03.2018	
	Non-Current	Current	Non-Current	Current
Total Outstanding Dues of Micro and Small Enterprises	-	15.12	-	5.16
Total Outstanding Dues other than Micro and Small Enterprises	1.55	20,707.73	24.04	20,399.64
	<b>1.55</b>	<b>20,722.85</b>	<b>24.04</b>	<b>20,404.80</b>

## 26. Other Non-Current Financial Liabilities

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Derivative liabilities	110.38	119.96
Capital creditors	3.79	7.33
Security and other deposits	2.28	2.28
Others	63.01	53.82
	<b>179.46</b>	<b>183.39</b>

## 27. Other Current Financial Liabilities

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Current maturities of Long-term Debts	145.52	743.10
Current maturities of Finance Lease obligations	12.15	58.50
Interest accrued but not due on Borrowings	887.96	846.83
Investor Education and Protection Fund		
Unpaid Dividends - (a)	4.93	5.08
Application/call money due for refund	-	0.31
Unpaid matured debentures and interest accrued thereon	-	0.02
Derivative Liabilities	1,080.89	1,308.99
Derivative matured, pending settlement	86.14	269.17
Capital Creditors	1,740.65	1,217.69
Security and other Deposits	27.24	28.04
Debentures - (b)	3.00	3.00
Others	103.66	89.90
	<b>4,092.14</b>	<b>4,570.63</b>

- (a) These figures do not include any amount, due and outstanding, to be credited to "Investor Education and Protection Fund" except ₹ 0.07 crore (31/03/2018: ₹ 0.07 crore) which is held in abeyance due to legal cases pending.
- (b) In terms of Debenture Subscription Agreement between Utkal Alumina International Limited ('UAIL'), subsidiary of the Group, and Orissa Mining Corporation Limited ('OMCL'), UAIL issued during the year, a Zero Coupon Unsecured Redeemable Non-convertible Debentures of ₹ 3.00 crore to OMCL towards its obligation to pay OMCL an amount equivalent to 15% per annum on ₹ 20.00 crore as return up to March 31, 2019 which is due for redemption at par on September 30, 2019.

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### 28. Provisions

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Non-Current	Current	Total	Non-Current	Current	Total
Employee Benefits	6,451.80	1,030.87	7,482.67	6,130.64	832.14	6,962.78
Environmental Contingencies	7.74	84.38	92.12	20.04	29.95	49.99
Assets Retirement Obligation	410.30	4.06	414.36	416.10	-	416.10
Enterprise Social Responsibility	219.62	38.27	257.89	133.33	12.54	145.87
Renewable Power Obligation	-	98.63	98.63	-	151.77	151.77
Legal Matters	-	475.29	475.29	-	473.07	473.07
Others	350.65	246.58	597.23	380.94	372.97	753.91
	<b>988.31</b>	<b>947.21</b>	<b>1,935.52</b>	<b>950.41</b>	<b>1,040.30</b>	<b>1,990.71</b>
	<b>7,440.11</b>	<b>1,978.08</b>	<b>9,418.19</b>	<b>7,081.05</b>	<b>1,872.44</b>	<b>8,953.49</b>

- (a) The Group have made provisions towards environmental, asset retirement, social responsibility, renewable power, restructuring, rehabilitation, carbon emission, legal and other obligations at various locations involving considerable uncertainties towards amount and timing of outflow of economic resources. The provisions are discounted over the management expected timing of related cash flows.
- (b) Movements in each class of provisions are set out below:

₹ in Crore

	Environmental Contingencies	Assets Retirement Obligation	Enterprise Social Responsibility	Renewable Power Obligation	Legal Matters	Others *	Total
<b>As at April 01, 2017</b>	<b>43.42</b>	<b>272.64</b>	<b>142.49</b>	<b>402.36</b>	<b>143.50</b>	<b>771.82</b>	<b>1,776.23</b>
Recognised/Reversed	11.72	114.08	-	152.76	420.11	249.75	948.42
Used/Paid	(5.52)	(4.59)	(5.17)	(403.35)	(82.97)	(120.79)	(622.39)
Unwinding of discounts	0.87	18.38	8.55	-	-	0.85	28.65
Exchange adjustment	(0.50)	15.59	-	-	(7.57)	(142.55)	(135.03)
Other	-	-	-	-	-	(5.17)	(5.17)
<b>As at April 01, 2018</b>	<b>49.99</b>	<b>416.10</b>	<b>145.87</b>	<b>151.77</b>	<b>473.07</b>	<b>753.91</b>	<b>1,990.71</b>
Recognised/Reversed	64.26	(6.91)	107.91	165.10	25.95	167.46	523.77
Used/Paid	(22.06)	(4.94)	(4.65)	(219.63)	(30.79)	(293.65)	(575.72)
Unwinding of discounts	0.83	25.50	8.76	-	-	-	35.09
Exchange adjustment	(0.13)	(16.16)	-	-	(12.71)	(34.56)	(63.56)
Other	(0.77)	0.77	-	1.39	19.77	4.07	25.23
<b>As at March 31, 2019</b>	<b>92.12</b>	<b>414.36</b>	<b>257.89</b>	<b>98.63</b>	<b>475.29</b>	<b>597.23</b>	<b>1,935.52</b>

\* Primarily includes provisions towards restructuring, rehabilitation, tax matters, etc.

### 29. Contract Liabilities

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
Advance from Customers	176.62	-
	<b>176.62</b>	<b>-</b>

### 30. Other Liabilities

₹ in Crore

	As at 31.03.2019		As at 31.03.2018	
	Non-Current	Current	Non-Current	Current
Advance from Customers	-	-	-	263.42
Customer Refund Liability	-	89.38	-	-
Deferred Income - (a) & (b)	1,166.56	92.55	1,074.81	75.48
Statutory dues Payables	6.14	932.66	6.02	839.65
Others Payable	102.65	116.18	95.41	142.82
	<b>1,275.35</b>	<b>1,230.77</b>	<b>1,176.24</b>	<b>1,321.37</b>

- (a) Includes grant related to Export Promotion Capital Goods (EPCG) in non- current portion of ₹ 614.98 crore (as at 31/03/2018 ₹ 636.00 crore) and in current portion of ₹ 21.01 crore (as at 31/03/2018 ₹ 21.01 crore).
- (b) Includes deferred government grant income in non- current portion of ₹ 531.41 crore (as at 31/03/2018 ₹ 416.68 crore) and in current portion of ₹ 63.21 crore (as at 31/03/2018 ₹ 44.98 crore).

### 31. Current Borrowings

₹ in Crore

	As at	As at
	31.03.2019	31.03.2018
<b>Secured</b>		
Loans from Banks		
Rupee Loans - (a) & (b)	122.66	50.13
Foreign Currency Loans	-	14.38
Loans from Others		
Foreign Currency Loans	4.12	5.50
	<b>126.78</b>	<b>70.01</b>
<b>Unsecured</b>		
Loans from Banks		
Rupee Loans	-	2.49
Foreign Currency Loans	3,313.10	3,321.38
Loans from Others		
Rupee Loans	785.85	0.10
Foreign Currency Loans	-	4.18
	<b>4,098.95</b>	<b>3,328.15</b>
	<b>4,225.73</b>	<b>3,398.16</b>

- (a) Working Capital Loan for Aluminium Business, granted under the Consortium Lending Arrangement, are secured by a first pari-passu charge on entire stocks of raw materials, work-in-process, finished goods, consumable stores and spares and also book debts pertaining to the Company's Aluminium business, both present and future. Working Capital Loan of State Bank of India for the Copper business is secured by a first pari passu charge stocks of raw materials, work-in-process, finished goods and consumable stores and spares and also book debts and other moveable assets of Copper business, both present and future.
- (b) Cash Credit facilities for Utkal Alumina International Limited (Utkal) with banks are availed under the consortium lending arrangement and are secured by (a) first pari-passu charge by hypothecation of investments classified as "held for trading", entire stocks of raw materials, semi-finished and finished goods, consumable stores and spares, investments classified as "available for sale", stock-in trade and book debts pertaining to the company's business, both present and future and (b) second charge on Utkal's fixed assets. The borrowings carry floating interest rate at MCLR (ranging from 3 months to one year) + Spread (ranging from 25 bps to 55 bps).

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

### 32. Revenue from Operations

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Revenue from contract with customers		
Sale of Products - (a), (b) & (c)	128,723.22	115,151.27
Sale of Services - (d)	1,022.35	44.36
	<b>129,745.57</b>	<b>115,195.63</b>
Other Operating Revenues - (e) & (c)	796.68	624.07
	<b>130,542.25</b>	<b>115,819.70</b>
Reconciliation of revenue recognised with contract price:	₹ in Crore	
Contract Price	130,828.92	
Adjustments for:		
Refund Liabilities and discounts	(1,282.86)	
Hedging gain/ (loss)	242.18	
Others - Provisionally priced contracts	(42.67)	
Revenue from Contracts with Customers	<b>129,745.57</b>	

- (a) Includes Excise duty ₹ Nil (Previous year: ₹ 636.89 crore - till June 30, 2017). Subsequent to introduction of Goods and Service Tax (GST) with effect from July 01, 2017, revenue is reported excluding GST.
- (b) Includes sale of Di-ammonium phosphate (DAP) including nutrient based subsidy of Phosphorus (P) & Potassium (K) ₹ 311.17 crore (year ended 31/03/2018: ₹ 186.98 crore).
- (c) Sales of Copper products and precious metals are accounted for provisionally, pending finalization of price and quantity. Variations are accounted for in the period of settlement. Final price receivable on sale of above products for which provisional price was not finalized are realigned at year end forward LME/LMBA rate and is being presented as part of other operating revenue (previous year presented under revenue from sale of products). Revenue from subsequent variation in price movement for year ended 31/03/2019 is ₹ 42.67 crore (previous year ended 31/03/2018: ₹ 9.60 crore), including subsequent variation in price movement from trading sales of ₹ 20.00 crore (previous year ended 31/03/2018: ₹ Nil).
- (d) Sale of Services represents Freight and Insurance on certain Export contracts as well as shipping and handling charges related to FOB shipping point, which are identified as separate performance obligation and have been accounted for as service revenue.
- (e) Includes Government Grant in the nature of sales related export incentives and other benefits of ₹ 393.33 crore (31/03/2018: ₹ 315.93 crore).
- (f) Impact on the adoption of Ind AS 115:

The Group has applied Ind AS 115 for the first time by using the modified retrospective method of adoption with the date of initial application of April 1, 2018. Under this method, the cumulative effect of initially applying Ind AS 115 is recognised as an adjustment to the opening balance of retained earnings as at April 1, 2018. Comparative prior period has not been adjusted.

Entities applying the modified retrospective method can elect to apply the revenue standard only to the contracts that are not completed as at the date of initial application (that is, they would ignore the effect of applying the revenue standard to contracts that were completed prior to the date of initial application).

The adoption of the new standard did not have a material impact as at 1st April 2018 for the revenue contracts that are not completed as at that date.

- (g) Disaggregated information in respect of revenue is analysed by the country, in which customers are located and is given below:

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>India</b>	<b>31,961.16</b>	<b>24,484.91</b>
<b>Outside India</b>		
Germany	19,209.82	18,381.87
Korea	12,363.17	9,264.57
China	1,645.90	4,358.75
Brazil	14,346.60	11,928.02
USA	34,148.21	26,050.30
Others	16,867.39	21,351.28
	<b>130,542.25</b>	<b>115,819.70</b>

- (h) The following table presents the amounts by which each financial statement line item is affected in the current year ended March 31, 2019 by the application of Ind AS 115 as compared with the previous revenue recognition requirements. Advance from customer has been included as part of contract liabilities and provision for discount payable to customer has been separately presented as refund liabilities under other current liabilities. Line items that were not affected by the changes have not been included.

₹ in Crore

Balance Sheet	March 31, 2019 without adoption of Ind AS 115	Increase/ (decrease)	March 31, 2019 as reported
<b>Current Liabilities</b>			
Trade Payables	20,812.23	(89.38)	20,722.85
Other Current Liabilities	1,318.01	(87.24)	1,230.77
Contract Liabilities	-	176.62	176.62

Sale from services have been presented separately under Revenue from operations. These pertain to shipping and handling services identified as separate performance obligation.

- (i) Applying the practical expedient as given in Ind AS 115, the Group has not disclosed the remaining performance obligations related disclosures for contracts where revenue recognized corresponds directly with value to the customer of the entity's performance completed to date.

### 33. Other Income

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
Interest Income		
On Non-Current Investments	1.37	1.37
On Current Investments	65.96	102.28
On Others - (a)	475.69	338.10
Dividend Income		
On Non-Current Investments	45.13	39.38
On Current Investments	0.15	1.75
Gains (losses) on Financial Assets Measured at fair value through Profit and Loss (Net)		
On sale of Financial Assets FVTPL	517.80	627.78
On change of fair value of Financial Assets FVTPL	(194.54)	(212.89)
Profit/ (Loss) on Property, Plant and Equipment and Intangibles Assets sold/ discarded (Net)	(67.06)	(65.15)
Rent Income	15.44	14.65
Liabilities no longer required written back	40.00	54.79
Government Grants - (b)	84.50	78.66
Other Non-Operating Income (Net) - (c)	142.67	123.85
	<b>1,127.11</b>	<b>1,104.57</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

- (a) Interest Income on others mainly includes ₹ 257.40 Crore (year ended 31/03/2018: ₹ 197.80 Crore) of interest received from Income Tax Department.
- (b) Grant income mainly includes carbon emission credit allotments of ₹ 83.74 (31/03/2018: ₹ 78.66) for certain operations in Europe and Asia and grant income associated with fixed assets investments in North America, South America and Asia of Group's subsidiary Novelis Inc.
- (c) Includes gain on modification of borrowings of ₹ 75.39 crore (31/03/2018: ₹ 65.50) resulting from change in amount and timing of expected cash flow payments on term loans.

### 34. Cost of Materials Consumed

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Raw Materials	78,066.58	70,871.12
Packing Materials	2.04	1.17
	<b>78,068.62</b>	<b>70,872.29</b>

### 35. Purchases of Stock-in-Trade

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Materials Purchased	235.03	4.92
	<b>235.03</b>	<b>4.92</b>

### 36. Changes in Inventories of Finished Goods and Work-in-Progress

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>Opening Stocks</b>		
Work-in-Progress	10,620.22	8,948.86
Finished Goods	3,326.77	3,025.14
	<b>13,946.99</b>	<b>11,974.00</b>
<b>Less: Closing Stocks</b>		
Work-in-Progress	10,748.12	10,620.22
Finished Goods	3,303.67	3,326.77
	<b>14,051.79</b>	<b>13,946.99</b>
	<b>(104.80)</b>	<b>(1,972.99)</b>
Change in Excise Duty on Stock (Net)	-	(55.52)
Currency Translation Adjustment (Net)	490.45	37.09
	<b>385.65</b>	<b>(1,991.42)</b>

### 37. Employee Benefits Expenses

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>Salaries and Wages</b>	6,371.09	6,153.90
Post Employment Benefits:		
Contribution to Provident Fund and other Defined Contribution Funds (refer Note 49)	611.84	666.19
Gratuity and other Defined Benefit Plans (refer Note 49)	642.56	505.74
Employee Share-based Payment (refer Note 47)		
Equity-settled Share-based Payment	9.70	1.94
Cash-settled Share-based Payment	135.03	138.49
Employee Welfare Expenses	1,306.51	1,191.98
	<b>9,076.73</b>	<b>8,658.24</b>
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	(33.64)	(13.46)
	<b>9,043.09</b>	<b>8,644.78</b>



Impact of Hon'ble Supreme Court judgment on computation of provident fund contribution:

The Hon'ble Supreme Court of India ("SC") by their order dated February 28, 2019, in the case of Surya Roshani Limited v/s EPFO, set out the principles based on which allowances paid to the employees should be identified for inclusion in basic wages for the purposes of computation of Provident Fund contribution. Subsequently, a review petition against this decision has been filed and is pending before the SC for disposal.

The Company is awaiting the outcome of the review petition, and also directions from EPFO, if any, to assess any potential impact on the Company. Considering the above and uncertainty involved in the above matter, the Company has not made any adjustments in the consolidated financial statements and will continue to monitor the same.

### 38. Power and Fuel

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Power and Fuel Expenses	9,618.23	8,614.11
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	(0.03)	-
	<b>9,618.20</b>	<b>8,614.11</b>

### 39. Finance Costs

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Interest Expenses on Financial Liabilities not at FVTPL	3,606.69	3,744.58
(Gain) /Loss on Foreign Currency Transactions and Translation (Net)	12.34	0.90
Other Borrowing Costs	181.81	180.74
	<b>3,800.84</b>	<b>3,926.22</b>
Less: Transferred to Capital Work-in-Progress - (a)	(22.80)	(15.49)
	<b>3,778.04</b>	<b>3,910.73</b>

(a) Weighted average capitalisation rate applicable to the borrowings that are outstanding during the year, other than borrowings made specifically for the purpose of obtaining a qualifying asset is ranging from 5.30% to 8.67%. (31/03/2018: 4.88 % to 10.85%)

### 40. Depreciation and Amortisation

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Depreciation of Property, Plant and Equipment	4,200.97	3,959.67
Depreciation of Investment Properties	0.57	0.57
Amortisation of Intangible Assets	575.44	546.00
	<b>4,776.98</b>	<b>4,506.24</b>

### 41. Impairment Loss/ (Reversal) (Net)

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Impairment Loss	-	100.25
Impairment Reversal	(10.75)	-
Impairment Loss/ (Reversal) (Net)	<b>(10.75)</b>	<b>100.25</b>

The Group assess the recoverability of property, plant and equipment and 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, change in utilization of property and equipment and intangible assets, or market factors such as metal price and input costs.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

If any indication exists and an impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount and it will be its new cost basis. For a depreciable 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.

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 "Impairment Loss/(Reversal) (Net)" in the consolidated statement of profit and loss. For the year ended March 31, 2019, Novelis Inc. reversed impairment loss of ₹ 10.75 crore related to its property, plant & equipment in Gottingen, Germany facility.

For the year ended March 31, 2018, Novelis Inc., a subsidiary of the Company, had recorded ₹ 100.25 crore as impairment charges as under:

- ₹ 64.58 crore related to plant and equipment in the Gottingen, Germany facility. This was related to the production litho material line that was shut down.
- ₹ 30.50 crore related to intangible asset under development in Europe. This is related to the SAP software that would no longer be developed.
- ₹ 5.17 crore in CWIP items within projects related to Research and Development facility.

The recoverable value of all the impaired assets discussed above was nil.

### 42. Other Expenses

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Consumption of Stores and Spares	2,803.73	2,617.50
Repairs to Buildings	236.01	207.81
Repairs to Machinery	1,911.90	1,701.74
Rates and Taxes	116.32	134.61
Rental Charges (refer Note 50)	320.59	295.56
Insurance Charges	156.79	168.35
Payments to Auditors	52.67	61.03
Research and Development	531.19	435.60
Freight and Forwarding Expenses (Net) - (a)	4,487.27	3,455.11
Allowance for doubtful debt, loans, advances and receivables (Net)	18.07	27.67
Bad debt, loans, advances and receivables written off/ (written back) (Net)	2.92	5.50
Donation - (b)	31.61	25.76
Directors' Fees and Commission	10.37	11.55
(Gain)/ Loss on assets held for sale	-	0.89
(Gain)/ Loss on Change in Fair Value of Derivatives (Net)	(14.26)	(204.43)
(Gain)/ Loss on Foreign Currency Transactions and Translation (Net)	55.03	(20.19)
Cost of own Manufactured Products Capitalized/ Used	(60.31)	(29.03)
Premium on Coal Extraction	747.31	761.10
Miscellaneous Expenses	6,412.09	5,535.79
	<b>17,819.30</b>	<b>15,191.92</b>
Less: Transferred to Capital Work-in-Progress/ Intangible Assets under development	(127.41)	(74.42)
	<b>17,691.89</b>	<b>15,117.50</b>

- Freight and forwarding expenses is net of freight subsidy of ₹ 19.74 crore (31/03/2018: ₹ 21.48 crore) on sale of DAP.
- Donation includes ₹ 13.25 crore (31/03/2018: ₹ 6.75 crore) paid to AB General Electoral Trust (erstwhile General Electoral Trust) as political donation.

### 43. Exceptional Items (Net)

Exceptional Items consist of the followings:

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Exceptional Income - (a), (b) & (c)	-	2,160.62
Exceptional Expenses - (d), (e) & (f)	-	(386.46)
	<b>-</b>	<b>1,774.16</b>

Details of Exceptional Items are given below:

- During the year ended March 31, 2018, Novelis Korea Limited, a subsidiary of the Group, sold 49.9% of its shares resulting in the Group recognizing a net gain of ₹ 1,782.46 crore on the transaction. (refer Note 58)
- The Group has discontinued the accounting of its Investment in Vodafone Idea Limited ("VIL") [formerly known as Idea Cellular Limited ("ICL")] as 'Investment in Associates' effective March 31, 2018 and designated the investment in VIL as "Fair Value through Other Comprehensive Income (FVTOCI)". This change has resulted into a gain of ₹ 305.10 crore. (refer Note 57 D)
- Based on Honorable Supreme Court judgment dated October 13, 2017 and considering the prospective contribution required to be made to the DMF by the holder of a mining lease or a prospecting license-cum-mining lease in addition to the payment of royalty, an amount of ₹ 73.06 crore had been written back during financial year 2017-18, which was provided/ paid in earlier years relating to period for which such levy was held invalid or not applicable.
- Based on the Honorable Supreme Court judgment dated September 22, 2017, in the matter of proportionate reduction in input tax credit in case of sale in course of inter-state trade, commerce and branch transfer under the Gujarat Value Added Tax Act, 2003 to which the Company is not a party, an amount of ₹ 27.42 crore related to earlier periods has been provided during the financial year 2017-18.
- Based on the Honorable Supreme Court judgment dated September 15, 2017, in the matter of Transit Fee on forest produce (as applicable, amongst others, in the States of Uttar Pradesh and Madhya Pradesh), an amount of ₹ 139.35 crore has been provided during the financial year 2017-18 towards probable obligation that may arise.
- Based on the Honorable Supreme Court judgment dated August 2, 2017, in the matter of Common Cause V/s Union of India (to which the Company is not a party), provisional demands are raised on the Company for its bauxite mines. The Company has challenged the purported demand and obtained stay on the demands. As the matter is pending final determination and considering the implication of existing litigation, the Company has provided ₹ 219.69 crore during the financial year 2017-18.

### 44. Income Tax Expenses

The Group's income tax expenses and effective tax rate reconciliation given below:

#### (a) Amount recognised in Statement of Profit and Loss

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>Current Tax</b>		
Current Tax Expenses for the year	1,910.45	1,742.42
Adjustments for current tax of prior periods (Net)	(0.04)	(78.25)
	<b>1,910.41</b>	<b>1,664.17</b>
<b>Deferred Tax</b>		
Deferred Income Tax Expenses - (ii)	1,454.62	900.36
MAT Credit Entitlement	(776.94)	(490.36)
	<b>677.68</b>	<b>410.00</b>
<b>Total Income Tax Expenses</b>	<b>2,588.09</b>	<b>2,074.17</b>

- Applicable Indian Statutory Income Tax rate for the year ended March 31, 2019 and March 31, 2018 is 34.944% and 34.608%, respectively.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

- ii. Deferred income tax expenses during the year ended March 31, 2019, includes the effect of change in tax rates in Novelis Inc. which is primarily related to a state legislative change in the United States. During the year ended March 31, 2018, the effect of change in tax rates was attributable to the Tax Cuts and Jobs Act (the "Act"), which was enacted on December 22, 2017. Among its numerous changes, the Act reduces the U.S. corporate rate from 35% to 21% effective January 1, 2018 for Novelis. The result is a blended U.S. corporate rate of 31.55% for fiscal year 2018. The impact of the lower statutory rate applied to year-to-date earnings has been recorded in the year ended March 31, 2018. Also recorded in the same year is an estimated non-cash income tax benefit of ₹ 306.64 crore for the remeasurement of deferred tax assets and liabilities to reflect the anticipated rate at which the deferred items will be realized.
- iii. MAT Credit entitlement includes ₹ 401.75 crore pertains to Utkal Alumina International Limited.

### (b) Reconciliation of Effective Tax Rate

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Profit/ (Loss) before Tax	8,083.10	8,157.04
Indian Statutory Income Tax Rate (%)	34.944%	34.608%
Tax expenses using the Company's domestic tax rate	2,824.56	2,822.99
Tax effect of adjustments to reconcile reported income tax expense:		
Tax credits and other concessions	(110.00)	(145.93)
Income exempt from tax	(32.00)	(88.05)
Expenses not deductible in determining taxable profit	58.60	158.18
Tax on income (domestic and foreign) at rates different from statutory income tax rate	(192.88)	(564.84)
Adjustments pertaining to prior years	11.91	(71.83)
Change in previously unrecognised tax loss, tax credit or temporary difference of a prior period	(300.98)	(206.62)
Uncertain tax positions	24.22	21.05
Tax on Undistributed Earnings	6.36	-
Share of profit of equity accounted investees	-	(97.01)
Deferred tax not recognised on carry forward losses and benefits	164.05	193.62
Foreign exchange translation & remeasurement	162.18	62.32
Others	(27.93)	(9.71)
Total Tax expenses recognised in the Consolidated Statement of Profit and Loss	<b>2,588.09</b>	<b>2,074.17</b>

### 45. Other Comprehensive Income

The disaggregation of changes to other comprehensive income (OCI) by each class is given below:

	Year ended 31.03.2019			Year ended 31.03.2018		
	Gross	Tax	Net	Gross	Tax	Net
<b>(a) Items that will not be reclassified to Profit and Loss</b>						
Actuarial Gain/ (Loss) on Defined Benefit Obligations	(160.86)	47.45	(113.41)	105.79	(101.84)	3.95
Share in Equity Accounted Investments	0.15	(0.04)	0.11	0.06	(0.02)	0.04
Change in Fair Value of Financial Instruments designated as FVTOCI	(1,776.01)	3.05	(1,772.96)	580.60	5.09	585.69
	<b>(1,936.72)</b>	<b>50.46</b>	<b>(1,886.26)</b>	<b>686.45</b>	<b>(96.77)</b>	<b>589.68</b>
<b>(b) Items that will be reclassified to Profit and Loss</b>						
Change in Fair Value of Debt Instruments designated as FVTOCI	2.37	(0.83)	1.54	(1.56)	0.56	(1.00)
Effective portion of Cash Flow Hedges	(126.08)	15.25	(110.83)	1,110.15	(367.18)	742.97
Cost of Hedging Reserve	(223.38)	78.06	(145.32)	361.02	(128.29)	232.73
Gain/ (Loss) on Hedge of Net Investment	-	-	-	(110.81)	-	(110.81)
Foreign Currency Translation Reserve	(325.05)	-	(325.05)	1,537.85	-	1,537.85
	<b>(672.14)</b>	<b>92.48</b>	<b>(579.66)</b>	<b>2,896.65</b>	<b>(494.91)</b>	<b>2,401.74</b>
<b>Total Other Comprehensive Income</b>	<b>(2,608.86)</b>	<b>142.94</b>	<b>(2,465.92)</b>	<b>3,583.10</b>	<b>(591.68)</b>	<b>2,991.42</b>

## 46. Earnings/ (Loss) per Share (EPS)

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
Profit/ (Loss) for the year		
As per Statement of Profit and Loss	5,495.01	6,082.87
Less: Non-Controlling Interests share in Profit/ (Loss)	(0.66)	(0.05)
Profit/ (Loss) attributable to Owners of the Company	<b>5,495.67</b>	<b>6,082.92</b>
Weighted average number of shares used in the calculation of EPS:		
Weighted average number of equity shares for basic EPS	2,227,573,655	2,227,789,728
Dilutive impact of Employee Stock Options Scheme	1,126,728	1,292,718
Weighted average number of equity shares for diluted EPS	2,228,700,383	2,229,082,446
Face value of per equity share (₹)	1.00	1.00
Earnings/ (Loss) per share		
Basic (₹)	24.67	27.30
Diluted (₹)	24.66	27.29

Treasury shares are excluded from weighted average numbers of shares used in the calculation of EPS.

## 47. Employee share-based payments

The Group has formulated employee share-based payment schemes with objective to attract and retain talent and align the interest of employees with the Group as well as to motivate them to contribute to its growth and profitability. The Group views employee stock options as instruments that would enable the employees to share the value they create for the Group in the years to come. At present two employee share-based payment schemes are in operation at Hindalco Industries Limited, the Parent, whereas three employee share-based payment schemes are in operation at Novelis Inc., a subsidiary of the Group. Details of these employee share-based schemes are given below:

### A. Employee share-based payments at Parent

#### Employee Stock Option Scheme 2006 (“ESOS 2006”):

The shareholders of the Company has approved on 23/01/2007 an Employee Stock Option Scheme 2006 (“ESOS 2006”), formulated by the Company, under which the Company may issue 3,475,000 stock options to its permanent employees in the management cadre, whether working in India or out of India, including Managing and the Whole Time Directors of the Company, in one or more tranches. The ESOS 2006 is administrated by the Compensation Committee of the Board of Directors of the Company (“the Committee”). Each stock option when exercised would be converted into one fully paid-up equity share of ₹ 1/- each of the Company. The stock options will vest in 4 equal annual installments after completion of one year of service from the date of grant. The exercise price shall be average price of the equity shares of the Company in the immediate preceding seven day period on the date prior to the date on which the ESOS compensation committee finalises the specific numbers of Options to be granted to the employees discounted by such percentage not exceeding 30 % (thirty percent) to be determined by ESOS Compensation Committee in the best interest of the various stake holders in the prevailing market conditions. The maximum period of exercise is 5 years from the date of vesting and these stock options do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/ expired stock options are also available for grant. Further, on 23/09/2011 the ESOS 2006 has been partially modified and by which the Company may issue 6,475,000 stock options to its eligible employees.

Under the ESOS 2006, till 31/03/2019 the Committee has granted 4,328,159 stock options (31/03/2018: 4,328,159 stock options) to its eligible employees out of which 1,819,941 stock options (31/03/2018: 1,819,941 stock options) has been forfeited/ expired and are available for grant as per term of the Scheme. A summary of movement of the stock options and weighted average exercise price (WAEP) is given below:

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

	Year ended 31.03.2019		Year ended 31.03.2018	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	868,701	118.69	1,002,139	118.65
Granted during the year	-	-	-	-
Forfeited during the year	-	-	-	-
Exercised during the year	(52,330)	118.35	(133,438)	118.35
Expired during the year	-	-	-	-
Outstanding at year end	<b>816,371</b>	<b>118.71</b>	<b>868,701</b>	<b>118.69</b>
Vested and Exercisable at year end	<b>816,371</b>	<b>118.71</b>	<b>868,701</b>	<b>118.69</b>

Under ESOS 2006, as at 31/03/2019 the range of exercise prices for stock options outstanding was ₹ 118.35 to ₹ 118.73 (31/03/2018: ₹ 118.35 to ₹ 118.73) whereas the weighted average remaining contractual life for the stock options outstanding was 1.96 years (31/03/2018: 2.83 years).

### Employee Stock Option Scheme 2013 (“ESOS 2013”):

On 10/09/2013, the shareholders of the Company has approved another Employee Stock Option Scheme 2013 (“ESOS 2013”), under which the Company may grant up to 5,462,000 Options (comprising of Stock Options and/ or Restricted Stock Units (RSU)) to the permanent employees in the management cadre and Managing and Whole time Directors of the Company and its subsidiary companies in India and abroad, in one or more tranches. The ESOS 2013 is administered by the Compensation Committee of the Board of Directors of the Company (“the Committee”). The stock options exercise price would be determined by the Committee whereas the RSUs exercise price shall be the face value of the equity shares of the Company As at the date of grant of RSUs. Each stock option and each RSU entitles the holders to apply for and be allotted one fully paid-up equity share of ₹ 1/- each of the Company upon payment of exercise price during exercise period. The stock options will vest in 4 equal annual installments after completion of one year of the services from the date of grant, whereas RSU will vest upon completion of three years of services from the date of grant. The maximum period of exercise is 5 years from the date of vesting and these stock option/ RSU do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/ expired stock options and RSUs are also available for grant.

In terms of ESOS 2013, till 31/03/2019 the Committee has granted 2,250,754 stock options and 2,252,254 RSUs (31/03/2018: 2,250,754 stock options and 2,252,254 RSUs) to the eligible employees of the Company and some of its subsidiary companies. Further, 2,31,224 stock options and 2,48,954 RSUs (31/03/2018: 2,31,224 stock options and 2,48,954 RSUs) has been forfeited/ expired and are available for grant as per term of the Scheme. A summary of movement of stock options and RSUs and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2019				Year ended 31.03.2018			
	Stock Options		RSUs		Stock Options		RSUs	
	Number	WAEP (₹)	Number	WAEP (₹)	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	968,665	119.16	460,555	1.00	1,953,262	119.91	1,046,945	1.00
Granted during the year	-	-	-	-	-	-	-	-
Forfeited during the year	-	-	-	1.00	(4,385)	119.45	-	1.00
Re-instated during the year	-	-	-	-	8,772	151.30	-	-
Exercised during the year	(367,395)	115.45	(147,618)	1.00	(988,984)	120.64	(586,390)	1.00
Expired during the year	-	-	-	-	-	-	-	-
Outstanding at year end	<b>601,270</b>	<b>121.89</b>	<b>312,937</b>	<b>1.00</b>	<b>968,665</b>	<b>119.16</b>	<b>460,555</b>	<b>1.00</b>
Vested and Exercisable at year end	<b>515,759</b>	<b>119.43</b>	<b>235,955</b>	<b>1.00</b>	<b>837,045</b>	<b>118.51</b>	<b>272,239</b>	<b>1.00</b>

Under ESOS 2013, the range of exercise prices for stock options outstanding as at 31/03/2019 was ₹ 73.60 to ₹ 167.15 (31/03/2018: ₹ 73.60 to ₹ 167.15) whereas exercise price in case of RSUs was ₹ 1 (31/03/2018: ₹ 1). The weighted average remaining contractual life for the stock options and RSUs outstanding as at 31/03/2019 was 2.78 years and 3.69 years respectively (31/03/2018: 3.96 years and 4.68 years respectively).

### Employee Stock Option Scheme 2018 (“ESOS 2018”):

The shareholders of the company has approved on 21/09/2018 an Employee Stock Option Scheme 2018 (“ESOS 2018”), formulated by the company, under which the Company may grant not more than 13,957,302 (Comprising of Stock Options and Restricted Stock Units) to its permanent employees of the company in management cadre including Managing and the Wholetime Director of the company and its subsidiary companies in India and abroad, in

one or more tranches. The ESOS 2018 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company (“the Committee”) and the Hindalco Employees Welfare Trust (“Trust”). The Stock options exercise price would be determined by the Committee whereas the RSU exercise price shall be the face value of the equity shares of the company as at the date of grant of RSUs. Each stock option and each RSU entitles the holders to apply for and be allotted one fully paid-up equity share of ₹ 1/- each of the Company upon payment of exercise price during the exercise period. The stock options will vest in 4 equal annual installments after completion of one year of the services from the date of grant, whereas RSU will vest upon completion of three years of services from the date of grant. The maximum period of exercise is 5 years from the date of vesting and these stock options/RSUs do not carry rights to dividends or voting rights till the date of exercise. Further, forfeited/expired stock options and RSUs are also available for grant.

In terms of ESOS 2018, till 31/03/2019 the Committee has granted 4,299,563 stock options and 1,276,137 RSUs (31/03/2018: Nil stock options and Nil RSUs) to the eligible employees of the Company and some of its subsidiary companies. A summary of movement of stock options and RSUs and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2019			
	Stock Options		RSUs	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	-	-	-	-
Granted during the year	4,299,563	218.75	1,276,137	1.00
Forfeited during the year	-	-	-	-
Re-instated during the year	-	-	-	-
Exercised during the year	-	-	-	-
Expired during the year	-	-	-	-
Outstanding at year end	<b>4,299,563</b>	<b>218.75</b>	<b>1,276,137</b>	<b>1.00</b>
Vested and Exercisable at year end	-	-	-	-

Under ESOS 2018, the range of exercise prices for stock options outstanding as at 31/03/2019 was ₹ 205.45 to ₹ 218.80 whereas exercise price in case of RSUs was ₹ 1. The weighted average remaining contractual life for the stock options and RSUs outstanding as at 31/03/2019 was 7.20 years and 7.76 years respectively.

The fair values at grant date of stock options granted during the year ended 31/03/2019 was ₹ 83.28 to ₹ 115.23 and fair values in case of RSUs was ₹198.57 to ₹ 208.86 respectively. The fair value has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk free rate of interest. The assumptions used for fair valuation of awards are given below:

	Year ended 31.03.2019			
	Tranche I		Tranche II	
	Stock Option	RSU	Stock Option	RSU
Grant date	10-12-18	10-12-18	26-03-19	26-03-19
Exercise price (₹)	218.80	1.00	205.45	1.00
Life of options granted (years)	4.43-7.43 yrs	8 years	4.43-7.43 yrs	8 years
Share price on grant date (₹)	218.80	218.80	208.50	208.50
Expected volatility (%)	37.48%	37.48%	36.99%	36.99%
Expected dividend (%)	0.58%	0.58%	0.58%	0.58%
Risk free interest rate (%)	7.36 %-7.51%	7.57%	6.91%-7.38%	7.50%

The expected dividend is based on last year data and is not necessarily indicative. The expected volatility was determined based on the historical share price volatility over the past period depending on life of the options granted which is indicative of future periods and which may not necessarily be the actual outcome.

#### Stock Appreciation Rights ('SAR'):

The Company had granted 956,522 Share Appreciation Rights (“SAR 2013”) to its eligible employee to be vested in 4 equal annual installments after completion of one year of the service from the date of grant (i.e. 09/10/2013). The SAR 2013 is administered by the Nomination and Remuneration Committee of the Board of Directors of the Company (“the Committee”). The SAR 2013 have performance linked vesting conditions which are decided by the committee,

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The options shall lapse in case of performance linked vesting conditions are not met. The Exercise price of the SAR is ₹ 118.73. The SAR can be exercised within 3 years from the date of vesting or within 6 years from the date of grant, whichever is earlier.

A Summary of movement of SAR and weighted average exercise price (WAEP) is given below:

	Year ended 31.03.2019		Year ended 31.03.2018	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	956,522	118.73	956,522	118.73
Granted during the year	-	-	-	-
Forfeited during the year	-	-	-	-
Re-instated during the year	-	-	-	-
Exercised during the year	(478,261)	118.73	-	-
Expired during the year	-	-	-	-
Outstanding at year end	<b>478,261</b>	<b>118.73</b>	<b>956,522</b>	<b>118.73</b>
Vested and Exercisable at year end	<b>478,261</b>	<b>118.73</b>	<b>956,522</b>	<b>118.73</b>

The fair values as at 31/03/2019 was ₹ 90.15 (31/03/2018: ₹ 99.09 - ₹ 106.29). The fair value has been carried out by an independent valuer by applying Black and Scholes Model. The inputs to the model include the exercise price, the term of option, the share price at grant date and the expected volatility, expected dividends and the risk free rate of interest. The assumptions used for fair valuation are given below:

	Year ended 31.03.19	Year ended 31.03.18
Grant date	09-10-13	09-10-13
Valuation Date	31-03-19	31-03-18
Exercise price (₹)	118.73	118.73
Expected volatility (%)	36.88%	29.31%
Expected dividend (%)	0.58%	0.51%
Risk free interest rate (%)	6.17%	6.24%-6.70%

The weighted average remaining contractual life for the SAR as at 31/03/2019 is 0.53 years (31/03/2018: 1.03 years)

### B. Employee share-based payments schemes at Novelis Inc (“Novelis”), a subsidiary of the Group:

The Novelis’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 (Phantom RSUs), and Novelis Performance Units (Novelis PUs) are granted to certain executive officers and key employees. The Hindalco and Novelis SARs vest at the rate of 25% or 33% per year, subject to the achievement of an annual performance target, and expire seven years from their original grant date. The performance criterion for vesting of the Hindalco and Novelis 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. 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 exercise. The amount of cash paid to settle Hindalco and Novelis SARs are limited to two and a half or three times the target payout, depending on the plan year. The Hindalco and Novelis SARs do not transfer any shareholder rights of Hindalco or Novelis to a participant. The Hindalco and Novelis SARs are classified as liability awards and are remeasured at each reporting period until the SARs are settled or cancelled. Novelis expenses each fiscal year’s SAR tranche(s) over the employee requisite service period, which results in the expense being recorded on an accelerated basis.

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



In May 2016, the Novelis's board of directors approved the issuance of Novelis PUs which have a fixed USD 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 Novelis PUs awards are not based on the Hindalco or Novelis stock prices and therefore are accounted for in accordance with Ind AS 19 - Employee Benefits.

**(a) Hindalco Stock Appreciation Rights (Hindalco SARs)**

	Year ended 31.03.2019		Year ended 31.03.2018	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	11,197,974	134.32	15,161,233	122.16
Granted during the year	2,359,347	230.95	2,324,230	186.11
Forfeited during the year	(185,640)	137.96	(358,965)	131.94
Exercised during the year	(2,727,951)	123.80	(5,928,524)	123.54
Expired during the year	-	-	-	-
Outstanding at year end	<b>10,643,730</b>	<b>161.80</b>	<b>11,197,974</b>	<b>134.32</b>
Vested and Exercisable at year end	<b>4,244,193</b>	<b>141.77</b>	<b>2,923,178</b>	<b>134.62</b>

**(b) Novelis Stock Appreciation Rights (Novelis SARs)**

	Year ended 31.03.2019		Year ended 31.03.2018	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	92,223	5,546.45	108,549	5,420.12
Granted during the year	-	-	-	-
Forfeited during the year	(12,819)	6,017.53	(7,518)	5,623.77
Exercised during the year	(5,458)	4,928.59	(8,808)	4,095.42
Expired during the year	-	-	-	-
Outstanding at year end	<b>73,946</b>	<b>5,956.99</b>	<b>92,223</b>	<b>5,546.45</b>
Vested and Exercisable at year end	<b>67,674</b>	<b>6,090.09</b>	<b>71,153</b>	<b>5,744.62</b>

**(c) Phantom Restricted Stock Units (Phantom RSUs)**

	Year ended 31.03.2019		Year ended 31.03.2018	
	Number	WAEP (₹)	Number	WAEP (₹)
Outstanding at beginning of the year	7,114,057	-	7,712,984	-
Granted during the year	2,273,078	-	2,594,805	-
Forfeited during the year	(70,067)	-	(367,480)	-
Exercised during the year	(4,010,445)	-	(2,826,252)	-
Expired during the year	-	-	-	-
Outstanding at year end	<b>5,306,623</b>	<b>-</b>	<b>7,114,057</b>	<b>-</b>

**(d) Particulars of share based payment**

**i. Carrying amount and intrinsic value of liabilities given below:**

	As at 31.03.2019		As at 31.03.2018	
	Total carrying amount at the end of the period for liabilities	Total intrinsic value at the end of the period of liabilities (vested portion)	Total carrying amount at the end of the period for liabilities	Total intrinsic value at the end of the period of liabilities (vested portion)
Hindalco SAR	74.44	56.87	62.78	89.00
Novelis SAR	3.51	3.11	0.85	0.19
Phantom RSU	83.41	-	112.56	-
	<b>161.36</b>	<b>59.98</b>	<b>176.19</b>	<b>89.19</b>

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### ii. Number of options exercised and the weighted average exercise price given below:

	As at 31.03.2019		As at 31.03.2018	
	Number of options exercised	Weighted average exercise price	Number of options exercised	Weighted average exercise price
Hindalco SAR (price in ₹)	2,727,951	123.80	5,928,524	123.54
Novelis SAR (price in ₹)	5,458	4,928.59	8,808	4,095.42
Phantom RSU (price in ₹)	4,010,445	-	2,826,252	-

### (e) Unrecognised compensation expense

	As at 31.03.2019		As at 31.03.2018	
	₹ in Crores	Period over which expense will be recognised (in years)	Number of options exercised	Period over which expense will be recognised (in years)
Hindalco SAR	9.39	1.33	14.91	1.27
Novelis SAR	0.01	0.08	0.08	1.01
Phantom RSU	28.87	1.36	37.42	1.31

### (f) Inputs to the model used to determine fair value are as under:

	Year ended 31.03.2019		Year ended 31.03.2018	
	Hindalco SAR	Novelis SAR	Hindalco SAR	Novelis SAR
Risk free interest rate (%)	6.24% - 7.22%	2.19% - 2.46%	6.14% - 7.67%	1.71% - 2.55%
Dividend yield (%)	0.58%	-	0.53%	-
Volatility (%)	27% - 39%	17% - 25%	29% - 42%	22% - 25%
Source of historical volatility	Hindalco historical volatility	Comparable companies	Hindalco historical volatility	Comparable companies
Model used	Monte Carlo Simulation Model	Monte Carlo Simulation Model	Monte Carlo Simulation Model	Monte Carlo Simulation Model

### C. Effect of employee share-based payment transactions on profit or loss for the year and on financial position:

During the year ended 31/03/2019, the Company has allotted 567,343 fully paid-up equity share of ₹ 1/- each of the Company (31/03/2018: 1,708,812) on exercise of equity settled options for which the Company has realised ₹ 4.87 crore (31/03/2018: ₹ 13.57 crore) as exercise prices. The weighted average share price at the date of exercise of options was ₹ 222.60 per share (31/03/2018: ₹ 243.95 per share).

For the year ended 31/03/2019, the Group recognised expenses of ₹ 9.70 crore (31/03/2018: ₹ 1.94 crore) related to equity-settled share based transactions, whereas ₹ 135.03 crore as expenses (31/03/2018: ₹ 138.49 crore) towards cash-settled share based transactions accounted for as part of employee benefits expenses. (refer Note 37)

### 48. Segment Information:

The Group has identified three reportable segments viz. Aluminium, Copper and Novelis as its reportable segments basis how the Chief Operating Decision Maker (CODM) allocates resources and assess performance of the Group. No operating segments have been aggregated to form these reportable segments. Description of each of the reporting segments is as under:

- Aluminium Segment: This part of business manufactures and sells Hydrate and Alumina, Aluminium and Aluminium Products.
- Copper Segment: This part of business manufactures and sells Copper Cathode, Continuous Cast Copper Rods, Sulphuric Acid, DAP & Complexes, Gold, Silver and other precious metals.

- iii. Novelis Segment: This represents Novelis Inc, a wholly owned foreign subsidiary, engaged in producing and selling aluminium sheet and light gauge products and operating in all four major industrialized continents: North America, South America, Europe and Asia, identified as separate reportable segment based on its geographical area and regulatory environment.

The chief operating decision maker (CODM) primarily uses earnings before interest, tax, depreciation and amortisation (EBITDA) as performance measure to assess the performance of the operating segments. However, the CODM also receives information about the segment's revenues, segment assets and segment liabilities on regular basis.

**A. Segment Profit or Loss:**

Segment's performance are measured based on Segment EBITDA. Segment EBITDA is defined as "Earnings from Continuing Operations before Finance Costs, Exceptional Items, Tax Expenses, Depreciation and Amortization, Impairment of Non-Current Assets, Investment income, Fair value gains or losses on financial assets and share in profit/ loss in equity accounted entities but after allocation of Corporate Expenses". Segment EBITDA are as follows:

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Aluminium	5,107.15	4,692.12
Copper	1,516.23	1,594.36
Novelis	9,193.76	7,902.55
<b>Total Segment EBIDTA</b>	<b>15,817.14</b>	<b>14,189.03</b>

Segment EBITDA reconciles to Profit/ (Loss) before Tax from Continuing Operations as follows:

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
Total Segment EBIDTA	15,817.14	14,189.03
Finance Costs	(3,778.04)	(3,910.73)
Depreciation and Amortization	(4,776.98)	(4,506.24)
Impairment Loss/ (Reversal) (Net)	10.75	(100.25)
Exceptional Items (Net)	-	1,774.16
Share in Profit/ (Loss) in Equity Accounted Investments (Net of Tax)	0.49	(125.09)
Interest and Dividend Income	405.88	348.63
Gains/ (losses) on Financial Assets Measured at fair value through Profit and Loss (Net)	323.26	414.89
Other Unallocated Income/ (Expenses) (Net)	80.60	72.64
<b>Profit/ (Loss) before Tax from Continuing Operations</b>	<b>8,083.10</b>	<b>8,157.04</b>

Following amount are either included in the measure of segment profit or loss reviewed by the CODM or are regularly provided to the CODM:

	Year ended 31.03.2019			Year ended 31.03.2018		
	Aluminium	Copper	Novelis	Aluminium	Copper	Novelis
Interest Income - (a)	21.49	63.67	97.26	31.53	47.46	55.26
Depreciation and Amortization - (b)	1,818.65	172.36	2,762.79	1,770.47	159.26	2,556.30
Impairment Loss/ (Reversal) of Non-Current Assets (Net) - (b)	-	-	(10.75)	-	-	100.24

(a) Represents interest income from customers/ security deposits etc which are included in the measure of segment profit or loss.

(b) Does not included in the measure of segment profit or loss but provided to the CODM.

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### B. Segment Revenue:

The segment revenue is measured in the same way as in the Consolidated Statement of Profit and Loss. Sales between operating segments are eliminated on consolidation. Segment Revenue and reconciliation of the same with total revenue as follows:

	Year ended 31.03.2019			Year ended 31.03.2018		
	Segment Revenue	Inter-segment Revenue	Revenue from operations	Segment Revenue	Inter-segment Revenue	Revenue from operations
Aluminium	24,160.22	6.51	24,153.71	21,395.95	1.38	21,394.57
Copper	22,197.60	19.65	22,177.95	22,426.74	7.75	22,418.99
Novelis	84,210.59	-	84,210.59	72,006.14	-	72,006.14
<b>Total</b>	<b>130,568.41</b>	<b>26.16</b>	<b>130,542.25</b>	<b>115,828.83</b>	<b>9.13</b>	<b>115,819.70</b>

₹ in Crore

During the year ended March 31, 2019, there is no revenue from a single customer which is more than 10% of the Company's total revenue, whereas during previous year Revenue of approximately ₹ 2,619.47 crore included in revenue from Copper Segment arose from a single external customer which was more than 10% of the copper segment's total revenue during that reported period.

Novelis's ten largest customers accounted for approximately 66% and 65% of Novelis segment's total "Revenue from operations" for the year ended March 31, 2019 and 2018, respectively, out of which two major customer contributes to 22% (₹ 18,877.86 crore) (31/03/2018: 22% (₹ 15,959.92 crore)] and 11% (₹ 9,012.63 crore) (31/03/2018: 11% (₹ 7,657.96 crore)) of the Novelis segment's total "Revenue from Operations", respectively.

The Group's operations are located in India and outside India. The amount of its revenue from external customers analysed by the country in which customers are located irrespective of origin of the goods or services are given below:

	Year ended	Year ended
	31.03.2019	31.03.2018
India	31,961.16	24,484.91
Outside India	98,581.09	91,334.79
	<b>130,542.25</b>	<b>115,819.70</b>

₹ in Crore

The Group recognises revenue at a point in time.

### C. Segment Assets:

Segment assets are measured in the same way as in the consolidated financial statements. These assets are allocated based on the operations of the segment and the physical location of the asset. However, certain assets like investments, investment accounted for using equity method, loans, assets classified as held for sale, current and deferred tax assets are not considered to be segment assets as they are managed at corporate level. Further, corporate administrative assets of an entity having operation which are part of more than one reporting segments are not allocated to individual segments as they also managed at corporate levels and does not linked to any specific segment.

In case of Novelis segment, all the assets of Novelis Inc. are considered as part of segment assets as it solely represents Novelis Inc. a separate legal entity as separate segment.

Segment assets and reconciliation of the same with total assets as follows:

	As at	As at
	31.03.2019	31.03.2018
Aluminium	52,222.04	50,574.80
Copper	9,897.92	9,282.55
Novelis	77,454.78	72,938.11
<b>Total Segment Assets</b>	<b>139,574.74</b>	<b>132,795.46</b>
Investment Property	23.15	23.72
Investments (Non-Current and Current)	8,990.97	10,766.62
Investments Accounted for using Equity Method	21.04	14.69
Other Corporate Assets	4,021.79	4,226.78
<b>Total Assets</b>	<b>152,631.69</b>	<b>147,827.27</b>

₹ in Crore

During the year ended 31/03/2019, capital expenditure relating to Aluminium, Copper and Novelis segments are ₹ 1,410.55 crore, ₹ 205.98 crore and ₹ 2,468.3 crore respectively (31/03/2018: Aluminium, Copper and Novelis ₹ 1,516.29 crore, ₹ 236.50 crore and ₹ 1,919.10 crore respectively).

The total of Non-Current assets excluding financial assets, investments accounted for using equity method and deferred tax assets analysed by the country in which assets are located are given below.

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
India	43,656.51	43,543.24
Outside India	48,588.63	44,897.80
	<b>92,245.14</b>	<b>88,441.04</b>

#### D. Segment Liabilities:

Segment liabilities are measured in the same way as in the financial statements. These liabilities are allocated based on the operations of the segment. In measurement of Aluminium and Copper segment's liabilities, items like borrowings, current and deferred tax liabilities, liabilities associated with assets classified as held for sale etc. are not considered to be segment liabilities as they are managed at corporate level. Further, corporate administrative liabilities of an entity having operation which are part of more than one reporting segments are not allocated to individual segments as they also managed at corporate levels and does not linked to any specific segment.

In case of Novelis segment, all the liabilities of Novelis Inc. except borrowings, are considered as part of segment liabilities as it solely represents Novelis Inc. a separate legal entity as separate segment.

Segment liabilities and reconciliation of the same with total liabilities as follows:

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Aluminium	5,763.66	5,864.64
Copper	4,393.94	3,986.23
Novelis	28,848.56	27,774.02
<b>Total Segment Liabilities</b>	<b>39,006.16</b>	<b>37,624.89</b>
Borrowings (Non-Current and Current, including current Maturity)	52,415.01	52,074.02
Other Corporate Liabilities	3,699.31	3,267.95
<b>Total Liabilities</b>	<b>95,120.48</b>	<b>92,966.86</b>

## 49. Employee Benefit Obligations

### A. Defined Benefit Plans

Defined benefit plans expose the Group to actuarial risks such as Interest Rate Risk, Salary Risk and Demographic Risk.

- i. Interest Rate risk: The defined benefit obligation calculated uses a discount rate based on government bonds. If the bond yield falls, the defined benefit obligation will tend to increase.
- ii. Salary Risk: Higher than expected increases in salary will increase the defined benefit obligation.
- iii. Demographic Risk: This is the risk of variability of results due to unsystematic nature of decrements that include mortality, withdrawal, disability and retirement. The effect of these decrements on the defined benefit obligations is not straight forward and depends on the combination of salary increase, discount rate and vesting criteria. It is important not to overstate withdrawals because in the financial analysis the retirement benefit of a short career employee typically costs less per year as compared to a long service employee.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

### (a) Gratuity Plans

The Group has various schemes (funded/unfunded) for payment of gratuity to all eligible employees calculated at specified number of days (ranging from 15 days to 1 month) of last drawn salary depending upon the tenure of service for each year of completed service subject to minimum service of five years payable at the time of separation upon superannuation or on exit otherwise. These defined benefit gratuity plans are governed by Payment of Gratuity Act, 1972.

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>i. Change in Defined Benefit Obligation (DBO)</b>		
Defined Benefit Obligation at beginning of the year	903.95	849.60
Current Service cost	58.19	53.42
Interest Cost on the DBO	66.14	57.84
Actuarial (gain)/ loss experience	(6.21)	(26.80)
Actuarial (gain)/ loss demographic assumption	-	(18.41)
Actuarial (gain)/ loss financial assumption	-	34.94
Benefits paid directly by Company	(21.49)	(25.42)
Benefits paid from plan assets	(28.95)	(21.22)
Defined Benefit Obligation at the end of the year	<b>971.63</b>	<b>903.95</b>
<b>ii. Change in Fair Value of Plan Assets</b>		
Fair value of assets at the beginning of the year	733.73	616.84
Interest Income on plan assets	55.56	43.98
Employer's contributions	43.04	44.22
Return on plan assets greater/(lesser) than discount rate	(9.21)	49.91
Benefits Paid	(28.95)	(21.22)
Fair value of assets at the end of the year	<b>794.17</b>	<b>733.73</b>
<b>iii. Development of Net Balance Sheet Position</b>		
Defined Benefit Obligation	(971.63)	(903.95)
Fair Value of Plan Assets	794.17	733.73
Net defined benefit asset/(liability)	<b>(177.46)</b>	<b>(170.22)</b>
<b>iv. Reconciliation of Net Balance Sheet Position</b>		
Net Defined benefit asset/(Liability)at beginning of the year	(170.22)	(232.76)
Service cost	(58.19)	(53.42)
Net Interest on net defined benefit liability/(asset)	(10.59)	(13.86)
Amount recognised in OCI	(2.99)	60.17
Employer's contributions	43.04	44.23
Benefit paid directly by Company	21.49	25.42
Net Defined benefit asset/(Liability)at the end of the year	<b>(177.46)</b>	<b>(170.22)</b>
<b>v. Expense recognised during the year</b>		
Current Service cost	58.19	53.42
Net Interest on net defined benefit liability/(asset)	10.59	13.86
Net Gratuity Cost	<b>68.78</b>	<b>67.28</b>
<b>vi. Other Comprehensive Income(OCI)</b>		
Actuarial (gain)/loss due to DBO experience	(6.21)	(26.80)
Actuarial (gain)/loss due to DBO financial demographic assumption changes	-	16.53
Actuarial (gain)/loss arising during the period	(6.21)	(10.27)
Return on Plan Assets(greater)/less than discount rate	9.20	(49.91)
Actuarial (gain)/loss recognised in OCI	<b>2.99</b>	<b>(60.18)</b>
<b>vii. Defined Benefit Cost</b>		
Service Cost	58.19	53.42
Net Interest on net defined benefit liability/(asset)	10.59	13.86
Actuarial (gain)/loss recognised in OCI	2.99	(60.17)
Defined Benefit Cost	<b>71.77</b>	<b>7.11</b>

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>viii. Principal Actuarial Assumptions</b>		
Discount rate (based on the market yields available on Government bonds at the accounting date with a term that matches that of the liabilities)	7.50%	7.50%
Salary escalation rate	8.00%	8.00%
Weighted average duration of the defined benefit obligation	9 Years	8 Years
Mortality Rate	Indian Assured Lives Mortality 2006-08	
	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>ix. Non-Current and Current portion of Defined Benefit Obligation</b>		
Current portion	(4.78)	(5.14)
Non-Current portion	(172.68)	(165.08)
	<b>(177.46)</b>	<b>(170.22)</b>

**x. Sensitivity Analysis**

Sensitivity analysis are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the defined benefit liability recognised in the balance sheet.

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>Discount Rate</b>		
Discount rate as at end of the year	7.50%	7.50%
Effect on Defined Benefit Obligation due to 1% Increase in Discount Rate	(73.71)	(67.61)
Effect on Defined Benefit Obligation due to 1% Decrease in Discount Rate	91.14	77.13
<b>Salary Escalation Rate</b>		
Salary Escalation Rate as at end of the year	8.00%	8.00%
Effect on Defined Benefit Obligation due to 1% Increase in Salary Escalation Rate	83.30	76.18
Effect on Defined Benefit Obligation due to 1% Decrease in Salary Escalation Rate	(74.06)	(67.94)

**xi. Methodology for defined benefit obligation:**

The Projected Unit Credit (PUC) actuarial method has been used to assess the plan's liabilities, including those related to death-in-service and incapacity benefits.

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>xii. Expected benefit payments (undiscounted)</b>		
Within 1 year	56.82	48.78
from 1 year to 2 Year	56.12	79.73
from 2 year to 3 Year	75.66	83.08
from 3 year to 4 Year	76.92	86.85
from 4 year to 5 Year	76.34	91.87
from 5 year to 10 Year	397.62	539.29

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
<b>xiii. Plan Assets Information</b>		
<b>Major categories of Plan Assets are as under:</b>		
Cash and Bank	1.99%	2.59%
Scheme of insurance - conventional product	1.43%	78.39%
Scheme of insurance - ULIP Product	96.58%	19.02%
	<b>100.00%</b>	<b>100.00%</b>
<b>xv.</b> Expected Contributions to post employment benefit plan of Gratuity for the year ended March 31, 2020 are ₹ 60.15 Crore.		

### (b) Pension and Post Employment Medical Benefits of Novelis Inc, the Group's overseas subsidiary

Obligations related to the Group's overseas operations, 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; (3) unfunded lump sum indemnities payable upon retirement to employees in France, Malaysia and Italy; and (4) partially funded lump sum indemnities in South Korea. These defined benefit plans provide a benefit to eligible employees based on plan provisions, including but not limited to, years of service, compensation, or other vesting criteria. Each of the funded pension plans is governed by an Investment Fiduciary. Other post retirement obligations include unfunded health care and life insurance benefits provided to eligible retired employees in the U.S., Canada, and Brazil.

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>i. Change in obligation over the year</b>		
Present Value of defined benefit obligations at the beginning of the year	13,677.90	12,642.48
Exchange (gain)/loss on translation	240.72	755.73
Current Service Cost	383.16	306.47
Interest Cost	427.04	386.91
Curtailment cost/(credit)	8.79	(6.52)
Settlement cost/(credit)	(2.92)	(155.72)
Plans assumed on acquisitions	-	71.98
Plan Participants Contribution	31.27	29.17
Plan Amendments	10.73	(31.09)
Net actuarial(gain)/loss	248.40	101.85
Benefits Paid	(532.30)	(423.36)
Present Value of defined obligations at the end of the year	<b>14,492.79</b>	<b>13,677.90</b>
<b>ii. Change in plan Assets (Reconciliation of opening and closing Balance)</b>		
Fair Value of plan Assets at the beginning of the year	7,956.90	7,187.39
Exchange gain/ (loss) on translation	259.33	327.26
Plans assumed on acquisitions	-	61.57
Plan Settlements	(2.92)	(155.72)
Remeasurements	2.52	248.22
Interest Income	260.32	228.08
Employers' Contributions	361.36	454.29
Plan participants contribution	31.27	29.17
Benefits Paid	(532.30)	(423.36)
Fair value of assets at the end of the year	<b>8,336.48</b>	<b>7,956.90</b>



₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>iii. Reconciliation of fair value of assets &amp; obligations</b>		
Present value of defined benefit obligations at the end of the year	14,492.79	13,677.90
Fair Value of Plan assets at the end of the year	8,336.48	7,956.90
Amount recognized in the consolidated balance sheet	<b>6,156.31</b>	<b>5,721.00</b>

**Details on Minimum Pension Liabilities:**

Novelis Canadian Pension Plan has a surplus of ₹ 30.17 Crores (USD 4.36 million) that is not recognised on the basis that future economic benefits are not available to the entity in the form of a reduction in future contributions or a cash refund.

₹ in Crore

	Year ended 31/03/2019	Year ended 31/03/2018
<b>iv. Expenses recognized during the year</b>		
Current service cost	383.16	306.47
Past service cost/ Curtailment costs/(gain)	19.52	(37.61)
Interest cost (net)	166.72	158.84
	<b>569.40</b>	<b>427.70</b>

**Details of events during the year:**

North America - Fairmont Pension Plan: Effective for future retirements, the pension multiplier for employees covered by the fairmont hourly pension plan was increased to ₹ 3874.36 (USD 56) per year of service. Additionally, effective December 31, 2019, all future benefit accruals in the pension plan will be frozen, resulting to a curtailment loss of ₹ 8.79 Crores (USD 1.27 million).

Europe - Novelis UK Pension Plan: On October 26, 2018, the UK High Court determined that defined benefit pension schemes in the UK that were contracted out of the state earnings related pension scheme, will be required to equalize benefits in respect of Guaranteed Minimum Pensions (GMPs) accrued from May 17, 1990 to April 5, 1997. While the judgment relates to the Lloyds Banking Group pension schemes, it is expected to create a precedent for other UK defined benefit schemes with GMPs, including the Novelis pension plan in the UK. Local actuaries have estimated the impact of the GMP equalization to be around 0.5% increase in the benefit obligation. The impact of the GMP equalization amounts to an increase in plan cost of ₹ 10.13 Crores (USD 1.46 million).

Europe - Other plans: Italy TFR: The lump sum distributions of ₹ 1.71 Crores (USD 0.25 million) exceeded the settlement threshold of service cost + interest cost. The settlement calculations resulted in an accelerated loss recognition of ₹ 0.24 Crores (USD 0.03 million) in the 2019 pension expense.

Pension Kasse: The lump sum distributions of ₹ 1.13 Crores (USD 0.16 million) for the Management Sierre plan exceeded the settlement threshold of service cost + interest cost. The settlement calculations resulted in an accelerated loss recognition of ₹ 0.36 Crores (USD 0.05 million) in the 2019 pension expense.

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>v. Remeasurement of net defined benefit liability/(asset) (OCI)</b>		
Actuarial (gains)/ losses arising from changes in demographic assumptions	36.76	(0.82)
Actuarial (gains)/ losses arising from changes in financial assumptions	283.55	130.67
Actuarial (gains)/ losses arising from changes in experience adjustments	(71.91)	(28.00)
Remeasurement of net defined benefit liability	<b>248.40</b>	<b>101.85</b>
Remeasurement return on plan assets excluding amount included in interest income	(2.52)	(248.22)
Exchange Gain/ (Loss)	(88.34)	102.67
	<b>157.54</b>	<b>(43.70)</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

	₹ in Crore	
	Year ended 31.03.2019	Year ended 31.03.2018
<b>vi. Composition of Plan Assets</b>		
Equity	2,591.26	2,444.19
Fixed Income	4,314.09	4,339.93
Real Estate	190.00	216.35
Cash and cash equivalent	85.95	412.22
Investments measured at net asset value	1,155.18	544.21

### vii. Sensitivity analysis for each significant actuarial assumption

	₹ in Crore			
	As at 31.03.2019		As at 31.03.2018	
	Approximate (increase)/ decrease		Approximate (increase)/ decrease	
	Defined Benefits obligation	Post Employment Medical Benefits	Defined Benefits obligation	Post Employment Medical Benefits
<b>Discount Rate</b>				
Increase of 1 percentage	2,106.43	70.05	1,778.66	70.49
Decrease of 1 percentage	(2,204.81)	(82.92)	(2,226.11)	(77.59)
<b>Salary Growth Rate</b>				
Increase of 1 percentage	(478.56)	-	(398.85)	-
Decrease of 1 percentage	456.24	-	360.29	-
<b>Expected future lifetimes(in years) for employees</b>				
Participants assumed to have the mortality rates of individuals who are one year older	(387.49)	(2.78)	(289.70)	(2.71)
Participants assumed to have the mortality rates of individuals who are one year younger	384.60	3.26	284.68	3.50
<b>Medical cost trend rates</b>				
Increase of 1 percentage	-	(46.06)	-	(46.92)
Decrease of 1 percentage	-	47.40	-	46.79

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the defined benefit liability recognised in the balance sheet. The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the prior period.

### viii. The principal actuarial assumptions at the reporting dates(expressed as weighted averages) for defined benefit plans

	As at 31.03.2019	As at 31.03.2018
Discount Rate	1.24% - 3.80%	1.39% - 3.85%
Salary growth Rate	2.59% - 4.00%	2.59% - 4.00%
Expected future lifetimes(in years) for employees		
Pensioners	17.55	24.00
Current employees	29.97	31.66

**ix. The principal actuarial assumptions at the reporting dates(expressed as weighted averages) for post employment medical benefits**

	As at 31.03.2019	As at 31.03.2018
Long term increase in health costs	2.31% - 5.04%	2.31% - 5.29%
Discount rate	2.30% - 8.50%	2.40% - 9.40%

**x. Weighted average duration of the defined benefit obligation in years**

	As at 31.03.2019	As at 31.03.2018
Long term increase in health costs	2.31% - 5.04%	2.31% - 5.29%
Weighted average duration of the defined benefit obligation in years	9 - 17.45 yrs	10 - 18 yrs

**xi. Expected maturity analysis of undiscounted defined benefit plan and post employment medical benefit plans**

	As at 31.03.2019				As at 31.03.2018			
	Within 1 year	Between 1-2 years	Between 2-5 years	5 to 10 years	Within 1 year	Between 1-2 years	Between 2-5 years	5 to 10 years
Defined benefit plan	547.99	1,230.23	1,969.71	3,668.37	578.65	1,074.03	2,274.24	3,229.28
Post employment medical benefit plan	36.01	74.24	124.84	256.94	38.25	67.94	156.75	237.16

₹ in Crore

xii. Expected contributions to the defined benefit plans for the year ended March 31, 2020 are ₹ 341.67 crore.

**B. Other Defined Benefit and contribution Plans**

**(a) Pension**

The Group contributes a certain percentage of salary for all eligible employees in India in the managerial cadre towards Superannuation Funds with option to put certain portion in NPS and/or in funds managed by approved trusts of by Life Insurance Corporation of India. The amount charged to the Profit and Loss during the year is ₹ 22.51 crore (previous year ₹ 24.04 crore) and amount of actuarial gain/ (loss) recognised in Other Comprehensive Income during the year is ₹ (0.20) crore (previous year ₹ (0.41) crore).

**(b) Post Retirement Medical Benefit**

The Group provides post retirement medical benefit to its certain employees in India. The scheme involves reimbursement of expenses towards medical treatment of self and dependents. The amount charged to the Profit and Loss during the year is ₹ 0.33 crore (previous year ₹ 0.41 crore) and amount of actuarial gain/ (loss) recognised in Other Comprehensive Income during the year is ₹ 0.51 crore (previous year ₹ (1.45) crore).

**(c) Leave Obligation**

The leave obligation cover the Group's liability for earned leave. The entire amount of the provision of ₹ 228.71 crore (year ended 31/03/2018 ₹ 216.2 crore) is presented as current, since the Group does not have an unconditional right to defer settlement for these obligations.

**(d) Provident Fund**

The Company and certain Indian subsidiaries in the Group contributes 12% of salary for all eligible employees in India towards Provident Fund managed either by approved trusts or by the Central Government of India which is debited to the Consolidated Statement of Profit and Loss. In respect of provident fund management by the approved trust, these entities have an obligation to fund any shortfall on the yield of the trust's investments over the administered interest rates on an annual basis. The Company and certain subsidiaries in India also contributes to Coal Mines Provident Fund (CMPF) in respect of employees working in coal mines. The amount debited to the Consolidated Statement of Profit and Loss during the year was ₹ 96.80 crore (previous year ₹ 91.54 crore).

Based on actuarial valuation, the Group has recognised obligation of ₹ 8.50 crore as at March 31, 2019 (previous year ₹ 7.78 crore) towards shortfall on the yield of the trust's investments over the administered interest rates.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

Assumption use in determining the present value obligation of the interest rate guarantee under the Deterministic Approach:

	As at 31.03.2019	As at 31.03.2018
Discount rate	7.50%	7.50%
Expected EPFO (Employees' Provident Fund Organisation) Return	8.65% for first year and 8.60% thereafter	8.55%

The Group also contributes to Coal Mines Provident Fund (CMPF) in respect of employees working in coal mines.

### 50. Operating Lease

The Group obtained certain land, buildings and equipment under non-cancelable operating leases expiring at various dates. Operating leases generally have one to ten-year terms, with one or more renewal options, with 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. During the year ended March 31, 2019, the Group has paid ₹ 320.59 crore (31/03/2018: ₹ 295.56 crore) towards minimum lease payment. The future aggregate minimum lease payments under non-cancellable operating leases are as follow:

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
Not later than 1 year	219.38	220.77
Later than 1 year and not later than 5 years	460.99	493.98
Later than 5 years	142.39	233.41
	<b>822.76</b>	<b>948.16</b>

### 51. Contingent Liabilities

The Group 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. The Group 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, the Management does 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.

The Group's estimates involve significant judgment, and therefore, the estimate will change from time to time and actual losses may differ from the current estimate. Management 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 amount for which the Group is contingently liable are given below:

	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
(a) Claims against the Group not acknowledged as debt (Disputed demands for excise duty, custom duty, sales tax, income tax, stamp duty, entry tax, transit fees, cess, green cess etc. and other matters not acknowledged as debts, pending at various appellate authorities)	1,065.78	1,496.12
(b) Other money for which the Company is contingently liable:		
i. Customs Duty on Raw Materials imported under Advance License, against which export obligation is to be fulfilled.	10.09	10.28
ii. For contingent liabilities relating to associates and joint ventures, if any, are given in Note 57 D and 57 E.		

## 52. Commitments

₹ in Crore

	As at 31.03.2019	As at 31.03.2018
The Group's commitments with regard to various items in respect of:		
(a) Estimated amount of contracts remaining to be executed on capital account and not provided for	1,587.91	442.41
(b) Purchase commitments in relation to Materials and Services (net of advances)	54,008.29	35,947.70
(c) The Company has given the following undertakings in connection with the loan of Utkal Aluminium International Limited (UAIL), a wholly owned subsidiary:		
i. To hold minimum 51% equity shares in UAIL.		
ii. To ensure to meet the Financial Covenants, except Fixed Asset Coverage Ratio, as provided in the loan agreements.		

## 53. Capital Management

The Group's objective to manage its capital is to ensure continuity of business while at the same time provide reasonable returns to its various stakeholders but keep associated costs under control. In order to achieve this, requirement of capital is reviewed periodically with reference to operating and business plans that take into account capital expenditure and strategic investments. Apart from internal accrual, sourcing of capital is done through judicious combination of equity and borrowing, both short term and long term. Net debt (total borrowings less current investment and cash & cash equivalents) to equity ratio is used to monitor capital. No changes were made to the objectives, policies or processes for managing capital during the years ended March 31, 2019 and March 31, 2018.

As at March 31, 2019 and March 31, 2018, the Group was in compliance with all of its debt covenants for borrowings.

## 54. Financial Instruments

### A. Fair Value Measurements

- (a) The following table shows the carrying amount and fair values of financial assets and financial liabilities by category.

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Amortised Cost	Fair value through OCI	Fair value through P&L	Amortised Cost	Fair value through OCI	Fair value through P&L
<b>Financial Assets</b>						
<b>Investments in Equity Instruments</b>						
Quoted Equity Instruments	-	5,004.62	-	-	6,798.17	-
Unquoted Equity Instruments	-	44.27	-	-	24.17	-
<b>Investments in Preference Shares</b>	-	-	23.57	-	-	22.66
<b>Investments in Debt Instruments</b>						
Mutual Funds	-	-	3,605.20	-	-	3,214.69
Bonds & Debentures	-	-	224.92	-	-	620.90
Government Securities	-	88.39	-	-	86.03	-
Commercial Paper	-	-	-	-	-	-
<b>Derivatives</b>	-	-	1,414.73	-	-	2,041.39
<b>Cash &amp; Cash Equivalents</b>						
Cash & Bank *	6,942.17	-	-	6,386.35	-	-
Liquid Mutual Funds	-	-	2,176.57	-	-	1,658.59
<b>Bank Balances other than cash &amp; cash equivalents *</b>	667.82	-	-	12.82	-	-
<b>Trade receivables *</b>	11,459.76	-	-	9,959.81	-	-
<b>Loans *</b>	130.27	-	-	135.43	-	-
<b>Other financial assets *</b>	940.84	-	-	1,224.29	-	-
<b>Total Financial Assets</b>	<b>20,140.86</b>	<b>5,137.28</b>	<b>7,444.99</b>	<b>17,718.70</b>	<b>6,908.37</b>	<b>7,558.23</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Amortised Cost	Fair value through OCI	Fair value through P&L	Amortised Cost	Fair value through OCI	Fair value through P&L
<b>Financial Liabilities</b>						
<b>Borrowings</b>						
Long term Borrowings	48,031.61	-	-	47,874.26	-	-
Short term Borrowings *	4,225.73	-	-	3,398.16	-	-
<b>Derivatives</b>	-	-	1,191.27	-	-	1,428.95
<b>Trade Payables *</b>	20,724.40	-	-	20,428.84	-	-
<b>Other financial Liabilities *</b>	3,080.33	-	-	3,325.07	-	-
<b>Total Financial Liabilities</b>	<b>76,062.07</b>	<b>-</b>	<b>1,191.27</b>	<b>75,026.33</b>	<b>-</b>	<b>1,428.95</b>

(b) The following table shows fair value for financial assets and financial liabilities measured at amortised cost.

₹ in Crore

	As at 31.03.2019		As at 31.03.2018	
	Carrying Value	Fair Value	Carrying Value	Fair Value
<b>Financial Assets</b>				
Loans and Deposits	326.00	326.00	367.43	367.43
<b>Financial Liabilities</b>				
Long term Borrowings **	48,076.04	49,769.34	48,539.83	50,266.76

\* Fair values for these financial instruments have not been disclosed because their carrying amount are a reasonable approximation of their fair values.

\*\* Carrying amount includes current portion of debt shown under other current financial liabilities but excludes finance lease obligation and deferred payment liabilities.

The Company had acquired certain equity instruments for purpose of holding for a longer duration and not for the purpose of selling in near term for short term profit. Such instruments have been categorized as FVTOCI.

### B. Fair Value Hierarchy

The following table shows the details of financial assets and financial liabilities, including their levels in the fair value hierarchy.

(a) Financial assets and liabilities measured at fair value - Recurring fair value

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
<b>Financial Assets</b>						
<b>Investments in Equity Instruments</b>						
Quoted Equity Instruments	5,004.62	-	-	6,798.17	-	-
Unquoted Equity Instruments	-	-	44.27	-	-	24.17
<b>Investments in Preference Shares</b>	-	23.57	-	-	-	22.66
<b>Investments in Debt Instruments</b>						
Mutual Funds	3,560.36	44.84	-	3,214.69	-	-
Bonds & Debentures	5.16	179.95	39.81	-	375.07	245.83
Government Securities	-	44.13	44.26	-	62.77	23.26
Commercial Paper	-	-	-	-	-	-
<b>Derivatives</b>	-	1,414.73	-	-	2,041.39	-
<b>Cash &amp; Cash Equivalents</b>						
Liquid Mutual Funds	2,176.57	-	-	1,658.59	-	-
<b>Other financial assets</b>	-	-	-	-	-	-
<b>Total Financial Assets</b>	<b>10,746.71</b>	<b>1,707.22</b>	<b>128.34</b>	<b>11,671.45</b>	<b>2,479.23</b>	<b>315.92</b>
<b>Financial Liabilities</b>						
Derivatives	-	1,171.48	19.79	-	1,383.73	45.22
<b>Total Financial Liabilities</b>	<b>-</b>	<b>1,171.48</b>	<b>19.79</b>	<b>-</b>	<b>1,383.73</b>	<b>45.22</b>

(b) Financial assets and liabilities measured at amortised cost for which fair value disclosure is given

₹ in Crore

	As at 31.03.2019			As at 31.03.2018		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
<b>Financial Assets</b>						
Loans and Deposits	-	-	326.00	-	-	367.43
<b>Financial Liabilities</b>						
Long term Borrowings	-	49,769.34	-	-	47,815.36	2,451.40

Level 1: Hierarchy includes financial instruments valued using quoted market prices. Listed equity instruments and traded debt instruments which are traded in the stock exchanges are valued using the closing price at the reporting date. Mutual funds are valued using the closing NAV.

Level 2: Hierarchy includes financial instruments that are not traded in active market. This includes over the counter (OTC) derivatives, close ended mutual funds and debt instruments valued using observable market data such as yield etc. of similar instruments traded in active market. Borrowings have been fair valued using credit adjusted interest rate prevailing on the reporting date.

Level 3: If one or more significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity instruments and certain debt instruments which are valued using assumptions from market participants. Valuations for certain derivatives for which forward prices are not observable, have been valued using forward prices for a nearby geographical market and adjusted for historical spreads between cash prices of the two markets.

(c) Disclosure of changes in level 3 items for the period ended 31/03/2019 and 31/03/2018 respectively

₹ in Crore

	Unquoted Equity Instruments	Unquoted Debt Instruments	Total
<b>As at 1.04.2017</b>	<b>28.62</b>	<b>349.39</b>	<b>378.01</b>
Acquisitions	-	24.91	24.91
Sale	(5.39)	(252.44)	(257.83)
Gain/(losses) recognised in Profit or loss	-	1.84	1.84
Gain/(losses) recognised in OCI	0.72	-	0.72
Transfer from Level 1 & 2	0.22	168.05	168.27
<b>As at 1.04.2018</b>	<b>24.17</b>	<b>291.75</b>	<b>315.92</b>
Acquisitions	2.56	-	2.56
Sale	-	(136.43)	(136.43)
Gain/(losses) recognised in Profit or loss	-	1.93	1.93
Gain/(losses) recognised in OCI	17.54	-	17.54
Transfer from Level 1 & 2	-	61.76	61.76
Transfer to Level 1 & 2	-	(134.94)	(134.94)
<b>As at 31.03.2019</b>	<b>44.27</b>	<b>84.07</b>	<b>128.34</b>
Unrealised Gain/(loss) recognised in profit and loss relating to assets and liabilities held at the end of reporting period:			-
<b>31.03.2019</b>	<b>-</b>	<b>1.50</b>	<b>1.50</b>
<b>31.03.2018</b>	<b>-</b>	<b>(3.46)</b>	<b>(3.46)</b>

Valuation techniques used for valuation of instruments categorised as level 3.

For valuation of investments in equity shares which are unquoted, peer comparison has been performed wherever available. Valuation has been primarily done by considering the net worth of the Company and price to book multiple to arrive at the fair value. In cases where income approach was feasible valuation has been arrived using the earnings capitalisation method. For inputs that are not observable for these instruments, certain assumptions are made based on available information. The most significant of these assumptions are the discount rate and credit spreads used in the valuation process.

For valuation of investments in debt securities categorised as level 3, market polls which represent indicative yields are used as assumptions by market participants when pricing the asset.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

### 55. Financial Risk Management and Derivative Financial Instruments

#### A. Financial Risk Management

The Group's activities exposes it to various risks such as market risk, liquidity risk and credit risk. This section explains the risks which the Group is exposed to and how it manages the risks.

##### (a) Credit Risk

Credit risks is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligation, and arises principally from the Group's receivables from customers.

Credit risk arises from cash and cash equivalents, contractual cash flows of debt investments, favourable derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to customers including outstanding receivables.

Credit risk is managed on an group basis. The Group has adopted a policy of dealing only with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating risk of financial loss from defaults. The Group invests only in those instruments issued by high rated banks/ institutions and government agencies. The Group assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. The Group's investments in debt instruments and certain loans are considered are considered to have low credit risk. The credit ratings of the investments are monitored for credit deterioration.

For some trade receivables the Group obtains security in the form of guarantees, deed of undertaking or letters of credit which can be called upon if the counterparty is in default under the terms of the agreement.

The Group periodically monitors the recoverability and credit risks of its other financials assets including security deposits and other receivables. The Group evaluates 12 month expected credit losses for all the financial assets for which credit risk has not increased. In case credit risk has increased significantly, the Group considers life time expected credit losses for the purpose of impairment provisioning.

The Group has used a practical expedient by computing the expected credit loss allowance for trade receivables based on a provision matrix. The provision matrix takes into account historical credit loss experience and adjusted for forward-looking information.

##### (b) Market Risk

###### i. Commodity Price Risk

Hindalco's India Operations consist of two businesses – Copper Business and Aluminium Business. The Copper Business works under a "Custom Smelting" model wherein the focus is to improve the processing margin. The timing mis-match risk between the input and output price, which is linked to the same international pricing benchmark, is eliminated through use of derivatives. This off-set hedge model (through use of derivatives) is used to manage the timing mis-match risk for both Commodity (Copper and Precious Metals) and Currency Risk (primarily, USD/INR). The Copper Business also has a portion of View Based exposure for both Commodity and Currency, beyond the above timing mis-match risk. Lower Copper Prices, Stronger USD/INR exchange rate and Higher "Other Input" Prices (eg Coal, furnace oil, natural gas etc) are the major price risks that adversely impact the business. Here, the Company may use derivative instruments, wherever available, to manage these pricing risks. A variety of factors, including the risk appetite of the business and price view, are considered while taking Hedging Decisions. Such View based hedges are usually done for the next 1-8 quarters.

The Aluminium Business is a vertically integrated business model wherein the input and output pricing risks are independent of each other, i.e. – are on different pricing benchmarks, if any. Here, the Company may use derivative instruments, wherever available, to manage its pricing risks for both input and output products. Lower Aluminium Prices, Stronger USD/INR exchange rate and Higher Input Prices (e.g. Alumina, Furnance Oil) are the major price risks that adversely impact the Business. Hedging decisions are based on a variety of factors, including risk appetite of the business and price View. Such Hedge decisions are usually done for the next 1-12 quarters.



### Embedded Derivatives

Copper concentrate is purchased on future pricing model based on month's average LME (in case of copper)/ LBMA (in case of gold and silver). Since, the value of the concentrate changes with response to change in commodity pricing indices, embedded derivatives (ED) is identified and segregated in the contract. The ED so segregated, is treated like commodity derivative and qualify for hedge accounting. These derivatives are put into a Fair Value hedge relationship with respect to inventory.

Novelis business model is conducted under a conversion model which allows us to pass through increases or decreases in the price of aluminium to our customers. Derivative instruments are used to preserve conversion margins and manage timing differences associated with metal price lag related to base aluminium price. Novelis also uses several sources of energy such as natural gas, electricity, fuel oil and transport oil in manufacturing and delivery of its products.

The table below summarises the gain/(loss) impact on account of increase/decrease in the commodity prices on the Group's equity and profit for the period.

₹ in Crore

	Year ended 31.03.2019			Year ended 31.03.2018	
	Increase in Rate/Price	Change in Statement of Profit & Loss	Change in Other Components of Equity	Change in Statement of Profit & Loss	Change in Other Components of Equity
Aluminium	10%	18.50	(646.79)	(64.13)	(971.23)
Copper	10%	(379.36)	(2.30)	(261.76)	(7.62)
Gold	10%	154.02	(222.03)	(21.18)	(70.74)
Silver	10%	(1.82)	(10.31)	(3.27)	(18.81)
Coal	10%	0.01	2.99	-	-
Furnace Oil	10%	1.54	6.84	-	-
Electricity	10%	-	20.57	-	23.63
Natural Gas	10%	0.75	25.78	0.78	33.50
Diesel Fuel	10%	-	16.85	9.49	-

Decrease in prices by 10% will have equal and opposite impact in financial statements.

### ii. Foreign Currency Risk

Exchange rate movements, particularly the United States Dollar (USD) and Euro (EUR) against Indian Rupee (INR) have an impact on our operating results. In addition to the foreign exchange inflow from exports, the commodity prices in the domestic market are derived based on the landed cost of imports in India where LME prices and USD/INR exchange rate are the main factors. In case of conversion business, the objective is to match the exchange rate of outflows and related inflows through derivative financial instruments. With respect to Aluminium business where costs are predominantly in INR, the strengthening of INR against USD adversely affects the profitability of the business and benefits when INR depreciates against USD. The Group enters into various foreign exchange contracts to protect profitability. The Group also enters into various foreign exchange contracts to mitigate the risk arising out of foreign currency exchange rate movement in foreign currency contracts executed with foreign suppliers to procure capital items for its project activities.

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.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

The Group's exposure to foreign currency risk at the end of the reporting period expressed in INR, is as follows:

Currency [Payable/(Receivable)]	₹ in Crore	
	As at 31.03.2019	As at 31.03.2018
USD	377.52	679.51
EUR	(43.41)	39.10
GBP	2.11	2.50
SEK	0.12	0.12
NOK	0.99	1.03
SGD	-	0.14
CAD	18.87	21.61
AUD	0.88	0.56
CHF	0.90	0.98
JPY	0.40	0.55
AED	0.01	0.01
ZAR	-	0.36
DKK	(0.05)	-
BRL	111.74	86.74
<b>Total</b>	<b>470.08</b>	<b>833.21</b>

The table below summarises the gain/(loss) impact on account of increase/decrease in the exchange rates on the Group's equity and profit for the period.

Currency Pair	Increase in Rate/Price	Year ended 31.03.2019		Year ended 31.03.2018	
		Change in Statement of Profit & Loss	Change in Other Components of Equity	Change in Statement of Profit & Loss	Change in Other Components of Equity
USD_INR	10%	14.16	(920.73)	(41.26)	(1,147.37)
EUR_INR	10%	6.88	9.71	1.86	-
GBP_INR	10%	(0.20)	-	(0.23)	-
NOK_INR	10%	(0.06)	-	(0.07)	-
SGD_INR	10%	-	-	(0.01)	-
CAD_INR	10%	(0.03)	-	(0.04)	-
AUD_INR	10%	(0.06)	-	(0.02)	-
CHF_INR	10%	(0.06)	-	(0.06)	-
JPY_INR	10%	(0.03)	-	(0.04)	-
ZAR_INR	10%	-	-	0.03	-
EUR_USD	10%	(95.78)	(23.30)	160.96	27.59
BRL_USD	10%	4.72	187.73	12.84	87.46
KRW_USD	10%	115.32	158.07	107.86	145.28
CAD_USD	10%	7.36	18.22	6.58	18.13
GBP_USD	10%	(10.58)	-	(12.20)	-
CHF_USD	10%	(0.15)	(0.14)	(16.88)	(1.76)
CNY_USD	10%	(17.63)	-	(69.15)	-
GBP_CHF	10%	0.46	-	1.50	-
EUR_CHF	10%	103.93	40.72	304.73	76.96
EUR_GBP	10%	64.91	-	137.10	-
EUR_CNY	10%	0.89	-	0.01	-
SEK_USD	10%	(0.01)	-	-	-
JPY_KRW	10%	-	-	0.59	-
DKK_USD	10%	0.01	-	(0.01)	-

Decrease in prices by 10% will have equal and opposite impact in financial statements.

### iii. Interest Rate Risk

The Group is exposed to interest rate risk on financial liabilities such as borrowings, both short-term and long-term. It maintains a balance of fixed and floating interest rate borrowings and the proportion is determined by current market interest rates, projected debt servicing capability and view on future interest rates. Such interest rate risk is actively evaluated and interest rate swap is taken whenever considered necessary.

The Group is also exposed to interest rate risk on its financial assets that include fixed deposits, bonds, debentures, commercial paper, mutual funds and liquid investments comprising mainly mutual funds (which are part of cash and cash equivalents). Since, all these are generally for short durations, the Company believes it has manageable and limited interest rate risk.

The table below summarises the (gain)/loss impact on account of decrease/increase in the benchmark interest rates on the Group's equity and profit for the period.

₹ in Crore

	Increase in Rate/Price	Year ended 31.03.2019		Year ended 31.03.2018	
		Change in Statement of Profit & Loss	Change in Other Components of Equity	Change in Statement of Profit & Loss	Change in Other Components of Equity
Interest Rate Borrowings in India	50 bps	(49.50)	-	(50.84)	-
Interest Rate Borrowings in Novelis	100 bps	(122.97)	-	(114.57)	-

Decrease in prices by 50 bps and 100 bps, respectively, on above borrowings will have equal and opposite impact in financial statements.

### iv. Other price risk

The Group's exposure to equity securities price risk arises from movement in market price of related securities classified either as fair value through OCI or as fair value through profit and loss. The Group manages the price risk through diversified portfolio.

The table below summarises the gain/(loss) impact on account of increase/decrease in the equity share prices on the Group's equity and profit for the period.

₹ in Crore

	Increase in Rate/Price	Year ended 31.03.2019		Year ended 31.03.2018	
		Change in Statement of Profit & Loss	Change in Other Components of Equity	Change in Statement of Profit & Loss	Change in Other Components of Equity
<b>Other Price Risk</b>					
Investment in Equity securities	10%	-	500.47	-	679.82

Decrease in prices by 10% will have equal and opposite impact in financial statements.

### (c) Liquidity Risk

The Group determines its liquidity requirements in the short, medium and long term. This is done by drawing up cash forecast for short and medium term requirements and strategic financing plans for long term needs.

The Group manages its liquidity risk in a manner so as to meet its normal financial obligations without any significant delay or stress. Such risk is managed through ensuring operational cash flow while at the same time maintaining adequate cash and cash equivalent position. The management has arranged for diversified funding sources and adopted a policy of managing assets with liquidity in mind and monitoring future cash flows and liquidity on a regular basis. Surplus funds not immediately required are invested in certain investments (including mutual fund) which provide flexibility to liquidate at short notice and are included in current investments and cash and cash equivalents. Besides, it generally has certain undrawn credit facilities which can be accessed as and when required; such credit facilities are reviewed periodically.

The Group has developed appropriate internal control systems and contingency plans for managing liquidity risk. This incorporates an assessment of expected cash flows and availability of alternative sources for additional funding, if required.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

### Maturity Analysis

The table below shows the Group's financial liabilities into relevant maturity groupings based on their contractual maturities for all non-derivative financial liabilities and net settled derivative financial instruments. The amounts disclosed in the table are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying balances as the impact of discounting is not significant.

₹ in Crore

	Less than 1 Year	1-2 Years	2- 5 Years	More Than 5 Years	Total	Carrying Value
<b>Contractual maturities of financial liabilities as at March 31, 2019</b>						
Non Derivatives						
Borrowings*	6,433.83	3,119.78	26,121.72	34,696.19	70,371.52	52,364.19
Obligations under finance lease	16.32	16.77	19.83	10.13	63.05	50.82
Trade payables	20,722.85	0.79	0.76	-	20,724.40	20,724.20
Other financial liabilities	2,853.58	3.79	-	65.29	2,922.66	2,922.66
<b>Total Non Derivative liabilities</b>	<b>30,026.58</b>	<b>3,141.13</b>	<b>26,142.31</b>	<b>34,771.61</b>	<b>94,081.63</b>	<b>76,061.87</b>
Derivatives	1,080.89	92.40	17.98	-	1,191.27	1,191.27
<b>Total Derivative liabilities</b>	<b>1,080.89</b>	<b>92.40</b>	<b>17.98</b>	<b>-</b>	<b>1,191.27</b>	<b>1,191.27</b>

₹ in Crore

	Less than 1 Year	1-2 Years	2- 5 Years	More Than 5 Years	Total	Carrying Value
<b>Contractual maturities of financial liabilities as at March 31, 2018</b>						
Non Derivatives						
Borrowings*	7,347.83	3,278.59	25,813.18	34,750.97	71,190.57	56,164.59
Obligations under finance lease	66.33	50.90	21.84	16.14	155.21	135.16
Trade payables	20,404.80	0.59	1.06	22.39	20,428.84	20,428.84
Other financial liabilities	2,460.04	11.60	0.32	51.51	2,523.47	2,523.47
<b>Total Non Derivative liabilities</b>	<b>30,279.00</b>	<b>3,341.68</b>	<b>25,836.40</b>	<b>34,841.01</b>	<b>94,298.09</b>	<b>79,252.06</b>
Derivatives	1,308.99	89.16	30.80	-	1,428.95	1,428.95
<b>Total Derivative liabilities</b>	<b>1,308.99</b>	<b>89.16</b>	<b>30.80</b>	<b>-</b>	<b>1,428.95</b>	<b>1,428.95</b>

\* Includes Principal and interest payments, short term borrowings, current portion of debt and excludes unamortised fees.

### B. Derivative Financial Instruments

The Group uses derivative financial instruments such as forwards, futures, swaps, options etc. to hedge its risks associated with foreign exchange fluctuation. Risks associated with fluctuation in the price of the products (copper, aluminium, coal, furnace oil, natural gas, electricity, diesel and precious metals) are minimized by undertaking appropriate derivative instruments. Derivatives embedded in other contracts are treated as separate derivatives when their risks and characteristics are not closely related to their host contracts. In some cases, the embedded derivatives may be designated in a hedge relationship. The fair values of all such derivative financial instruments are recognized as assets or liabilities at the balance sheet date.

The Group also applies hedge accounting using certain foreign currency non-derivative monetary items which are used as hedging instruments for hedging foreign exchange risk.

(a) The Asset and Liability position of various outstanding derivative financial instruments is given below:

₹ in Crore

Nature of Risk being Hedged	As at 31.03.2019		As at 31.03.2018		
	Liability	Asset	Liability	Asset	
<b>Current</b>					
Cash flow hedges					
- Commodity contracts	Price Risk	(79.04)	484.28	(338.08)	477.21
- Interest rate contracts	Interest rate movement risk	-	-	(0.05)	-
- Foreign currency contracts	Exchange rate movement risk	(518.19)	370.36	(235.60)	843.05
Fair value Hedges					
- Embedded derivatives	Risk of change in Fair Value of unpriced inventory	(248.60)	6.11	(4.64)	154.52
Non-designated hedges					
- Commodity contracts	Price Risk	(292.60)	300.89	(524.26)	499.02
- Foreign currency contracts	Exchange rate movement risk	(191.06)	151.79	(211.00)	103.88
<b>Total</b>		<b>(1,329.49)</b>	<b>1,313.43</b>	<b>(1,313.63)</b>	<b>2,077.68</b>
<b>Non - current</b>					
Cash flow hedges					
- Commodity contracts	Price Risk	(28.60)	30.98	(76.65)	72.45
- Foreign currency contracts	Exchange rate movement risk	(72.54)	67.46	(35.75)	43.79
Non-designated hedges					
- Commodity contracts		(2.07)	2.24	(2.83)	1.95
- Foreign currency contracts		(7.17)	6.73	(4.73)	0.04
<b>Total</b>		<b>(110.38)</b>	<b>107.41</b>	<b>(119.96)</b>	<b>118.23</b>
<b>Grand Total</b>		<b>(1,439.87)</b>	<b>1,420.84</b>	<b>(1,433.59)</b>	<b>2,195.91</b>

Fair Value of Embedded Derivatives of ₹ (242.29) crore previous year ₹ 149.88 crore accounted for as part of Trade Payables

Derivative assets are part of other financial assets included in note 12. Derivative liabilities are part of other financial liabilities included in note 26 and 27.

(b) Outstanding position and fair value of various foreign exchange derivative financial instruments:

Currency Pair	As at 31.03.2019			As at 31.03.2018			
	Average exchange rate	Notional Value in Million	Fair Value Gain/ (Loss) ₹ in Crore	Average exchange rate	Notional Value in Million	Fair Value Gain/ (Loss) ₹ in Crore	
<b>Foreign currency forwards</b>							
<b>Cash flow hedges</b>							
Buy	CHF_EUR	0.88	76.05	9.44	0.88	97.00	(18.58)
Buy	USD_CHF	0.98	2.79	(0.07)	0.94	3.00	(0.15)
Buy	BRL_USD	0.26	316.32	(35.64)	0.30	157.00	(5.75)
Buy	EUR_USD	1.15	15.75	1.47	1.22	11.00	(1.39)
Buy	USD_CAD	1.30	29.46	(4.27)	1.28	31.00	(1.21)
Buy	USD_KRW	1,099.02	262.40	(50.54)	1,070.72	200.00	13.50
Buy	EUR_INR	82.72	19.28	(7.06)	-	-	-
Buy	USD_INR	71.65	127.70	(25.10)	-	-	-
Sell	USD_INR	74.18	656.78	88.49	71.30	866.07	360.00
<b>Total</b>				<b>(23.28)</b>			<b>346.42</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

Currency Pair	As at 31.03.2019			As at 31.03.2018			
	Average exchange rate	Notional Value in Million	Fair Value Gain/ (Loss) ₹ in Crore	Average exchange rate	Notional Value in Million	Fair Value Gain/ (Loss) ₹ in Crore	
<b>Foreign currency swaps</b>							
<b>Cash flow hedges</b>							
Sell	USD_INR	63.69	588.81	(129.63)	63.96	938.04	269.07
<b>Total</b>				(129.63)			269.07
<b>Non-Designated</b>							
Buy	AUD_INR	-	-	-	50.40	0.03	-
Buy	EUR_INR	84.86	7.45	(2.57)	80.06	10.63	1.48
Buy	GBP_INR	95.49	0.01	(0.02)	90.00	0.11	0.04
Buy	USD_INR	69.25	31.01	0.99	65.43	126.47	0.35
Buy	GBP_EUR	1.33	185.56	0.01	1.12	212.00	12.72
Buy	USD_KRW	1,117.96	191.44	(20.05)	1,070.38	150.00	4.53
Buy	USD_EUR	0.98	67.67	(1.25)	0.82	64.00	(8.02)
Buy	GBP_USD	0.79	19.76	(0.01)	0.72	19.00	(2.84)
Buy	USD_CHF	1.05	3.02	(0.82)	1.03	29.00	(1.39)
Buy	CAD_USD	0.78	14.90	(4.82)	0.74	15.00	4.75
Buy	USD_BRL	3.13	26.77	(42.16)	3.13	39.00	(21.36)
Buy	JPY_KRW	-	-	-	0.10	1.00	0.03
Buy	CHF_GBP	0.75	0.66	(0.15)	0.74	2.00	(0.07)
Buy	CHF_EUR	0.78	190.99	20.28	0.87	399.00	(63.20)
Buy	CNY_USD	0.15	34.73	14.99	0.15	90.00	(40.87)
Buy	CNY_EUR	0.12	1.28	(0.65)	0.13	4.00	(0.28)
Sell	USD_INR	69.92	129.65	(3.48)	65.98	120.11	2.32
<b>Total</b>				<b>(39.71)</b>			<b>(111.81)</b>

- (c) Outstanding position and fair value of various foreign exchange non-derivative financial instruments used as hedging instruments:

Currency Pair	As at 31.03.2019			As at 31.03.2018			
	Average exchange rate	Notional Value (in Million)	Fair Value Gain/ (Loss) (₹ Crore)	Average exchange rate	Notional Value in Million	Fair Value Gain/ (Loss) ₹ in Crore	
<b>Foreign currency monetary items</b>							
<b>Cash flow hedges</b>							
Debt	USD_INR	71.87	433.83	113.99	64.52	468.77	(30.86)
Liability for Copper Concentrate	USD_INR	69.91	350.17	24.58	64.75	413.08	(14.49)
<b>Total</b>				<b>138.57</b>			<b>(45.35)</b>

- (d) Outstanding position and fair value of various commodity derivative financial instruments

- (i) Outstanding position and fair value of various commodity derivative financial instruments as at 31st March, 2019:

	Currency	Average Price/ Unit	Quantity	Unit	Notional value in millions	Fair Value Gain/(Loss) ₹ in Crore	
<b>Commodity Futures/Forwards/Swaps</b>							
<b>Cash Flow Hedge</b>							
Aluminium	Sell	USD	2,015.99	561,594	MT	1,132.17	361.23
Gold	Sell	INR	3,279,046	6,843	KGS	22,438.51	65.64
Silver	Sell	USD	16.06	1,513,065	TOZ	24.30	8.25
Copper	Sell	USD	6,487.50	800	MT	5.19	0.03
Furnace Oil	Buy	USD	341.20	50,000	MT	17.06	12.46
Coal	Buy	USD	81.00	90,000	MT	7.29	(3.79)
Diesel Fuel	Buy	USD	3.22	8,064,000	Gallons	25.96	(4.19)
Natural gas	Buy	USD	2.87	15,160,000	MMBtu	43.45	(12.22)
Electricity	Buy	USD	46.85	769,828	Mwh	36.07	(19.79)
<b>Total</b>							<b>407.62</b>

		Currency	Average Price/ Unit	Quantity	Unit	Notional value in millions	Fair Value Gain/(Loss) ₹ in Crore
<b>Non-Designated</b>							
Aluminium	Buy	USD	1,890.11	136,315	MT	257.65	(34.63)
Aluminium	Sell	USD	1,911.53	122,755	MT	234.65	78.70
Copper	Buy	USD	6,377.04	8,275	MT	52.77	10.60
Copper	Sell	USD	6,510.89	12,625	MT	82.20	1.96
Gold	Buy	INR	3,288,031	4,474	KGS	14,710.65	(51.23)
Silver	Buy	USD	15.43	217,134	TOZ	3.35	(0.33)
Silver	Sell	USD	15.55	69,015	TOZ	1.07	0.13
Furnace Oil	Buy	USD	363.67	9,998	MT	3.64	3.66
Furnace Oil	Sell	USD	417.39	9,998	MT	4.17	0.06
Natural Gas	Buy	USD	2.86	440,000	MMBtu	1.26	(0.46)
<b>Total</b>							<b>8.46</b>
<b>Embedded derivatives</b>							
<b>Fair Value Hedge</b>							
Copper	Sell	USD	6,105.30	121,896	MT	755.00	(245.71)
Gold	Sell	USD	1,306.69	33,123	TOZ	43.28	2.32
Silver	Sell	USD	15.56	351,099	TOZ	5.46	0.90
<b>Total</b>							<b>(242.49)</b>

- (ii) Outstanding position and fair value of various commodity derivative financial instruments as at 31st March, 2018:

		Currency	Average Price/ Unit	Quantity	Unit	Notional value in millions	Fair Value Gain/(Loss) ₹ in Crore
<b>Commodity Futures/ Forwards/Swaps</b>							
<b>Cash Flow Hedge</b>							
Aluminium	Sell	USD	1,975.80	966,666	MT	1,909.94	196.73
Gold	Sell	USD	1,303.23	126,148	TOZ	164.40	(24.07)
Silver	Sell	USD	17.03	2,713,922	TOZ	46.21	7.32
Copper	Sell	USD	7,270.37	2,700	MT	19.63	8.85
Natural gas	Buy	USD	2.90	20,280,000	MMBtu	58.73	(8.69)
Electricity	Buy	USD	46.85	747,186	Mwh	35.01	(45.21)
<b>Total</b>							<b>134.93</b>
<b>Non-Designated</b>							
Aluminium	Buy	USD	2,027.21	131,299	MT	266.17	(29.16)
Aluminium	Sell	USD	1,630.37	185,144	MT	301.85	14.03
Copper	Buy	USD	6,776.52	22,150	MT	150.10	(12.37)
Copper	Sell	USD	6,574.85	4,175	MT	27.45	(3.05)
Gold	Buy	USD	1,328.29	101,194	TOZ	134.42	(1.84)
Gold	Sell	USD	1,314.30	81,373	TOZ	106.95	(5.71)
Silver	Buy	USD	16.40	553,630	TOZ	9.08	(0.14)
Silver	Sell	USD	16.72	553,630	TOZ	9.25	1.26
Diesel Fuel	Buy	USD	2.71	4,956,000	Gallons	13.44	9.88
Natural Gas	Buy	USD	2.94	480,000	MMBtu	1.41	(0.67)
Furnace Oil	Buy	USD	277.33	3,000	MT	0.83	1.83
Furnace Oil	Sell	USD	361.51	3,000	MT	1.08	(0.18)
<b>Total</b>							<b>(26.12)</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

		Currency	Average Price/ Unit	Quantity	Unit	Notional value in millions	Fair Value Gain/(Loss) ₹ in Crore	
<b>Embedded derivatives</b>								
<b>Fair Value Hedge</b>								
	Copper	Sell	USD	6,916.84	110,063	MT	761.29	150.14
	Gold	Sell	USD	1,326.24	57,285	TOZ	75.97	(0.74)
	Silver	Sell	USD	16.56	466,348	TOZ	7.72	0.48
	<b>Total</b>							<b>149.88</b>

- (e) The following table presents the outstanding position and fair value of various interest rate derivative financial instruments:

Interest rate swaps	Fixed leg	As at 31.03.2019			As at 31.03.2018		
		Average exchange rate	Notional Value in Million	Fair Value Gain/ (Loss) ₹ in Crore	Average exchange rate	Notional Value in Million	Fair Value Gain/ (Loss) ₹ in Crore
<b>Cash flow hedges</b>							
3M-CD-3200	Pay fixed		-	-	3.35%	28.13	(0.05)
<b>Total</b>				<b>-</b>			<b>(0.05)</b>

- (f) The following table presents details of amount held in Effective portion of Cash Flow Hedge and the period during which these are going to be released and affecting Statement of Profit and Loss.

		As at 31.03.2019			As at 31.03.2018		
Cash Flow Hedges	Products/ Currency Pair	Release			Release		
		As at March 31, 2019	In less than 12 Months	After 12 Months	As at March 31, 2018	In less than 12 Months	After 12 Months
Hedge Instrument Type		Gain/ (Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)
Commodity Forwards	Aluminium	458.66	432.99	25.67	182.83	123.11	59.72
	Gold	0.18	0.18	-	(23.88)	(23.88)	-
	Silver	8.23	8.23	-	7.33	7.47	(0.14)
	Copper	0.03	0.03	-	8.85	8.85	-
	Furnace Oil	12.26	12.26	-	-	-	-
	Coal	(3.78)	(3.78)	-	-	-	-
	Diesel Fuel	(2.25)	(1.50)	(0.75)	-	-	-
	Electricity	(24.35)	(8.35)	(16.00)	(50.43)	(12.87)	(37.56)
	Natural Gas	(16.32)	(2.10)	(14.22)	(12.96)	(5.41)	(7.55)
	<b>Total</b>	<b>432.66</b>	<b>437.96</b>	<b>(5.30)</b>	<b>111.74</b>	<b>97.27</b>	<b>14.47</b>
<b>Non derivative financial instruments</b>							
Debt		113.99	113.99	-	(30.86)	(30.86)	-
Liability for Copper		19.54	19.54	-	(9.58)	(9.58)	-
Currency Forwards	USD_INR	88.24	22.49	65.75	360.51	317.69	42.82
	EUR_INR	(7.91)	(7.00)	(0.91)	-	-	-
	USD_EUR	1.65	1.65	-	(2.35)	(5.58)	3.23
	USD_BRL	(36.52)	(13.30)	(23.22)	3.06	1.08	1.98
	USD_CAD	(4.27)	(4.15)	(0.12)	(1.21)	(0.97)	(0.24)
	EUR_KRW	-	-	-	-	(0.26)	0.26
	USD_KRW	(51.07)	(51.39)	0.32	14.79	15.44	(0.65)
	EUR_CHF	10.41	10.41	-	(19.97)	(20.96)	0.99
	USD_CHF	(0.18)	(0.18)	-	(0.06)	(0.06)	-
Currency Swaps	USD_INR	(317.46)	(252.44)	(65.02)	(103.94)	(23.59)	(80.35)
	<b>Total</b>	<b>(183.58)</b>	<b>(160.38)</b>	<b>(23.20)</b>	<b>210.39</b>	<b>242.35</b>	<b>(31.96)</b>
Interest rate swaps	3M-CD-3200	-	-	-	(0.03)	(0.05)	0.02
	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(0.03)</b>	<b>(0.05)</b>	<b>0.02</b>
	<b>Grand Total</b>	<b>249.08</b>	<b>277.58</b>	<b>(28.50)</b>	<b>322.10</b>	<b>339.57</b>	<b>(17.47)</b>



₹ in Crore

Cash Flow Hedges	Products/ Currency Pair	As at 31.03.2019			As at 31.03.2018		
		Release			Release		
		As at March 31, 2019	In less than 12 Months	After 12 Months	As at March 31, 2018	In less than 12 Months	After 12 Months
Hedge Instrument Type		Gain/ (Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)	Gain/(Loss)
Deferred Tax on above		(49.12)	(102.67)	53.54	(59.75)	(82.27)	22.52
<b>Total</b>		<b>199.96</b>	<b>174.91</b>	<b>25.04</b>	<b>262.35</b>	<b>257.30</b>	<b>5.05</b>
<b>Hedge Instrument Type</b>							
Currency Swaps	USD_INR	771.61	615.19	156.42	994.99	360.97	634.02
Deferred Tax on above		(269.63)	(214.97)	(54.66)	(347.69)	(126.14)	(221.55)
		<b>501.98</b>	<b>400.22</b>	<b>101.76</b>	<b>647.30</b>	<b>234.83</b>	<b>412.47</b>

(g) The following tables presents the amount of gain/(loss) recognized in Effective portion of Cash Flow Hedge and recycled during the year 2018-19:

₹ in Crore

Cash Flow Hedges	Opening Balance	Net Amount recognised	Recycled			CTA	As at 31.03.2019
			To P&L	Amount added to Non-Financial Assets	Total Amount recycled		
Commodity	111.74	909.34	609.91	2.39	612.30	23.88	432.66
Forex	210.39	(1,297.82)	(872.33)	(31.11)	(903.44)	0.41	(183.58)
Interest	(0.03)	-	(0.03)	-	(0.03)	-	-
<b>Total</b>	<b>322.10</b>	<b>(388.48)</b>	<b>(262.45)</b>	<b>(28.72)</b>	<b>(291.17)</b>	<b>24.29</b>	<b>249.08</b>
Deferred Tax on above	(59.75)	106.74	90.38	5.17	95.55	(0.56)	(49.12)

₹ in Crore

Cost of Hedging Reserve	Opening Balance	Net Amount recognised	Recycled			CTA	As at 31.03.2019
			To P&L	Amount added to Non-Financial Assets	Total Amount recycled		
Commodity	-	(41.15)	(41.15)	-	(41.15)	-	-
Forex	994.99	200.42	423.80	-	423.80	-	771.61
<b>Total</b>	<b>994.99</b>	<b>159.27</b>	<b>382.65</b>	<b>-</b>	<b>382.65</b>	<b>-</b>	<b>771.61</b>
Deferred Tax on above	(347.69)	(55.66)	(133.72)	-	(133.72)	-	(269.63)

The following tables presents the amount of gain/(loss) recognized in Effective portion of Cash Flow Hedge and recycled during the year 2017-18:

₹ in Crore

Cash Flow Hedges	Opening Balance	Net Amount recognised	Recycled			CTA	As at 31.03.2018
			To P&L	Amount added to Non-Financial Assets	Total Amount recycled		
Commodity	(1,671.43)	(210.57)	(1,987.31)	(0.11)	(1,987.42)	6.32	111.74
Forex	886.92	264.44	932.74	7.14	939.88	(1.09)	210.39
Interest	(1.75)	(0.43)	(2.15)	-	(2.15)	-	(0.03)
<b>Total</b>	<b>(786.26)</b>	<b>53.44</b>	<b>(1,056.72)</b>	<b>7.03</b>	<b>(1,049.69)</b>	<b>5.23</b>	<b>322.10</b>
Deferred Tax on above	308.92	(68.07)	300.60	-	300.60	-	(59.75)

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

₹ in Crore

Cost of Hedging Reserve	Opening Balance	Net Amount recognised	Recycled			CTA	As at 31.03.2018
			To P&L	Amount added to Non-Financial Assets	Total Amount recycled		
Forex	633.97	361.02	-	-	-	-	994.99
Deferred Tax on above	(219.40)	(128.29)	-	-	-	-	(347.69)

- (h) The following table presents the amount of gain/ (loss) recycled from Effective portion of Cash Flow Hedge and Cost of Hedging Reserve and reference of the line item in the Statement of Profit and Loss where those amounts are included:

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
Revenue from Operations	242.18	(1,113.72)
Cost of Materials Consumed	(102.76)	58.24
Depreciation and Amortization	(7.25)	(6.90)
Finance Costs	(0.12)	(2.08)
Other Expenses	(11.85)	7.74
<b>Total</b>	<b>120.20</b>	<b>(1,056.72)</b>

- (i). The adjustment as part of the carrying value of inventories arising on account of fair value hedges is as follows:

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
Copper	251.16	(148.61)
Gold	(2.41)	0.89
Silver	(0.97)	(0.49)
<b>Total</b>	<b>247.78</b>	<b>(148.21)</b>

The Group's hedging policy only allows for effective hedge relationships to be established. The effective portion of hedge is recognised in OCI, while ineffective portion of hedge is recognised immediately in the Statement of Profit and Loss. The Group uses hypothetical derivative method to assess effectiveness. Ineffectiveness may arise on account of differences in critical terms and credit risk of the hedging instrument and the hedged item.

### 56. Offsetting

Financial instruments subject to offsetting, enforceable master netting arrangement and similar arrangement.

#### i. As at March 31, 2019:

₹ in Crore

	Effects on Balance sheet			Related amounts not offset		
	Gross amount	Gross amount set off in the balance sheet	Net amount in the balance sheet	Amounts subject to master netting	Financial Instrument collateral	Net Amount
<b>Financial Assets</b>						
Derivatives	1,454.27	(39.54)	1,414.73	(249.29)	-	1,165.44
Cash and cash equivalents	9,118.74	-	9,118.74	-	-	9,118.74
Trade Receivables	11,459.76	-	11,459.76	-	-	11,459.76
Other financial assets	940.84	-	940.84	-	-	940.84
<b>Total Financial Assets</b>	<b>22,973.61</b>	<b>(39.54)</b>	<b>22,934.07</b>	<b>(249.29)</b>	<b>-</b>	<b>22,684.78</b>
<b>Financial Liabilities</b>						
Derivatives	1,230.81	(39.54)	1,191.27	(249.29)	(75.98)	866.00
Trade Payables	20,724.40	-	20,724.40	-	-	20,724.40
Other financial Liabilities	3,080.33	-	3,080.33	-	-	3,080.33
<b>Total Financial Liabilities</b>	<b>25,035.54</b>	<b>(39.54)</b>	<b>24,996.00</b>	<b>(249.29)</b>	<b>(75.98)</b>	<b>24,670.73</b>

ii. As at March 31, 2018:

₹ in Crore

	Effects on Balance sheet			Related amounts not offset		
	Gross amount	Gross amount set off in the balance sheet	Net amount in the balance sheet	Amounts subject to master netting	Financial Instrument collateral	Net Amount
<b>Financial Assets</b>						
Derivatives	2,063.81	(22.42)	2,041.39	(371.33)	-	1,670.06
Cash and cash equivalents	8,044.94	-	8,044.94	-	-	8,044.94
Trade Receivables	9,959.81	-	9,959.81	-	-	9,959.81
Other financial assets	1,224.29	-	1,224.29	-	-	1,224.29
<b>Total Financial Assets</b>	<b>21,292.84</b>	<b>(22.42)</b>	<b>21,270.42</b>	<b>(371.33)</b>	<b>-</b>	<b>20,899.10</b>
<b>Financial Liabilities</b>						
Derivatives	1,451.37	(22.42)	1,428.95	(371.33)	(3.57)	1,054.05
Trade Payables	20,428.84	-	20,428.84	-	-	20,428.84
Other financial Liabilities	3,325.07	-	3,325.07	-	-	3,325.07
<b>Total Financial Liabilities</b>	<b>25,205.28</b>	<b>(22.42)</b>	<b>25,182.86</b>	<b>(371.33)</b>	<b>(3.57)</b>	<b>24,807.96</b>

57. Interest in Other Entities

A. Subsidiaries:

The Group's wholly-owned subsidiaries along with country of incorporation, place of operation and principal activities are set out below.

Name of Entity	Principal Activity	Country of Incorporation	Place of Operation
Minerals & Minerals Limited	Mining	India	India
Renukeshwar Investments & Finance Limited	Investment	India	India
Renuka Investments & Finance Limited	Investment	India	India
Lucknow Finance Company Limited	Investment	India	India
Dahej Harbour and Infrastructure Limited	Cargo services	India	India
Utkal Alumina International Limited	Manufacturing	India	India
Utkal Alumina Technical & General Services Limited #	Technical Services	India	India
Mauda Energy Limited #	Power Generation	India	India
Hindalco Guinea SARL #	Dormant	South Africa	South Africa
AV Minerals (Netherlands) N.V.	Investment	Netherland	Netherland
Hindalco Do Brasil Industria Comercia de Alumina Ltda	Subsidiary	Brazil	Brazil
AV Metals Inc.	Investment	Canada	Canada
Novelis Inc.	Manufacturing	Canada	Canada
Novelis do Brasil Ltda.	Manufacturing	Brazil	Brazil
Brecha Energetica Ltda.	Distribution Services	Brazil	Brazil
4260848 Canada Inc.	Management Company	Canada	Canada
4260856 Canada Inc.	Management Company	Canada	Canada
8018227 Canada Inc	Management Company	Canada	Canada
Novelis (China) Aluminum Products Co. Limited	Manufacturing	China	China
Novelis (Shanghai) Aluminum Trading Company	Import and export aluminum	China	China
Novelis Lamines France SAS	Distribution Services	France	France
Novelis PAE SAS	Engineering	France	France
Novelis Aluminium Beteiligungs GmbH	Manufacturing	Germany	Germany
Novelis Deutschland GmbH	Manufacturing	Germany	Germany
Novelis Sheet Ingot GmbH	Manufacturing	Germany	Germany
Novelis (India) Infotech Ltd.	Dormant	India	India

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

Name of Entity	Principal Activity	Country of Incorporation	Place of Operation
Novelis Aluminium Holding Company	Intermediate subsidiary	Ireland	Ireland
Novelis Italia SpA	Manufacturing	Italy	Italy
Novelis de Mexico SA de CV	Dormant	Mexico	Mexico
Novelis Korea Ltd.	Manufacturing	South Korea	South Korea
Novelis AG	Management Company	Switzerland	Switzerland
Novelis Switzerland SA	Manufacturing	Switzerland	Switzerland
Novelis MEA Limited	Import and export aluminum	UAE	UAE
Novelis Europe Holdings Limited	Intermediate subsidiary	UK	UK
Novelis UK Ltd.	Manufacturing	UK	UK
Novelis Services Limited	Management Company	UK	UK
Novelis Corporation	Manufacturing	USA	USA
Novelis South America Holdings LLC	Intermediate subsidiary	USA	USA
Novelis Acquisitions LLC	Management Company	USA	USA
Novelis Holdings Inc.	Intermediate subsidiary	USA	USA
Novelis Services (North America) Inc.	Cash management Service	USA	USA
Novelis Global Employment Organization, Inc.	Management Company	USA	USA
Novelis Services (Europe) Inc.	Management Company	USA	USA
Novelis Vietnam Company Limited	Manufacturing	Vietnam	Vietnam

# De-registered/Dissolved/Liquidated, etc. during the year ended March 31, 2019.

The Company has Hindalco Jan Seva Trust and Copper Jan Seva Trust which are consolidated in these financial statements.

### B. Non-Controlling Interests (NCI)

The Group has following non-wholly owned subsidiaries:

Name of Entity	Principal Activity	Country of incorporation	Ownership interest held by the Group	
			31.03.2019	31.03.2018
Suvas Holdings Limited	Power Generation	India	74.00%	51.00%
Hindalco-Almex Aerospace Limited	Manufacturing	India	97.18%	97.18%
East Coast Bauxite Mining Company Private Limited	Mining	India	74.00%	74.00%

None of above non-wholly owned subsidiary is material to the Group, therefore financial information about these non-wholly owned subsidiary are not disclosed separately.

### C. Joint Operations

The Group is engaged in various arrangements on a joint basis with other companies. In assessing whether joint control exists for these arrangements, management evaluate the structure and legal framework and contracts governing the arrangement combined with an assessment of which decisions that significantly influence the return from the arrangement. The Group assesses whether joint arrangements are joint operations where the Group has rights to the assets and obligations for the liabilities related to the arrangement, or a joint venture where the group have an interest in the net assets of the joint arrangement. Accordingly, the Group has identified following joint arrangements as joint operations:

Name of the joint operations	Principal activities	Country of Incorporation	Group's proportion of ownership interest and voting power	
			31.03.2019	31.03.2018
Mahan Coal Limited	Mining	India	50.00%	50.00%
Tubed Coal Mines Limited	Mining	India	60.00%	60.00%
Aluminium Norf GmbH	Rolling and recycling	Germany	50.00%	50.00%
Logan Aluminium Inc.	Rolling and finishing	USA	40.00%	40.00%
Ulsan Aluminium Limited	Rolling and recycling	South Korea	50.10%	50.10%
AluInfra Services SA	Service Company	Switzerland	50.00%	-

- (a) Mahan Coal Limited and Tubed Coal Mines Limited are classified as held for sale.
- (b) Novelis Inc, a subsidiary of the Group, is engaged in following arrangements that are concluded to be joint operations.
- i. Aluminium Norf GmbH (“Alunorf”), a large rolling mill in Germany, is a joint operation between Novelis and Hydro Aluminium Deutschland GmbH (“Hydro”). Both Novelis and Hydro hold a 50% interest in equity, profits and losses, shareholder voting and management control. Novelis shares control of the management of Alunorf with Hydro through a jointly-controlled shareholders’ committee and supervisory board. Management of Alunorf is led jointly by two managing executives, one nominated by Novelis and one nominated by Hydro. The primary objective of Alunorf is to provide tolling services (output) exclusively to Novelis and Hydro as the total output capacity is allocated between Novelis and Hydro. This indicates that both Novelis and Hydro get substantially all of the economic benefits from the assets of the joint arrangement. The major or sole sources of cash inflows for Alunorf are Novelis and Hydro, who are legally obliged to cover production costs.
  - ii. Logan Aluminium Inc (“Logan”), an aluminum rolling mill in Kentucky, is a joint operation between Novelis and Tri-Arrows Aluminium Inc. (“Tri-Arrows”). Logan processes metal exclusively received from Novelis and Tri-Arrows and charges the respective partner a fee to cover expenses. This indicates that both Novelis and Tri-Arrows get substantially all of the economic benefits from the assets of the joint arrangement. Logan is thinly capitalized and relies on the regular reimbursement of costs and expenses by Novelis and Tri-Arrows to fund its operations, indicating that Novelis and Tri-Arrows have an obligation for the liabilities of the arrangement. Other than these contractually required reimbursements, Novelis does not provide other material support to Logan. Logan’s creditors do not have recourse to our general credit. Novelis has a 40% voting interest; however, our participating interest in operations ranges from greater than 50% to approximately 55% depending on output. Novelis has joint ability to make decisions regarding Logan’s production operations and take our share of production and associated costs.
  - iii. In May 2017, Novelis Korea Ltd., a subsidiary of Novelis Inc., entered into definitive agreements with Kobe Steel Ltd. (“Kobe”), an unrelated party, under which Novelis Korea and Kobe Steel Ltd. will jointly own and operate the Ulsan manufacturing plant currently owned by Novelis Korea. In April 2017, Novelis Korea formed a new wholly owned subsidiary, Ulsan Aluminium, Ltd. (UAL). In September 2017, the transaction closed and Novelis Korea sold 49.9% of its shares in UAL to Kobe. The primary objective of UAL is to provide output exclusively to Novelis and Kobe as the total output capacity is allocated between Novelis and Kobe. This indicates that both Novelis and Kobe get substantially all of the economic benefits from the assets of the joint arrangement. The major or sole sources of cash inflows for UAL are Novelis and Kobe, who are legally obliged to cover production costs. We have joint ability to make decisions regarding UAL’s production operations and take our share of production and associated costs.  
  
The primary objective of UAL is to provide output exclusively to Novelis and Kobe as the total output capacity is allocated between Novelis and Kobe. This indicates that both Novelis and Kobe get substantially all of the economic benefits from the assets of the joint arrangement. The major or sole sources of cash inflows for UAL are Novelis and Kobe, who are legally obliged to cover production costs. We have joint ability to make decisions regarding UAL’s production operations and take our share of production and associated costs. We have a 50.1% voting interest; however, our participating interest in operation ranges from greater than 50% to approximately 100% depending on output. We have joint ability to make decisions regarding Logan’s production operations and take our share of production and associated costs. (refer Note 58)
  - iv. In July 2018, Novelis Switzerland SA (Novelis Switzerland), a subsidiary of Novelis, entered into definitive agreements with Constellium Valais SA (Constellium), an unrelated party, under which Novelis Switzerland and Constellium will jointly own and operate Alulnfra Services SA (Alulnfra), the joint arrangement. Each of the parties to the joint arrangement hold a 50% interest in the equity, profits and losses, shareholder voting, management control and rights to use the production capacity of the facility.

**D. Investments in Associates:**

Details of Associates of the Group are set out below. The country of incorporation is also their principal place of business and the proportion of ownership interest is the same as the proportion of voting rights held. The Group’s interests in these entities are accounted for using equity method in the Consolidated Financial statements.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

Name of Entity	Country of incorporation	Proportion of Ownership Interests (%)		Carrying Amount ₹ in Crore	
		31.03.2019	31.03.2018	31.03.2019	31.03.2018
Aditya Birla Science & Technology Company Pvt. Limited (ABSTCPL)	India	49.00%	49.00%	15.16	14.69
Aditya Birla Renewable Subsidiary Limited (ABRSL)	India	26.00%	-	5.88	-
Vodafone Idea Limited (VIL) #	India	-	-	-	-

(a) Summarised financial information in respect of the Group's associates are set out below. These information is based on their Ind-AS financial statements after alignment of Group's accounting policies.

	₹ in Crore			
	As at 31.03.2019		As at 31.03.2018	
	ABSTCPL	ABRSL	ABSTCPL	VIL
<b>Summarised Balance Sheet</b>				
Total Assets	151.29	115.87	147.76	-
Total Liabilities	120.36	93.27	117.79	-
Net Assets	30.93	22.60	29.97	-
Group's share of Net Assets of Associates	15.16	5.88	14.69	-
Dividend Received	-	-	-	-
Carrying Amount	15.16	5.88	14.69	-
<b>Contingent Liabilities</b>				
Share of Contingent Liabilities of the associate	3.25	-	3.25	-

	₹ in Crore			
	Year ended 31.03.2019		Year ended 31.03.2018	
	ABSTCPL	ABRSL	ABSTCPL	VIL
<b>Summarised Statement of Profit and Loss</b>				
Total Revenues	53.96	5.26	56.54	28,242.00
Total Profit/ (Loss) for the year	0.74	0.50	2.22	(4,168.20)
Other comprehensive income for the year	0.23	-	0.07	28.30
Group's share of Profit/ (Loss) of Associates	0.36	0.13	1.09	(218.33)
Group's share of Other comprehensive income of Associates	0.11	-	0.03	-
<b>Reconciliation to carrying amounts</b>				
Opening net assets	29.97	-	27.68	24,732.24
Increase on account of acquisition during the year	-	22.10	-	-
Profit/(Loss) for the year	0.74	0.50	2.22	(4,168.20)
Other comprehensive income	0.23	-	0.07	-
Amounts directly recognised in equity	-	-	-	6,698.36
Closing net assets	<b>30.94</b>	<b>22.60</b>	<b>29.97</b>	<b>27,262.40</b>
Group's share (%)	49.00%	26.00%	49.00%	5.24%
Group's share (Amount)	15.16	5.88	14.69	1,428.00
Dividend Received	-	-	-	-
Carrying amount	<b>15.16</b>	<b>5.88</b>	<b>14.69</b>	<b>1,428.00</b>

# During the year ended March 31, 2018, Idea Cellular Limited (ICL) issued additional shares to its investors which has resulted in dilution of the Group's interest ICL from 6.33% to 5.23%. This dilution of interest in ICL resulted in gain of ₹ 92.15 crore, which had been recorded in consolidated statement of profit and loss account as part of "Share in Profit/ (Loss) in Equity Accounted Investments (Net of Tax)". Further, effective March 31, 2018, the Group has discontinued the equity accounting for its investment in ICL as 'Investment in Associates' as it no longer has significant influence over ICL. Accordingly, the Group had designated its investment in ICL as 'Fair Value through Other Comprehensive Income (FVTOCI)' and recognised a gain of ₹ 305.10 crore, which had been recorded as exceptional income (refer Note 43).

### E. Interests in Joint Ventures:

Details of Joint Ventures of the Group are set out below. The joint ventures listed below have share capital consisting solely equity shares, which are directly held by the Group. The country of incorporation is also their principal place of business and the proportion of ownership interest is the same as the proportion of voting rights held. No entity listed below is listed on any public stock exchange.

	Country of Incorporation	Proportion of Ownership Interests		Carrying Amount ₹ in Crore	
		31.03.2019	31.03.2018	31.03.2019	31.03.2018
MNH Shakti Limited (MNH Shakti)	India	15.00%	15.00%	12.77	12.77
Hydromine Global Minerals (GMBH) Limited (Hydromine)	British Virgin Islands	45.00%	45.00%	0.70	0.70

MNH Shakti and Hydromine have been classified as held for sale. Accordingly, equity accounting for consolidation of MNH Shakti and Hydromine has been discontinued from said dates. The investments in both the joint ventures are carried at fair value and presented as part of "Not-current Assets classified as held for Sale/ Distribution to Owners" in Consolidated Balance Sheet.

### F. Acquisition of Aleris Corporation (Aleris):

On July 26, 2018, Novelis Inc. has signed a definitive agreement to acquire Aleris Corporation (Aleris), a global supplier of rolled aluminum products, for approximately USD 2.58 billion including assumption of debt. As part of the acquisition, Novelis will acquire Aleris's 13 manufacturing facilities across North America, Asia and Europe. The acquisition is subject to customary closing conditions and regulatory approvals.

## 58. Disposal of Subsidiaries

In May 2017, Novelis Korea Ltd., a subsidiary of Novelis Inc., entered into definitive agreements with Kobe Steel Ltd. ("Kobe"), an unrelated party, under which Novelis Korea and Kobe Steel Ltd. will jointly own and operate the Ulsan manufacturing plant currently owned by Novelis Korea. In April 2017, Novelis Korea formed a new wholly owned subsidiary, Ulsan Aluminium, Ltd. (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 ₹ 2,053.15 crore. In this transaction, the Group recognized a net gain of ₹ 1,782.46 crore on the transaction, pre-tax, consisting of: (1) ₹ 915.35 crore gain related to the difference between the fair value of the consideration received and the carrying amount of the former subsidiary's assets (including goodwill of ₹ 274.14 crore) and liabilities; (2) ₹ 952.94 crore gain related to the remeasurement of the retained share in UAL; and (3) ₹ 85.83 crore transaction fees. The net gain of ₹ 1,782.46 crore is recognized as 'exceptional income' in consolidated Statement of Profit and Loss. The fair value of the retained investment was determined using the third party purchase price determined in an arm's length transaction (i.e., fair value). Pursuant to loss of control in UAL, 100% of UAL's assets (including goodwill) are first de-recognised and for remaining 50.1% stake retained, being accounted as business combination, those assets are again recognised as 'additions'.

Gain/(Loss) on disposal of UAL and analysis of assets and liabilities as at date of disposal over which control was lost given below:

	₹ in Crore
<b>Gain/(Loss) on Disposal of Subsidiary</b>	
Consideration received	2,053.15
Net assets over which control was lost	(1,090.20)
Deferred Income	(38.06)
Selling cost	(85.83)
Foreign currency translation	(9.54)
<b>Gain/(loss) on disposal</b>	<b>829.52</b>
Fair value of net assets retained in UAL	1,679.84
Goodwill created	382.43
Carrying value of net assets retained in UAL	(1,094.58)
Presentational foreign currency translation	(14.75)
<b>Gain on remeasurement of the retained interest in the net assets of UAL</b>	<b>952.94</b>
<b>Total gain on disposal of subsidiary</b>	<b>1,782.46</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

₹ in Crore

### Analysis of assets and liabilities over which control was lost

#### ASSETS

##### Non-Current Assets

##### Property, plant and equipment

Land	159.87
Buildings	225.78
Plant and Equipment	544.98
Vehicles and Aircraft	0.26
Furniture and Fixtures	7.57
Office Equipments	0.30
Capital work-in-progress	13.98
Goodwill	137.09
Other intangible assets	0.27
Other Non-Current Assets	0.10
<b>Total Non-Current Assets</b>	<b>1,090.20</b>
<b>Total Assets</b>	<b>1,090.20</b>

### 59. Related party transactions

The Group's related parties principally consist of its associates, joint ventures, trusts and its key managerial personnel. The Group routinely enters into transactions for sale and purchase of products and rendering and receiving services with these related parties. Transactions and balances between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation. Details of transactions and balances between the Group and other related parties, included in the financial statements, are disclosed below.

#### A. Associates and Joint Ventures:

##### (a) Transactions

₹ in Crore

	Year ended 31.03.2019		Year ended 31.03.2018	
	Associates	Joint Ventures	Associates	Joint Ventures
<b>i. Services rendered</b>	-	-	<b>0.03</b>	-
Vodafone Idea Limited	-	-	0.03	-
<b>ii. Interest and dividend received</b>	<b>3.52</b>	-	<b>4.37</b>	-
Vodafone Idea Limited	-	-	0.92	-
Aditya Birla Science & Technology Company Pvt Ltd	3.52	-	3.45	-
<b>iii. Purchase of Materials, Capital Equipment and Others</b>	<b>5.26</b>	-	-	-
Aditya Birla Renewables Subsidiary Ltd.	5.26	-	-	-
<b>iv. Services Received</b>	<b>15.39</b>	-	<b>17.14</b>	-
Vodafone Idea Limited	-	-	3.91	-
Aditya Birla Science & Technology Company Pvt Ltd	15.39	-	13.23	-
<b>v. Investments, Deposits, Loans and Advances made during the year</b>	<b>5.75</b>	-	-	-
Aditya Birla Renewables Subsidiary Ltd.	5.75	-	-	-
<b>vi. Deposits, Loans and Advances received back during the year</b>	-	-	<b>4.90</b>	-
Aditya Birla Science & Technology Company Pvt Ltd	-	-	4.90	-



## (b) Outstanding Balances

₹ in Crore

	As at 31.03.2019		As at 31.03.2018	
	Associates	Joint Ventures	Associates	Joint Ventures
<b>i. Receivables</b>	-	0.03	-	0.03
Hydromine Global Minerals GMBH Limited	-	0.03	-	0.03
<b>ii. Payables</b>	1.33	-	0.26	-
Aditya Birla Science & Technology Company Pvt Ltd	-	-	0.26	-
Aditya Birla Renewables Subsidiary Ltd.	1.33	-	-	-
<b>iii. Deposits, Loans and Advances</b>	50.59	-	50.59	-
Aditya Birla Science & Technology Company Pvt Ltd	50.59	-	50.59	-

All outstanding balances are unsecured and are repayable in cash.

## B. Trusts

### (a) Name of Trusts

Hindalco Employee's Gratuity Fund, Kolkata  
Hindalco Employee's Gratuity Fund, Renukoot  
Hindalco Employees Provident Fund Institution, Renukoot  
Hindalco Superannuation Scheme, Renukoot  
Hindalco Industries Limited Employees' Provident Fund II  
Hindalco Industries Limited Senior Management Staff Pension Fund II  
Hindalco Industries Limited Office Employees' Pension Fund  
For details of transaction with the trust refer Note 49.

## C. Key Managerial Personnel

₹ in Crore

	Year ended 31.03.2019	Year ended 31.03.2018
<b>(a) Managerial Remuneration</b>	<b>37.03</b>	<b>31.98</b>
Mr. D. Bhattacharya - Vice Chairman*	4.04	6.93
Mr. Satish Pai - Managing Director **	28.72	20.97
Mr. Praveen Maheshwari-Whole time Director & Chief Financial Officer **	4.27	4.08
<b>(b) Directors' Remuneration</b>	<b>8.08</b>	<b>9.48</b>
Mr. Kumar Mangalam Birla	3.64	5.19
Smt. Rajashree Birla	0.14	0.08
Mr. A.K. Agarwala	1.20	1.11
Mr. D Bhattacharya	1.21	1.15
Mr. M.M. Bhagat	0.22	0.24
Mr. K.N. Bhandari	0.22	0.21
Mr. Y.P. Dandiwala	0.16	0.17
Mr. Ram Charan	0.07	0.09
Mr. Jagdish Khattar (Resigned w.e.f. May 2018)	-	0.08
Mr. Girish Dave	0.10	0.10
Ms. Alka Bharucha	0.07	-
Mr. Satish Pai (As a Director of Novelis Inc.)	1.05	1.06

\* Includes Pension of ₹ 4.02 crore (31/03/2018: ₹ 4.02 crore) and reimbursement for medical expenses of ₹ 0.02 crore (31/03/2018: ₹ 0.02 crore) for past services.

\*\* Excluding amortisation of fair value of share based payments under Ind AS 102 and provision for gratuity, leave encashment recognised on the basis of actuarial valuation as separate figures are not available.

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

### (c) Outstanding Balances

	As at 31.03.2019	As at 31.03.2018
₹ in Crore		
<b>Payables</b>		
Directors' Remuneration payable	0.01	0.01

**60.** The Company is one of the promoter members of Aditya Birla Management Corporation Private Limited (ABMCPL), a Company limited by guarantee which has been formed to provide common facilities and resources to its members, with a view to optimize the benefits of specialization and minimize cost for each member. The Company is one of the participants in the common pool and shares the expenses incurred by ABMCPL, which is accounted for under appropriate heads. The share of expenses charged by ABMCPL during the year ended March 31, 2019 is ₹ 428.96 crore (31/03/2018: ₹ 341.77 crore) and net outstanding payable balance as at March 31, 2019 is ₹ 32.11 crore (31/03/2018: ₹ 71.58 crore). The outstanding deposit with ABMCPL as at March 31, 2019 is ₹ 16.26 crore (31/03/2018: ₹ 44.71 crore).

**61. During the financial year ended March 31, 2019, the Group has reclassified following comparatives which does not have material impact on the Consolidated Financial Statements.**

Note No.	Note Description	Previously reported amount	Revised amount	Change
₹ in Crore				
<b>Consolidated Balance Sheet</b>				
<b>Assets</b>				
Note 12	Other Financial Assets (Current)	2,982.49	2,857.50	(124.99)
Note 14	Deferred Tax Asset (Net)	643.30	813.45	170.15
Note 15	Other Current Assets	2,930.28	3,055.27	124.99
<b>Liabilities</b>				
Note 26	Other Non Current Financial Liabilities	178.82	183.39	4.57
Note 30	Other Non Current Liabilities	1,180.81	1,176.24	(4.57)
Note 13	Current Tax Liabilities (Net)	954.60	1,193.24	(238.64)
Note 14	Deferred Tax Liabilities (Net)	3,776.57	3,867.21	(90.64)
Note 25	Trade Payables (Current)	20,415.11	20,404.80	10.31
Note 28	Provisions (Non-current)	7,445.69	7,081.05	364.64
Note 28	Provisions (Current)	1,656.62	1,872.44	(215.82)
-				
<b>Consolidated Statement of Profit and Loss</b>				
<b>Income</b>				
Note 32	Revenue from Operations	115,808.59	115,819.70	(11.11)
<b>Expenses</b>				
Note 34	Cost of Materials Consumed	70,865.98	70,872.29	6.31
Note 38	Power and Fuel	8,584.12	8,614.11	29.99
Note 42	Other Expenses	15,142.69	15,117.50	(25.19)
Note 44	Income Tax Expenses (Current Tax)	1,585.46	1,664.17	78.71
Note 44	Income Tax Expenses (Deferred Tax)	488.71	410.00	(78.71)
-				
<b>Consolidated Statement of Cash flows</b>				
	Other Non-operating (Income)/ Expenses (Net)	(35.45)	(25.09)	(10.36)
	(Increase)/ Decrease in Inventories (Net)	(2,975.72)	(2,979.63)	3.91
	(Increase)/ Decrease in Trade and other Receivables (Net)	(728.19)	(465.02)	(263.17)
	Increase/ (Decrease) in Trade and other Payables (Net)	1,917.70	2,173.02	(255.32)
	(Payment)/ Refund of Income Tax (Net)	(1,408.13)	(1,923.12)	514.99
	Impact on Net Cash Generated/ (Used) - Operating Activities	10,887.73	10,897.68	(9.95)
	Effect of exchange variation on Cash and Cash Equivalents	317.47	307.52	9.95

## 62. Additional information required under Schedule III of the Companies Act, 2013

### A. Information regarding subsidiaries, associates, joint ventures and trusts included in the consolidated financial statements for the year ended March 31, 2019:

	Net Assets i.e. total Assets minus total Liabilities		Share in Profit/ (Loss)		Share in Other Comprehensive Income/ (Loss)		Share in total Comprehensive Income/(Loss)	
	As % of Consolidated Net Assets	Amount (₹ Crore)	As % of Consolidated Profit/ (Loss)	Amount (₹ Crore)	As % of Other Comprehensive Income	Amount (₹ Crore)	As % of Total Comprehensive Income	Amount (₹ Crore)
<b>Parent:</b>								
Hindalco Industries Limited	84.43%	48,557.69	21.94%	1,205.43	68.18%	(1,681.22)	-15.71%	(475.79)
<b>Subsidiaries:</b>								
<b>Indian:</b>								
Minerals & Minerals Limited	0.01%	8.35	0.02%	1.34	0.00%	-	0.04%	1.34
Utkal Alumina International Limited	12.29%	7,065.88	25.93%	1,425.10	0.19%	(4.66)	46.89%	1,420.44
Suvas Holdings Limited	0.05%	27.47	-0.03%	(1.59)	0.00%	-	-0.05%	(1.59)
Renuka Investments & Finance Limited	0.25%	142.24	0.19%	10.48	0.68%	(16.82)	-0.21%	(6.34)
Renukeshwar Investments & Finance Limited	0.15%	87.07	0.14%	7.66	0.51%	(12.63)	-0.16%	(4.97)
Dahej Harbour and Infrastructure Limited	0.15%	88.88	0.58%	31.98	0.00%	-	1.06%	31.98
Lucknow Finance Company Limited	0.03%	16.22	0.03%	1.82	0.00%	-	0.06%	1.82
Hindalco-Almex Aerospace Limited	0.15%	83.89	0.08%	4.30	0.01%	(0.16)	0.14%	4.14
East Coast Bauxite Mining Company Private Ltd	0.00%	(0.02)	0.00%	-	0.00%	-	0.00%	-
<b>Foreign:</b>								
AV Minerals (Netherlands) N.V.	20.49%	11,784.18	-0.01%	(0.79)	0.58%	(14.36)	-0.50%	(15.15)
AV Metals Inc.	18.81%	10,818.19	0.00%	-	0.06%	(1.56)	-0.05%	(1.56)
Novelis Inc. (Consolidated)	31.55%	18,142.22	54.13%	2,974.54	55.23%	(1,362.02)	53.23%	1,612.52
Hindalco Do Brasil Industria Comercia de Alumina Ltda	0.25%	144.86	-2.42%	(132.72)	2.42%	(59.71)	-6.35%	(192.43)
Hindalco Guinea SARL	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Non-controlling Interest	0.02%	9.48	-0.01%	(0.66)	0.00%	-	-0.02%	(0.66)
<b>Associates</b>								
<b>Indian:</b>								
Aditya Birla Renewable Subsidiary Limited	0.01%	5.88	0.00%	0.13	0.00%	-	0.00%	0.13
Aditya Birla Science and Technology Company Private Limited	0.03%	15.16	0.01%	0.36	0.00%	0.11	0.02%	0.47
<b>Trusts</b>								
<b>Indian:</b>								
Hindalco Jan Seva Trust	0.00%	1.42	0.00%	(0.14)	0.00%	-	0.00%	(0.14)
Copper Jan Seva Trust	0.01%	3.41	0.01%	0.82	0.00%	-	0.03%	0.82
	<b>168.67%</b>	<b>97,002.47</b>	<b>100.60%</b>	<b>5,528.06</b>	<b>127.86%</b>	<b>(3,153.03)</b>	<b>78.41%</b>	<b>2,375.03</b>
Consolidation Adjustments	-68.67%	(39,491.26)	-0.60%	(33.05)	-27.86%	687.11	21.59%	654.06
	<b>100.00%</b>	<b>57,511.21</b>	<b>100.00%</b>	<b>5,495.01</b>	<b>100.00%</b>	<b>(2,465.92)</b>	<b>100.00%</b>	<b>3,029.09</b>

## NOTES FORMING PART OF THE CONSOLIDATED FINANCIAL STATEMENTS

### B. Information regarding subsidiaries, associates and joint ventures included in the consolidated financial statements for the year ended March 31, 2018:

	Net Assets i.e. total Assets minus total Liabilities		Share in Profit/ (Loss)		Share in Other Comprehensive Income/ (Loss)		Share in total Comprehensive Income/ (Loss)	
	As % of Consolidated Net Assets	Amount (₹ Crore)	As % of Consolidated Profit/ (Loss)	Amount (₹ Crore)	As % of Other Comprehensive Income	Amount (₹ Crore)	As % of Total Comprehensive Income	Amount (₹ Crore)
<b>Parent:</b>								
Hindalco Industries Limited	90.14%	49,450.74	23.62%	1,436.49	32.00%	957.15	26.38%	2,393.64
<b>Subsidiaries:</b>								
<b>Indian:</b>								
Minerals & Minerals Limited	0.01%	7.01	0.09%	5.31	0.00%	-	0.06%	5.31
Utkal Alumina International Limited	10.29%	5,645.44	9.23%	561.29	0.00%	0.09	6.19%	561.38
Utkal Alumina Technical & General Services Limited	0.00%	-	0.00%	(0.04)	0.00%	-	0.00%	(0.04)
Suvas Holdings Limited	0.02%	13.04	0.00%	(0.25)	0.00%	-	0.00%	(0.25)
Renuka Investments & Finance Limited	0.32%	178.14	0.14%	8.26	-0.26%	(7.70)	0.01%	0.56
Renukeshwar Investments & Finance Limited	0.19%	106.50	0.11%	6.45	-0.38%	(11.37)	-0.05%	(4.92)
Dahej Harbour and Infrastructure Limited	0.18%	99.10	0.66%	39.93	0.00%	-	0.44%	39.93
Lucknow Finance Company Limited	0.03%	19.18	0.03%	1.59	0.00%	-	0.02%	1.59
Hindalco-Almex Aerospace Limited	0.15%	79.76	0.04%	2.69	0.00%	(0.12)	0.03%	2.57
East Coast Bauxite Mining Company Private Ltd	0.00%	(0.02)	0.00%	-	0.00%	-	0.00%	-
Mauda Energy Limited	0.00%	-	0.00%	-	0.00%	-	0.00%	-
<b>Foreign:</b>								
AV Minerals (Netherlands) N.V.	19.94%	10,937.62	-0.01%	(0.70)	-0.03%	(0.90)	-0.02%	(1.60)
AV Metals Inc.	18.56%	10,181.78	0.00%	0.01	0.00%	(0.10)	0.00%	(0.09)
Novelis Inc. (Consolidated)	28.87%	15,837.28	65.41%	3,978.69	60.07%	1,796.81	63.65%	5,775.50
Hindalco Do Brasil Industria Comercia de Alumina Ltda	0.23%	128.29	-2.47%	(149.96)	-0.37%	(11.07)	-1.77%	(161.03)
Hindalco Guinea SARL	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Non-controlling Interest	0.02%	8.64	0.00%	(0.05)	0.00%	-	0.00%	(0.05)
<b>Associates</b>								
<b>Indian:</b>								
Vodafone Idea Limited (refer Note 57 D)	0.00%	-	-2.07%	(126.18)	0.00%	-	-1.39%	(126.18)
Aditya Birla Science and Technology Company Private Limited	0.03%	14.69	0.02%	1.09	0.00%	0.04	0.01%	1.13
	<b>168.99%</b>	<b>92,707.19</b>	<b>94.77%</b>	<b>5,764.62</b>	<b>91.02%</b>	<b>2,722.83</b>	<b>93.53%</b>	<b>8,487.45</b>
Consolidation Adjustments	-68.99%	(37,846.78)	5.23%	318.25	8.98%	268.59	6.47%	586.84
	<b>100.00%</b>	<b>54,860.41</b>	<b>100.00%</b>	<b>6,082.87</b>	<b>100.00%</b>	<b>2,991.42</b>	<b>100.00%</b>	<b>9,074.29</b>

C. MNH Shakti Limited, an Indian joint venture, and Hydromine Global Minerals (GMBH) Limited, a foreign joint venture, of the Group have been classified as held for sale. As a result of the same, equity accounting for these joint ventures has been discontinued and the investments in these joint ventures are carried at fair value.

As per our report annexed.

**For Price Waterhouse & Co Chartered Accountants LLP**  
Firm Registration Number: 304026E/ E-300009

**Sumit Seth**  
Partner  
Membership Number: 105869

**For and on behalf of the Board of Hindalco Industries Limited**

**Praveen Kumar Maheshwari**  
Whole-time Director &  
Chief Financial Officer  
DIN-00174361

**Anil Malik**  
Company Secretary

**Satish Pai**  
Managing Director &  
DIN-06646758

**M M Bhagat**  
Director  
DIN-00006245

Place : Mumbai  
Dated : May 16, 2019

## Form AOC-1

Pursuant to first proviso to sub-section (3) of Section 129 read with Rule 5 of Companies (Accounts) Rules, 2014, Statement containing salient features of the financial statement of subsidiaries/associate companies/joint ventures

### Part "A" - Subsidiaries

Figures INR in Core & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments			Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
								Shares, Debitures, Bonds & Others	Total	Others						
1	Minerals and Minerals Limited {}	India	INR	0.05	8.30	22.12	13.77	-	-	44.48	1.90	0.57	1.34	-	100	
2	Renuka Investments and Finance Limited {}	India	INR	9.25	132.99	142.89	0.65	127.29	10.74	10.45	(0.03)	10.48	-	100		
3	Renukeshwar Investments and Finance Limited {}	India	INR	4.80	82.28	87.08	0.00	78.46	7.63	7.62	(0.03)	7.66	-	100		
4	Suvas Holding Limited {}	India	INR	29.25	(1.78)	38.53	11.06	-	0.05	(2.07)	(0.48)	(1.59)	-	74		
5	Utkal Alumina International Limited {}	India	INR	6,251.48	814.40	10,041.86	2,975.98	23.57	4,190.06	1,776.63	351.53	1,425.10	-	100		
6	Hindalco-Almex Aerospace Limited {}	India	INR	88.56	(4.66)	93.78	9.89	19.09	77.13	5.12	0.82	4.30	-	97.18		
7	Lucknow Finance Company Limited {}	India	INR	9.90	6.32	17.18	0.96	7.86	2.77	2.33	0.52	1.82	-	100		
8	Danej Harbour and Infrastructure Limited {}	India	INR	50.00	38.88	108.19	19.30	46.20	79.33	45.24	13.26	31.98	-	100		
9	East Coast Bauxite Mining Co.Pvt.Ltd. {}	India	INR	0.01	(0.03)	0.01	0.03	-	-	(0.00)	-	(0.00)	-	74		
10	Mauda Entergy Limited {}%	India	INR	-	-	-	-	-	-	-	-	-	-	100		
11	Utkal Alumina Technical and General Services Ltd. {} <sup>98%</sup>	India	INR	-	-	-	-	-	-	(0.04)	-	(0.04)	-	100		
12	A V Minerals ( Netherlands) N.V. *	Netherlands	INR	12,029.17	(1,026.23)	11,003.03	0.08	11,002.89	-	(485.01)	-	(485.01)	-	100		
			USD	1,738.70	(148.33)	1,590.38	0.01	1,590.36	0.00	(69.40)	0.00	(69.40)	-			
13	A V Metals Inc. #*	Canada	INR	-	10,818.19	10,818.20	0.01	10,818.20	-	-	-	-	-	100		
			USD	0.00	1,563.66	1,563.66	0.00	1,563.66	0.00	0.00	0.00	0.00	0.00	-		
14	Novelis Inc. ##*	Canada	INR	10,931.22	(7,832.25)	17,302.74	14,203.78	0.00	4,214.63	(269.42)	20.22	(289.64)	-	100		
			USD	1,580.00	(1,132.07)	2,500.94	2,053.01	0.00	603.03	(38.55)	2.89	(41.44)	-			
15	4260848 Canada Inc. *	Canada	INR	848.51	(574.99)	278.44	4.92	0.00	0.00	0.00	4.97	(4.97)	-	100		
			USD	122.64	(83.11)	40.25	0.71	0.00	0.00	0.00	0.71	(0.71)	-			
16	4260856 Canada Inc. *	Canada	INR	1,272.80	(872.78)	407.36	7.35	0.00	0.00	0.00	7.42	(7.42)	-	100		
			USD	183.97	(126.15)	58.88	1.06	0.00	0.00	0.00	1.06	(1.06)	-			
17	Novelis South America Holdings LLC *	USA	INR	0.01	(0.01)	-	-	-	-	-	0.00	-	-	100		
			USD	0.00	(0.00)	0.00	0.00	0.00	0.00	0.00	0.00	-	-			
18	Novelis (India) Infotech Ltd. \$	India	INR	1.00	-	-	(1.0)	-	-	-	-	-	-	100		
			USD	-	(6,655.60)	23,211.57	29,867.16	-	34,501.61	1,335.91	304.31	1,031.61	-	100		
19	Novelis Corporation (Texas) *	USA	USD	0.00	(982.00)	3,355.00	4,317.00	0.00	4,936.49	191.14	43.54	147.60	-	100		
			INR	0.05	(0.05)	-	-	-	-	-	0.00	-	-	100		
20	Novelis de Mexico SA de CV *	Mexico	USD	0.01	(0.01)	0.00	0.00	0.00	0.00	0.00	0.00	-	-	100		
			INR	1,694.41	4,641.80	11,783.72	5,447.52	-	14,440.96	2,255.47	817.94	1,437.53	-	100		
21	Novelis do Brasil Ltda. *	Brazil	BRL	958.53	2,625.87	6,666.06	3,081.66	0.00	7,806.02	1,219.19	442.14	777.05	-	100		
			INR	2.61	3,366.54	9,293.58	5,924.42	0.00	13,850.12	469.58	90.80	378.78	-	100		
22	Novelis Korea Limited *	Korea	KRW	416.78	537,572.22	1,484,006.00	946,017.00	0.00	2,206,141.00	74,798.00	14,463.00	60,335.00	-	100		

Figures INR in Core &amp; Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments Shares, Debentures, Bonds & Others	Turnover/ Revenues	Profit/ (Loss) before Tax	Provision for Tax	Profit/ (Loss) after Tax	Proposed Dividend	% of Share Holding
23	Novelis UK Ltd. *	England	INR	1,315.50	766.27	2,960.80	879.03	-	3,995.91	94.80	25.47	69.32	-	100
			GBP	146.09	85.10	328.80	97.62	0.00	435.76	10.34	2.78	7.56	-	
24	Novelis Services Limited *	England	INR	1,390.69	1,813.10	3,209.91	6.12	-	413.46	334.41	44.79	289.61	-	100
			USD	201.01	262.07	463.96	0.89	0.00	59.16	47.85	6.41	41.44	-	
25	Novelis Deutschland GmbH *	German	INR	937.64	34.70	6,006.27	5,033.93	-	23,472.81	242.76	0.00	242.76	-	100
			EUR	120.80	4.47	773.78	648.52	0.00	2,902.24	30.02	0.00	30.02	-	
26	Novelis Aluminium Beteiligungs GmbH *	England	INR	0.19	0.17	0.37	0.00	0.00	0.00	(0.00)	0.00	(0.00)	-	100
			EUR	0.03	0.02	0.05	0.00	0.00	0.00	(0.00)	0.00	(0.00)	-	
27	Novelis Switzerland SA *	Switzerland	INR	34.74	2,928.73	4,000.97	1,037.50	0.00	5,510.48	179.04	38.06	140.98	-	100
			CHF	5.00	421.48	575.78	149.31	0.00	781.70	25.40	5.40	20.00	-	
28	Novelis Laminés France SAS *	France	INR	24.06	24.44	50.15	1.65	-	4.81	0.45	0.17	0.29	-	100
			EUR	3.10	3.15	6.46	0.21	0.00	0.60	0.06	0.02	0.04	-	
29	Novelis Italia SPA *	Italy	INR	745.17	(249.93)	1,127.78	632.54	-	1,730.58	(1.81)	0.44	(2.25)	-	100
			EUR	96.00	(32.20)	145.29	81.49	0.00	213.97	(0.22)	0.05	(0.28)	-	
30	Novelis Aluminium Holding Company *	Ireland	INR	1,685.15	578.44	6,833.64	4,570.05	-	264.12	61.60	35.81	25.79	-	100
			EUR	217.10	74.52	880.37	588.76	0.00	32.66	7.62	4.43	3.19	-	
31	Novelis PAE SAS *	France	INR	31.36	82.98	225.03	110.69	-	199.85	5.40	0.75	4.66	-	100
			EUR	4.04	10.69	28.99	14.26	0.00	24.71	0.67	0.09	0.58	-	
32	Novelis Europe Holdings Limited *	Wales	INR	339.68	2,051.99	5,402.05	3,010.38	-	(6.86)	(151.22)	0.00	(151.22)	-	100
			USD	49.10	296.60	780.81	435.12	0.00	(0.98)	(21.64)	0.00	(21.64)	-	
33	Novelis AG (Switzerland) *	Switzerland	INR	6.95	1,250.70	4,937.22	3,679.57	-	6,497.52	49.95	0.42	49.54	-	100
			CHF	1.00	179.99	710.52	529.53	0.00	921.72	7.09	0.06	7.03	-	
34	Novelis Holdings Inc. *	USA	INR	0.00	1,709.17	2,109.17	400.00	-	-	(258.83)	(18.54)	(240.29)	-	100
			USD	0.00	247.04	304.86	57.82	0.00	0.00	(37.03)	(2.65)	(34.38)	-	
35	8018227 Canada Inc. *	France	INR	0.00	(590.35)	1,754.99	2,345.34	0.00	0.00	(133.74)	5.82	(139.56)	-	100
			USD	0.00	(85.33)	253.67	339.00	0.00	0.00	(19.14)	0.83	(19.97)	-	
36	Novelis Acquisitions LLC *	USA	INR	-	-	-	-	-	-	-	0.00	-	-	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	
37	Novelis Sheet Ingot GmbH (Germany) *	German	INR	155.24	-	1,359.43	1,204.19	-	727.55	(7.60)	0.00	(7.60)	-	100
			EUR	20.00	0.00	175.14	155.14	0.00	89.96	(0.94)	0.00	(0.94)	-	
38	Novelis MEA Ltd (Dubai) *	USA	INR	6.31	635.42	1,680.49	1,038.76	-	3,679.21	213.02	0.00	213.02	-	100
			USD	0.91	91.84	242.90	150.14	0.00	526.42	30.48	0.00	30.48	-	
39	Novelis (Shanghai) Aluminium Trading Company *	China	INR	22.82	91.53	122.41	8.06	-	49.15	5.49	2.13	3.36	-	100
			CNY	22.14	88.80	118.76	7.82	0.00	47.22	5.28	2.05	3.23	-	
40	Novelis (China) Aluminium Products Co. Ltd. *	China	INR	468.26	95.18	1,658.40	1,094.97	-	1,762.22	176.77	46.01	130.75	-	100
			CNY	454.28	92.33	1,608.91	1,062.29	0.00	1,692.89	169.81	44.20	125.61	-	
41	Novelis Vietnam Company Limited (Vietnam) *	Vietnam	INR	5.93	26.77	42.95	10.25	0.00	11.60	(5.27)	0.06	(5.33)	-	100
			VND	19,648.92	88,645.26	142,231.96	33,937.78	0.00	38,474.81	(17,492.08)	205.94	(17,698.02)	-	

Figures INR in Core & Foreign Currency in Million

Sr. No.	Name of the Subsidiary Company	Country	Reporting currency	Capital	Reserves	Total Assets	Total Liabilities	Investments		Turnover/ Revenues	Profit/(Loss) before Tax	Provision for Tax	Profit/(Loss) after Tax	% of Share Holding
								Shares, Debentures, Bonds & Others	Total					
42	Novelis Services (North America) Inc. *	USA	INR	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00	-	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	
43	Novelis Services (Europe) Inc. *	USA	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	
44	Brecha Energetica Ltda *	Brazil	INR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	99.99
			BRL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	
45	Global Employment Organization (GEO) - Repurpose of Eurofoil and PAE Delaware *	USA	INR	2.25	(0.66)	13.72	12.13	-	-	0.00	(0.12)	(0.02)	(0.09)	100
			USD	0.33	(0.10)	1.98	1.75	0.00	0.00	0.00	(0.02)	(0.00)	(0.01)	
46	Hindalco Guinea SARL %*	South Africa	INR	-	-	-	-	-	-	-	-	-	-	100
			USD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
47	Hindalco Do Brazil Industria Comercio de Alumina LTDA #*	Brazil	INR	939.40	(794.53)	319.61	174.75	342.65	(132.05)	0.00	(132.05)	-	-	100
			Reals	531.42	(449.47)	180.81	98.85	0.00	185.46	(71.47)	0.00	(71.47)	-	

\* Subsidiary of AV Minerals (Netherlands) N.V.

# Subsidiary of AV Metals Inc.

@ Subsidiary of Utkal Alumina International Limited

% De-registered/Dissolved/Liquidated etc.

§ Under Liquidation

\* Balance sheet items are translated at closing exchange rate and Profit/(Loss) items are translated at average exchange rate.

(†) For Indian Entities. Revenue includes Turnover + Other Income

List of Subsidiaries which have been liquidated / amalgamated / sold during FY 18-19	From Ccy	To Ccy	Avg spot rate for the year	Closing rate for 31st March 2019	From Ccy		To Ccy		List of Subsidiaries which are yet to commence operations.
					From Ccy	To Ccy	From Ccy	To Ccy	
Mauda Entergy Limited	AUD	INR	50,939	49,114	BRL	USD	3,783	3,914	East Coast Bauxite Mining Co.Pvt.Ltd
Utkal Alumina Technical and General Services Ltd. @	BRL	INR	18,500	17,677	CHF	USD	0.991	0.996	
Hindalco Guinea SARL	CAD	INR	53,259	51,777	CNY	USD	6,713	6,712	
	CHF	INR	0,014	0,014	EUR	USD	1,158	1,122	
	CNY	INR	0,096	0,097	GBP	USD	1,313	1,302	
	EUR	INR	80,878	77,622	JPY	USD	110,876	110,815	
	GBP	INR	91,699	90,048	SEK	USD	8,963	9,291	
	JPY	INR	1,587	1,602	SGD	USD	1,358	1,355	
	NOK	INR	8,398	8,030					
	SEK	INR	7,799	7,446					
	SGD	INR	51,453	51,061					
	USD	INR	69,891	69,185					

## Part “B” Statement pursuant to Section 129 (3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

Sr. No.	Name of Associates / Joint Ventures	Shares of Associate/Joint Ventures held by the company on the year end				Profit/Loss for the year			Description of how there is significant influence	Base on why the associate / joint venture is not considered
		Latest Audited Balance Sheet Date	Number of shares	Amount of investment (₹ in crore)	Extent of Holding% attributable	Network to Shareholding as per latest audited balance sheet (₹ in Crore)	Considered in consolidation (₹ in Crore)	Not considered in consolidation		
<b>Associates</b>										
1	Aditya Birla Science and Technology Company Private Limited	31-Mar-19	9,800,000	9.80	49.00	15.16	0.36		Note A	
2	Aditya Birla Renewables Subsidiary Ltd	31-Mar-19	5,746,000	5.75	26.00	5.88	0.13			
3	Associates of Novelis Inc. @	31-Mar-19	3,001.00	10.64		5.57	0.26			
<b>Joint Ventures</b>										
1	Hydromine Global Minerals (GMBH) Limited	31-Mar-18	6,465,000	1.00	45.00	30.45	-	(0.14)	Note B	Held for sale
2	MNH Shakti Limited	31-Mar-19	12,765,000	12.77	15.00	12.69	-			Held for sale
<b>Joint Operations</b>										
1	Mahan Coal Limited	31-Mar-19	41,250,000	19.25	50.00	20.79	1.19		Note A	Held for sale
2	Tubed Coal Mines Limited	31-Mar-19	15,296,700	0.00	60.00	1.80	0.03			Held for sale
3	Associates of Novelis Inc. @	31-Mar-19	10,041.00	38.69		19,953.59	331.03			
<b>@ - Associates of Novelis Inc.</b>										
	Deutsche Aluminium VerpackungRecycling GMBH	31-Dec-18	1	7,148,995	30%	2,973,989	105,408			Equity
	France Aluminium Recyclage SA	31-Dec-18	3,000	3,492,995	20%	2,599,160	155,561.0			Equity
<b>@ - Joint Operations of Novelis Inc.</b>										
	Aluminium Norf GmbH	31-Dec-18	1	2,382,998	50%	3,473,045,620	261,398,102			Equity
	Ulsan Aluminium	31-Mar-19	5,000	1,564,177	50%	18,619,833,354	115,640,646			Equity
	Logan	31-Mar-19	40	27.67	40%	(2,139,285,325)	(46,005,989)			Consolidated
	AluInfra	31-Dec-18	5,000	34,743,650	50%	NOTE B	NOTE B			Equity

Note A: There is significant influence due to percentage holding of share capital

Note B: Non-availability of Financial Statements

For and on behalf of the Board of Hindalco Industries Limited

**Praveen Kumar Maheshwari**  
Whole-time Director & Chief Financial Officer  
DIN-00174361

**Anil Malik**  
Company Secretary

**Satish Pai**  
Managing Director  
DIN-06646758

**M M Bhagat**  
Director  
DIN-00006245

Place : Mumbai  
Dated : May 16, 2019



## GLOSSARY OF TERMS

\$	- United States Dollar	Tc/Rc	- Treatment Charge and Refining Charge
ABG	- Aditya Birla Group	US	- The United States of America
Al/AL	- Aluminium	VAP	- Value Added Products
BEE	- Bureau of Energy Efficiency	IMF	- International Monetary Fund
Bn	- Billion	GDP	- Gross Domestic Product
CAGR	- Compounded Annual Growth Rate	NITI	- National Institute for Transforming India
CCR	- Copper Continuous Cast Rods	JNARDDC	- Jawaharlal Nehru Aluminium Research Development and Design Centre
CII	- Confederation of Indian Industry	IMMT	- Institute of Minerals and Materials Technology
CIL	- Coal India Limited	ARAI	- Automobile Research Association of India
CSR	- Corporate Social Responsibility	ISRO	- Indian Space Research Organisation
Cu	- Copper	EPS	- Earning per Share
CY	- Calendar Year	ZLD	- Zero Liquid Discharge
DAP	- Di Ammonium Phosphate	DSIR	- Department of Scientific & Industrial Research
EBITDA	- Earnings Before Interest, Tax, Depreciation and Amortisation	M&A	- Mergers and Acquisitions
EV	- Electric Vehicles	WAH	- Women's Conclave for Hindalco
FICCI	- Federation of Indian Chambers of Commerce & Industry	HTU	- Hindalco Technical University
FRP	- Flat Rolled Products	AR	- Augmented Reality
FY	- Financial Year	VR	- Virtual Reality
GHG	- Green House Gas	AI	- Artificial Intelligence
GJ/t	- GigaJoule	INCAL	- International Conference on Aluminium and Exhibition
GW	- Giga Watt	MoU	- Memorandum of Understanding
HIL	- Hindalco Industries Limited	HFQ	- Hot Form Quench
HR	- Human Resource	RAV	- Recreational Active Vehicle
IIT	- Indian Institute of Technology	SG&A	- Selling General and Administrative
kA	- Kilo Ampere	NPS	- Net Promoter Score
Kt	- Kilo Tonnes	OTIF	- On time in Full
LME	- London Metal Exchange	SME	- Small and Medium Enterprises
LTISR	- Loss Time Injury Severity Rate	SDG	- Sustainable Development Goals
M <sup>3</sup> /t	- Cubic Meters per tonne	CIGRE	- Conseil International des Grands Réseaux Électriques
Mn	- Million	UNDP	- United Nations Development Programme
Mtpa	- Million Tonnes per Annum	NAMC	- National Award for Manufacturing Competitiveness
Mt	- Million Tonnes		
MW	- Mega Watt		
PAT	- Profit After Tax		
PBT	- Profit Before Tax		
R&D	- Research & Development		
SWOT	- Strength, Weakness, Opportunities and Threats		





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