OUR EARTH OUR GROWTH

THE SUSTAINABLE WAY

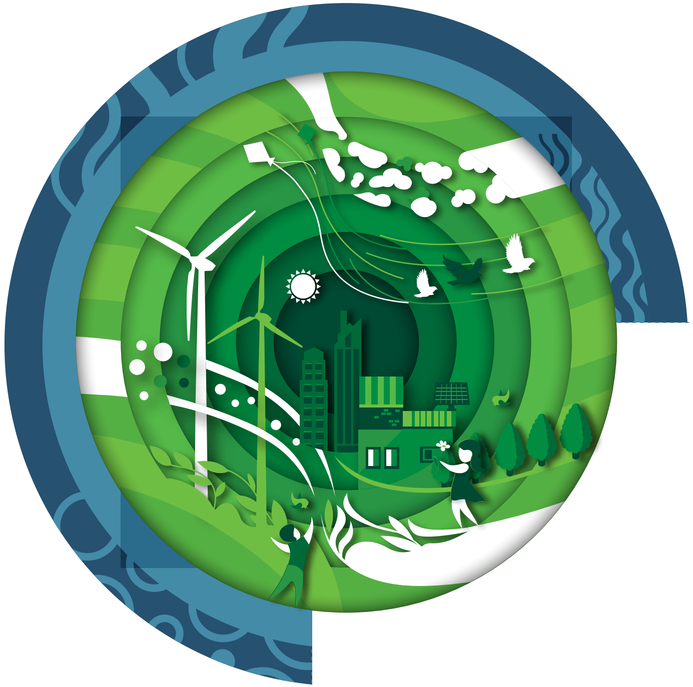
vedanta
transforming elements

Desh Ki Zarooraton Ke Liye

Resources That Grow Nations

VEDANTA RESOURCES LIMITED

INTEGRATED REPORT AND ANNUAL ACCOUNTS 2019-20



OUR EARTH, OUR GROWTH.
THE SUSTAINABLE WAY.

At Vedanta, we unearth and harness the enormous potential of natural resources in the most sustainable manner to enable a better world for all.

Our brand promise is built on the premise that everything we enjoy on Earth comes from beneath it. It is these resources that help us live, grow and sustain.

We are in the business of exploring and transforming natural resources sustainably with a long-term growth focus. We undertake responsible explorations, to fulfil natural resource requirements and contribute to the nation's resource sufficiency.

Our strategy is to focus on all-round operational excellence, allocate capital judiciously, maintain a resilient balance sheet, augment our Reserves and Resources (R&R) base, identify and deliver on growth opportunities.

In doing so, we create lasting value, led by best possible technology, a zeal for innovation, an expert workforce and a strong commitment to sustainability.

ABOUT THE REPORT

Inspired by our values, we remain committed to disclosing relevant information pertaining to our material issues, with highest standards of transparency and integrity. These reports are prepared to assist our stakeholders, primarily the providers of financial capital, to make an informed assessment of our ability to create value over the short, medium and long term. They strive to demonstrate our confidence, capacity to grow and our ability to deliver on set strategies that can drive significant financial and non-financial value for everyone.

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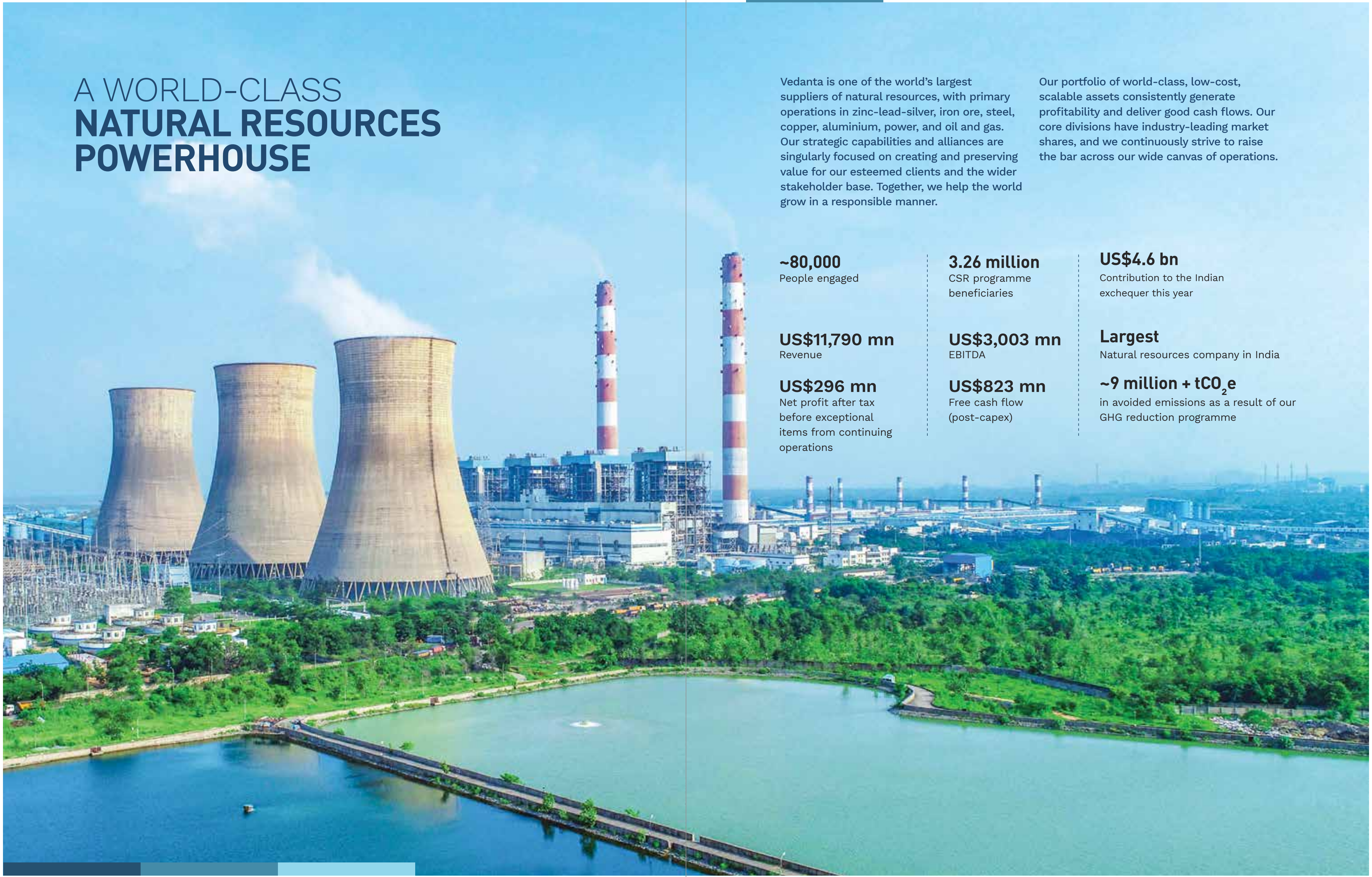


A WORLD-CLASS **NATURAL RESOURCES POWERHOUSE**

Vedanta is one of the world's largest suppliers of natural resources, with primary operations in zinc-lead-silver, iron ore, steel, copper, aluminium, power, and oil and gas. Our strategic capabilities and alliances are singularly focused on creating and preserving value for our esteemed clients and the wider stakeholder base. Together, we help the world grow in a responsible manner.

Our portfolio of world-class, low-cost, scalable assets consistently generate profitability and deliver good cash flows. Our core divisions have industry-leading market shares, and we continuously strive to raise the bar across our wide canvas of operations.

~80,000
People engaged

US$11,790 mn
Revenue

US$296 mn
Net profit after tax before exceptional items from continuing operations

3.26 million
CSR programme beneficiaries

US$3,003 mn
EBITDA

US$823 mn
Free cash flow (post-capex)

US$4.6 bn
Contribution to the Indian exchequer this year

Largest
Natural resources company in India

~9 million + tCO_2e
in avoided emissions as a result of our GHG reduction programme

WHAT WE DO
OUR VALUE CHAIN

EXPLORATION
We have consistently added more to our Reserves and Resources (R&R) through brownfield and greenfield activities. This helps us extend the lives of our existing mines and oilfields.

ASSET DEVELOPMENT
We have a good track record of executing projects on time and within budget. We take special care to develop the resource base to optimise production and increase the life of the resource. We also strategically develop processing facilities.

EXTRACTION
Our operations are focused on exploring and producing metals, extracting oil and gas and generating power. We extract zinc-lead-silver, iron ore, steel, copper and aluminium. We have three operating blocks in India to produce oil and gas.

PROCESSING
We produce refined metals by processing and smelting extracted minerals at our zinc, lead, silver, copper, and aluminium smelters, and other processing facilities in India and Africa. For this purpose, we generate captive power as a best practice measure and sell any surplus power.

VALUE ADDITION
We meet market requirements by converting the primary metals produced into value-added products such as sheets, rods, bars and rolled products, among others, at our zinc, aluminium and copper businesses.

WELL-RESOURCED TO CREATE LONG-TERM VALUE

255 million tonnes	73 million tonnes	1,194 mmboe	6.5 million tonnes
Zinc reserves	Iron ore reserves	Oil reserves	Bauxite reserves

WHAT DRIVES US
OUR PURPOSE

Our values nurture our culture and underpin our growth and success over the long term. Our ~80,000-strong workforce knows what is critical, how we work together as a team and the way in which growth and sustainable development are at the centre of what we do.

These are universal values, which guide us as we expand into unexplored markets and countries. Our people are our best brand ambassadors, who are empowered to drive excellence and innovation and we demonstrate world-class standards of governance, safety, sustainability and social responsibility.

Our business was built with a simple mission envisioned by the Group's Chairman, Anil Agarwal: To create a leading global natural resource company. We also make significant contributions to society as we continue to create jobs, thus supporting our host communities through our various social programmes in childcare, health, education and women empowerment. As one of the largest contributors to the national exchequer, we create and distribute significant value along our entire supply chain.

WHAT UNDERPINS US
OUR CORE VALUES

Trust | Care | Integrity | Entrepreneurship

Innovation | Respect | Excellence

Refer to People & Culture Section on Page 40.

VEDANTA AT A GLANCE CONTINUED...

CONTRIBUTION TO THE INDIAN NATIONAL ECONOMY

VRL's GDP Contribution

2.2% **INDUCED IMPACT**

VRL influences consumption patterns of employees and suppliers by generating jobs and creating induced impact on India's economy, equivalent to **2.2% of the country's GDP**

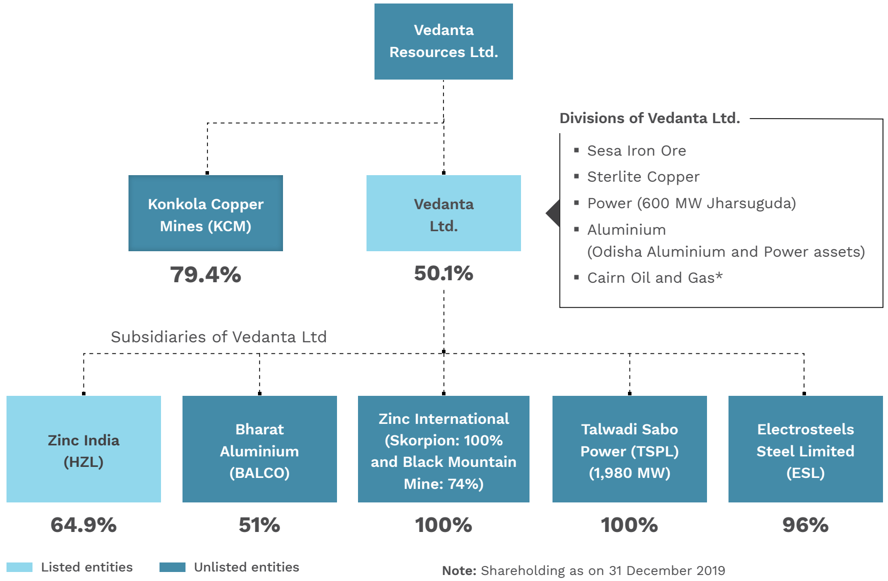
0.4% **DIRECT IMPACT**

VRL **directly contributes 0.4% to India's GDP** through its operations

1% **INDIRECT IMPACT**

The indirect impact of VRL through its supplier network is as large as **1% of India's GDP**

WELL-STRUCTURED TO DELIVER VALUE-ACCRETIVE GROWTH



Vedanta Resources Ltd.

Konkola Copper Mines (KCM) 79.4%

Vedanta Ltd. 50.1%

Divisions of Vedanta Ltd.

- Sesa Iron Ore
- Sterlite Copper
- Power (600 MW Jharsuguda)
- Aluminium (Odisha Aluminium and Power assets)
- Cairn Oil and Gas*

Subsidiaries of Vedanta Ltd

Zinc India (HZL)	Bharat Aluminium (BALCO)	Zinc International (Skorpion: 100% and Black Mountain Mine: 74%)	Talwadi Sabo Power (TSPL) (1,980 MW)	Electrosteels Steel Limited (ESL)
64.9%	51%	100%	100%	96%

▨ Listed entities ■ Unlisted entities

Note: Shareholding as on 31 December 2019
*50% of the share in the RJ Block is held by a subsidiary of Vedanta

Mangala Processing Terminal, Barmer

VEDANTA AT A GLANCE CONTINUED...

DELIVERING VALUE ACROSS BUSINESSES

We operate across seven key verticals and assume market-leading positions with our scale, innovation and commitment to responsible value creation.

ZINC-LEAD-SILVER

77% market share in India's primary zinc market

BUSINESS
Zinc India
(Hindustan Zinc Limited - HZL)
Zinc International

PRODUCTION VOLUME
Zinc India (HZL)
- Zinc+Lead: **870 kt**
- Silver: **610 t**

Zinc International: **240 kt**

EBITDA (In US$ mn)
- Zinc India (HZL): **1,230**
- Zinc International: **54**

ASSET HIGHLIGHTS
- Largest fully integrated zinc-lead producer in the world
- World's second largest zinc mine at Rampura Agucha, India
- Globally the ninth largest silver producer
- Developing the largest undeveloped zinc deposit in the world at Gamsberg, South Africa
- Zinc India has R&R of 403 million tonnes with mine life of ~25 years
- Zinc International has R&R of over 524 million tonnes, supporting mine life in excess of 30 years
- HZL is a low-cost zinc producer, which lies in the first quartile of the global zinc cost curve

APPLICATION AREAS
- Galvanising for infrastructure and construction sectors
- Die-casting alloys, brass, oxides and chemicals

OIL & GAS

Operates **26%** of India's crude oil production

BUSINESS
Cairn India

PRODUCTION VOLUME
174 kboepd
(Average Daily Gross Operated Production)

EBITDA (In US$ mn)
1,032

ASSET HIGHLIGHTS
- World's longest continuously heated pipeline from Barmer, Rajasthan to Gujarat Coast (~670 km)
- 136 wells drilled; 41 wells hooked up in FY2020 growth phase
- Early gas production facility ramped up to designed capacity of 90 mmscfd
- Largest private sector oil and gas producer in India
- Executing one of the largest polymer Enhanced Oil Recovery (EOR) projects in the world
- Footprint over a total acreage of ~65,000 sq km
- Gross proved and probable reserves and resources of 1,194 mmboe

APPLICATION AREAS
- Crude oil is used by hydrocarbon refineries
- Natural gas is mainly used by the fertiliser sector

ALUMINIUM

37% market share in primary Indian aluminium market

BUSINESS
Aluminium smelters at Jharsuguda and Korba (BALCO), Lanjigarh Alumina Refinery

PRODUCTION VOLUME
Aluminium: **1,904 kt**
Alumina: **1,811 kt**

EBITDA (In US$ mn)
281

ASSET HIGHLIGHTS
- Largest installed aluminium capacity in India at 2.3 million tonnes per annum (mtpa)
- Strategically located large-scale assets with integrated power and an alumina refinery
- 37% market share among domestic primary aluminium producers
- Emerged as the highest bidder for Jamkhani coal block, strategically located near Jharsuguda alumina smelter

APPLICATION AREAS
- Used primarily in automotive, building and construction, transportation and electrical industries
- Product portfolio includes ingots, wire rods, billets, primary foundry alloys, slabs and rolled products

POWER

9 GW diversified power portfolio

BUSINESS
Power plants at Talwandi Sabo, Jharsuguda and Korba

SALES VOLUME
~11 billion kWh

EBITDA (In US$ mn)
233

ASSET HIGHLIGHTS
- One of India's largest power generators with 9 GW diversified power portfolio
- Talwandi Sabo Power Limited (TSPL) is the largest thermal power producer in Punjab
- 3.3 GW of commercial power generation capacity, with balance for captive usage
- Leading producers of wind power in India: 96% thermal power and 4% from renewable energy sources

APPLICATION AREAS
- 63% is allotted to captive use while 37% is used for commercial purposes, of which ~95% is backed by long-term Power Purchase Agreements with local Indian distribution companies

COPPER

One of India's largest copper producers

BUSINESS
Copper India

PRODUCTION VOLUME
77 kt

EBITDA (In US$ mn)
- Tuticorin smelter and refinery currently not operational

ASSET HIGHLIGHTS
- One of the largest copper producers in India

Note: The copper plant at Tuticorin has not been operational since March 2018.

APPLICATION AREAS
- Used for making cables, transformers, castings, motors and castings and alloy-based products

IRON ORE & STEEL

One of the largest iron ore miners in India

BUSINESS
Iron Ore India
Electrosteel India

PRODUCTION VOLUME
- Pig Iron: **681 kt**
- Steel: **1.23 mt**

EBITDA (In US$ mn)
Iron: **117**
Steel: **83**

ASSET HIGHLIGHTS

Iron Ore
- Karnataka iron ore mine with R&R of 81 million tonnes and 18 years lifecycle
- Value added business: 3 blast furnaces (0.8 mtpa), 2 coke oven batteries (0.5 mtpa) and 2 power plants (60 MW)
- Goa operations remain suspended due to state-wide directive from the Hon'ble Supreme Court; engagement continues with the government for a resumption of mining operations

Steel
- Design capacity of 2.5 mtpa
- Largely long steel product

APPLICATION AREAS
- Construction, infrastructure, transport, energy, packaging, appliances and industry
- Product portfolio includes pig iron, billets, TMT bars, wire rods and ductile iron pipes

A YEAR OF CONSISTENT PERFORMANCE

FINANCIAL HIGHLIGHTS

- Revenue decreased by 9% to US$11.8 billion (FY2019: US$13.0 billion), mainly driven by subdued commodity prices, lower volume at Zinc India, lower volume at oil and gas and power sales at TSPL, partially offset by higher volume in Aluminium business, additional volumes from Gamsberg operations, higher sales at Iron Ore Karnataka and Steel businesses
- EBITDA at US$3.0 billion, 13% lower y-o-y (FY2019: US$3.5 billion)
- Operating profit before special items at US$1.6 billion, down 23% y-o-y (FY2019: US$2.1 billion), driven by lower EBITDA and higher depreciation charge, partially offset by improved cost of production, softening of input commodity prices and favourable currency movement
- Robust adjusted EBITDA margin of 29% (FY2019: 30%)
- ROCE at 10.3% in FY2020 (FY2019: 9.6%)
- Impairment of Property Plant Equipment (PPE), exploration assets and claims and receivable of US$2,072 million, which mainly includes impairment charge of oil & gas assets at US$1,906 million, impairment charges of Copper Capital Work In Progress (CWIP) and capital advances of US$94 million, and impairment charge of glass substrate business' assets at Avanstrate Inc. (ASI) worth US$72 million
- The Group has a total exposure of US$1,952 million (including equity investment in KCM of US$266 million) to Konkola Copper Mines (KCM) in the form of loans, receivables, investments and amounts relating to the guarantees issued by VRL, which have been accounted for at fair value on initial recognition and disclosed under non-current assets in the Consolidated Statement of Financial Position [For more information, refer note 3(e) of consolidated financial statements].
- Profit/(Loss) after tax for the year from continuing operation at US$(976) million (FY2019: US$757 million) driven by lower operating profit, impairment charge recognition, higher net interest partially offset by tax credit recognised during the year
- Profit/(Loss) after tax for the year from discontinued operation at US$(771) million (includes US$661 million loss on deconsolidation for KCM) pursuant to an ex-parte order received from the High Court of Zambia, appointing a Provisional Liquidator (PL) for KCM with effect from 21 May 2019 obtained by minority shareholder Zambian State Mining Company ZCCM-IH (ZCCM). (For more information, refer Note 3(e) of Consolidated Financial Statements)
- Free Cash Flow (FCF)[◊] post-capex of US$823 million (FY2019: US$1,330 million), driven by lower EBITDA and working capital blockage due to COVID-19 impact, partially offset by continued focus on cost savings, lower capex outflow and tax outflow
- Gross debt at US$15.1 billion (FY2019: US$16.0 billion), driven by repayment of borrowing at Vedanta Standalone, TSPL, temporary borrowing at Zinc India and favourable currency movement partially offset by increase in borrowing at oil and gas and VRL
- Net debt at US$10.0 billion (FY2019: US$10.3 billion), primarily due to the repayment of borrowing and favourable currency movement, partially offset by working capital blockage due to COVID-19 and dividend payment during the year. Stable financial position with cash equivalent, liquid investment and structured investments of US$5.1 billion (FY2019: US$5.7 billion)
- Realised power debtors of ~US$142 million at TSPL, as per Supreme Court Order.
- Vedanta is implementing the approved resolution plan of acquisition of Ferro Alloys Corporation Limited (FACOR) as per NCLT approval dated 30 January 2020. FACOR is in the business of producing Ferro Alloys and owns a ferro chrome plant with a capacity of 72,000 TPA, two operational chrome mines and 100 MW of Captive Power Plant (CPP) through its subsidiary, FACOR Power Limited (FPL). The consideration payable for the acquisition of FACOR on a cash-free and debt-free basis is ~US$1.4 million as well as an equivalent of cash balance in FACOR's subsidiary, FPL as upfront consideration and zero coupon, secured and unlisted Non-Convertible Debentures of aggregate face value of ~US$36 million to the Financial Creditors payable equally over 4 years, commencing March 2021 [For more information, refer Note 3(a) of the Consolidated Financial Statement]
- Further to the downgrade by S&P to B/Stable in November 2019, S&P downgraded the ratings to B – with stable outlook in March 2020 on account of weakened liquidity and increased refinancing risk due to volatility in commodity prices.
- Moody downgraded Corporate Family Rating of VRL from Ba3 to B1 and subsequently placed the rating under review for downgrade in March 2020 on account of expectation of weaker credit metrics in low commodity price environment in the wake of COVID-19. On 28 July 2020, Moody's confirmed VRL's B1 Corporate Family Rating and B3 rating on the senior unsecured bonds and changed the outlook on the rating to negative from ratings under review for downgrade.
- Proactive management facilitated to maintain average debt maturity period of around three years for the entire debt portfolio
- Contribution to the exchequer of ~US$4.6 billion in FY2020 (FY2019: ~US$6.2 billion)

BUSINESS HIGHLIGHTS FY2020

Zinc India

- Record ore production of 14.5 million tonnes, despite disruptions on account of COVID-19
- Mined metal production of 917 kt, down 2% y-o-y
- Refined zinc-lead production of 870 kt, down 3% y-o-y

Zinc International

- Cost of production at US$1,665 per tonne, down 13% y-o-y
- Increase in Gamsberg production volume from 17kt in FY2019 to 108kt in FY2020

Oil & Gas

- Average gross production of 174 kboepd for FY2020
- Early gas production facility, fully commissioned to design capacity of 90 mmscfd
- Construction of new gas processing terminal in progress to add another 90 mmscfd
- Liquid handling capacity upgradation by 30% in progress
- Production Sharing Contracts (PSC) signed for Ravva block extended for 10 years, subject to certain conditions [For more information, refer Note 2(c)(I)(viii) of the Consolidated Financial Statement along with divisional review section of Oil & GAS]
- FTG survey completed in Assam and Kutch basins; Seismic survey ongoing in OALP Blocks
- **Capex growth projects update**
  - 9 rigs are currently deployed; 136 wells drilled during FY2020
  - 7 appraisal wells drilled in Vijay and Vandana, DP and MBH
  - 2 new wells hooked up in Ravva, adding ~10KBoepd of incremental volumes

Aluminium

- India's highest aluminium production at 1,904 kt
- Record alumina production from Lanjigarh refinery at 1,811 kt, up 21% y-o-y
- Hot metal cost of production significantly lower at US$1,690 per tonne, 14% lower y-o-y in FY2020
- Hot metal cost of production significantly lower at US$1,451 per tonne, 20% lower y-o-y in Q4FY20

Power

- Record Plant Availability Factor (PAF) of 91% at the 1,980 MW TSPL plant in FY2020
- Achieved Plant Load Factor (PLF) of 11% at the Jharsuguda 600 MW in FY2020
- Achieved Plant Load Factor (PLF) of 71% at the 300 MW BALCO IPP in FY2020

Iron Ore

- Goa operations remain suspended due to statewide directive from the Hon'ble Supreme Court; engagement continues with the government for a resumption of mining operations
- Production of saleable ore at Karnataka at 4.4 million tonnes, up 6% y-o-y
- Iron ore sales at Karnataka at 5.8 million tonnes, up 125% y-o-y.

Steel

- Record annual steel production at 1.23 million tonnes for FY2020, up 3% y-o-y
- Robust margin of US$127 per tonne during the last quarter (~26% EBITDA margin)

Copper India

- Due legal process being followed to achieve a sustainable restart of the operations

Copper Zambia

- KCM business treated as discontinued operations with effect from 21 May 2019 [For more information, refer Note 3(e) of Consolidated Financial Statement]

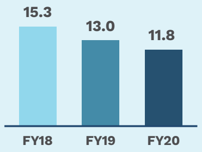
CONSOLIDATED GROUP RESULTS

(US$ million, unless stated)

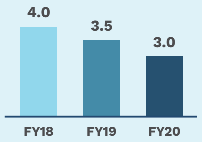
Particulars	FY2020	FY2019	% Change
Net sales/Income from operations	11,790	13,006	(9)
EBITDA[1]	3,003	3,457	(13)
EBITDA margin[◊] (%)	25	27	-
Adjusted EBITDA margin[◊ 2] (%)	29	30	-
Operating profit before special items	1,591	2,076	(23)
Profit/(loss) attributable to equity holders of the parent	(1,568)	(237)	
Underlying attributable profit/(loss)	(171)	38	-
ROCE (%)[◊ 3]	10.3	9.6	-
Dividend[4] (US cents per share)	123	65	89

1. Excludes Copper Zambia as its operations have been discontinued and deconsolidated in books with effect from 21 May 2019
2. Excludes custom smelting at Copper India, and Zinc India operations
3. Previous period figures have been regrouped or re-arranged wherever necessary to conform to current period's presentation except ROCE
4. Dividend includes first interim dividend of US cents 53/share and second interim dividend US cents 70/share declared in FY2020 (FY2019 - Final dividend declared of US cents 65/share) [For more information, refer Note 13 of the Consolidated Financial Statements].

REVENUE (US$ Billion)



EBITDA (US$ Billion)



WELL-POSITIONED FOR THE FUTURE

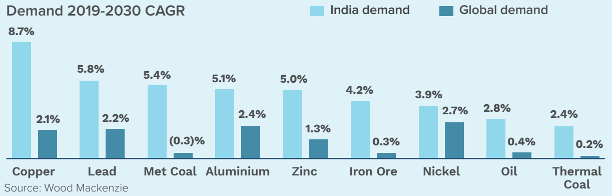
Natural resources represent a critical growth engine for the economy. We are well-positioned to make a significant contribution to the operating nation's prosperity. Our investment case is focused on delivering sustainable, long-term returns to our shareholders and creating value for our larger stakeholder community.

LARGE, LOW-COST AND DIVERSIFIED ASSET BASE WITH AN ATTRACTIVE COMMODITY MIX

VRL's large-scale, diversified asset portfolio, with an attractive cost position across its multiple core businesses, positions us to deliver strong margins and free cash flows through the commodity cycle. We have an attractive commodity mix, with strong fundamentals and leading demand growth and a keen focus on base metals and oil.

The commodity markets strengthened in the second half of the financial year, driven by improved demand factors and continuing supply-side constraints, benefiting global commodity prices, particularly VRL's core commodities, including zinc, aluminium and oil and gas.

Demand 2019-2030 CAGR



Source: Wood Mackenzie

IDEALLY POSITIONED TO CAPITALISE ON INDIA'S GROWTH POTENTIAL

India is our core market and it has a huge growth potential, given that the current per capita metal consumption is significantly lower than the global average.

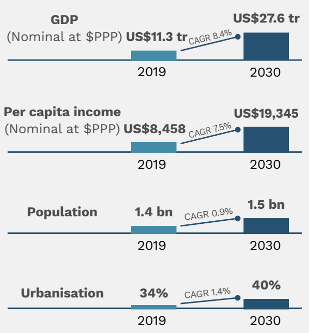
The COVID-19 pandemic is inflicting significant human costs in India and the world. Protecting lives and allowing healthcare systems to cope requires social isolation, lockdowns, and widespread closures to flatten the curve in India as in other parts of the world. Against this bleak backdrop, IMF predicts that the Indian economy is estimated to have grown by 1.9% in the financial year. However, the economy's long-term potential remains robust, as it is likely to rebound to 7.4% in FY2021,, provided the outbreak is contained and there is no recurrence.

Once the economy reboots and the crisis blows over, strong liquidity in the economy and government impetus on infrastructure building, housing and industrialisation will generate demand for natural resources. The country's high resource import bill offers significant opportunities for a diversified player like us. The government has lately announced various policy measures to support the commodity sector, which augurs well for our operations.

We are uniquely positioned to benefit from India's growth due to:

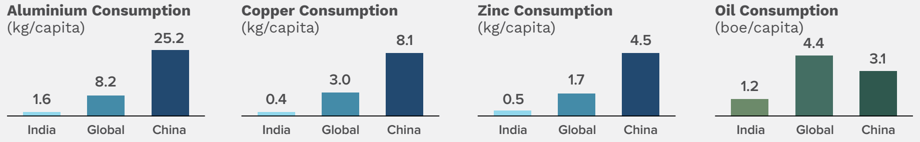
- A diversified portfolio of established operations in India
- A strong market position as India's largest base metals producer and largest private sector oil producer
- An operating team with an extensive track record of executing projects and achieving growth

India's Growth Potential



Source: IHS Markit

Commodity Demand Potential 2020

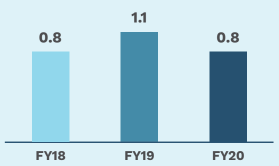


Source: Wood Mackenzie, IMF, IHS Markit, BMI, BP Energy Outlook 2019 Note: All commodities demand corresponds to primary demand

WELL-INVESTED ASSETS DRIVING FREE CASH FLOW GROWTH

A significant proportion of our capital investment programme has been completed, and we are now ramping up production to take advantage of our expanded capacity. We have already started seeing the results of our investments, with Zinc India and the Aluminium business delivering robust production in the past year, and we expect our Zinc International, particularly the Gamsberg project, to provide further impetus to our Zinc business, going forward. In the oil and gas business, we started implementing our growth projects with a gross capex of over US$3.2 billion, and this will enable us to increase volumes over the near and medium term, which refers to the next 3-4 years. These increases in production will lead to strong cash flow generation through the cycle.

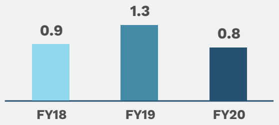
Growth Capex (In US$ bn)



OPERATIONAL EXCELLENCE AND TECHNOLOGY DRIVING EFFICIENCY AND SUSTAINABILITY

We consistently strive to improve our operations, integrate our businesses through the value chain and optimise our performance through operational efficiencies and innovative technological solutions. We also employ these tools to ensure sustainable operations and focus on delivering a positive impact for all our stakeholders and, more broadly, the society as a whole.

FCF Post Capex (In US$ bn)

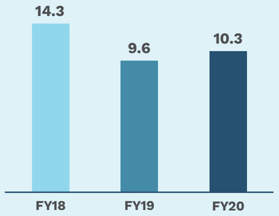


FOCUSSED FINANCIAL PROFILE

Our operational performance, coupled with a strong focus on optimisation of capital allocation, has helped maintain our financial resilience. In FY2020, it was still seen as a subdued environment for commodity prices, while our focus on capital discipline and profitability allowed us to deliver:

- Revenues of US$11.8 billion and EBITDA of US$3 billion
- ROCE of ~10.3%
- Proactive liability and maturities management exercises
- CF of US$823 million
- Cash and liquid investments of US$5.1 billion
- Secure balance sheet with respect to Net debt/EBITDA and gearing
- Dividend of 123 US cents per share paid in FY2020

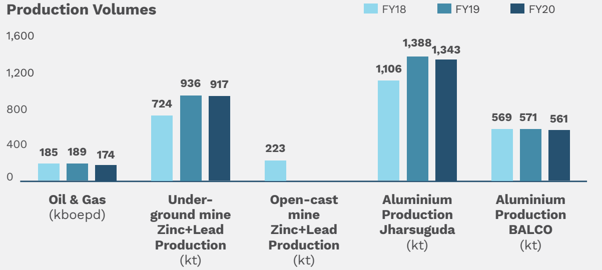
ROCE (%)



PROVEN TRACK RECORD

Our management team has a diverse and extensive range of sector and global experience, which ensures that operations are run efficiently and responsibly, with key insights. We have taken a disciplined approach to development, growing our production steadily across our operations, with an ongoing focus on operational efficiency and cost savings. Since our listing in 2003, our assets have delivered an average of 15% CAGR production growth.

Production Volumes



ENABLING A WELL-RESOURCED FUTURE

> With ample natural, human and technological resources and strong reform-focused democratic governance, India holds out hope in the post-COVID era as global businesses and investors look at reducing dependency on China. This will mean more jobs, more investments, rapid development and a great boost to the Indian government's 'Make in India' initiative.

Anil Agarwal
Chairman

Dear Stakeholders,

It is a great honour for me to share my thoughts with you as your Company's Chairman. It is with great pride that I say, your Company has always been on a continuous journey of growth and expansion with best-in-class safety, benchmark technology, and cost efficiency. We continuously ensure that we have the right management in place to drive our business and take the organisation to the next level.

I sincerely wish and pray that you all are safe at your homes. Your safety matters to us, as the world is currently grappling with an unprecedented health crisis that we all are fighting together. These are undoubtedly testing times, but it also brings to the fore the undaunted and ingenious human spirit that prevails against all challenges. At Vedanta, we salute this human spirit and solidarity of citizens as well as nations across the world, and reaffirm our commitment to work towards a self-reliant and sustainable future for all

PERFORMANCE DURING THE YEAR

As we have seen, the year was challenging, which tested our organisational mettle amidst a turbulent macro environment. However, our Company emerged stronger at the end of it, paving pathways for accelerated future growth.

The year saw us accomplishing good production volumes in multiple segments and continued building our asset base, while improving asset integrity. We have further strengthened the Company with strong operational and productivity focus, enhanced our capital allocation framework to create long-term shareholder value and delivered a sound set of financial outcomes.

It is gratifying to note that we remained cashflow positive, while maintaining a resilient balance sheet. Our work continued in an uninterrupted manner across all key result areas. As a testimony to our efforts, we also received well-accredited recognitions across governance, safety and environmental parameters, including a ranking up in the Dow Jones Sustainability Index (DJSI).

To summarise, it was a year where we could, yet again, validate the confidence vested in us by everyone.

A GRADUAL ECONOMIC RECOVERY

In CY2019, the global economy seemed to be on a path to recovery. This was primarily led by the bottoming out of manufacturing activity and global trade and monetary policy easing by central banks the world over. This sentiment was further bolstered at the start of CY2020, in light of the progress in the US-China trade talks and the Brexit deal.

In what was expected to be a year of continued recovery, CY2020 now has a fresh challenge to combat, in the form of the COVID-19 pandemic. Although it is early to ascertain its impact on global supply chains, consumer behaviour, overall business sentiment and supply-demand equations in the short term, we will have more clarity only over the medium-term.

A PRO-GROWTH, PRO-BUSINESS ENVIRONMENT IN INDIA

For India, FY2020 was characterised by several developments, including the re-election of the ruling party with an even larger mandate; the systemic identification, restructuring and tidying up of prevailing issues in the financial services sector; and the announcement of a slew of policy measures by the government.

Harnessing wind power at Hindustan Zinc

While the clean-up applied temporary brakes on growth owing to a credit crunch, the fiscal and monetary policy announcements acted as a counterbalance, along with focus on keeping inflation under permissible limits.

At the juncture that we are in, India faces its own unique opportunities and the priorities that come with it. As we stand today, we have the reasons to believe that we are better positioned than any other nation with a visionary government, young working population, a conducive business environment and rising public expenditure.

The government's announcements made through the year and as part of the Union Budget 2020-21 are directed at setting the stage for India's future growth. Among these, the National Infrastructure Pipeline with a projected total investment of US$1.44 trillion during the period 2020-2025 deserves a special mention. It reinforces the government's commitment to building an India of the future, with better connectivity and better resilience. It also has a direct and positive impact on heavy industries such as ours, with expected short- to medium-term buoyancy in demand. Other measures, such as a corporate tax cut, 100% FDI in coal mining, and merger of public sector banks are also noteworthy, which are directed at boosting the business climate in the country.

METALS AND MINING – PROPELLING INDIA'S GROWTH

With large-scale infrastructure spend on the horizon, the metals and mining sector is expected to receive a boost in demand both over the short as well as longer term. This growth will be further facilitated by the National Mineral Policy 2019, launched to ensure transparency, better regulation and enforcement, and to ensure a balance between social and economic growth. The Policy touches upon contemporary issues and guides on the adoption of scientific mining, technology and innovation, and environmental and social priorities. As Vedanta, we are well-aligned to these guidelines and continue to set new benchmarks in good mining practices.

VEDANTA - READY TO SERVICE THE NATION'S NEEDS

As India grows, so will its needs and aspirations. At Vedanta, we are focussed on providing vital commodities that facilitate the everyday lives of Indians and service their needs. Vedanta as India's only diversified natural resources group is presented with a unique opportunity to provide the vital commodities the country needs for infrastructure development, asset creation, mobility, housing, consumer goods and general consumption. Together with everyone, we can harness the potential of natural resources in the most sustainable manner to fuel the nation's progress. It is with this objective that we have reinforced our positioning as 'Vedanta, Desh ki Zarooraton ke liye. (Vedanta, For the needs of the country)'

CONTRIBUTING TO NATION-BUILDING

At Vedanta, our business performance contributes directly to the nation's economy. With over 40% of revenue being contributed to the Indian national exchequer, we continue to deliver on our commitments, in the most transparent and ethical manner. We also employ closer to ~80,000 on-roll and contractual personnel, thus creating a multiplier effect on the economy. According to a recent Institute for Competitiveness, a subsidiary of Harvard Business School (IFC) report of the World Bank Group, Vedanta's operations contribute ~1% to India's GDP.

As we grow further, we continue to play a pivotal role in India's social development stage, and maintain a strong social engagement through our corporate responsibility initiatives. In FY 2019-20, we spent ~USD 41 million, to touch the lives of over 3.1 million people. Our core impact areas are education, health, sustainable livelihoods, women empowerment, sports and culture, environment and community development. Each of our Group companies have their own CSR agenda and they undertake associated interventions in one or more of the above impact areas. For example, BALCO actively supports the fight against cancer through its 170-bed Medical Centre in Chhattisgarh, under the aegis of the Vedanta Medical Research Foundation.

Our flagship CSR programme, Nand Ghar, is aimed at building modern community resource centres through the length and breadth of the nation. Conceived in association with the Ministry of Women and Child Development (MoWCD), the Nand Ghar initiative targets the empowerment of 8.5 crore children and 2 crore women across 13.7 lakh Anganwadis in India. 2019 was a milestone year for this initiative, as we witnessed the inauguration of our 1,000th Nand Ghar. By FY2021, we are planning to quadruple the number of these centres, with an unwavering commitment to giving back to the society.

A FIRM FOCUS ON SUSTAINABILITY

Our sustainability approach is strongly driven by the need to address the expectations of our stakeholders, while delivering strong business performance. As a company, we are attuned to global expectations and endeavour to contribute to the fulfilment of the United Nations Sustainable Development Goals (UN SDGs).

Our sustainable development agenda straddles four major pillars of Responsible Stewardship, Building Strong Relationships, Adding and Sharing Value, and Strategic Communications. These are developed in line with our core values, internal and external sustainability imperatives and global relevant frameworks.

Vedanta employees participating in awareness building team activities

Our Environmental, Social and Governance (ESG) priorities are well-aligned to our enterprise goals and to this end, we are working with a target-based approach to foster an inclusive and sustainable future for all. We ensure the safety of our workforce with its associated programmes on Visible Felt Leadership, deeper engagement on safety with our Business Partners, and managing critical safety tasks.

We are also managing our environmental impact through associated programmes on GHG emissions intensity reduction, tailings dam management, and recycling of our high-volume-low-effect wastes such as fly ash. We have defined a social performance framework for the organisation to secure our social licence to operate assessing the maturity of our business in the context, and driving community development activities across multiple spheres such as child education, women's empowerment, medical infrastructure development, and sports, among others.

EMPLOYEE SAFETY, HEALTH AND WELLBEING

The safety, health and wellbeing of our employees continue to be a highly critical focus area for us. However, I regret to inform that even with a razor-sharp focus on occupational health and safety, we witnessed seven fatalities this year. One life lost is too many for us, and we have redoubled our efforts to effectively enforce a safety culture and avoid any untoward incident, going forward.

TOGETHER WE WIN

Ever since we began our journey, our culture has always been people-centric, because we believe we are only as resourceful, resilient and future ready as our people. We are committed to providing our people a safer, sustainable, inspiring and inclusive culture.

Our culture enshrines our core values and nurtures innovation, creativity and diversity. We align our business goals with individual goals and enable our employees to grow on the personal as well as the professional front. Being an equal opportunity employer, and a meritocracy – all our decisions regarding employees are based on their contribution, attitude and potential.

CHANGES IN LEADERSHIP

With a heavy heart, I would like to announce that Srinivasan Venkatakrishnan (Venkat) stepped down as the CEO and Director of the Company for personal reasons, with effect from 5 April 2020, and will be re-joining his family in South Africa. Over the last two years, I have enjoyed working with Venkat to drive our vision for the Company and the country, at large.

I admire Venkat for his passion, dedication, ability to connect with people and his grasp of business. Venkat is a committed leader and will be remembered for his passion for sustainability, asset integrity, development and positioning Vedanta in global markets. We would like to acknowledge and express our deep appreciation and gratitude to Venkat for his immense contribution to the Company. This year, we also had to bid adieu to Ajay Kumar Dixit, our Cairn Oil & Gas business CEO and Deshnee Naidoo, our Zinc International business CEO. Ajay superannuated from the Company at the end of his five-year term this May, while Deshnee had to leave us for personal reasons. Both led respective businesses with great zeal and passion. We wish them the best for all their upcoming endeavours.

Teamwork at Barmer, Cairn Oil & Gas

It is my pleasure to welcome Sunil Duggal — as our CEO for Vedanta Limited, a mature and proven leader, who has held key leadership positions across the Group in the last 10 years. Sunil is an industry veteran and an active member of several industry and advocacy forums. He is passionate about safety, environment and ESG. We look forward to Sunil taking the Company to greater heights.

I also want to place on record my thanks to the ~80,000 people who make up the Vedanta family and who, during this year, have innovated, broken records, and driven up our output with ever-increasing efficiency.

WAY FORWARD

I sincerely believe that the post-COVID world will bring huge opportunities for India to secure a better place in the emerging global economic order. With ample natural, human and technological resources and strong reform-focused democratic governance, India holds out hope in the post-COVID era as global businesses and investors look at reducing dependency on China. This will mean more jobs, more investments, rapid development and a great boost to our 'Make in India' initiative.

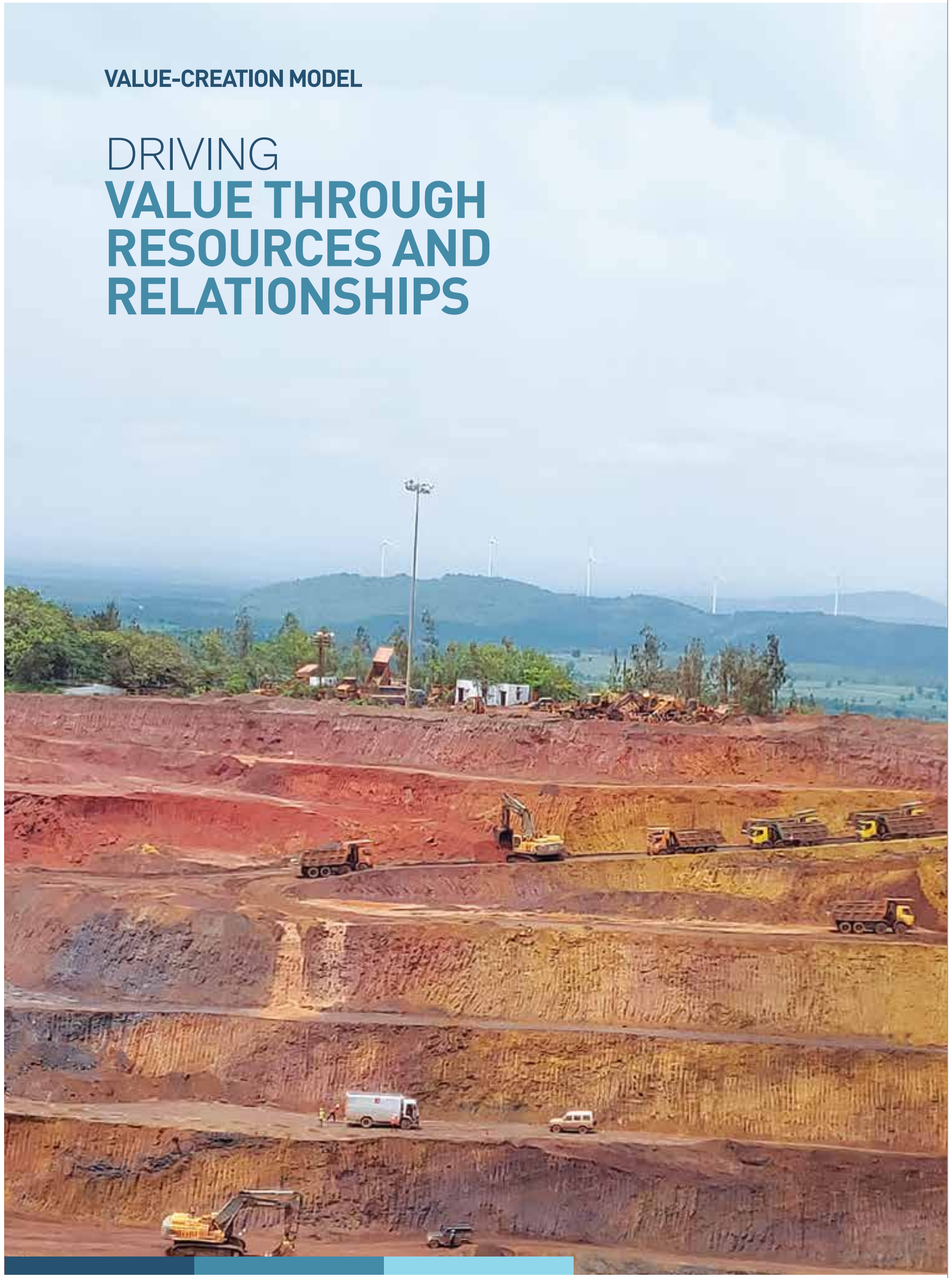
As I look back at Vedanta's journey so far, I can say with reasonable confidence that we have steadily grown and evolved to be an organisation creating disproportionate value for the stakeholders. Even amidst a short-term environment of uncertainty, I have well-founded belief in our fundamentals, our strategy and our people, which taken together, is a powerful force to reckon with. My outlook remains positive for the country and for the Company and we are equipped to fulfil every commitment we have towards our stakeholders.

On behalf of the Board and the entire leadership team, I solicit your continued cooperation for all our present and future endeavours.

Best regards,
Anil Agarwal
Chairman

VALUE-CREATION MODEL

DRIVING VALUE THROUGH RESOURCES AND RELATIONSHIPS



FINANCIAL CAPITAL

We are focused on optimising capital allocation and maintaining a strong balance sheet, while generating strong free cash flows. We also review all investments, taking into account the Group's financial resources with a view to maximising returns to shareholders.

MANUFACTURED CAPITAL

We invest in best possible equipment and machinery to ensure we operate as efficiently and safely as possible, both at our current operations and in our expansion projects. This also supports our sustainable cash flow generation.

INTELLECTUAL CAPITAL

As a relatively young Company, we are keen to embrace technological developments and encourage innovation. We encourage our people to nurture and implement innovative ideas which will lead to operational improvements.

HUMAN CAPITAL

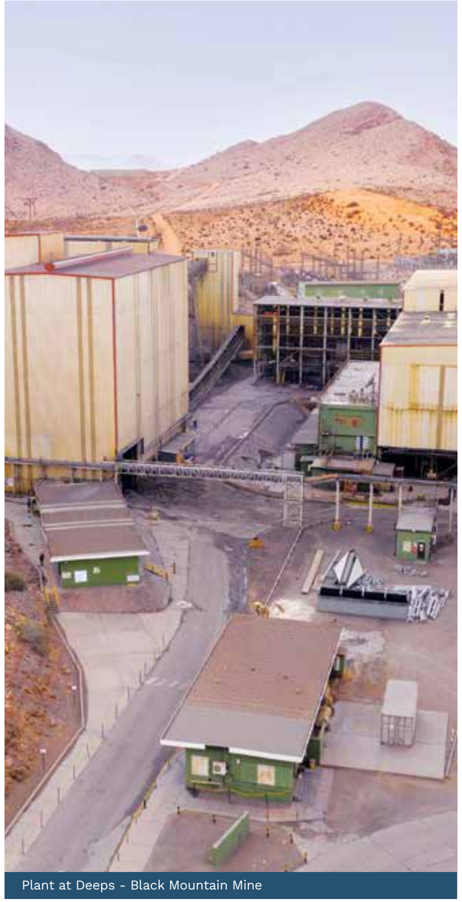
We have employees drawn from across the world, and their diverse skills and experience contribute to our operations. The mining and plant operations require specialised skills for which we employ qualified technical, engineering and geology experts. In addition, we create a culture which nurtures safety, innovation, creativity and diversity, which helps us to meet our business goals while also enabling our employees to grow personally and professionally

SOCIAL & RELATIONSHIP CAPITAL

We aim to forge strong partnerships by engaging with our key stakeholders, including shareholders and lenders, suppliers and contractors, employees, governments, communities and civil society. These relationships help maintain and strengthen our licence to operate.

NATURAL CAPITAL

India and Africa have favourable geology and mineral potential. These regions provide us with world-class mining assets and extensive reserves and resources. Additionally, operating our mines requires a range of resources, including water and energy, which we aim to use prudently and sustainably.



Plant at Deeps - Black Mountain Mine

CREATING VALUE FOR OUR STAKEHOLDERS

Shareholders
A return on investment

Communities
Investment in health, education and local businesses

Employees
A safe and inclusive working environment

Suppliers, customers and service providers
Building long-term partnerships

Governments
Generating economic value for the society and delivering sustainable growth

VALUE-CREATION MODEL CONTINUED...

Our value-creation model is aimed at delivering the optimum value for all our stakeholders, in various means and forms.

INPUTS

FINANCIAL CAPITAL

Gross debt
US$15.1 billion

Net worth
US$2.2 billion

Capex
US$0.8 billion

Cash and cash equivalents
US$5.1 billion

MANUFACTURED CAPITAL

Plant and equipment (in value terms)
US**$13.3** billion

HUMAN AND INTELLECTUAL CAPITAL

Employees including contractors
~80,000

Geologists including contractors
386

HSE employees including contractors
1,709

Number of hours of training
~548,952

Safety training hours
1.5 million

Best-in-class corporate governance practices

Highest quality safety practices

SOCIAL & RELATIONSHIP CAPITAL

Community investment
US$41 million

Rated by two domestic rating agencies
S&P and Moody's

Strong network of global and domestic relationship banks
25

Independent Directors
4

NATURAL CAPITAL

R&R - Zinc India
403 million tonnes, containing **31.8** million tonnes of zinc-lead metal and **898** million ounces of silver

R&R – O&G
1,194 mmboe gross proved and probable reserves and resources

Water consumed
257 million m³

R&R - Zinc International
509.4 million tonnes, containing **26.6** million tonnes of metal

Energy consumption
526 million GJ

Coal used
24 million tonnes

ACTIVITIES

We operate across the mining value chain, focusing on long-term and low-cost assets in India and Africa

EXPLORE
We invest selectively in exploration and appraisal to extend mine and reservoir life.

DEVELOP
We develop world-class assets, using the latest technology to optimise productivity.

EXTRACT
We operate low-cost mines and oil fields, with a clear focus on safety and efficiency.

PROCESS
We focus on operational excellence and high asset utilisation to deliver top quartile cost performance and strong cash flow.

MARKET
We supply our commodities to customers in a wide range of industry sectors, from automotive to construction, from energy to consumer goods.

RESTORE
We manage our long-life assets as effectively as possible and return them to a natural state at the end of their useful life.

OUTCOMES

FINANCIAL CAPITAL

Turnover
US$11.8 billion

FCF post-capex
US$0.8 billion

Net debt to EBITDA
3.3x

EBITDA
US$3.0 billion

RoCE
10.3%

Total exchequer contribution
C.US$4.6 billion

Dividends paid
123 US cents per share

MANUFACTURING CAPITAL

Production across various businesses

Zinc India
Zinc+Lead: **870** kt
Silver: **610** tonnes

Zinc International
Scorpion and BMM:
> 133 kt
Gamsberg: **108** kt

Oil & Gas
Gross volume: **174** kboepd

Aluminium
Alumina: **1.8** mtpa
Aluminium: **1.9** mtpa

Copper
77 kt

Power
11.2 billion kWh

Pig Iron
681 kt

Steel
1.2 mt

HUMAN AND INTELLECTUAL CAPITAL

Lost Time Injury Frequency Rate (LTIFR) **0.67**

Attrition rate
7.4%

Diversity ratio
10.9%

SOCIAL & RELATIONSHIP CAPITAL

CSR Programme Beneficiaries
~3.26 million

Dividends, royalty and taxes paid to the government
US$4.6 billion

Nand Ghars (women-child welfare centres)
1,302

Youth provided with vocational skills for employment
3,600+

Dividends paid
US$536 million (including US$185 million final dividend of FY2019)

NATURAL CAPITAL

Water recycled
29%

Fly ash utilisation rate
~105.6%

Water savings
2.99 million m^3

GHG emitted
59 Mn tCO$_2$e

High-volume, low-effect waste recycled: 88%

An evening at Cairn Oil & Gas, Barmer

PROGRESSING ON OUR GROWTH PATH

Aerial shot of the alumina refinery at Lanjigarh

STRATEGIC PRIORITY

COMMITMENT TO THE LARGER PURPOSE WITH FOCUS ON WORLD-CLASS ESG PERFORMANCE

DESCRIPTION

We operate as a responsible business, focusing on achieving ‘zero harm, zero discharge and zero wastage’, and thus minimising our environmental impact. We promote social inclusion across our operations for inclusive growth. We establish management systems and processes in place to ensure our operations create sustainable value for all our stakeholders.

KPIs

- LTIFR
- CSR footprint
- Carbon footprint
- Gender diversity

RISKS

- Health, safety and environment (HSE)
- Tailings dam stability
- Managing relationship with stakeholders
- Regulatory and legal risk

FY2020 UPDATE

- Seven fatalities occurred in the fiscal year; consequent commitment to increase oversight from Group Executive Committee (ExCo) to prevent future occurrences. Investigations completed and recommendations have been shared across the organisation to prevent repeat incidents
- Average score of 65% achieved in ten safety performance standards
- LTIFR reported at 0.67
- Achieved water savings of 2.99 million cubic metres (Target: 3.5 million cubic meters)
- Achieved ~13.83% reduction in GHG intensity over baseline of 2012
- Achieved energy saving of 2.4 million GJ
- Third-party review of tailings/ash dyke management system and development of specific improvement plan (India operations)
- 105% of generated fly ash is being utilised
- Baseline surveys conducted across Group, BU plans aligned with findings/recommendation
- 1,302 Nand Ghars constructed
- ‘Passion to serve’, employee volunteering online platform launched in August 2019
- A standard online community grievance record/redressal software (NIVARAN) established across the Group
- 100% new hires trained on Code of Conduct
- 8.7% improvement in our campus female hiring programme

STRATEGIC PRIORITY

AUGMENT OUR RESERVES & RESOURCES (R&R) BASE

DESCRIPTION

We look at ways to expand our R&R base through targeted and disciplined exploration programmes. Our exploration teams aim to discover mineral and oil deposits in a safe and responsible way, to replenish the resources that support our future growth.

KPIs

- Total 2P+2C Reserves & Resources in O&G
- Total R&R in Zinc India and Zinc International

RISKS

- Health, safety and environment (HSE)
- Discovery risk
- Regulatory and legal risk

FY2020 UPDATE

Zinc India

- During the year, gross additions of 14.6 million tonnes were made to R&R, prior to depletion of 14.5 million tonnes
- Combined R&R were estimated to be 403 million tonnes, containing 31.8 million tonnes of zinc-lead metal and 898 million ounces of silver
- Overall mine life continues to be more than 20 years

Zinc International

- During the year, gross additions of 75.4 million tonnes of ore and 4 million tonnes of metal were made to R&R, after depletion
- Combined mineral resources and ore reserves estimated at 509.4 million tonnes, containing 26.6 million tonnes of metal
- The R&R support a mine life of more than three decades

Oil & Gas

- Upside potential of ~5.5 billion boe of resource across a total of 51 blocks with the addition of 10 new blocks in OLAP II and III

STRATEGIC PRIORITY

DELIVERING ON GROWTH OPPORTUNITIES

DESCRIPTION

We are focused on growing our operations organically by developing brownfield opportunities in our existing portfolio. Our large well-diversified, low-cost and long-life asset portfolio offers us attractive expansion opportunities, which are evaluated based on our return criteria for long-term value creation for all stakeholders.

KPIs

- Revenue
- ROCE
- FCF post-capex
- Growth capex

RISKS

- Major project delivery
- Cairn-related challenges
- Regulatory and legal risk

FY2020 UPDATE

Oil & Gas

- Early gas production facility fully commissioned with ramped up volumes to ~127 mmscfd
- Won 10 exploratory blocks in OALP rd II and III
- The addition of 10 blocks catapults us to become one of the largest private acreage holders in India, with a tenfold jump in acreage from its existing/producing blocks of ~6,000 sq km to ~65,000 sq km across its total 58 blocks
- To deliver the capex project, 235 wells have been drilled and 75 wells hooked up till FY2020

STRATEGIC PRIORITY

OPTIMISE CAPITAL ALLOCATION AND MAINTAIN STRONG BALANCE SHEET

DESCRIPTION

Our focus is on generating strong business cash flows and maintaining strict capital discipline in investing in profitable high IRR projects. Our aim is to maintain a strong balance sheet through proactive liability management. We also review all investments (organic and acquisitions) based on our strict capital allocation framework, with a view to maximising returns for shareholders.

KPIs

- FCF post-capex
- Net debt/EBITDA (Consol)
- EPS (before exceptional items)
- Interest cover ratio
- Dividend

RISKS

- Access to capital
- Fluctuation in commodity prices (including oil) and currency exchange rates
- Regulatory and legal risk
- Tax related matters

FY2020 UPDATE

- FCF reduced from US$1,330 million to US$823 million, down 38% y-o-y
- Net debt decreased from US$10.3 billion to US$10.0 billion
- Net debt/EBITDA at 3.3x
- Dividend of 123 US cents per share distributed in VRL

STRATEGIC PRIORITY

OPERATIONAL EXCELLENCE

DESCRIPTION

We strive for all-round operational excellence to achieve benchmark performance across our business, by debottlenecking our assets to enhance production, supported by improved digital and technology solutions. Our efforts are focused on enhancing profitability by optimising our cost and improving realisation through the right marketing strategies.

KPIs

- EBITDA
- Adj. EBITDA margin
- FCF post-capex
- ROCE

RISKS

- Fluctuation in commodity prices (including oil) and currency exchange rates
- HSE
- Tailings dam stability
- Loss of assets or profit due to natural calamities

Employee at Aluminum plant

FY2020 UPDATE

Zinc India

- Record ore production of 14.5 million tonnes despite disruptions on account of COVID-19
- Mined metal production of 917 kt and refined zinc-lead production of 870 kt

Zinc International

- Cost of production at US$1,665/t, down 13% y-o-y
- Increase in Gamsberg production volume from 17 kt in FY2019 to 108 kt in FY2020
- During FY2020, total production stood at 240 kt, 63% higher y-o-y. This was primarily due to ramp up of first phase of Gamsberg expansion plan.

Oil & Gas

- Development rigs as of March 2020, with 136 wells drilled and 41 wells hooked up during the year
- 2 new wells hooked up in Ravva block adding ~10 kboepd of incremental volumes
- Gas production for Rajasthan block increased by 122% to 79 mmscfd as early production facility fully commissioned with ramped up volumes to ~127 mmscfd
- Implemented largest Full Tensor Gravity Gradiometry™ (FTG) airborne survey in India covering an area of 1,200 LKM in Assam blocks and 8,000 LKM in Kutch blocks
- Satellite-based Sub-Terrain prospecting (STeP®) applied in Assam, which includes eight remote sensing and computational technologies covering an area of 3,650 sq km
- Seismic acquisition programme commenced in Assam and Kutch; 1,100 sq km in Kutch and 120 sq km, 265 LKM completed in Assam
- Production Sharing Contracts (PSC) signed for Ravva block extended for 10 years

Aluminium and Power

- India's highest aluminium production at 1,904 kt
- Record alumina production from Lanjigarh refinery at 1,811 kt, up 21% y-o-y, through continued debottlenecking
- Q4FY20 Lanjigarh cost of production lowest quarterly ever at US$258 /t
- Q4FY20 hot metal cost of production significantly lower at US$1,451 per tonne, 20% lower y-o-y
- CoP of alumina improved to US$275/t due to benefits from increase in locally sourced bauxite, continued debottlenecking, improved plant operating parameters and rupee depreciation
- Record PAF of 91% at the 1,980 MW TSPL plant in FY2020

Steel

- Cost decreased by 9% y-o-y from US$457/t to US$418$/t in FY2020
- Healthy margin of ~US$127/t during the last quarter

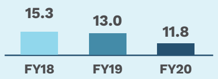
Copper and Iron Ore

- Production of saleable ore at Karnataka at 4.4 million tonnes, up 6% y-o-y
- Iron ore sales at Karnataka at 5.8 million tonnes, up 125% higher y-o-y due to an increase in production and stock liquidation at Karnataka by 1.4 million tonnes
- Production of pig iron decreased by 1% to 681,000 tonnes in FY2020, mainly due to improved metallurgical coke availability during the year and other operational efficiencies.
- Continued engagement with the government and local communities to restart operations at Goa and Tuticorin

PERFORMING TO DELIVER **ATTRACTIVE RETURNS**

GROWTH METRICS

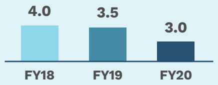
REVENUE (US$ Billion)



Description: Revenue represents the value of goods sold and services provided to third parties during the year.

Commentary: FY2020, consolidated revenue was at US$11.8 billion compared with US$13.0 billion in FY2019. This was driven by subdued commodity prices, lower volume at Zinc India and oil & gas businesses and lower power sales at TSPL, partially offset by higher volume at the aluminium business, additional volumes from Gamsberg operations, higher sales at Iron Ore Karnataka and Electrosteel, and rupee depreciation.

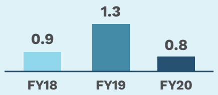
EBITDA (US$ Billion)



Description: EBITDA is a factor of volume, prices and cost of production. This measure is calculated by adjusting operating profit for special items and adding depreciation and amortisation.

Commentary: EBITDA for FY2020 was at US$3 billion, 13% lower y-o-y. This was mainly on account of subdued commodity prices, lower volume and higher cost at Zinc India and oil & gas business, partially offset by higher volume at aluminium business, additional volumes from Gamsberg operations higher sales at Iron Ore Karnataka & Electrosteel, easing out of input commodity inflation, improved cost of production at aluminium business, past exploration cost recovery at oil & gas business and rupee depreciation.

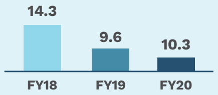
FCF POST-CAPEX (US$ Billion)



Description: This represents net cash flow from operations after investing in growth projects. This measure ensures that profit generated by our assets is reflected by cash flow, in order to de-lever or maintain future growth and shareholder returns.

Commentary: We generated FCF of US$0.8 billion (FY2019: US$1.3 billion) driven by lower EBITDA primarily on account of lower commodity prices and working capital blockage due to COVID-19 impact, partially offset by continued focus on cost savings, disciplined capex outflow and lower tax outflow.

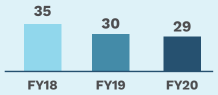
RETURN ON CAPITAL EMPLOYED (ROCE) (%)



Description: This is calculated on the basis of operating profit, before special items and net of tax outflow, as a ratio of average capital employed. The objective is to earn a post-tax return consistently above the weighted average cost of capital.

Commentary: ROCE is up 0.7% y-o-y, primarily due to decrease in average capital employed on account of impairment charge recognised during the year, and lower tax outflow partially offset by lower EBIT during the year.

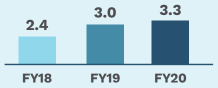
ADJUSTED EBITDA MARGIN (%)



Description: Calculated as EBITDA margin, excluding EBITDA and turnover from custom smelting of Copper India and Zinc India businesses.

Commentary: Adjusted EBITDA margin for FY2020 was 29% (FY2019: 30%).

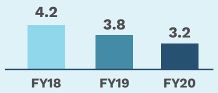
NET DEBT/EBITDA (consolidated)



Description: This ratio represents the level of leverage of the Company. It represents the strength of the balance sheet of VRL. Net debt is calculated in the manner as defined in Note 19(d) of the Consolidated Financial Statements.

Commentary: Net debt/EBITDA ratio as on 31 March 2020 was at 3.3x, compared to 3.0x as at 31 March 2019, primarily due to lower EBITDA in FY2020, compared to FY2019.

INTEREST COVER



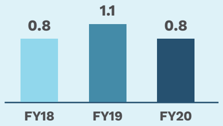
Description: The ratio is a representation of the ability of the Company to service its debt. It is computed as a ratio of EBITDA divided by gross finance costs (including capitalised interest) less investment revenue.

Commentary: The interest cover for the Company was at ~3.2 times, lower y-o-y on account of lower EBITDA and higher net finance costs due to decrease in interest income partially offset by reduction in finance cost on account of decrease in average borrowing due to repayment of debt and lower borrowing cost.

Zinc Smelter, Chanderiya, HZL

LONG-TERM VALUE

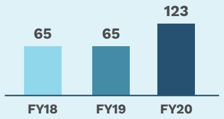
GROWTH CAPEX (US$ Billion)



Description: This represents the amount invested in our organic growth programme during the year.

Commentary: Our stated strategy is of disciplined capital allocation on high-return, low-risk projects. Expansion capital expenditure during the year stood at US$0.8 billion, with the majority invested in projects at Zinc India, growth projects at oil & gas and ramping up our aluminium capacities.

DIVIDEND (US cents)

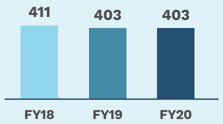


Description: Dividend per share is the total of the final dividend recommended by the Board in relation to the year, and the interim dividend paid out during the year.

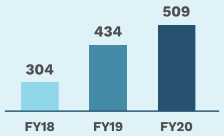
Commentary: The Board has recommended a total dividend of 123 US cents per share this year compared with 65 US cents per share in the previous year.

RESERVES AND RESOURCES (R&R)

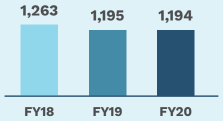
Zinc India (million mt)



Zinc International (million mt)



Oil & Gas (mmboe)



Description: Reserves and resources are based on specified guidelines for each commodity and region.

Commentary:

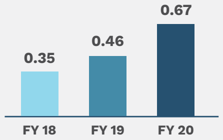
Zinc India
During the year, gross additions of 14.6 million tonnes were made to R&R, prior to depletion of 14.5 million tonnes, which resulted in total R&R of 403 million tonnes as at 31 March 2020. At current mining rates, the R&R underpins metal production for more than 20 years.

Zinc International
During the year, gross additions of 75.40 million tonnes were made to R&R, after depletion which resulted in total R&R of 509 million tonnes as at 31 March 2020. The reserves and resources support a mine life of more than 30 years.

Oil & gas
During FY2020, the gross proven and probable R&R were depleted by 1 mmboe, primarily due to production during the year.

SUSTAINABLE DEVELOPMENT

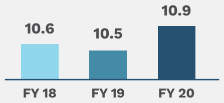
LTIFR



Description: LTIFR is the number of lost-time injuries per million person-hours worked. This includes our employees and contractors working in our operations and projects.

Commentary: This year the LTIFR was 0.67. Safety remains the key focus across our businesses.

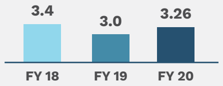
GENDER DIVERSITY (%)



Description: The percentage of women in the total permanent workforce.

Commentary: We provide equal opportunities to men and women. During the year, the proportion of female employees was 10.9% of total employees.

CSR FOOTPRINT (million beneficiaries)



Description: The total number of beneficiaries through our community development programmes across all our operations.

Commentary: We benefited ~3.26 million people this year through our community development projects comprising community health, nutrition, education, water and sanitation, sustainable livelihood, women empowerment and bio-investment.

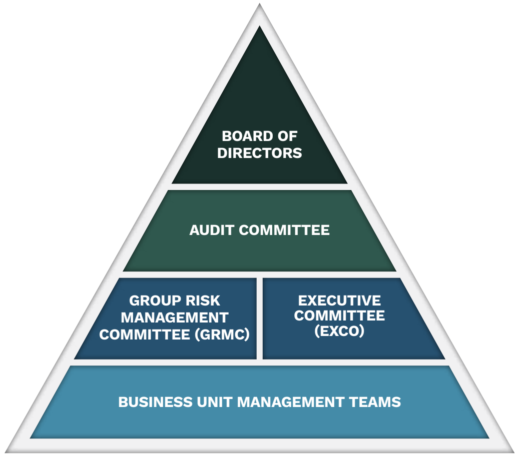
Encouraging diversity in talent

BUSINESS RISKS

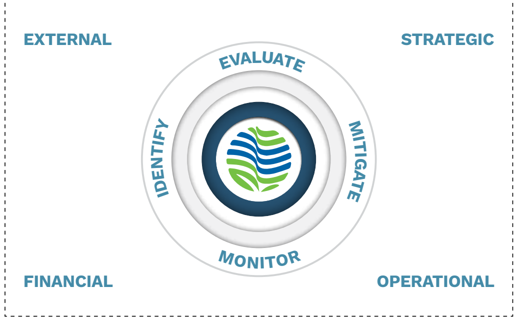
ENTERPRISE RISK MANAGEMENT

As a global natural resources company, our businesses are exposed to a variety of risks. It is therefore essential to have in place the necessary systems and a robust governance framework to manage risk, while balancing the risk-reward equation expected by stakeholders.

RISK GOVERNANCE FRAMEWORK


BOARD OF DIRECTORS
AUDIT COMMITTEE
GROUP RISK MANAGEMENT COMMITTEE (GRMC)
EXECUTIVE COMMITTEE (EXCO)
BUSINESS UNIT MANAGEMENT TEAMS

GROUP RISK MANAGEMENT FRAMEWORK



Our risk management framework is designed to be simple and consistent and provide clarity on managing and reporting risks to our Board. Together, our management systems, organisational structures, processes, standards and code of conduct and ethics form the system of internal control that governs how the Group conducts its business and manages the associated risks. The Board has the ultimate responsibility for the management of risks and for ensuring the effectiveness of internal control systems. The Board's review includes the Audit Committee's report on the risk matrix, significant risks, and the mitigating actions we have put in place. Any weaknesses identified by the review are addressed by enhanced procedures to strengthen the relevant controls, and these are reviewed at regular intervals.

The Audit Committee is in turn assisted by the Group-level Risk Management Committee in evaluating the design and effectiveness of the risk mitigation programme and control systems. The Group Risk Management Committee (GRMC) meets every quarter and comprises the Group Chief Executive Officer, Group Chief Financial Officer, Non-Executive Director and Director-Management Assurance. The Group Head-Health, Safety, Environment & Sustainability is invited to attend these meetings. GRMC discusses key events impacting the risk profile, key risks and uncertainties, emerging risks and progress against planned actions.

Since it is critical to the delivery of the Group's strategic objectives, risk management is embedded in business-critical activities, functions and processes. The risk management framework helps the Company by aligning operating controls with the objectives of the Group. It is designed to manage rather than eliminate the risk of failure to achieve business objectives and provides reasonable and not absolute assurance against material misstatement or loss. Materiality and risk tolerance are key considerations in our decision-making. The responsibility for identifying and managing risk lies with every manager and business leader.

In addition to the above structure, other key risk governance and oversight committees in the Group include the following:

- Finance Standing Committee (FSC) comprises Group CEO, Group CFO and Senior Advisor and it supports the Board by considering and approving matters related to finance, investment, banking, treasury, etc. Invitees to these committee meetings are the business CFOs, Group Head Treasury and BU Treasury Heads. In addition to this, the Investment Committee reviews the investment related risks.
- Group Project/Capex Council evaluates risks while reviewing any capital investment decisions as well as works on instituting risk management framework in projects.

In addition to the above, there are various group-level councils such as Procurement Council, Tax Council, HSE Council, Insurance Council, etc. that work on identifying risks in those specific areas and mitigating them.

The Group has a consistently applied methodology for identifying risks at the individual business level for existing operations and for ongoing projects.

At a business level, formal discussions on risk management occur at review meetings at least once a quarter. The respective businesses review their major risks, and changes in their nature and extent since the last assessment and discuss the control measures which are in place and further action plans. The control measures, stated in the risk matrix are also periodically reviewed by the business management teams to verify their continued effectiveness. These meetings are chaired by the respective business CEOs and attended by CXOs, senior management and appropriate functional heads. Risk officers have been formally nominated at each of the operating businesses as well as at Group level, whose role is to create awareness of risks at senior management level and to develop and nurture a risk management culture. Risk mitigation plans form an integral part of the performance management process. Structured discussions on risk management also happen at business level with regard to their respective risk matrix and mitigation plans. The leadership teams of the businesses are accountable for governance of the risk management framework and they provide regular updates to the GRMC.

Each of our businesses have developed their own respective risk matrix, which is reviewed by their respective management committee/executive committee, chaired by their CEOs. In addition, each business has developed its own risk register depending on the size of its operations and number of SBUs/locations. Risks across these risk registers are aggregated and evaluated and the Group's principal risks are identified based on the frequency, and potential magnitude and impact of the risks identified.

This element is an important component of the overall internal control process, from which the Board obtains assurance. The scope of work, authority and resources of Management Assurance Services (MAS) are regularly reviewed by the Audit Committee. The responsibilities of MAS include recommending improvements in the control environment and reviewing compliance with our philosophy, policies and procedures. The planning of internal audits is approached from a risk perspective. In preparing the internal audit plan, reference is made to the risk matrix, and inputs are sought from the senior management, business teams and members of the Audit Committee. In addition, we refer to past audit experience, financial analysis, besides the current economic and business environment.

The year 2020 has seen the outbreak of COVID-19 (Coronavirus) pandemic. As a result of COVID-19, we have seen macro-economic uncertainty with regards to prices and demand for commodities and oil & gas. The scale and duration of these developments remain uncertain, but could impact earnings and cash flow of resource companies.

The order in which these risks appear in the section below does not necessarily reflect the likelihood of their occurrence or the relative magnitude of their impact on our business. The risk direction of each risk has been reviewed based on events, economic conditions, changes in business environment and regulatory changes during the year. While our risk management framework is designed to help the organisation meet its objectives, there can be no guarantee that the Group's risk management activities will mitigate or prevent these or other risks from occurring.

The Board, with the assistance of management, carries out periodic and robust assessments of the principal risks and uncertainties of the Group and tests the financial plans for each of risks and uncertainties mentioned.

BUSINESS RISKS CONTINUED...

SUSTAINABILITY RISKS

Impact	Mitigation	Risk Direction
Health, safety and environment (HSE) The resources sector is subject to extensive health, safety and environmental laws, regulations and standards. Evolving requirements and stakeholder expectations could result in increased cost or litigation or threaten the viability of operations in extreme cases. **Emissions and climate change** Our global presence exposes us to a number of jurisdictions in which regulations or laws have been, or are being, considered to limit or reduce emissions. The likely effect of these changes could be to increase the cost for fossil fuels, impose levies for emissions in excess of certain permitted levels, and increase administrative costs for monitoring and reporting. Increasing regulation of GHG emissions, including the progressive introduction of carbon emissions trading mechanisms and tighter emission reduction targets, is likely to raise costs and reduce demand growth.	▪ HSE is a high priority area for Vedanta. Compliance with international and local regulations and standards, protecting our people, communities and the environment from harm and our operations from business interruptions are key focus areas ▪ Policies and standards are in place to mitigate and minimise any HSE-related occurrences. Safety standards issued/continue to be issued to reduce risk level in high risk areas. Structured monitoring and a review mechanism and system of positive compliance reporting are in place ▪ Business Unit (BU) Leadership continues to emphasise on three focus areas i.e. visible felt leadership, safety critical tasks and managing business partners ▪ The process to improve learning from incidents is currently being improved with the aim of reducing re-occurrence of similar incidents ▪ A Vedanta Critical Risk Management programme will be launched to identify critical risk controls and to measure, monitor and report the control effectiveness ▪ The Company has implemented a set of standards to align its sustainability framework with international practice. A structured sustainability assurance programme continues to operate in the business divisions covering environment, health, safety, community relations and human rights aspects, and is designed to embed our commitment at operational level ▪ All businesses have appropriate policies in place for occupational health-related matters, supported by structured processes, controls and technology ▪ To provide incentives for safe behaviour and effective risk management, safety KPIs have been built into performance management of all employees ▪ Carbon forum has been re-constituted with updated Terms of Reference and representation from all businesses. It has a mandate to develop and recommend to the ExCo and Board the carbon agenda for the Group ▪ The Group companies are actively working on reducing the GHG Emissions Intensity of our operations ▪ A task force team is formulated to assess end-to-end operational requirement for FGD plant. We continue to engage with various stakeholders on the matter	◀▶

Community involvement programme

SUSTAINABILITY RISKS

Impact	Mitigation	Risk Direction
Managing relationship with stakeholders The continued success of our existing operations and future projects are in part dependent on broad support and a healthy relationship with our respective local communities. Failure to identify and manage local concerns and expectations can have a negative impact on relations and therefore affect the organisation's reputation and social licence to operate and grow.	▪ CSR approach to community programmes is governed by the following key considerations: the needs of the local people and the development plan in line with the new Companies Act in India; CSR guidelines; CSR National Voluntary Guidelines of the Ministry of Corporate Affairs, Government of India; and the UN's sustainable development goals ▪ Our BU teams are proactively engaging with communities and stakeholders through a proper and structured engagement plan, with the objective of working with them as partners ▪ Business ExCos factor in these inputs, and then decide upon focus areas of CSR and budgets, while also aligning with strategic business priorities ▪ All BUs follow well-laid processes for recording and resolving all community grievances ▪ Every business has a dedicated Community Development Manager, who is a part of the BU ExCo. They are supported with dedicated teams of community professionals ▪ Our business leadership teams have periodic engagements with the local communities to build relations based on trust and mutual benefit. Our businesses seek to identify and minimise any potentially negative operational impacts and risks through responsible behaviour, acting transparently and ethically, promoting dialogue and complying with commitments to stakeholders ▪ Stakeholder engagement is driven basis stakeholder engagement plan at each BUs by CSR and cross-functional teams. Regular social and environment risk assessment discussions are happening at BU level ▪ Strategic CSR communication is being worked upon for visibility. Efforts continue to meet with key stakeholders, showcase our state-of-the-art technology, increase the organic followers and enhance engagement through social media ▪ CSR communication and engagement with all stakeholders – within and outside communities	◀▶
Tailings dam stability A release of waste material leading to loss of life, injuries, environmental damage, reputational damage, financial costs and production impacts. A tailings dam failure is considered to be a catastrophic risk – i.e. a very high severity, but very low frequency event that must be given the highest priority.	▪ The Risk Management Committee included tailings dams on the Group Risk Register with a requirement for annual internal review and three-yearly external review ▪ Operation of tailings dams is executed by suitably experienced personnel within the businesses ▪ Third party has been engaged to review tailings dam operations, including improvement opportunities/remedial works required and the application of Operational Maintenance and Surveillance (OMS) manuals in all operations. This is an oversight role in addition to technical design and guidance arranged by respective business units. Technical guidelines are also being developed ▪ Vedanta Tailings Management Standard has been reviewed, augmented and reissued including an annual, independent review of every dam and half-yearly CEO sign-off that dams continue to be managed within design parameters and in accordance with the last surveillance audit. Move towards dry tailings facilities has commenced ▪ Those responsible for dam management received training from third party and will receive on-going support and coaching from international consultants ▪ Management standard implemented with business involvement ▪ BUs are expected to ensure ongoing management of all tailings facilities with ExCo oversight with independent third-party assessment on Golder recommendations implementation status y-o-y ▪ Tailings management standard is updated to include latest best practices in tailings management. UNEP/ICMM Global Tailings Standard to be incorporated into Vedanta Standard during FY2021	◀▶

BUSINESS RISKS CONTINUED...

OPERATIONAL RISKS

Impact	Mitigation	Risk Direction
Challenges in aluminium and power business Our projects have been completed and may be subject to a number of challenges during operationalisation phase. These may also include challenges around sourcing raw materials and infrastructure-related aspects and concerns around Ash utilisation/evacuation.	▪ One of the impacts of the COVID-19 slowdown has been falling Aluminium LME prices, partly offset by lower alumina and carbon prices ▪ Continue to pursue new coal linkages to ensure coal security. Operations at Chotia coal mines also started. We have received the vesting orders for Jamkhani coal block for Jharsuguda and look forward to operationalising in FY2021 ▪ Local sourcing of bauxite and alumina from Odisha ▪ Jharsuguda facilities have ramped up satisfactorily ▪ Project teams in place for Ash Pond, Red Mud, railway infrastructure and FGD ▪ Dedicated teams working towards addressing the issue of new emission norms for power plants ▪ TSPL is engaging with all stakeholders regarding FGD matter ▪ Global technical experts have been inducted to strengthen operational excellence ▪ Continuous focus on plant operating efficiency improvement programme to achieve design parameters, manpower rationalisation, logistics and cost reduction initiatives ▪ Continuous augmentation of power security and infrastructure ▪ Strong management team continues to work towards sustainable low-cost of production, operational excellence and securing key raw material linkages ▪ Force majeure notice dated 29 March 2020 issued by PSPCL to over 100 plants from which it buys electricity due to lower demand on account of COVID-19 stating (a) not to declare capacity (b) delay in payments. Ministry of Power in its direction to CERC have clearly mentioned that obligation to pay for the capacity charges as per the PPA would continue ▪ Talwandi Saboo (TSPL) power plant matters are being addressed structurally by a competent team	◀▶
Discovery risk Increased production rates from our growth-oriented operations place demand on exploration and prospecting initiatives to replace R&R at a pace faster than depletion. A failure in our ability to discover new reserves, enhance existing reserves or develop new operations in sufficient quantities to maintain or grow the current level of our reserves could negatively affect our prospects. There are numerous uncertainties inherent in estimating ore and oil and gas reserves, and geological, technical, and economic assumptions that are valid at the time of estimation. These may change significantly when new information becomes available.	▪ Dedicated exploration cell with continuous focus on enhancing exploration capabilities ▪ Appropriate organisation and adequate financial allocation in place for exploration ▪ Strategic priority is to add to our R&R by extending resources at a faster rate than we deplete them, through continuous focus on drilling and exploration programme ▪ Exploration Executive Committee (ExCo) has been established to develop and implement strategy and review projects group wide ▪ Continue to make applications for new exploration tenements in countries in which we operate under their respective legislative regimes ▪ Exploration-related systems being strengthened, and standardised group wide and new technologies being utilised wherever appropriate ▪ International technical experts and agencies are working closely with our exploration teams to enhance our capabilities	◀▶

OPERATIONAL RISKS CONTINUED

Impact	Mitigation	Risk Direction
Breaches in IT/cybersecurity Like many global organisations, our reliance on computers and network technology is increasing. These systems could be subject to security breaches resulting in theft, disclosure, or corruption of key/strategic information. Security breaches could also result in misappropriation of funds or disruptions to our business operations. A cybersecurity breach could have an impact on business operations.	▪ Group-level focus on formulating necessary frameworks, policies, and procedures in line with best practices and international standards ▪ Implementation and adoption of various best-in-class tools and technologies for information security to create a robust security posture ▪ Special focus to strengthen the security landscape of Plant Technical Systems (PTS) through various initiatives ▪ Adoption of various international standards relating to Information Security, Disaster Recovery and Business Continuity Management, IT Risk Management and setting up internal IT processes and practices in line with these standards ▪ Work towards ensuring strict adherence to the IT-related Standard Operating Procedure (SOPs) to improve operating effectiveness and continuous focus for employees to go through mandatory cybersecurity awareness training ▪ Periodic assessment of entire IT systems landscapes and governance framework from vulnerability and penetration perspective through reputed expert agencies and addressing the identified observations in a time-bound manner	◀▶
Loss of assets or profit due to natural calamities Our operations may be subject to a number of circumstances, not wholly within the Group's control. These include damage to or breakdown of equipment or infrastructure, unexpected geological variations or technical issues, extreme weather conditions and natural disasters – any of which could adversely affect production and/or costs.	▪ Vedanta has taken appropriate group insurance cover to mitigate this risk ▪ An external agency reviews the risk portfolio and adequacy of this cover and assists us in our insurance portfolio ▪ Our underwriters are reputed institutions and have capacity to underwrite our risk ▪ Established mechanism of periodic insurance review in place at all entities. However, any occurrence not fully covered by insurance could have an adverse effect on the Group's business ▪ Continuous monitoring and periodic review of security function ▪ Continue to focus on capability building within the Group	◀▶
Cairn-related challenges Cairn India has 70% participating interest in Rajasthan Block. The Production Sharing Contract (PSC) of Rajasthan Block runs till 2020. The Government of India has granted its approval for ten-year extension at less favourable terms, pursuant to its policy for extension of Pre-NELP Exploration Blocks, subject to certain conditions. Ramp up of production vs envisaged may have impact on profitability.	▪ RJ PSC 2020 extension was issued by DGH subject to certain conditions. Ongoing dialogue with the government and relevant stakeholders to address the conditions ▪ The applicability of the Pre-NELP Extension Policy to the RJ Block is currently sub judice ▪ Cairn team is engaging with stakeholders for PSC extension ▪ Drop in crude price due to COVID-19 slowdown coupled with refusal by key global producers to reduce their output. Gas prices have also halved in recent months due to fall in Liquefied Natural Gas (LNG) prices globally. However, in the month of May, the crude prices have started improving ▪ Discussions within teams as well as with partners have been initiated with an objective to optimise cost across all spheres of operations ▪ Constant engagement with vendors/partners to ensure minimal project delay based on the current situation and plan to ramp-up ▪ Government has extended the PSC for the Ravva block in Andhra Pradesh by 10 years. The growth projects are being implemented through an Integrated Contracting approach. Contracts have built in mechanism for risk and reward ▪ Project management committee and project operating committee have been set to provide support to the outsourcing partner and address issues on time to enable better quality control as well as timely execution for growth projects	▲

BUSINESS RISKS CONTINUED...

COMPLIANCE RISKS

Impact	Mitigation	Risk Direction
Regulatory and legal risk We have operations in many countries around the globe. These may be impacted because of legal and regulatory changes in the countries in which we operate resulting in higher operating costs, and restrictions such as the imposition or increase in royalties or taxation rates, export duty, impacts on mining rights/bans, and change in legislation.	▪ The Group and its business divisions monitor regulatory developments on an ongoing basis ▪ Business-level teams identify and meet regulatory obligations and respond to emerging requirements ▪ Focus has been to communicate our responsible mining credentials through representations to government and industry associations ▪ Continue to demonstrate the Group's commitment to sustainability by proactive environmental, safety and CSR practices. Ongoing engagement with local community/media/NGOs ▪ SOX compliant subsidiaries ▪ Common compliance monitoring system being implemented in group companies. Legal requirements and a responsible person for compliance have been mapped in the system ▪ Legal counsels within the Group continues to work on strengthening the compliance and governance framework and the resolution of legal disputes ▪ Competent in-house legal organisation is in place at all the businesses and the legal teams have been strengthened with induction of senior legal professionals across all group companies ▪ Standard operating procedures (SOPs) have been implemented across our businesses for compliance monitoring ▪ Greater focus for timely closure of key non-compliances ▪ Contract management framework has been strengthened with the issue of boiler plate clauses across the group which will form part of all contracts. All key contract types have also been standardised ▪ Framework for monitoring performance against anti-bribery and corruption guidelines is also in place	◀▶
Tax-related matters Our businesses are in a tax regime and changes in any tax structure or any tax-related litigation may impact our profitability.	▪ Tax Council reviews all key tax litigations and provides advice to the Group ▪ Continue to engage with concerned authorities on tax matters ▪ Robust organisation in place at business and group-level to handle tax-related matters ▪ Continue to consult and obtain opinion from reputable tax consulting firms on major tax matters to mitigate the tax risks on the group and its subsidiaries	◀▶

Leveraging technology for growth

FINANCIAL RISKS

Impact	Mitigation	Risk Direction
Fluctuation in commodity prices (including oil) and currency exchange rates Prices and demand for the Group's products may remain volatile/uncertain and could be influenced by global economic conditions, natural disasters, weather, pandemics, such as the COVID-19 (coronavirus) outbreak, political instability, among others. Volatility in commodity prices and demand may adversely affect our earnings, cash flow and reserves. Our assets, earnings and cash flows are influenced by a variety of currencies due to the diversity of the countries in which we operate. Fluctuations in exchange rates of those currencies may have an impact on our financials.	▪ The Group has a well-diversified portfolio, which acts as a hedge against fluctuations in commodities and delivers cash flows through the cycle ▪ Pursue low-cost production, allowing profitable supply throughout the commodity price cycle ▪ Vedanta considers exposure to commodity price fluctuations to be an integral part of the Group's business and its usual policy is to sell its products at prevailing market prices and not to enter into price hedging arrangements other than for businesses of custom smelting and purchased alumina, where back-to-back hedging is used to mitigate pricing risks. Strategic hedge, if any, is taken after appropriate deliberations and due approval from ExCo ▪ Our forex policy prohibits forex speculation ▪ Robust controls in forex management to hedge currency risk liabilities on a back-to-back basis ▪ Finance standing committee reviews all forex and commodity-related risks and suggests necessary courses of action as needed by business divisions ▪ Seek to mitigate the impact of short-term movements in currency on the businesses by hedging short-term exposures progressively, based on their maturity. However, large, or prolonged movements in exchange rates may have a material adverse effect on the Group's businesses, operating results, financial condition and/or prospects ▪ Notes to the financial statements in the Annual Report give details on the accounting policy followed in calculating the impact of currency translation	◀▶
Major project delivery Shortfall in achievement of expansion projects stated objectives leading to challenges in achieving stated business milestones – existing and new growth projects.	▪ Empowered organisation structure has been put in place to drive growth projects. Project Management systems streamlined to ensure full accountability and value stream mapping ▪ Strong focus on safety aspects in the project ▪ Geo-technical audits are being carried out by independent agencies ▪ Engaged global engineering partner to do complete Life of Mine Planning and Capital Efficiency analysis to ensure that the project objectives are in sync with the Business Plan and growth targets ▪ Standard specifications and SOPs for all operations to avoid variability. Reputable contractors are engaged to ensure completion of the project on indicated timelines ▪ Mines being developed using best-in-class technology and equipment and ensuring the highest level of productivity and safety. Digitalisation and analytics to improve productivity and recovery ▪ Stage gate process to review risks and remedy at multiple stages on the way. ▪ Robust quality control procedures have also been implemented to check safety and quality of services/design/actual physical work	◀▶
Access to capital The Group may not be able to meet its payment obligations when due or may be unable to borrow funds in the market at an acceptable price to fund actual or proposed commitments. A sustained adverse economic downturn and/or suspension of its operation in any business, affecting revenue and free cash flow generation, may cause stress on the Company's ability to raise financing at competitive terms.	▪ A focused team continues to work on proactive refinancing initiatives with an objective to contain cost and extend tenor ▪ The team is actively building the pipeline for long-term funds for near- to medium-term requirements both for refinancing and growth capex with endeavour to keep diverse investor base of banks, capital market participants, insurance companies, pension funds, Foreign Institutional Investors (FIIs), etc. ▪ Track record of good relations with banks, and of raising borrowings in last few years ▪ Regular discussions with rating agencies to build confidence in operating performance ▪ Business teams ensure continued compliance with the Group's treasury policies that govern our financial risk management practices ▪ KCM matter is being addressed through structured engagement with various stakeholders ▪ Credit matrix trending weaker due to challenging refinancing environment and volatility in commodity prices (COVID-19) is being addressed through structured initiatives ▪ Please refer consolidated financial statements for more details on Page 110	▲

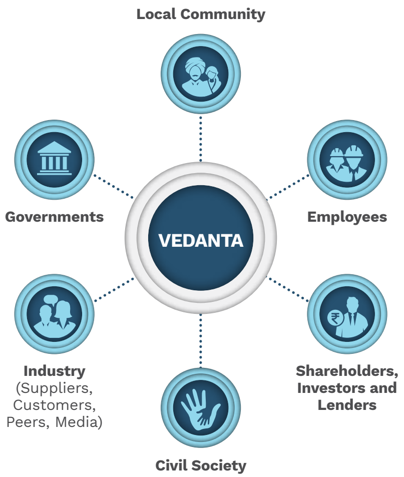
ALIGNING STAKEHOLDER EXPECTATIONS WITH BUSINESS STRATEGY

Continuous engagement with our stakeholders allows us to remain responsive to their expectations, foresee emerging risks and identify opportunities. Our social responsibility performance standards help ensure effective engagement with relevant stakeholders across multiple industries and geographies; provide adequate grievance mechanisms to help resolve situations of potential conflict; and develop specialised standards for potentially vulnerable communities such as indigenous people. The standards follow five principles of engagement:

ASK	ANSWER	ANALYSE	ALIGN	ACT
Our dialogue begins with questions that solicit feedback. Our stakeholders have access to a number of platforms to reach out to Vedanta personnel and voice concerns.	We disclose not just because we want to be heard, but because we are responsible. We aim to provide a constructive response to feedback received.	We have established a robust investigation process for complaints reported via the whistleblowing mechanism, sustainability and Group communications email IDs, involving senior management and relevant personnel.	We work hand-in-hand with stakeholders and align our goals and actions with their high-priority areas. The feedback from all our engagement becomes part of our materiality identification process.	We back our words with demonstrable actions that move the needle towards promised outcomes.

Enhancing agricultural incomes through innovative techniques

OUR KEY STAKEHOLDERS


Local Community
Governments
VEDANTA
Employees
Industry (Suppliers, Customers, Peers, Media)
Shareholders, Investors and Lenders
Civil Society

The table below represents an overview of the ongoing engagement with our stakeholders and the manner in which the Company responds to their expectations.

Stakeholder Groups	Types of Engagement	Key Expectations	Initiatives in FY2020
Local Community	Community group meetings, village council meetings, community needs/social impact assessments, public hearings, grievance mechanisms, cultural events, engaging philanthropically with communities via the Vedanta Foundation.	▪ Need-based community development projects ▪ Increasing reach of community development programmes ▪ Improved grievance mechanism for community	▪ US$40.6 million invested as social investment ▪ ~3.26 million beneficiaries of community development programmes ▪ Community grievance process followed at all operations
Employees	Chairman's workshops, Chairman's/CEO's town hall meetings, feedback sessions, performance management systems, various meetings at plant level, V-Connect mentor programme, event management committee and welfare committee, women's club.	▪ Improved training on safety ▪ Increased opportunities for career growth ▪ Increasing the gender diversity of the workforce	▪ 1.55 million person-hours of training on safety ▪ 30% of all new hires are women ▪ Identification of top talent and future leaders through workshops
Shareholders, Investors and Lenders	Regular updates, investor meetings, site visits, AGM, quarterly results calls, dedicated contact channels: vedantaltd.ir@vedanta.co.in sustainability@vedanta.co.in.	▪ Consistent disclosure on economic, social, and environmental performance	▪ US$11.8 billion in revenue ▪ Sustainability assurance audits conducted through Vedanta Sustainability Assurance Programme (VSAP) ▪ Investor briefings and pro-active engagement with the investment community on ESG topics
Civil Societies	Partnerships with, and membership of international organisations, working relationships with organisations on specific projects, engagement with international, national, and local NGOs, conferences and workshops, dedicated contact channel – sustainability@vedanta.co.in.	▪ Expectation of being aligned with the global sustainability agenda ▪ Commitment to ensuring human rights for all	▪ Membership of international organisations, including the United Nations Global Compact, CII, and Indian Biodiversity Business Initiative (IBBI) ▪ Focus towards implementing Sustainable Development Goals ▪ Compliance to the Modern Slavery Act
Industry (Suppliers, Customers, Peers, Media)	Customer satisfaction surveys, scorecards, in-person visits to customers, suppliers, and vendor meetings.	▪ Consistent implementation of the code of business conduct & ethics ▪ Ensuring contractual integrity	▪ Hotline service and email ID to receive whistle-blower complaints
Governments	Participation in government consultation programmes, engagement with national, state, and regional government bodies at business and operational level, engagement with regulators on policy matters.	▪ Compliance with laws ▪ Contributing towards the economic development of the nation	▪ US$4.6 billion in payments to the Indian and the UK exchequer ▪ KCM liquidation, PSC extension

FOSTERING A VALUE-DRIVEN CULTURE

Vedanta has always aspired to build a culture that demonstrates world-class standards in safety, environment and sustainability. People are our most valuable asset and we are committed to providing all our employees with a safe and healthy work environment.

Our culture exemplifies our core values and nurtures innovation, creativity and diversity. We align our business goals with individual goals and enable our employees to grow on a personal as well as professional front.

vedanta
sesa goa iron ore
5 S
Work Place Management
PLACE FOR EVERYTHING AND EVERYTHING AT ITS PLACE

VEDANTA VALUES THAT DRIVE THE ORGANISATIONAL CULTURE

TRUST
We actively foster a culture of transparency in our interactions and encourage an open dialogue which ensures mutual trust and respect.

CARE
We are committed to our triple bottom line of ‘People, Planet and Prosperity’ to create a sustainable future in a ‘zero-harm, zero waste and zero discharge’ environment for our communities.

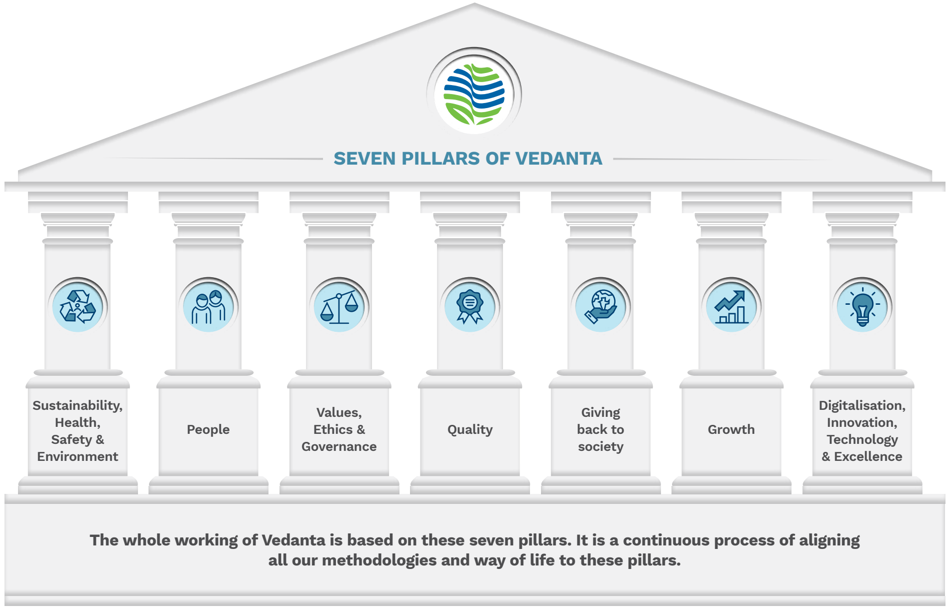
INTEGRITY
We engage ethically and transparently with all our stakeholders, taking accountability for our actions. We maintain the highest standards of professionalism and stringently comply with all international policies and procedures.

INNOVATION
We encourage innovation that leads to zero harm, zero waste and zero discharge, and we are committed to optimising the use of our natural resources, improving efficiencies and maximising recoveries of by-products.

ENTREPRENEURSHIP
People are at the heart of everything we do. We create an enabling environment to support them in pursuing their goals.

RESPECT
We place an emphasis on human rights and respect the principle of free, prior, informed consent, while our engagements with stakeholders give local communities the opportunity to voice their opinions and concerns.

EXCELLENCE
Our primary focus is on delivering performance of the highest standard. We are constantly looking at ways to reduce costs and increase production in our businesses through benchmarking best practices and employee participation.


SEVEN PILLARS OF VEDANTA
Sustainability, Health, Safety & Environment
People
Values, Ethics & Governance
Quality
Giving back to society
Growth
Digitalisation, Innovation, Technology & Excellence

The whole working of Vedanta is based on these seven pillars. It is a continuous process of aligning all our methodologies and way of life to these pillars.

DIGITALISATION INITIATIVES

Standing firm on the 'Digitalisation, Innovation, Technology and Excellence' pillar of Vedanta, various initiatives have been introduced on the people front to enhance process efficiency and maintain a competitive edge.

V-Accelerate

An end-to end online Internal Job Posting (IJP) portal was launched in FY2020, which was developed inhouse. The portal will add a great value to increase transparency and significantly reduce lead time in internal movements for filling up vacancies across the Group with internal talent.

MIP Dashboard

As part of our digitalisation initiatives, we developed the MIP Dashboard, which provides a complete view of the ExCo structure at Group Level, ensuring that we have visibility of all leaders at the click of a button.

Campus Analytics Dashboard

We partnered with a reputed analytics firm to analyse and derive insights from our experiences with various college campuses and campus recruits over the years. As a result, we now have an exhaustive dashboard, which provides key insights for shaping up our campus hiring strategy and onboarding and anchoring young talent.

Employees at Hindustan ZInc

Building talent through teamwork at Balco

RECRUITMENT

Our recruitment programme includes a wide range of initiatives to support us in hiring skilled professionals across different functions and businesses.

Right Management in Place (RMIP)

To re-emphasise the Group's philosophy of empowering the SBUs, we have reviewed our existing business and SBU structures, and followed a rigorous assessment process to ensure we engage the right talent in the right role. The RMIP process also ensures that we have filled all the critical roles within our structures and any gaps in the management team are supported by strategic plans to fill vacancies. Our approach to recruitment is focused on hiring diverse, high-quality talent. We operate our businesses with global best practices and are benchmarked to global standards. Therefore, wherever needed, we also hire expats and specialists with world-class expertise and experience to manage such operations.

Vedanta Leadership Development Programme (VLDP)

VLDP is our flagship programme, which aims to build organisational capability by developing talented individuals from premier management and technology institutes. It is a tailored programme, which focuses on nurturing bright young minds to act as catalysts to steer our business to the next level of growth by implementing transformational new-age ideas. The programme includes induction sessions and cross-functional projects in significant roles, job rotation, development opportunities, and continuous anchoring to ensure that these individuals get an in-depth knowledge of our operations and recognise their areas of interest for a suitable role.

Diversity Hiring Project

At Vedanta, we see ourselves as an engine of inclusive growth that operates at scale, and ushers in prosperity for a large section of the society. In line with our vision to achieve 33% diversity across the Group, we have launched a project to bring onboard diversity leaders across technical, operations and enabling functions, which will help us strengthen representation of women leaders in business and SBU ExCo. Through this project, we are looking at hiring around 30-40 women professionals across our various businesses and locations. In the last one year, we have made significant progress in increasing the diversity representation in Group ExCo from 5% to 21%.

TALENT MANAGEMENT AND DEVELOPMENT

Leadership Performance Scorecard

We take great pride in our performance-driven culture, where every individual is motivated to contribute to the best of his/her potential. It is with this focus that we launched the 'Leadership Performance Scorecard', an initiative which aims to drive accountability and performance for our senior leaders aligned to their respective business, function, role and with the overall objectives of the organisation.

The performance scorecard covers ~570 senior leaders, diversity leaders and advisors across the Group, and provides a quarterly scorecard on the basis of goals and achievements for rewards and development. The entire exercise is being executed in a very objective and transparent manner, aimed at recognising and further growing our top performing leaders, assisting those facing challenges and addressing any performance issues.

Mentoring and peer learning is a big part of working at Vedanta

Top 50 Young Talent Anchoring Programme

At Vedanta, identifying and grooming business leaders for tomorrow and providing them with business exposure (in terms of higher responsibility, better visibility, differentiated rewards, focused guidance and support structure to perform) have formed a key part of our people agenda. In line with this, we launched the Top 50 Young Talent Anchoring Programme, where we have identified 50 young and high potential candidates with digital and analytical mindset from our pool of 350+ VLDPs, MTs and CAs. These candidates have joined us from campuses in the last two years, for anchoring directly by the senior leaders of the group. This young talent is being centrally mentored by our high performing senior leaders to enable them to fast track their career growth into future CXOs.

Employees at operational site, Vedanta Limited, Jharsuguda

V-Reach: Graduate Development Programme

At Vedanta, we have a strong and unwavering focus on identifying and developing internal talent from within. We have a 5,000+ strong talent pool who joined us as graduates, who form the backbone of our businesses. To identify the top 100 talent from this graduate talent pool and provide them elevated roles and opportunities, we launched V-Reach, which will help fast track their career growth within the Group. The project will be carried out in two steps. First ~300 potential leaders will be identified via desktop analysis based on objective parameters. Next, all the selected candidates will go through a structured Chairman's Workshop to identify the Top 100 leaders.

CONTAINER STACKING YARD

Employees at Cairn Oil & Gas

Vedanta advocates fun team building activities

PERFORMANCE MANAGEMENT & TOTAL REWARDS

V-Perform: One Performance System for One Vedanta

Our focus is to constantly improve the level of automation in all our operations. V-Perform is a pan-Vedanta initiative to standardise the Performance Management System (PMS) and process across all Vedanta Group companies by leveraging technology. This enables functions, teams and individuals to track performance on a regular basis, evaluate efficiency through advanced analytics and implement proactive decisions towards achieving Vedanta's objectives. We foster a culture of safety and sustainability to achieve our ultimate vision of 'Zero Harm, Zero Waste & Zero Discharge'. To enhance our safety performance in the workplace and strengthen our existing Safety Management System, a safety competency assessment process was completed mid-year by all employees.

Employees at Hindustan ZInc

360-degree Feedback

We promote growth and nurturing of our internal talent pool by encouraging internal dialogue between senior leaders and their young mentees and peers. Towards this, we have launched a 360 Degree Feedback for our ExCo Leaders in collaboration with an external partner. We believe that this will help to fast-track assessment and development of leaders and we aim to extend this to cover all our professionals in due course.

Aluminium CEO interacting with on site team

Employee Stock Option Scheme 2019-20

Employee stock options is a conditional share plan for rewarding performance on pre-determined performance criteria and continued employment with the Company. It provides a much better line-of-sight to all employees. On 29 November 2019, Nomination and Renumeration Committee approved the grant of Employee Stock Options 2019 to Vedanta employees covering 35% of eligible population.

In order to align the scheme with best-in-class reward practices globally, the ESOS 2019 Plan has undergone significant transformation. The grant under the ESOS 2019 is completely driven by performance and is a combination of individual contribution and business/SBU performance. Although the plan continues to be linked to Vedanta Limited for its R-TSR performance, but since business delivery is of prime importance for the organisation today, the internal parameters of volume, cost, Net Sales Revenue and EBITDA, as applicable to respective business and SBU have been introduced as additional performance parameters with enhanced weightage. The vesting of such options will also be a factor of sustained individual performance subject to continued employment with the Group. Through this change, we not only ensure to protect the shareholder interests but also enable a better control of the outcome of the plan in the hands of the employee.

An employee at Cairn Oil & Gas

CASE STUDY 01:
IDENTIFYING AND KEEP NURTURING HOMEGROWN LEADERS

In the global context, nowadays most CEOs cite an inadequate pool of leadership talent as a business threat and yet many organisations do not move fast enough to address this. While companies expect talent to have growth, positive mindset, manage complexity, be agile, innovate, integrate, collaborate and empower, the talent, in return, expects continuous learning, exciting challenges, diverse and inclusive work environment, flexible career paths and ongoing feedback, to grow.

During 2015, Vedanta was at such a crossroad to build a pipeline of Leaders of Tomorrow and under the leadership of the Chairman, took the opportunity to initiate what was to become one of the largest and most successful internal leadership growth programmes in the industry.

'Leadership from Within' has been our cardinal philosophy as we grow and in line with this, we designed the 'Chairman's Internal Growth Workshop Programme' to identify 'hidden gems' across the businesses basis the 3 Ps - Personal Background (Education, Age, Experience, etc.); Performance (Last three years' performance, Star of the Business, etc.); Potential (Identified by a comprehensive assessment mechanism).

Through this robust exercise, we have identified a bench-strength of 600+ New Leaders, who have been entrusted with elevated/enhanced roles across business and functions. Meeting the growth aspirations of our employees and ensuring internal mobility of high-quality talent has been the highlight of this endeavour. The New Leaders have been empowered through various key strategic initiatives across the Group and regular feedback sessions have ensured they are on the right track of adding business value.

We also recently engaged an outsourced partner to conduct an independent study to gather objective feedback about the programme's effectiveness. The study revealed a resounding positive feedback from across stakeholder segments (over 85% satisfaction level – in terms of role satisfaction and recognition, leadership visibility, right guidance etc.) thus re-enforcing its impact across the organisation.

Employees in Underground Mine at the Rajpura Dariba Mine

FINANCE REVIEW

EXECUTIVE SUMMARY

We delivered sound operational and financial performance in FY2020, despite the challenging operating environment of low commodity prices and some impact on production on account of the lockdown to combat COVID-19. The Company continues to focus on controllable factors such as resetting cost base through diverse cost optimisation initiatives, disciplined capital investments, working capital initiatives, marketing initiatives and volume with strong control measures to ensure safe operations across businesses within the framed government and corporate guidelines in view of COVID-19.

In FY2020, we recorded an EBITDA of US$3,003 million, 13% lower y-o-y, and robust adjusted EBITDA margin of 29% (FY2019: US$3,457 million, margin 30%).

Lower production volumes, at Zinc India and in the Oil & Gas business, resulted in decrease in EBITDA by US$15 million. However, this was partially offset by higher sales volume at Iron Ore Karnataka and steel business, additional volume from Gamsberg and increase in volumes at the Aluminium business.

Market factors were also responsible for the decrease in EBITDA by US$567 million compared to FY2019. This was primarily driven by the downturn in the commodity prices across businesses, partially offset by input commodity deflation (mostly in alumina, thermal coal and carbon prices) and favourable currency movement.

Gross debt decreased to US$15.1 billion as at 31 March 2020 from US$16.0 billion as at 31 March 2019, driven by repayment of debt at Vedanta Standalone, Talwandi Sabo Power Plant (TSPL), temporary borrowing at Zinc India and favourable currency movement partially offset by increase in borrowing at the Oil & Gas business, Vedanta Resources Limited (VRL).

Net debt decreased to US$10.0 billion as at 31 March 2020 from US$10.3 billion as at 31 March 2019, primarily due to the repayment of debt and favourable currency movement, partially offset by working capital blockage due to COVID-19, dividend payment during the year and net debt to EBITDA ratio increased to 3.3x as at 31 March 2020 from 3x as at 31 March 2019.

The financial position is positive with cash equivalent, liquid investment and structured investments of US$5.1 billion (FY2019: US$5.7 billion).

The balance sheet of Vedanta Limited, the Indian listed subsidiary of Vedanta Resources, continues to remain strong with cash and liquid investments of ~US$5.1 billion (FY2019: US$5.6 billion) and net debt to EBITDA ratio at 1.0x, which is the lowest among Indian peers.

CONSOLIDATED OPERATING PROFIT SUMMARY BEFORE SPECIAL ITEMS

Operating profit before special items decreased to US$1,591 million from US$2,076 million in FY2019. This was mainly driven by downturn in commodity prices, lower volume and higher cost at Zinc India and Oil & Gas business, higher depreciation charge partially offset by additional volumes from Gamsberg operations, higher sales at Iron Ore Karnataka and steel business and higher volume at Aluminium business, easing out of input commodity inflation, improved cost of production at Aluminium business, past exploration cost recovery at Oil & Gas business and depreciation of our operating currencies.

CONSOLIDATED OPERATING PROFIT SUMMARY BEFORE SPECIAL ITEMS

(US$ million, unless stated)

Consolidated operating profit before special items	FY2020	FY2019	% change
Zinc	875	1,287	(32)
-India	911	1,248	(27)
-International	(36)	39	-
Oil & Gas	466	489	(5)
Aluminium	48	76	(36)
Power	151	133	14
Iron Ore	83	55	52
Steel	49	85	(43)
Copper India/Australia	(61)	(57)	7
Others	(20)	8	-
Total Group operating profit before special items	**1,591**	**2,076**	**(23)**

1. Excludes Copper Zambia, as its operations have been discontinued and deconsolidated in books with effect from 21 May 2019.

CONSOLIDATED OPERATING PROFIT BRIDGE BEFORE SPECIAL ITEMS

(In US$ million)

Operating profit before special items for FY2019[1]	**2,076**
Market and regulatory: US$(566) million	
a) Prices, premium/discount	(1,122)
b) Direct raw material inflation	512
c) Foreign exchange movement	43
d) Profit petroleum to GOI at Oil & Gas	24
e) Regulatory changes	(23)
Operational: US$81 million	
f) Volume	(15)
g) Cost and marketing	47
h) Others	81
Depreciation and amortisation	**(32)**
Operating profit before special items for FY2020	**1,591**

A) PRICES, PREMIUM/DISCOUNT

Commodity price fluctuations have a significant impact on the Group's business. During FY2020, we saw a net negative impact on EBITDA of US$1,122 million due to commodity price fluctuations.

Zinc, lead and silver: Average zinc LME prices during FY2020 dropped to US$2,042 per tonne, down 12% y-o-y; lead LME prices decreased to US$1,958 per tonne, down 8% y-o-y; and silver prices increased to US$16.5 per ounce, up 7% y-o-y. The collective impact of these price fluctuations lowered EBITDA by US$308 million.

Aluminium: Average aluminium LME prices decreased to US$1,749 per tonne in FY2020, down 14% y-o-y. This had a negative impact of US$566 million on EBITDA.

Oil & Gas: The average Brent price for the year was US$60.9 per barrel, lower by 13% compared to US$70.4 per barrel during FY2019. This was further reduced by a higher discount to Brent during the year (FY2020: 7.1%; FY2019: 6.1%). These had negative impact on EBITDA by US$147 million.

B) DIRECT RAW MATERIAL INFLATION

Prices of key raw materials such as imported alumina, thermal coal, carbon and caustics reduced significantly in FY2020, improving EBITDA by US$512 million, mainly at the Aluminium and Zinc India business.

C) FOREIGN EXCHANGE FLUCTUATION

The Indian rupee and the South African rand both depreciated against the US dollar during FY2020. Stronger dollar is favourable to the Group's EBITDA, given the local cost base and predominantly US dollar-linked pricing. These favourable currency movements in the aggregate increased EBITDA by US$43 million compared to FY2019.

Key exchange rates against the US dollar :

	Average year ended 31 March 2020	Average year ended 31 March 2019	% change	As at 31 March 2020	As at 31 March 2019	% Change
Indian rupee	70.86	69.89	1.4	74.81	69.17	5
South African rand	14.78	13.76	7.41	17.89	14.48	(2)

Encouraging young leaders, Vedanta Aluminum Business

D) PROFIT PETROLEUM TO GOI AT OIL & GAS

The profit petroleum outflow to the Government of India (GOI), as per the Production Sharing Contract (PSC), reduced by US$24 million. The reduction was primarily due to the higher recovery of capital expenditure incurred over the previous year.

E) REGULATORY

During FY2020, changes in regulatory levies such as electricity duty, Goods and Services Tax (GST) credits, Renewable Power Obligation etc. had a cumulative negative impact on the Group EBITDA of US$23 million.

F) VOLUMES

Lower volume led to decrease in EBITDA of US$15 million as reported by the following businesses:

Zinc India (negative US$84 million)
The integrated zinc metal sales stood at 860 kt, lower by 4%, and silver sales of 586 tonnes, lower by 13%. This had a cumulative negative impact on EBITDA of US$84 million.

Oil & Gas (negative US$91 million)
Oil & Gas business achieved Working Interest (WI) sales of 40.27 mmboe, down by 8% y-o-y. This had negative impact on EBITDA of US$91 million.

Iron Ore Karnataka (positive US$76 million)
Iron Ore Karnataka achieved sales of 5.78 million tonnes, up 125% y-o-y. This sales volume increase had a positive impact on EBITDA of US$76 million.

Zinc International (positive US$57million)
Increased volumes at Gamsberg from 15 kt in FY2019 to 109 kt in FY2020, mainly because of full year operation in FY2020. This has positively impacted EBIDTA by US$57 million.

Steel Business (positive US$18 million)
ESL achieved metal sales of 1,179 kt, up 15% y-o-y. This sales volume increase had a positive impact on EBITDA of US$18 million.

Aluminium (positive US$10 million)
In FY2020, the Aluminium business achieved metal sales of 1.92 million tonnes, up 3.6% y-o-y. This volume increase had a positive impact on EBITDA of US$10 million.

G) COST AND MARKETING

Improved costs, primarily at Aluminium business, resulted in an increase in EBITDA by US$47 million over FY2020. This was driven by globally falling input raw material indices (alumina, carbon, caustic etc.), lower power cost on account of materialisation of linkage coal supply and higher production of captive alumina at Lanjigarh and Steel business, driven by falling input raw material indices and operational efficiencies. This was partially offset by higher cost at Zinc India due to volume-led absorption, and Oil & Gas business due to higher maintenance cost and production enhancement initiatives during FY2020.

H) OTHERS

This primarily includes the past exploration cost recovery at Oil & Gas business during the FY2020 partially offset by lower power EBITDA, inventory valuation at Aluminium business and lower EBITDA at Avanstrate Inc. (ASI) with a net positive impact on EBITDA of US$81 million.

Depreciation and amortisation

Depreciation and amortisation increased by US$32 million against the previous year. This was primarily on account of higher charge at Oil & Gas business due to capitalisation of new wells partially offset by lower production; higher depreciation charge at Zinc India on account of higher ore production, additional capitalisation and increase in amortisation rate due to increase in cost; higher charge at Zinc international due to increased production from Gamsberg and acquisitions of Steel business in June 2018 partially offset by rupee depreciation.

INCOME STATEMENT[1]

(US$ million, unless stated)

Particulars	FY2020	FY2019[2]	% change
Revenue	11,790	13,006	(9)
EBITDA◊	3,003	3,456	(13)
EBITDA margin (%)◊	25	27	
EBITDA margin without custom smelting (%)◊	29	30	-
Special items	(2,065)	38	-
Depreciation and amortisation	(1,412)	(1,380)	2
Operating profit	(474)	2,114	-
Operating profit without special items	1,591	2,076	(23)
Net interest expense	(797)	(680)	17
Interest cost-related special items	12	9	39
Other gains /(losses)	(87)	(75)	15
Profit before taxation	(1,346)	1,368	-
Profit before taxation without special items	707	1,321	(46)
Income tax expense	(411)	(595)	(31)
Income tax (expense)/credit (special items)	781	(16)	-
Effective tax rate without special items (%)	27.5	44.7	-
Profit for the year from continuing operations	(976)	757	-
Profit for the period/year from continuing operations before special items	296	726	(59)
Profit for the year from discontinuing operations[1]	(771)	(333)	-
Profit for the period /year	(1,747)	424	-
Profit for the period /year without special items	296	726	(59)
Non-controlling interest	(179)	661	-
Non-controlling interest without special items	498	715	(30)
Attributable profit / (loss)	(1,568)	(237)	-
Attributable profit/loss without special items	(202)	11	-
Underlying attributable profit/(loss)◊	(170)	38	-

[1] It excludes Copper Zambia as its operations have been discontinued & deconsolidated in books with effect from 21 May 2019. [for more information, refer note set out in notes [3(e) of the consolidated financial statement].
[2] Previous period figures have been regrouped or re-arranged wherever necessary to conform to current period's presentation to include impact of KCM deconsolidation as mentioned in point 1 above.

CONSOLIDATED REVENUE

Revenue for FY2020 decreased by 9% to US$11,790 million (FY2019: US$13,006 million). This was driven by subdued commodity prices, lower volume at Zinc India and Oil & Gas businesses and lower power sales at TSPL partially offset by higher volume at Aluminium business, additional volumes from Gamsberg operations, higher sales at Iron Ore Karnataka and Steel business.

(US$ million, unless stated)

Consolidated revenue[1]	FY2020	FY2019	Net revenue (%)
Zinc	3,004	3,347	(10)
-India	2,563	2,955	(13)
-International	441	392	13
Oil & Gas	1,787	1,892	(6)
Aluminium	3,751	4,183	(10)
Power	827	934	(11)
Iron Ore	489	416	17
Steel	604	600	1
Copper India/Australia	1,278	1,537	(17)
Others[2]	51	97	47
Total	**11,790**	**13,006**	**(9)**

[1] Excludes Copper Zambia as its operations have been discontinued & deconsolidated in books with effect from 21 May 2019.
[2] Includes port business and eliminations of inter-segment sales.

(US$ million, unless stated)

Consolidated EBITDA[1]	FY2020	FY2019	% Change	Key drivers	EBITDA margin % FY2020	EBITDA margin % FY2019
Zinc	1,283	1,616	(21)		43	48
-India	1,230	1,516	(19)	Lower volumes and lower LME	48	51
-International	54	100	(46)	Lower LME offset by higher volume & lower cost	12	25
Oil & Gas	1,032	1,100	(6)	Past exploration cost recovery offset by lower oil price & volume	58	58
Aluminium	281	316	(11)	Improved cost of production	8	8
Power	233	219	6	Improved cost of production due to improved linkage realisation	28	23
Iron Ore	117	90	30	Higher Iron Ore Karnataka volumes	24	22
Steel	83	113	(27)	Lower sales realisation	14	19
Copper India/Australia	(40)	(36)	12	Lower Copper LME & volume	(3)	(2)
Others[2]	14	38	(63)		28	40
Total	**3,003**	**3,456**	**(13)**	EBITDA margin◊	**25**	**27**
				Adjusted EBITDA margin◊	29	30

[1] Excludes Copper Zambia as its operations have been discontinued & deconsolidated in books w.e.f. 21 May 2019.
[2] Includes port business and elimination of inter-segment transactions.

EBITDA AND EBITDA MARGIN

EBITDA for the year was at US$3,003 million, 13% lower y-o-y. This was mainly driven by subdued commodity prices, lower volume and higher cost at Zinc India and Oil & Gas business partially offset by higher volume at Aluminium business, additional volumes from commencement of Gamsberg operations and higher sales at Iron Ore Karnataka and Steel business, easing out input commodity inflation, improved cost of production at Aluminium business, past exploration cost recovery at Oil & Gas business and favourable currency movement. (See 'Operating profit variance' for more details)

We maintained a robust adjusted EBITDA margin of 29% for the year (FY2019: 30%)

SPECIAL ITEMS - CONTINUED OPERATIONS (INCLUDED INTEREST INCOME RELATED)

In FY2020 special items stood at negative US$2,053 million, which primarily includes:

- **Impairment charge of assets at Oil & Gas business:** The Group has recognised impairment charge of US$1,906 million on its assets in the Oil & Gas segment, which comprised:
  a. Impairment charge of US$1,795 million relating to Rajasthan Oil & Gas block primarily triggered by the significant fall in the crude oil prices. It includes US$1,648 million impairment charge against oil and gas producing facilities and US$147 million impairment charge against exploration intangible assets under development [For more information, refer note 2(c)(I)(viii) of consolidated financial statements and note 6 on special items set out in consolidated financial statement]
  b. Impairment charge of US$36 million relating to KG-ONN-2003/1 block, mainly due to reduction in crude price forecast
  c. Impairment charge of US$75 million relating to exploration block KG-OSN-2009/3, where the Group had represented to DGH to grant a 12-month excusable delay, along with unfettered and unrestricted access to the block. Based on the said representation, the DGH granted an extension up to 4 December 2020. However, there is now restricted access to the block and low oil price outlook. [For more information refer note [6] on special items set out in consolidated financial statement]
- **Impairment charge of copper CWIP & capital advances:** The Company took impairment of CWIP & capital advance balances of US$94 million at Copper business in relation to the 4TLPA expansion plant, where project activities are on halt since May 2018 [For more information, refer note [2(c)(I)(vii)] of the consolidated financial statement]
- **Impairment charge of assets at Avanstarte Inc. (ASI):** Overall global economy slowed down in 2019 and there is continued distress in panel market across Taiwan, Korea and China, resulting in downward correction of prices and volumes and consequently the profitability of ASI has reduced in the current year. The Company has carried out the detailed assessment of estimated future cash flows. The recoverable value is found to be less than the carrying value of PPE and booked an impairment of US$72 million [For more information, refer Note [2(C)(I)(xii)] of the Consolidated Financial Statement]
- **Provision on iron ore assets:** The Group has recognised impairment charge of US$17 million on financial asset due to an ongoing legal dispute relating to title of the land
- Accrued Interest on power dues at TSPL of ~US$12 million pertaining to the period prior to H1FY20 based on positive Supreme Court order
- Renewal power obligation liability reversal of US$24 million at Aluminium pertaining to past years based on revision of liability pursuant to Odisha Electricity Regulatory Commission notification. [For more information refer note [6] on special items set out in consolidated financial statement]

DISCONTINUED OPERATIONS

On 21 May 2019, ZCCM Investments Holdings Plc (ZCCM), a company majority owned by the Government of Zambia, which owns 20.6% of the shares in Konkola Copper Mines Plc (KCM), filed a petition in the High Court of Zambia to wind up KCM (Petition) on 'just and equitable' grounds. ZCCM also obtained an ex parte order from the High Court of Zambia appointing a Provisional Liquidator (PL) of KCM pending the hearing of the petition.

Following the filing of the petition, Vedanta Resources Holdings Limited (VRHL) and Vedanta Resources Limited (VRL or the Company) commenced the dispute resolution procedures prescribed by the KCM Shareholders' Agreement, and have initiated arbitration consistent with their position that ZCCM is in breach of the KCM Shareholders' Agreement by reason of its actions in seeking to wind up KCM before the Zambian High Court and applying for the appointment of the PL. As part of the dispute resolution process under the KCM Shareholders' Agreement, VRHL obtained injunctive relief from the High Court of South Africa requiring ZCCM to withdraw the petition, such that the PL is discharged from office and declaring ZCCM to be in breach of the arbitration clause in the KCM Shareholders' Agreement. ZCCM was further prohibited from taking any further steps to wind up KCM until the conclusion of the arbitration. ZCCM had sought leave to appeal to the Supreme Court of South Africa, which was granted, and the matter is pending to be heard.

In the interim, the Group had also filed an application with the arbitrator for grant of interim award under the threat of potential sale of mine prior to conclusion of hearing, causing significant irreversible harm to the Group which was set aside by the arbitration in March 2020 relying primarily on statement dated 12 June 2019 from the provisional liquidator, wherein he had submitted that it will be contempt of court to sell the mine before the court proceedings are concluded. Currently, the power to sell the mine is de facto considered by him to be frozen. The Tribunal has also made it clear that the parties are not to infer from the contents of the ruling any final view on any matter as to the merits of the arbitration.

Since all the significant decision-making powers, including carrying on the business of KCM and taking control over all the assets of KCM, rests with the PL, the Group believes that the appointment of PL has caused loss of its control over KCM as per IFRS 10. Accordingly, the Group has deconsolidated KCM with effect from 21 May 2019, and has presented the same in the income statement as a discontinued operation. This has also resulted in derecognition of non-controlling interests in KCM of US$86 million. The loss with respect to KCM operations, along with the loss on fair valuation of the Group's interest in KCM, has been presented as a special item in the income statement.

The Group has total exposure of US$1,952 million (including equity investment in KCM of US$266 million) to KCM in the form of loans, receivables, investments and amounts relating to the guarantees issued by VRL, which have been accounted for at fair value on initial recognition and disclosed under non-current assets in the Consolidated Statement of financial position.

The profit/loss for the comparative period and till 21 May 2019 of the current period, along with net gain/loss on de-consolidation of US$(771) million, has been accounted as special item during FY2020, which includes loss after tax from discontinued operations of US$(77) million, loss on deconsolidation amounting to US$(661) million, and fair value change during the year of US$(33) million [For more information, refer note set out in Note 3(e) of the Consolidated Financial Statement].

NET INTEREST

The blended cost of borrowings was 7.43% for FY2020 compared with 7.45% in FY2019.

Finance cost, excluding special items for FY2020, was at US$1,179 million, 3% lower y-o-y compared to US$1,213 million in FY2019, mainly on account of decrease in average borrowing due to repayment of debt at Vedanta standalone, TSPL, BALCO, repayment of temporary borrowing at Zinc India, repayment of preference shares at CIHL in FY2019, decline in average borrowing cost in line with market trends and rupee depreciation, which was partially offset by increased borrowing at Oil & Gas business and Vedanta Resources Limited.

Investment income for FY2020 stood at US$382 million, 28% lower y-o-y compared to US$533 million in FY2019. This was mainly due to mark to market loss on a treasury investment made by an overseas subsidiary of Vedanta Limited through a purchase of an economic interest in a structured investment in Anglo American Plc from its parent, Volcan Investments Limited, one-time reclassification from other comprehensive income to profit and loss account at Zinc India during FY2019 and rupee depreciation, which was partially offset by mark to market gain on other investment during the year.

The average post-tax return on the Group's investments during FY2020 was 6.12% (FY2019: 5.62%), and the average pre-tax return was 7.17% (FY2019: 6.26%).

The decreased finance cost was partially offset by decreased investment revenue, and this led to a net increase of US$117 million in net interest expense (excluding special items) during the period.

OTHER GAINS/(LOSSES) EXCLUDING SPECIAL ITEMS

Other gains/(losses) excluding special items for FY2020 amounted to US$(87) million, compared to US$(75) million in FY2019. This was mainly on account of significant depreciation of the Indian rupee against the US dollar.

TAXATION

Tax credit for FY2020 stood at US$370 million. Effective tax rate (before special items, tax on undistributed reserve of/dividend from subsidiary, new tax regime impact - Section 115BAA of Income Tax Act, 1961) for FY2020 was 52%, compared to 33% in FY2019.

The Effective Tax Rate (ETR) was higher in FY2020 by 19% mainly on account of:

- Change in profit mix within entities, primarily on account of increase of 5% in weightage of Cairn Energy Hydrocarbon (CEHC) which is taxable at a higher rate of 43.68%
- Reduction in denominator base on account of VRL losses, which is contributing 14% increase in ETR

Further, the tax credit for FY2020 includes deferred tax credit of US$233 million, which the Group has recognised after re-measuring its deferred tax balances as per Section 115BAA of the Income- tax Act, 1961 and based on the expected timing of exercising the option during the year, tax credit of US$781 million on special items recognised during the year, which primarily includes tax credit on impairment charge on assets. This was partially offset by tax charge of US$275 million recognised on distributable reserves of dividend from subsidiary viz. Zinc India and CIHL, respectively.

ATTRIBUTABLE PROFIT/(LOSS)

Attributable loss before special items was US$(202) million in FY2020 compared to an attributable profit of US$11 million in FY2019, primarily driven by lower EBITDA, higher net interest and higher depreciation charge partially offset by tax credit.

FUND FLOW POST-CAPEX◊

The Group generated Free Cash Flow (FCF) post-capex of US$823 million (FY2019: US$1,330 million), driven by lower EBITDA and working capital blockage due to COVID-19 impact, partially offset by continued focus on cost savings, disciplined capex outflow and lower tax outflow.

FUND FLOW MOVEMENT IN NET DEBT◊

Fund flow and movement in net debt◊ in FY2020 are set out below.

(US$ million, unless stated)

Particulars	FY2020	FY2019
EBITDA◊[2]	3,003	3,456
Working capital movements	(74)	278
Changes in non-cash items	18	34
Sustaining capital expenditure	(558)	(399)
Movements in capital creditors	84	107
Sale of property, plant and equipment	21	18
Net interest (including interest cost-related special items)	(687)	(697)
Tax paid	(165)	(386)
Expansion capital expenditure	(819)	(1,081)
Free cash flow (FCF) post capex◊	823	1,330
Dividend paid to equity shareholders	(536)	(113)
Dividend paid to non-controlling interests	(101)	(1,028)
Dividend Received	2	-
Tax on dividend from Group companies	-	(161)
Acquisition of subsidiary	(5)	(707)
Discontinued operations of Copper Zambia[2, 3]	(118)	(139)
Other movements[1]	222	115
Movement in net debt	287	(704)

[1] Includes foreign exchange movements.

[2] Copper Zambia operations have been discontinued & deconsolidated in books with effect from 21 May 2019.

[3] It includes US$149 million reduction in net debt arising pursuant to deconsolidation of KCM.

DEBT, MATURITY PROFILE AND REFINANCING

The gross debt decreased from US$16.0 billion in FY2019 to US$15.1 billion, mainly on account of repayment of borrowing at Vedanta standalone, TSPL and temporary borrowing at Zinc India and favourable currency movement partially offset by increase in borrowing at Oil & Gas business and VRL.

During FY2020, net debt decreased from US$10.3 billion to US$10.0 billion y-o-y, primarily due to the repayment of debt and favourable currency movement partially offset by working capital blockage due to COVID-19 and dividend payment during the year.

Our total gross debt of US$15.1 billion comprises:

- US$12.9 billion as term debt (March 2019: US$12.6 billion)
- US$1.2 billion of short-term borrowings (March 2019: US$2.9 billion)
- US$1.0 billion of working capital loans (March 2019: US$0.5 billion)

(US$ billion)

Particulars	As at 31 March 2019	As at 31 March 2020	FY2021	FY2022	FY2023	FY2024	FY2025 & beyond
Debt at VRL	6.3	6.7	1.0	1.4	1.8	1.1	1.9
Debt at subsidiaries	6.3	6.2	0.6	1.8	0.9	0.6	1.6
Total term debt[1]	**12.6**	**12.9**	**1.6**	**3.2**	**2.8**	**1.7**	**3.6**

[1] Term debt excluding preference shares.

Term debt at our subsidiaries was US$6.2 billion, with the balance at VRL. The total undrawn fund-based credit limit was ~US$0.7 billion as at 31 March 2020.

Cash and liquid investments stood at US$5.1 billion at 31 March 2020 (31 March 2019: US$5.7 billion). The portfolio continues to be invested in debt mutual funds, and in cash and fixed deposits with banks.

GOING CONCERN

The Group has prepared the consolidated financial statements on a going concern basis. The Directors have considered a number of factors in concluding on their going concern assessment covering the period to 31 December 2021. They have taken note of the material uncertainties arising out of liquidity and covenant compliance considerations and the mitigating options available to the Group and the Company to address them.

Notwithstanding the material uncertainties, the Directors have confidence in the Group's ability to execute sufficient mitigating actions. The Directors have a reasonable expectation that the Group and Company will meet its commitments as they fall due over the going concern period. Accordingly, the Directors continue to adopt the going concern basis in preparing the Group's consolidated financial statements and the Company's standalone financial statements [For further information, refer Note 1(d) of the Consolidated Financial Statements].

COVENANTS

The Company was in breach of a financial covenant as at 31 March 2020, for which it has secured the necessary covenant waivers and relaxations. However, the Company remains subject to financial covenants and, under the downside case, is expected to require further covenant waivers or relaxation of its financial covenants for periods subsequent to 31 March 2021 [For more information, refer to Note 25 of Consolidated Financial Statements on financial instruments].

CREDIT RATING

Moody's downgraded corporate family rating of VRL in March 2020 from Ba3 to B1 on account of sustained deterioration of credit metrics and expectation that credit metrics will remain weak. Further, on 28 July 2020, Moody's confirmed VRL's B1 Corporate Family Rating and B3 rating on the senior unsecured bonds and changed the outlook on the rating to negative from ratings under review for downgrade. The confirmation of the ratings is driven by Moody's expectation of stretched credit profile in FY2021 in the wake of the COVID-19 pandemic and recovery in credit metrics appropriate for current rating in FY2022. The negative outlook takes into account heightened refinancing risk in challenging market conditions.

S&P downgraded the ratings from B+ to B- with stable outlook in March 2020 on account of weakened liquidity and increased refinancing risk due to lower commodity prices and recent volatility in capital markets.

Shareholders' (deficit)/equity was US$(3,263) million at 31 March 2020 compared with US$(928) million at 31 March 2019. This mainly reflects the attributable loss for FY2020, deconsolidation of KCM and OCI for the year amounting to US$234 million, dividend pay-out of US$537 million (US cents 188 per share) and Foreign Currency Translation Reserve movement on foreign operations due to rupee depreciation.

Non-controlling interests decreased to US$5,536 million at 31 March 2020 (from US$6,181 million at 31 March 2019), mainly driven by the loss for the period, FCTR movement on foreign operations due to rupee depreciation and dividend pay-out during the year.

PROPERTY, PLANT AND EQUIPMENT (INCLUDING EXPLORATION AND EVALUATION ASSETS)

As at 31 March 2020, PPE was at US$13,245 million (FY2019: US$17,726 million). The decrease of US$4,481 million was primarily driven by deconsolidation of KCM, impairment charge recognition of US$2,072 million, provision on Iron ore business assets US$17 million, higher depreciation charge and the restatement of rupee-denominated assets caused by rupee depreciation.

This was partially offset by investment of US$819 million in expansion projects and US$558 million in sustaining capital expenditure during the period.

[For more information, refer Note 3(e) of consolidated financial statements for detailed treatment of KCM deconsolidation and Note 6 of consolidated financial statements for detailed information about impairment of assets.]

BALANCE SHEET

(US$ million, unless stated)

Particulars	31 March 2020	31 March 2019[1]
Goodwill	12	12
Intangible assets	100	107
Property, plant and equipment	13,005	17,322
Exploration and Evaluation Assets	240	404
Other non-current assets[2]	3,028	2,479
Cash, liquid investments and financial asset investment net of related liabilities	5,090	5,687
Other current assets	2,711	3,577
Total assets	**24,186**	**29,589**
Gross debt	(15,095)	(15,980)
Other current and non-current liabilities	(6,818)	(8,355)
Net assets	**2,273**	**5,254**
Shareholders' equity	(3,263)	(928)
Non-controlling interests	5,536	6,181
Total equity	**2,273**	**5,254**

[1] Copper Zambia operations have been discontinued & deconsolidated in books with effect from 21 May 2019, However, FY2019 balance sheet numbers have not been re-arranged or regrouped to confirm to current period's presentation.
[2] Includes US$693 million recoverable from KCM in form of loans, receivables, investments and amounts relating to the guarantees issued by VRL [For more information, refer note 3(e)(iii) of consolidated financial statements].

CONTRIBUTION TO THE EXCHEQUER

The Group contributed ~US$4.6 billion to the exchequer in FY2020 compared to US$6.2 billion in FY2019 through direct and indirect taxes, levies, royalties and dividend, which was paid by VRL.

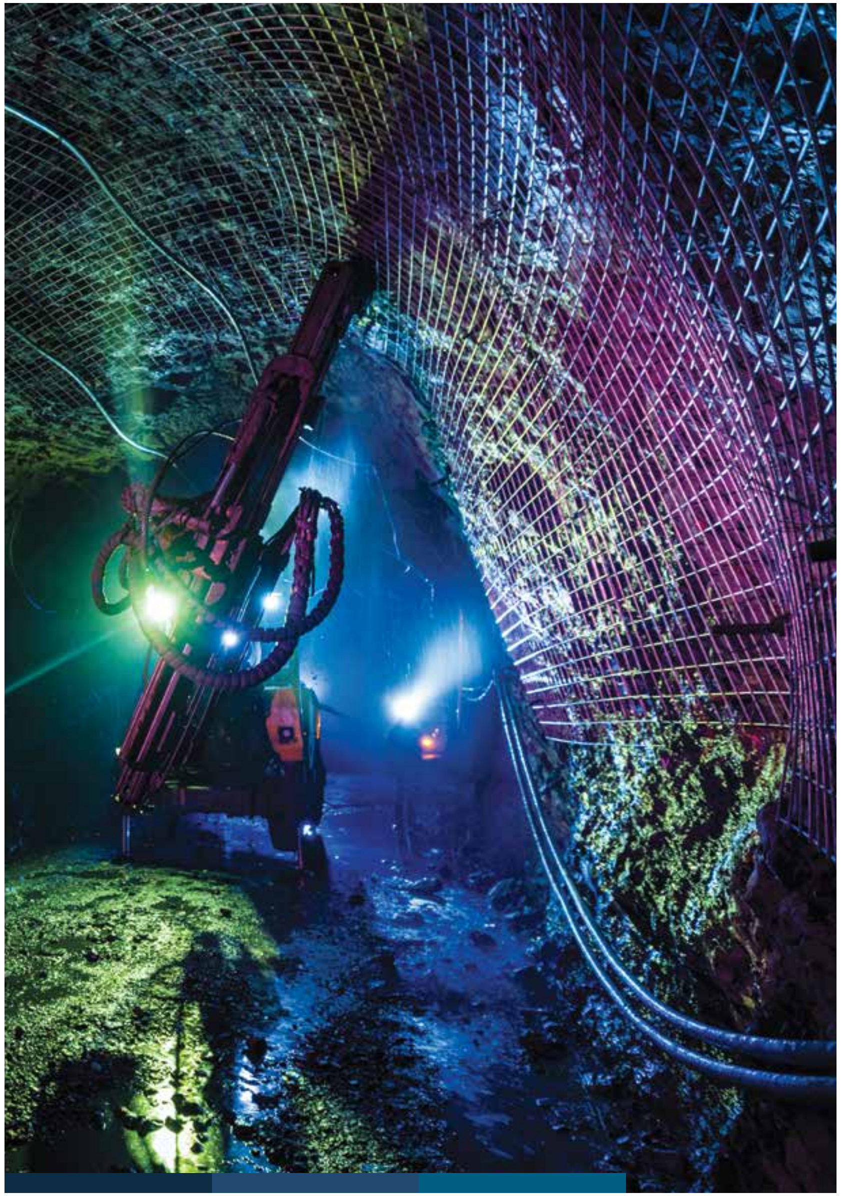
PROJECT CAPEX

(US$ million)

Capex in progress	Status	Total capex approved[3]	Cumulative spend up to March 2019	Spent in FY2020	Unspent as at 31 March 2020
Cairn India[1]					
Mangala Infill, Liquid handling, Bhagyam & Aishwariya EOR, Tight Oil & Gas etc	Ongoing	2,493	651	492	1,350
Aluminium Sector					
Jharsuguda 1.25mtpa smelter	Line 3: Fully capitalised Line 4: Fully capitalised Line 5: Six sections capitalised	2,920	2,915	10	-
Zinc India					
1.2mtpa mine expansion	Phase-wise by FY2020	2,076	1,569	157	350
Others		261	124	35	102
Zinc International					
Gamsberg mining Project[2]	Completed capitalisation	400	364	22	13
Copper India					
Tuticorin smelter 400ktpa	Project is under force majeure	717	198	-	519
Avanstrate Inc					
Furnace Expansion and Cold repair	Completed	56	41	7	8
Capex flexibility					
Metals and Mining					
Lanjigarh Refinery (Phase II) – 5mtpa	Under evaluation	1,570	857	52	661
Zinc India (1.2mtpa to 1.35mtpa mine expansion)	Subject to board approval	698	1	-	697
Skorpion refinery conversion	Currently deferred till pit 112 extension	156	14	-	142

[1] Capex approved for Cairn represents Net capex, however Gross capex is US$3.2 billion
[2] Capital approved US$400 million excludes interest during construction (IDC).
[3] Based on exchange rate prevailing at time of approval.
[4] Based on exchange rate prevailing at the time of incurrence.
[5] Unspent capex represents the difference between total projected capex and cumulative spend as at 31 March 2020
[6] Spent in FY2020 does not include ROU capex ~US$143 million

OPERATIONAL REVIEW
ZINC INDIA



THE YEAR IN SUMMARY

Mine production progressively improved during the year with ore production growth at Rampura Agucha and Zawar and steady production at Sindesar Khurd, while Kayad and RD mines operated at capacity. This led to a record ore production of 14.5 million tonnes, despite disruptions related to COVID-19 towards the end of the year. Operations were halted on account of lockdown to combat COVID-19 from 22 March 2020 onwards.

Mined metal production was 917 kt, lower by 2% due to inferior ore grades and COVID-19 related shutdown. Zinc production declined marginally while lead and silver were lower due to some temporary operational issues at Dariba Lead Smelter and lower silver grades.

Major projects were completed, including Rampura Agucha production shaft, and Sindesar Khurd production shaft was ramped up post its commissioning at the end of last year. The first dry tailing plant was commissioned in Zawar while the fumer project at Chanderiya and two pastefill/hydrofill plants in Zawar are ready for commissioning.

Employee at operational site, Hindustan Zinc Dariba Smelting Complex

OCCUPATIONAL HEALTH & SAFETY

We are deeply saddened to report two fatalities at the parking yard in Sindesar Khurd mine and Fumer project site in Chanderiya during the year. We have carried out detailed investigations of the incidents to learn and deploy our learnings across the Company and prevent any reoccurrences.

LTIFR for the year was 1.38 as compared to 0.63 a year ago. We are continuously trying to improve our methodologies of incident investigation, incident categorisation with enhanced leadership focus on incident reporting. There has been greater management focus to bring a cultural change via felt leadership programmes, safety town halls, enabling tools like safety whistle blower as well as reward & recognition for near-miss reporting.

In view of the COVID-19 health emergency, an advisory was issued for precautionary measures, along with awareness campaigns and drive for disinfecting facilities across the Company. The Company's operations were halted during the lockdown period and employees were asked to work from home, barring some employees who attended call of duty to keep production assets safe. To ensure business continuity, a committee of COVID-19 Response 'War Room' was organised to identify and implement urgent business decisions. We also engaged the Self-Help Group (SHG) women in our communities to stitch and distribute cloth masks among the villagers, police and administration officials. Our teams worked with civil administration to ensure that food reached vulnerable sections of the society.

Key safety initiatives undertaken during the year include Project Ru-ba-ru for business partner competency assessment with respect to manning, skill, qualifications, experience and gaps in organisation; 'I Support Aarohan', wherein all employees undertake individual safety projects every quarter to improve safety of their work area; roll-out of new safety standards for molten metal and ground control management; technology-enabled safety initiatives to reduce man-machine interactions; conducted Safety Perception Survey for making safety implementation system more effective and robust; and partnered with the global leader in industrial hygiene to improve hygiene with a one-year roadmap.

Employee at operational site, Sindesar Khurd Mine. Hindustan Zinc

ZINC INDIA

ENVIRONMENT

During the reporting year, hazardous waste recycling rose to 56% compared to 52% in FY2019, and water recycling rate was 39% (FY2019: 34%).

During the year, a tailing plant was commissioned at Zawar mine to reduce freshwater consumption by enhancing recovery of process water to 90%, to improve tailing dam structural stability and reduce the water footprint.

For effective metal recovery, a second ancillary plant was commissioned for treatment of process residues at Chanderiya Lead-Zinc Smelter and a project to recover sodium sulphate was commissioned at the Dariba Zinc Smelter. Waste such as Jarosite, Jarofix, slag and fly ash were gainfully utilised in cement manufacturing and road construction whilst tailings were used in back-filling voids in mines.

As a part of beyond-the-fence initiatives for water management, a 15 MLD sewage treatment plant is under commissioning in Udaipur city, which will take the total sewage treatment capacity to 60 MLD.

As part of our commitment towards biodiversity conservation, the Company is now a member of IUCN 'Leader for Nature India' initiative.

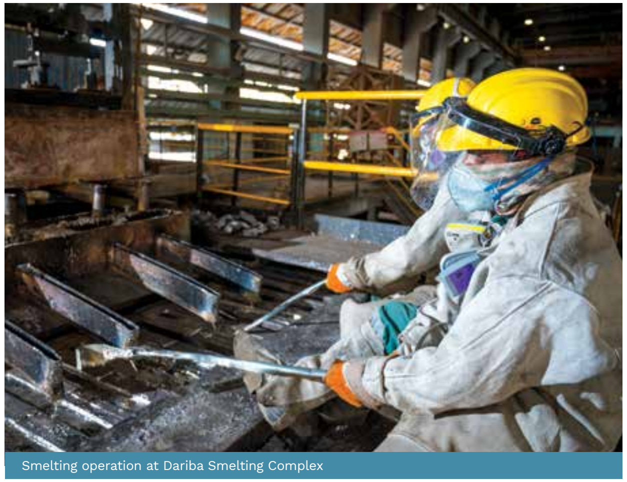
Our sustainability activities received several endorsements during the year, including the CII-ITC Sustainability Award for Corporate Environment as well as Best Environmental Sustainability Award in the category of National Awards for 'Excellence in CSR and Sustainability' on World CSR Day. Zinc India's sustainability performance was ranked fifth in the Dow Jones Sustainability Index (Metal and Mining) globally, and No. 1 in the Asia Pacific region and also selected as constituent of FTSE4Good Index series and the S&P Sustainability yearbook for the third consecutive year. Zinc India was also declared as 'Disclosure Champion' in the Asia Disclosure Index by FTI Consulting and is amongst the Top five companies in India.

Underground operations at Sindesar Khurd Mine

PRODUCTION PERFORMANCE

Production (kt)	FY2020	FY2019	% change
Total mined metal	917	936	(2)
Refinery metal production	870	894	(3)
Refined zinc – integrated	688	696	(1)
Refined lead – integrated[1]	182	198	(8)
Production – silver (in mn ounces)[2]	19.6	21.8	(10)

[1] Excluding captive consumption of 7,088 tonnes in FY2020 vs. 6,534 tonnes in FY2019.
[2] Excluding captive consumption of 1.2 million ounce in FY 2020 vs. 1.1 million ounce in FY 2019.


Smelting operation at Dariba Smelting Complex

OPERATIONS

For the full year, ore production was up 5% y-o-y to 14.5 million tonnes on account of strong production growth at Rampura Agucha and Zawar mines, which saw production go up 18% and 14%, respectively. Mined metal production for FY2020 was 917,000 tonnes compared to 936,000 tonnes in the prior year on account of COVID-19 related lockdown and low grades at Kayad and Sindesar Khurd mines in H1FY20.

Integrated metal production was down 3% to 870kt and silver production was lower by 10% to 610 mt due to COVID-19 related lockdown, and lower lead production in Q2 & Q3 was due to temporary operational issues and lower silver grades.

PRICES

Zinc LME prices fell by 12% to end the year at an average of US$2,402 per tonne on account of trade war between the US and China and the outbreak of COVID-19 in the final quarter of the year. On the positive side, exchange stocks continue to remain low at 7 days of global consumption, despite inflow of stocks to exchanges as unprecedented outbreak impacted demand.

The financial year started on a high note with Zinc LME price crossing US$3,000 per tonne mark, but subsequently the price witnessed falling trend before holding some ground in September and October. The signing of 'Phase I' of the trade agreement between the US and China in December provided some support to the price in January but prices again tumbled as the health catastrophe struck industrial metal prices, which took a hit as industrial activities and government spending on infrastructure projects stopped.

Particulars	FY2020	FY2019	% change
Average zinc LME cash settlement prices (US$ per tonne)	2,402	2,743	(12)
Average lead LME cash settlement prices (US$ per tonne)	1,952	2,121	(8)
Average silver prices (US$ per ounce)	16.5	15.4	7

ZINC DEMAND - SUPPLY

As many countries have imposed lockdown and have issued workforce curtailment advisories to tackle the spread of the virus, mines are operating at reduced efficiency. Many mines in Peru, Mexico, Bolivia have suspended operations. The present low zinc price in the US$1,900-US$2,000 range has made many mines economically unviable. New projects have been delayed and considering all these factors, global mine production is expected to witness contraction in CY2020. As per Wood Mackenzie, mine production is likely to contract by 3.8% in CY2020 compared to CY2019.

The benchmark Treatment Charge this year is US$299.5 per tonne, a substantial increase from last year's US$245 per tonne, highest since 2008. The spot TC is expected to remain higher for the year and would motivate smelters to continue production. The refined metal production is expected to grow at 0.6% in CY2020 as per Wood Mackenzie.

The last two years have witnessed a contraction in global zinc consumption with 0.4% in CY2018 and 1.8% in CY2019. Further, this year demand has weakened as the world is combating the pandemic. Lockdowns of 4-8 weeks have muted the demand for zinc in downstream industries. Major auto manufacturers in Europe have closed operations amid subdued demand and there are raw material supply chain constraints due to boundary closures and limited cargo movements. Infrastructure spending has also halted. As per Wood Mackenzie's initial reports, global zinc demand is expected to decline by 6.8%.

The Government of India announced a 21 days nationwide lockdown, which was further extended by 33 days in two steps to fight the pandemic. Downstream industries, steel manufactures, galvanisers, alloy makers have suspended operations or are operating at reduced capacities.

Zinc Global Balance (in kt)	CY2020 E	CY2019	CY2018
Mine production	12,853	13,363	12,894
Smelter production	13,686	13,601	13,237
Consumption	12,984	13,924	14,178

Source: Wood Mackenzie

UNIT COSTS

Zinc's cost of production (excluding royalty) for FY2020 was US$1,047 per tonne, higher by 4% y-o-y. The Cost of Production (COP) during the year benefited from declining imported coal prices and higher linkage coal. The COP increase reflects higher mine development expense, lower ore grades and volume, lower acid credits, higher cement prices, and electricity duty on captive power plants, which was hiked from ₹0.40 to ₹0.60 per unit starting July 2019, partly offset by lower coal costs.

Government levies amounted to US$355 per tonne (FY2019: US$389 per tonne). This comprised mainly royalty payments, the Clean Energy Cess, electricity duty and other taxes.

Particulars Unit costs (US$ per tonne)	FY2020	FY2019	% change
Zinc (including royalty)	1,373	1,381	(1)
Zinc (excluding royalty)	1,047	1,008	4

FINANCIAL PERFORMANCE

Revenue for the year was US$2,563 million, down 13% y-o-y, primarily on account of decline in LME prices and lower volume, partly offset by higher silver prices and rupee depreciation.

EBITDA in FY2020 decreased to US$1,230 million, down 19 % y-o-y. The decrease was primarily driven by lower revenue and higher cost of production.

(US$ million, unless stated)

Particulars	FY2020	FY2019	% change
Revenue	2,563	2,955	(13)
EBITDA	1,230	1,516	(19)
EBITDA margin (%)	48	51	-
Depreciation and amortisation	319	268	19
Operating profit before special items	911	1,248	(27)
Share in Group EBITDA (%)	41	45	-
Capital expenditure	532	520	2
- Sustaining	341	155	120
- Growth	191	365	(48)

PROJECTS

All major projects to build capacity of 1.2 mtpa mined metal were completed during the year. Capital mine development increased by 12% to 48 km in FY2020.

At Rampura Agucha, the shaft project was commissioned, along with the associated conveyor, crusher systems and hauling from shaft through ore pass, which commenced in the final quarter. This has increased haulage capacity allowing Rampura Agucha Underground mine to achieve production level of 4.5 mtpa.

At Sindesar Khurd, the shaft is fully integrated with the mine and ore hauling was ramped up to about 70% of capacity. The second pastefill plant was commissioned in June 2019, liberating the mine to operate at full production capacity.

At Zawar, India's first ever dry tail stacking plant was commissioned in the second quarter, significantly reducing water consumption and land requirement and addressing tailing dam risk. Further, the two backfill plants are under load trials and back filling of voids is expected to commence in Q1FY21. This will improve mine stability and provide an opportunity for pillar mining to remove left-out high-grade ore.

At Rajpura Dariba, the existing production shaft capacity is being upgraded from 0.7 to 1.3 mtpa to debottleneck the mine and erection work has commenced. Rajpura Dariba mine has received environment clearance for expansion in April 2020 from 1.08 to 2.0 million TPA of ore production and ore beneficiation from 1.2 to 2.5 million TPA.

Smelter debottlenecking to expand the capacity to 1.1 mtpa was completed during the year to maintain mines/smelter synergies at higher levels of production.

The Fumer plant at Chanderiya is ready for start-up and production will commence in FY2021.

Chanderia Lead Zinc Smelter, HZL

EXPLORATION

Zinc India's exploration objective is to upgrade the resources to reserves and replenish every tonne of mined metal to sustain more than 25 years of metal production by fostering innovation and using new technologies. The Company has an aggressive exploration programme focusing on delineating and upgrading Reserves and Resources (R&R) within its licence areas. Technology adoption and innovations play a key role in enhancing exploration success.

The Company's deposits remain 'open' and exploration identified a number of new targets on mining leases which have the potential to increase R&R over the next 12 months. Across all the sites, the Company increased its surface drilling to assist in upgrading R&R.

In line with previous years, the Mineral Resource is reported on an exclusive basis to the Ore Reserve and all statements have been independently audited by SRK Consulting (UK).

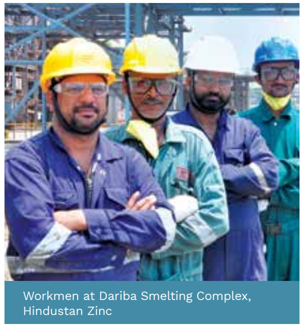
On an exclusive basis, total ore reserves at the end of FY2020 totalled 114.7 million tonnes and exclusive mineral resources totalled 288.3 million tonnes. Total contained metal in ore reserves is 7.95 million tonnes of zinc, 2.07 million tonnes of lead and 256.2 million ounces of silver and the mineral resource contains 15.87 million tonnes of zinc, 5.93 million tonnes of lead and 641.8 million ounces of silver. At current mining rates, the R&R underpins metal production for more than 20 years.

STRATEGIC PRIORITIES & OUTLOOK

Our primary objective remains to concentrate on enhancing overall output, cost efficiency of our operations and disciplined capital expenditure. Whilst the current economic environment remains uncertain, our goals over the medium term are unchanged.

Our key strategic priorities include:

- Further ramp up of underground mines towards their design capacity, deliver increased silver output in line with our communicated strategy
- Reduce cost of production to below US$1,000 per tonne through efficient ore hauling, higher volume and grades, and higher productivity through ongoing efforts in automation and digitisation
- Disciplined capital investments in minor metal recovery to enhance profitability
- Increase R&R through higher exploration activity and new mining tenements, as well as upgrade resource to reserve


Workmen at Dariba Smelting Complex, Hindustan Zinc

Virtual operations to ensure employee safety at HZL

OPERATIONAL REVIEW ZINC INTERNATIONAL

THE YEAR IN SUMMARY

During FY2020, Zinc International continued to ramp up production from its flagship project Gamsberg mine, and achieved production of 108 kt.

Black Mountain continued to have a stable production of 66 kt.

In May 2019, Skorpion experienced a major open pit failure, which resulted in an ore gap of four months that required the stoppage of the refinery from November 2019 to January 2020. The open pit failure was safely and successfully dealt with. However, further (smaller) failures have since occurred, with the latest one in January 2020, sterilising a significant portion of the open pit. This has resulted in an ore gap in excess of 10 months. Further, technical studies have indicated the existence of similar such failure structures at depth.

The safety of all employees is our first value. Therefore, we have decided to cease all mining operations at Skorpion and to put the mine under care and maintenance, while studies continue to look at feasible ways to make the pit safe for mining options that would allow for the extraction of the remainder of the accessible ore.

OCCUPATIONAL HEALTH & SAFETY

Regrettably, Vedanta Zinc International (VZI) reported a fatality at Black Mountain Mine, where Mrs. Venessa Plagg, a Mining Operator, was fatally injured on 10 January 2020. The mine conducted a comprehensive investigation using an independent Group-led team. The lessons learnt, following a thorough investigation, have been shared across the business and initiatives have been rolled out to strengthen our practices in housekeeping, person-machine interaction, stop and fix non-conformances and leaders engagement focusing on critical risk controls. Significant improvements have been made in the reduction of Lost Time Injuries (LTIs) from 23 to 10 for the year (LTIFR FY2019: 0.96 and FY2020: 0.98).

Airborne particulate management remains a key focus in reducing lead and silica dust exposures of employees. Black Mountain Mine has been approached by the Department of Mineral Resources and Energy (regulatory authority) to be a stakeholder in the development of national guidelines for South Africa. We have strengthened our Employee Wellness Programmes that resulted in increased participation of employees and communities in Voluntary counselling and testing for Aids/HIV, blood donation and community sporting events. A total of 2,961 employees were screened for TB during the year.

ENVIRONMENT

Zinc International had a good environmental performance in FY2020 with no level 3 or above environmental incidents reported. The Gamsberg Nature Reserve was proclaimed as Protected area under National Environmental Management Protected Area Act, 2003 (Act No. 57 of 2003) on 5 August 2019. The Gamsberg Nature Reserve Trust was established 6 March 2020.

Birdseye view of Gamsberg

PRODUCTION PERFORMANCE

Production (kt)	FY2020	FY2019	% change
Total production	240	148	63
Production– mined metal (kt)			
BMM	66	65	1
Gamsberg	108	17*	–
Refined metal Skorpion	67	66	2

*Includes trial run production of 10 kt

OPERATIONS

During FY2020, total production stood at 240,000 tonnes, 62% higher y-o-y. This was primarily due to ramp up of first phase of Gamsberg expansion plan.

Production at Skorpion stood at 67,000 tonnes during the year, slightly higher y-o-y. The plan was to produce 130,000 tonnes during the year, which was predominantly impacted by a multiple bench slope failure of ~400 kt material on the western pushback of the open pit on 9 May 2019 and further in January 2020 by a wedge failure, which extended the old slope failure to south area of the mine.

At Black Mountain Mine (BMM),, production was in line with that of the previous year. In spite of a slight decrease in grades (5.2% vs 5.3%), BMM performance has improved in FY2020, with higher recoveries and throughput. This was, however, offset by lower ore production due to suspension of mining operations for 16 days during Q4FY20 on account of a fatality.

Gamsberg's production was at 108,000 tonnes as the operation continues to ramp up with improved performance every quarter – Q1 23,000 tonnes, Q2 24,000 tonnes, Q3 31,000 tonnes and Q4 30,000 tonnes (impacted by COVID-19). Mining has fully ramped up to 4 mtpa capacity and ~1.8 mt of healthy ore stockpile has been built ahead of plant. Crusher is consistently running on throughput of ~700 tph (better than design of 685 tph) and milling run rates have improved significantly (average for the year was 430 tph vs 501 tph design). Recovery continues to be a focus area as the plant ramps up and is stable.

At both BMM and Gamsberg, production was also slightly impacted by the COVID-19 lockdown.

ZINC INTERNATIONAL

UNIT COSTS

The unit cost of production decreased by 13% to US$1,665 per tonne, from US$1,912 per tonne in the previous year. This was mainly driven by the Company's disciplined approach to reducing the cost and including reduction through higher production at Gamsberg, lower usage of purchased oxides at Skorpion Zinc, lower sulphur prices, local currency depreciation offset partially by higher Treatment Charge/ Refining Charge, lower copper credits and annual inflation.

Particulars	FY2020	FY2019	% change
Zinc unit cost (US$ per tonne)	1,665	1,912	(13)

FINANCIAL PERFORMANCE

During the year, revenue increased by 13% to US$441 million, driven by higher volumes compared to FY2019, partially offset by lower price realisations. EBITDA decreased by 46% to US$54 million, from US$100 million in FY2019, mainly on account of lower price realisation partially offset by improved cost and higher volume.

(US$ Million, unless stated)

Particulars	FY2020	FY2019	% change
Revenue	441	392	13
EBITDA	54	100	(46)
EBITDA margin (%)	12	25	-
Depreciation and amortisation	89	61	46
Operating profit before special items	(36)	39	-
Share in Group EBITDA (%)	2	3	-
Capital expenditure	101	196	(48)
- Sustaining	80	73	10
- Growth	21	123	(83)

PROJECTS

Skorpion Refinery Conversion
Project activities were resumed due to the Life of Mine getting completed at Skorpion and also being the fastest way to process Gamsberg concentrates. The previously completed feasibility study is currently being updated and based on this, a project decision will be taken in Q2FY21.

Swartberg Phase II
Mine plan and design are complete. Ore reserves have increased from 2.6 million tonnes to 25.4 million tonnes in FY2020.

Gamsberg Phase II
The previously completed Phase II feasibility study was updated based on the revised mine design, incorporating updated geological model post an extensive drilling programme. The new 8 mtpa mine design is complete. As much as 54 mt reserve has been added post completion of feasibility, which can result in additional 200 ktpa MiC production over and above current production.

Gamsberg Smelter
Substantial progress was made with respect to the Environmental Impact Assessment (EIA) process with public participation meetings getting completed and formal environment applications submission to the government authorities.

EXPLORATION

During the year, we made gross additions of 71.2 million tonnes of ore and 1.6 million tonnes of metal to R&R, after depletion.

As at 31 March 2020, combined mineral resources and ore reserves were estimated at 521.4 million tonnes, containing 28 million tonnes of metal. The R&R support a mine life of more than 30 years.

Mill at Gamsberg

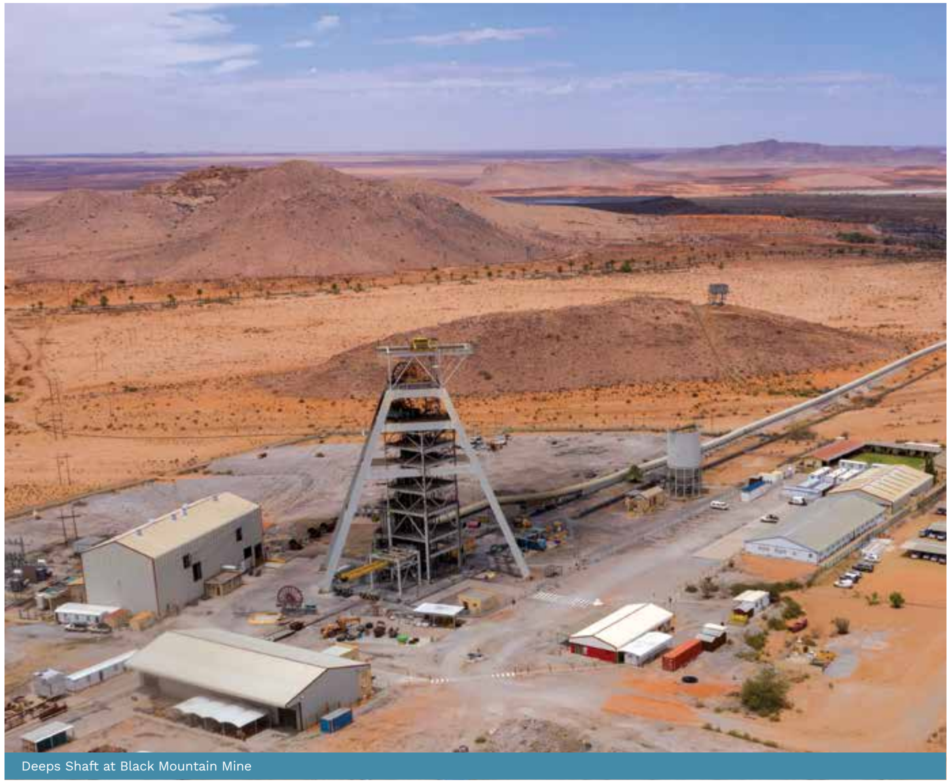
STRATEGIC PRIORITIES & OUTLOOK

Zinc International continues to remain focused on improving its y-o-y production by sweating its current assets beyond its design capacity, debottlenecking the existing capacity and adding capacity through growth projects. Our immediate priority is to ramp up the performance of our Gamsberg plant at designed capacity and simultaneously develop a debottlenecking plan to increase plant capacity by 10% to 4.4 million tonnes ore throughput. Likewise, BMM continues to deliver stable production performance and the focus is to debottleneck its ore volumes from 1.6 million tonnes to 1.8 million tonnes. Skorpion is expected to remain in 'Care and Maintenance' for H1FY21, while the management is assessing feasible and safe mining methods to extract ore from Pit 112. Zinc International continues to drive cost reduction programmes to place Gamsberg operations on the first quartile of global cost curve with cost of production below US$1,000 per tonne.

In addition to the above, our core growth strategic priorities include:

- Complete approval process and commence project activities of Swartberg Phase II project and Skorpion Refinery conversion project in FY2021
- Continue to improvise business case of Gamsberg Phase II and Gamsberg Smelter Project through government support, capex and opex reduction

Biodiversity at Gamsberg


Deeps Shaft at Black Mountain Mine

OPERATIONAL REVIEW OIL & GAS

THE YEAR IN SUMMARY

During FY2020, our focus was on the growth projects driven by gross capex of US$3.2 billion to increase volumes from its prolific operating blocks. In pursuit of our vision to contribute 50% of India's domestic crude oil production, we have increased our block acreage by acquiring 51 blocks in Open Acreage Licensing Policy (OALP) and two blocks in Discovered Small Fields (DSF). The acquisition has established us as one of the largest private acreage holders in the country, with a tenfold jump in acreage from 6,000 sq km in August 2018 to ~65,000 sq km.

The PSC blocks offer a rich project portfolio comprising enhanced oil recovery, tight oil, tight gas, facility upgradation and exploration and appraisal prospects. These projects are being executed under an 'Integrated Development' strategy, involving leading global oilfield service companies, and these are on track to deliver near term additional volumes. During the year, 136 wells were drilled and 41 wells hooked up.

In OALP blocks, our objective is to reduce the cycle time from exploration to production. We have implemented the largest onshore Full Tensor Gravity Gradiometry™ (FTG) airborne survey in India to optimise time and cost-intensive seismic data acquisition to fast track drilling. The seismic acquisition programme has been initiated in Assam and mobilisation of the crew is underway in Rajasthan.

OCCUPATIONAL HEALTH & SAFETY

There were 15 LTIs in FY2020 (FY2019: 11 LTIs). LTIFR stood at 0.3 per million man hours (FY2019: 0.3 per million man hours) amidst increased development activities. We strengthened the HSE culture by introducing 'Visible Felt Leadership'.

Important recognition and awards during the year are as below:

- Mangala Oil Field received first prize – Overall performance and rolling trophy for Best Performing Fire Fighting Unit during Mines Safety Week
- Raageshwari Oil & Gas Mines received first Prize in 8th FICCI Safety Systems Excellence Award
- HSE Excellence Safety Champion of the Year Award, at Synnex HSE Excellence Summit and Safety Awards in New Delhi
- '5Star' by British Safety Council for excellence in HSE Management for Pipeline Operation
- '5Star' in 'Par Excellence' rating by Quality Circle Forum of India for Raageshwari Oil & Gas Mine
- '5Star' by Quality Circle Forum of India for Bhagyam, NI, Radhanpur, Viramgam and Bhogat terminal
- Suvali offshore site received Genentech Safety Award 2019

Mangala Processing Terminal at night, Barmer

Production sharing contracts (PSC) signed for Ravva block extended for 10 years

Ensuring safety standards at Cairn Oil & Gas

ENVIRONMENT

Our Oil & Gas business is committed to protecting the environment, minimising resource consumption and driving towards our goal of 'zero discharge'. We have secured our position in sustainability front runners' category with a score of 912 out of 1,200 in recently assessed sustainability 4.0 award 2020, jointly instituted by Frost & Sullivan and TERI.

Highlights for FY2020 are:

- Environmental laboratory at Mangala Processing Terminal has been accredited by the National Accreditation Board for Testing and Calibration Laboratories
- Disposal of drilling and oily waste through co-processing at Cement Industries: 43,240 million tonnes in FY2020
- Recycling and reusing of produced water, resulting into reduced water abstraction: 96%. IOGP av. ~ 80%
- Natural gas was adopted at Raageshwari Gas Terminal for power generation, thereby eliminating flaring of gas emissions by ~17,000 tonnes of CO$_2$e/annum.
- Biodiversity conservation:
  a. Green belt development by only planting indigenous species in Rajasthan field, promoting plantation of desert native species
  b. Carbon sequestration - plantation in Rajasthan field: ~23,156 tonnes of CO$_2$e

OPERATIONAL REVIEW OIL & GAS CONTINUED...

OIL & GAS

PRODUCTION PERFORMANCE

Particulars	Unit	FY2020	FY2019	% change
Gross operated production	Boepd	172,971	188,784	(8)
Rajasthan	Boepd	144,260	155,903	(7)
Ravva	Boepd	14,232	14,890	(4)
Cambay	Boepd	14,479	17,991	(20)
Oil	Bopd	154,677	178,207	(13)
Gas	Mmscfd	109.8	63.5	73
Net production – working interest*	Boepd	110,459	119,798	(8)
Oil	Bopd	99,709	114,214	(13)
Gas	Mmscfd	64.5	33.5	93
Gross production	Mmboe	63.3	68.9	(8)
Working interest production	Mmboe	40.4	43.7	(8)

*Includes net production of 483 boepd from the KG-ONN block, which is operated by ONGC. Cairn holds a 49% stake.

A Cairn Oil & Gas employee

OPERATIONS

Average gross production across our assets was 8% lower y-o-y at 172,971 boepd. The Company's production from the Rajasthan block was 144,260 boepd, 7% lower y-o-y. The decrease was primarily due to natural reservoir decline and maintenance shutdown of Mangala Processing Terminal (MPT). The decline was managed by gains accruing from ramping up of gas facilities and the new wells brought online. Production from the offshore assets was at 28,711 boepd, 13% lower y-o-y, due to natural field decline.

Production details by block are summarised below:

Rajasthan Block

Gross production from the Rajasthan block averaged 144,260 boepd, 7% lower y-o-y. This decrease was primarily due to the natural reservoir decline and maintenance shutdown of the Mangala Processing Terminal (MPT). The MPT shutdown was carried out in February 2020 for production enhancement, reliability improvement and asset integrity enhancements. All the planned jobs during the shutdown were completed ahead of schedule, with lower production losses vis-à-vis plan. The decline was partially offset by increase in gas production through early production facility and from new wells brought online as part of Mangala infill, Aishwariya Barmer Hill and production optimisation activities.

At Rajasthan, 132 wells have been drilled, of these 39 wells have been brought online as part of the growth projects during FY2020.

Early gas production facility was brought online and ramped up to its design capacity of 90 mmscfd to supplement the existing gas infrastructure. Total gas production from Raageshwari Deep Gas (RDG) averaged 100.1 mmscfd in FY2020, with gas sales, post captive consumption, at 79.1 mmscfd.

Cairn Oil & Gas, Barmer

On 26 October 2018, the Government of India, acting through the Directorate General of Hydrocarbons, Ministry of Petroleum and Natural Gas, granted its approval for a ten-year extension of the PSC for the Rajasthan block, RJ-ON-90/1, subject to certain conditions, with effect from 15 May 2020. The applicability of the Pre-NELP extension policy to the RJ Block PSC is currently sub judice.

Ravva Block

The Ravva block produced at an average rate of 14,232 boepd, lower by 4% y-o-y. This was primarily due to the natural field decline, partially offset by the two new wells brought online through Ravva drilling campaign that commenced as part of the growth project during FY2020. On 11 March 2019, the Government of India, acting through the Directorate General of Hydrocarbons, Ministry of Petroleum and Natural Gas, granted its approval for a ten-year extension of the PSC for the Ravva block, subject to certain conditions, with effect from 29 October 2019.

Cambay Block

The Cambay block produced at an average rate of 14,479 boepd, lower by 20% y-o-y. This was primarily due to the natural field decline, partially offset by production optimisation measures.

PRICES

Crude oil price averaged US$60.9 per barrel, compared to US$70.4 per barrel in the previous year, driven by multiple reasons, shifting the world from the era of supply disruption to plenty. The year started with OPEC-led production cuts, countered by the US President's request to OPEC for a production increase to bring down fuel costs. Tensions were heightened at various points in the year in the Middle East with attacks on oil tankers off the coast of the UAE, and several drone strikes on Saudi Arabian oil facilities, leading to concerns over oil supply disruptions. Trade tensions between the US and China further raised geopolitical tensions, but eventually the US-China trade deal and planned OPEC production cuts in 2020 led to a steady rally in crude prices.

However, in March, in order to limit the impact of economic contraction caused by COVID-19 on oil demand, OPEC+ failed to reach an agreement to cut oil supply and on 7 March 2020, Saudi Arabia slashed its oil prices to gain market share. As a result, oil prices fell to ~US$17 per barrel towards the end of the year, the lowest level since 2002.

In April, OPEC and its partners agreed to significantly cut supplies, which would help reduce the imbalance, but this is unlikely to prevent uncertainty regarding product demand.

Going forward, the recent events will continue to have an impact on oil price volatility with downside risks until the global economies come out of lockdown, and all OPEC and partner countries act collectively.

Particulars	FY2020	FY2019	% change
Average Brent prices (US$/barrel)	60.9	70.4	(13)

FINANCIAL PERFORMANCE

Revenue for FY2020 was 6% lower y-o-y at US$1,787 million (after profit and royalty sharing with the Government of India), owing to fall in oil price realisation and lower volumes, partially offset by one off for past exploration cost recovery of US$180 million. EBITDA of FY2020 was at US$1,032 million, lower by 6% y-o-y in line with the lower revenue.

During the year, impairment of ~US$2 billion was recorded in Oil & Gas business (For more information, refer note [6] on special items, set out in consolidated financial statement and note 2(c)(I)(viii) on PSC extension).

The Rajasthan flood operating cost was US$6.1 per barrel in FY2020 compared to US$5.1 per barrel in the previous year, primarily driven by increase in maintenance and production enhancement initiatives. Overall, the blended Rajasthan operating costs increased to US$8.7 per barrel compared to US$7.6 per barrel in the previous year.

(US$ Million, unless stated)

Particulars	FY2020	FY2019	% change
Revenue	1,787	1,892	(6)
EBITDA	1,032	1,100	(6)
EBITDA margin (%)	58	58	-
Depreciation and amortisation	566	611	(7)
Operating profit before special items	466	489	(5)
Share in Group EBITDA (%)	34	32	-
Capital expenditure	495	480	3
- Sustaining	19	11	76
- Growth	476	469	2

A. GROWTH PROJECTS DEVELOPMENT

The Oil & Gas business has a robust portfolio of development opportunities with the potential to deliver incremental volumes. In order to execute these projects on time and within budget, we have devised an integrated project development strategy, with an in-built risk and reward mechanism. This new strategy is being delivered in partnership with leading global oilfield service companies.

MANGALA INFILL, ENHANCED OIL RECOVERY (EOR) AND ALKALINE SURFACTANT POLYMER (ASP)

The field is currently under full field polymer injection. In addition, to increase the ultimate oil recovery and support production volumes, we are executing a 45-well infill drilling campaign in the Mangala field. Till March 2020, 45 wells have been drilled and of these 35 wells are hooked up.

Going forward, the ASP project at Mangala will enable incremental recovery from the prolific Mangala field. The project entails drilling wells and developing infrastructure facilities at the Mangala Processing Terminal. Drilling campaign is already under progress and the contract for the ASP surface facility is yet to be awarded. Till March 2020, 60 wells have been drilled.

BHAGYAM & AISHWARYA ENHANCED OIL RECOVERY (EOR)

The EOR project at Bhagyam and Aishwariya is progressing as per plan. Till March 2020, 28 wells in Bhagyam and 14 wells in Aishwarya have been drilled, of these 19 wells in Bhagyam and eight wells in Aishwarya are hooked up. Surface facility development for polymer implementation has commenced and polymer injection is ongoing.

OIL & GAS

TIGHT OIL AND GAS PROJECTS

Tight oil: Aishwariya Barmer Hill (ABH)

ABH is the first tight oil project to monetise the Barmer hill potential and drilling of the project started in Q1FY19. All 39 wells have been successfully drilled and seven wells are hooked up. Surface facility is under construction and to be commissioned in near term.

Tight gas: Raageshwari Deep Gas (RDG) development

Gas development in the RDG field continues to be a strategic priority. Early production facility has been commissioned and ramped up to its designed capacity of 90 mmscfd.

Further construction of gas terminal through integrated contract is expected to deliver an additional ~90 mmscfd of gas production in near term. This will ramp up the overall Rajasthan gas production to ~240 mmscfd.

In order to realise the full potential of the gas reservoir, contract for drilling of 42 wells has been awarded and till March 2020, 25 wells have been drilled.

Processing Facility, Cairn

OTHER PROJECTS

Satellite Field Development

In order to monetise the satellite fields, an integrated contract for the appraisal and development activity through global technology partnership has commenced. Till March 2020, 13 wells have been drilled

Surface Facility Upgradation

The Mangala Processing Terminal (MPT) facility upgradation is progressing in line with the schedule to handle incremental liquids. Intra-field pipeline augmentation project has been completed, the MPT surface facility augmentation project is expected to be commissioned in the near term. The project will lead to the expansion in the liquid handling capacity by 30%.

An employee at the Mangala Processing Terminal, Barmer

Ravva development

An integrated development campaign has commenced. Till March 2020, four wells have been drilled and two wells are hooked up.

B. EXPLORATION AND APPRAISAL

RAJASTHAN - (BLOCK RJ-ON-90/1)

Rajasthan exploration

The Rajasthan portfolio provide access to multiple play types with oil in high permeability reservoirs, tight oil and tight gas. We are evaluating opportunities to commence the drilling programme.

Tight Oil Appraisal

The appraisal programme of four fields (Vijaya & Vandana, Mangala Barmer Hill, DP and Shakti) entails the drilling and extended testing of 10 new wells with multi-stage hydraulic fracturing. Till March 2020, seven wells have been drilled.

Open Acreage Licensing Policy (OALP)

Under the OALP, revenue-sharing contracts have been signed for 51 blocks located primarily in established basins, including some optimally close to existing infrastructure.

Our objective is to reduce cycle time from exploration to production. We have implemented an innovative technology - Full Tensor Gravity Gradiometry™ (FTG) airborne survey to prioritise areas of hydrocarbon prospectivity. This is the largest FTG survey programme in India, covering an area of 1,200 LKM in Assam blocks and 8,000 LKM in Kutch blocks.

The Seismic acquisition programme has commenced in Assam and Kutch and mobilisation of the crew is underway in Rajasthan, Cambay and offshore blocks. Further, we have applied Satellite-based Sub-Terrain prospecting (STeP®) in Assam, which includes eight remote sensing and computational technologies within a six-month time frame covering an area of 3,650 sq km. This is the first application in Oil & Gas exploration in India to provide information to optimises and prioritise areas for exploration focus.

Discovered Small Fields (DSF2)

Discovered small fields (DSF2) provide synergy with existing oil & gas blocks in the vicinity. These blocks were assessed based on the resource potential and proximity to infrastructure in prioritised sedimentary basins across India. Two discovered small fields named Hazarigaon and Kaza gas fields, located in Assam and Krishna Godavari basins respectively, have been awarded under DSF2.

PSC FOR RJ BLOCK

On 26 October 2018, the GoI, acting through the Directorate General of Hydrocarbons (DGH) granted its approval for a ten-year extension of the PSC for the Rajasthan Block (RJ), with effect from 15 May 2020 subject to certain conditions. The GoI had granted the extension under the Pre-NELP Extension Policy, the applicability whereof to PSC for Rajasthan Block is sub-judice and pending before the Hon'ble Delhi High Court. This policy entails additional 10% profit petroleum payment to GoI. In the ongoing proceedings in Delhi High court, GoI have agreed for ad hoc arrangement not to seek the 10% additional profit petroleum till 1 September 2020. The next date of hearing is scheduled on 20 August 2020.

The key conditions stated by DGH and the Group's position is detailed below:

a) **Submission of Audited Accounts and End of Year Statement**

Condition regarding submission of audited accounts and End of Year Statement for adoption by Management Committee of the Block has been delinked by DGH vide letter dated 3 December 2019 as a pre-condition to PSC extension.

b) **Profit Petroleum**

DGH has raised a demand for the period up to 31 March 2017 for the government's additional share of profit oil based on its computation of disallowance of cost incurred over the initially approved Field Development Plan (FDP) of pipeline project for US$202 million and retrospective re-allocation of certain common costs between Development Areas (DAs) of Rajasthan Block aggregating to US$364 million, representing the Group's share.

Subsequently, the Company in January 2020 received notifications from DGH on audit exceptions arising out of its audit for the FY2018, which comprises the consequential effects on profit oil due to the aforesaid matters and certain new matters on cost allowability plus interest aggregating to US$645 million, representing the Group's share, which have been responded to by the Group.

The Company believes that it has sufficient as well as reasonable basis (pursuant to PSC provisions & approvals), supported by legal advice, for having claimed such costs and for allocating common costs between different DAs. In the Company's opinion, these computations of the aforesaid demand/audit exceptions are not appropriate and the accounting adjustments sought for issues pertaining to Year 2007 and onwards are based on assumptions that are not in consonance with the approvals already in place. The Company's view is also supported by independent legal opinion and the Company has been following the process set out in PSC to resolve these aforesaid matters. Thus, the Company sought for appointment of a sole expert for opining on the audit exceptions by a letter dated 14 November 2019 and thereafter on 14 May 2020, the Company has issued a notice of Arbitration proceeding on the above matters and is confident of resolution of matters in its favour.

The GoI has responded to the Company's notice of arbitration on 29 June 2020 and raised claims of US$1,031 million (representing audit exceptions notified by DGH up to FY2018) plus consequential impact until the expiry of the current PSC on 14 May 2020.

GoI has nominated their arbitrator and the Company has notified GoI about proceeding with appointment of the presiding arbitrator as per the PSC.

Further to above stated letter from GoI on 26 October 2018, in view of pending non-finalisation of the Addendum to PSC, the extraordinary situation prevailing on account of COVID-19 and non-finalisation of issues including the aforesaid DGH demand, the GoI granted, vide letter dated 14 May 2020, permission to the Group to continue petroleum operations in Rajasthan block, till the execution of the Addendum to PSC or for a period of three months from 15 May 2020, whichever is earlier.

In our view, above mentioned condition linked to PSC extension is untenable and has not resulted in creation of any liability and cannot be a ground for non-extension. In addition, all necessary procedures prescribed in the PSC including appropriate dispute resolution process, in respect of the stated audit observation have also been satisfied. Accordingly, in our view, all the conditions of the PSC extension approval granted vide DGH letter dated 26 October 2018 stands addressed and no material liability would devolve upon the Group.

An adverse decision from the Government of India on the PSC extension could result in a substantial loss of value and could have a material adverse effect on Vedanta's results of operations and financial condition.

STRATEGIC PRIORITIES & OUTLOOK

Vedanta's Oil & Gas business has a robust portfolio mix comprising exploration prospects spread across basins in India, development projects in the prolific producing blocks and stable operations which generate robust cash flows.

The key priority ahead is to deliver our commitments from our world class resources with 'zero harm, zero waste and zero discharge':

- Commission the liquid handling capacity upgrade facility and new gas processing terminal to deliver incremental volume
- Increase recovery through full field injection in Bhagyam & Aishwariya Fields
- Unlock the potential of the exploration portfolio comprising OALP and PSC blocks
- Continue to operate at a low-cost base and generate free cash flow post-capex

OPERATIONAL REVIEW ALUMINIUM

THE YEAR IN SUMMARY

In FY2020, the aluminium smelters achieved India's highest production of 1.9 million tonnes (including trial run). It has been a remarkable year in our cost reduction journey across all levers. The input commodity costs have been benefited by falling alumina price indices from the all-time high last year. We observed similar trends in caustic and petroleum coke prices. The coal materialisation from Coal India improved significantly this year. The improvement in operational metrics across our refinery, smelters and power plants have further contributed to cost reduction. We continue to focus on optimising our controllable costs and improving our price realisation to improve profitability in a sustainable way.

The hot metal cost of production for FY2020 was US$1,690 per tonne, on account of structural improvements in the cost. The Q4FY20 hot metal cost of production stood at US$1,451 per tonne.

We also achieved record production of 1.81 million tonnes at the alumina refinery through continued debottlenecking. We continue to explore the feasibility of expanding the refinery's capacity, growing through a phased programme subject to bauxite availability.

OCCUPATIONAL HEALTH & SAFETY

We report with deep regret two fatalities during the year, one at our operations in Jharsuguda as a result of a rail accident at our smelter rail logistics, and the other at Chotia coal mines of BALCO. We investigated both incidents thoroughly and shared the lessons learned across the business.

This year, we experienced a total 21 LTIs at our operations with a LTIFR of 0.32. To enhance competencies of our executives, engineers and supervisors of business partners, we have imparted Making Better Risk Decision (MBRD) and Safety leadership trainings. Programmes were also conducted for managing safety in highly hazardous work areas like confined space, vehicle and driving and working at height through an external competent agency as a measure to prevent injuries and minimise potential risks going forward.

Moreover, to sensitise our employees towards our core values of 'Care', we regularly carry out programmes such as 'Suraksha ki Goth' and 'Suraksha Charcha'.

The worldwide outbreak of COVID-19 has not impacted our operations in FY2020. As part of our Corporate Social Responsibility, our Business Units (BUs) worked with the government and stakeholders, including the local community, to provide relief measures. Mobile health units were used for creating awareness with a clear emphasis on the importance of social distancing and maintaining personal hygiene. All our BUs provided support to district and state health services in terms of medical equipment, including hand sanitisers, medicines, reagents, PPEs such as surgical masks, gloves, gowns and manpower such as housekeeping staff, security personnel, medical personnel etc. in addition to contribution to the government's relief fund for COVID-19. The SHGs associated with our facility at Lanjigarh and Jharsuguda were involved in preparing masks, thereby creating livelihood while helping reduce the impact of COVID-19. Fire brigades at the facilities have been deployed to sanitise the premise and the core villages near our facilities. The facilities are providing food to migrant workers, identified community groups, police personnel etc. as part of our CSR initiatives.

Tree Plantation Drive, Aluminum Business

Encouraging all round development at Vedanta

ENVIRONMENT

Jharsuguda has recycled 21% of the water used in the year FY2020 while BALCO has recycled nearly 11%. Collectively, the Aluminium business recycles 19% of its water consumption. There has been a significant improvement in our water consumption of 0.69 m^3/Mt (FY2019: 0.72 m^3/Mt) at BALCO. We are consistently focusing on improving the recycled water percentage in the future.

Management of hazardous waste like spent pot line, aluminium dross, fly ash, etc. are material waste management issue for the Aluminium and Power business. Our BALCO unit sent 3,224 million tonnes spent pot lining and 6,507 million tonnes of aluminium dross, to authorised recyclers this year. Both BALCO and Jharsuguda have been able to dispose 100% of its fly ash generation at the units. In our Lanjigarh operations, 98.4% of lime grit has been utilised in FY2020 (FY2019: 97%).

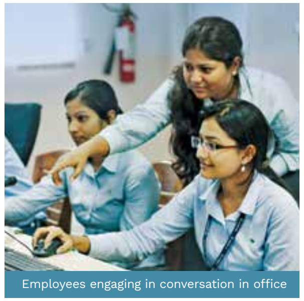
OPERATIONAL REVIEW ALUMINIUM CONTINUED...

ALUMINIUM

PRODUCTION PERFORMANCE

Production (kt)	FY2020	FY2019	% change
Alumina – Lanjigarh	1,811	1,501	21
Total aluminium production	**1,904**	**1,959**	**(3)**
Jharsuguda I	543	545	-
Jharsuguda II[1]	800	843	(5)
BALCO I	256	260	(2)
BALCO II	305	311	(2)

(1) Including trial run production of nil in FY2020 versus 63 kt in FY2019



Employees engaging in conversation in office

ALUMINA REFINERY: LANJIGARH

At Lanjigarh, production was 21% higher y-o-y at 1.81 million tonnes, primarily through continued plant debottlenecking. We continue to evaluate the possible expansion of the refinery, subject to bauxite availability.

ALUMINIUM SMELTERS

We ended the year with production of 1.9 million tonnes (including trial run). Both smelters at BALCO and Jharsuguda continued to show consistent performance. We continue to evaluate Line 4 of the Jharsuguda II smelter.

COAL LINKAGES

We continue to focus on the long-term security of our coal supply at competitive prices. We added 3.2 mtpa of coal linkages through Tranche IV and its materialisation began in March 2019. The captive coal block, Chotia, at BALCO is operating at full capacity. We emerged as the highest bidder for Jamkhani coal block and have signed the Coal Mine Development and Production Agreement with the Government of India. The Jamkhani coal block is currently rated at 2.6 mtpa. This takes our coal security to 72% of our requirements.

PRICES

Average LME prices for aluminium in FY2020 stood at US$1,749 per tonne, 14% lower y-o-y. LME prices hovered between US$1,700 per tonne-US$ 1,800 per tonne band for most of the year, showing a sharp decline in the last month of FY2020. LME was stabilising after sanctions against UC Rusal were lifted and US-China trade war concerns began receding. However, uncertainties over the impact of COVID-19 have caused prices to plummet in recent months.

Particulars	FY2020	FY2019	% change
Average LME cash settlement prices (US$ per tonne)	1,749	2,035	(14)%

Aluminum Rolls

UNIT COSTS

During FY2020, the cost of production (CoP) of alumina improved to US$275 per tonne, due to benefits from increase in locally sourced bauxite, continued debottlenecking, improved plant operating parameters and rupee depreciation. This was further backed by falling input commodity prices (mainly caustic soda and imported bauxite).

In FY2020, the total bauxite requirement of about 5.3 million tonnes was met by captive mines (9%), Odisha (49%) and imports (42%). In the previous year, the bauxite supply mix was captive mines (10%), Odisha (31%), other domestic sources (20%) and imports (39%).

In FY2020, the CoP of hot metal at Jharsuguda was US$1,686 per tonne, down by 13% from US$1,970 in FY2019. The hot metal CoP at BALCO fell to US$1,700 per tonne, down by 13% from US$1,962 per tonne in FY2019.

This was primarily driven by falling global input raw material indices across alumina, carbon, caustic etc. The global alumina price indices fell from an all-time high of US$ 590 per tonne in September 2018 to US$280 per tonne levels in Q4FY20. Caustic prices also followed a similar trend. The power cost was lower as materialisation of domestic coal supply from Coal India improved, without any major supply disruptions witnessed unlike the year before.

It was further helped by higher Lanjigarh alumina production, operational improvements at power plants and currency depreciation.

The hot metal cost of production for FY2020 was US$1,690 per tonne, significantly lower compared to the previous year on account of structural improvements in the cost due increased captive alumina production from the Lanjigarh refinery, improved coal materialisation, better processing costs and falling input commodity costs. Coal materialisation has been good throughout the year.

(US$ per tonne)

Particulars	FY2020	FY2019	% change
Alumina cost (ex-Lanjigarh)	275	322	(15)
Aluminium hot metal production cost	1,690	1,967	(14)
Jharsuguda CoP	1,686	1,970	(14)
BALCO CoP	1,700	1,962	(13)

FINANCIAL PERFORMANCE

During the year, revenue decreased by 10% to US$3,751 million, driven primarily by falling LME aluminium prices. EBITDA was lower at US$281 million (FY2019: US$316 million), mainly due to improved hot metal cost of production and true up of RPO liability being partially offset by lower sales realisations.

(US$ million, unless stated)

Particulars	FY2020	FY2019	% change
Revenue	3,751	4,183	(10)
EBITDA	281	316	(11)
EBITDA margin (%)	8	8	-
Depreciation and amortisation	233	240	(3)
Operating profit before special items	48	76	(36)
Share in Group EBITDA (%)	9	9	-
Capital expenditure	153	182	(16)
- Sustaining	96	100	(4)
- Growth	57	82	(30)

STRATEGIC PRIORITIES & OUTLOOK

In wake of COVID-19 concerns, the outlook for the initial months of FY2021 is volatile with aluminium consumers either reducing or shutting production across geographies. The global maritime supply chain is also running with delayed timelines. However, all our alumina and aluminium facilities have been categorised as essential services by the government authorities and continue to operate at current production levels. Our facilities have switched to limited manning, in line with the government guidelines and social distancing norms. We look to dynamically adapt our product mix to cater to changing market requirements. The management is watchful of changing global and local scenarios and is actively charting its new course with health and safety as its first priority followed by its business objectives.

The input commodity prices continue to be low and we are looking at ways to continuously optimise our costs, while also increasing the price realisation in order to improve profitability in a sustainable way.

At our power plants, we are also working towards reducing Gross Calorific Value (GCV) losses in coal as well as improving plant operating parameters, which should deliver higher Plant Load Factors (PLFs) and a reduction in non-coal costs. We look forward to operationalising our Jamkhani coal block in the last quarter of FY2021.

Whilst the current market outlook remains uncertain, our core strategic priorities include:

- Focus on the health and safety of our employees, our business partners and customers
- Deliver Lanjigarh refinery production growth and stable aluminium production
- Enhance our raw material security of bauxite and alumina
- Improve coal linkage security, better materialisation
- Operationalise Jamkhani coal block
- Improve our plant operating parameters across locations
- Improve realisations by improving our value-added product portfolio

OPERATIONAL REVIEW POWER

THE YEAR IN SUMMARY

FY2020 was a significant year for the Talwandi Sabo power plant (TSPL), where we achieved plant availability of ~91%. The Plant Load Factor (PLF) at BALCO was also higher on account of better coal availability.

OCCUPATIONAL HEALTH & SAFETY

The key focus area for this year was to improve leadership and develop a culture of care for which we launched the programme of Visible Felt Leadership. This allowed our experienced leaders to share their valuable knowledge with the workers on site through direct interactions, thereby minimising the gap. In FY2020, we did not have any fatalities and our LTIFR was 1.51.

ENVIRONMENT

One of the main environmental challenges for power plants is the management and recycling of fly ash. At all our operations, we have a sustained 100% utilisation of fly ash. Golder Associates has completed the review of our ash dyke structures and we are in the process of implementing their recommendations. TSPL has recycled 14% of the water used. We are further working to enhance the recycled water percentage through measures planned during FY2021.

VL-J Billets coming out of the casting process

TSPL Facility

PRODUCTION PERFORMANCE

Particulars	FY2020	FY2019	% change
Total power sales (MU)	11,162	13,515	(17)
Jharsuguda 600 MW	776	1,039	(25)
BALCO 300 MW*	1,726	2,168	(20)
MALCO#	-	-	-
HZL wind power	438	449	(3)
TSPL	8,223	9,858	(17)
TSPL – availability (%)	91	88	-

#continues to be under care and maintenance since 26 May 2017 due to low demand in Southern India.

*We have received an order dated 1 January 2019 from Chhattisgarh State Electricity Regulatory Commission for conversion of 300MW from Independent Power Producer to Captive Power Plant (IPP to CPP). During the Q4FY19, 184 units were sold externally from this plant.

POWER

OPERATIONS

During FY2020, power sales were 11,162 million units, 17% lower y-o-y. Power sales at TSPL were 8,223 million units with 91% availability in FY2020. At TSPL, the Power Purchase Agreement with the Punjab State Electricity Board compensates us based on the availability of the plant.

The 600 MW Jharsuguda power plant operated at a lower PLF of 11% in FY2020.

The 300 MW BALCO IPP operated at a PLF of 71% in FY2020.

The MALCO plant continues to be under care and maintenance, effective from 26 May 2017, due to low demand in southern India.

VL-J_Cast House Control Room

FGD UPDATE

Ministry of Environment, Forest and Climate Change revised emission norms for Coal based Thermal Power Plants (TPPs) in India vide its notification in December 2015. Installation of FGD is required to meet sulphur dioxide emission norms

The timelines for compliance is June 2020 for CPPs. IPPs of BALCO and Jharsuguda are required to comply with the norms by September 2021 and March 2022, respectively. We have placed the Letter of Intent (LoI) for installation of Flue Gas Desulphurisation (FGD) to competent bidders.

The timeline for FGD installation at TSPL was December 2019. TSPL had issued LoI on SEPCO1 before this deadline. TSPL is in regular communication with government agencies regarding several aspects of FGD and response is awaited on the same from them. Meanwhile, Central Pollution Control Board has imposed a nominal fine of ₹18 lakh per month per unit for all the plants till they install FGD. While similar fine might be imposed by Central Pollution Control Board (CPCB) to CPPs., which were to comply with the timeline of June 2020, we are yet to receive any communication from CPCB on the same.

UNIT SALES AND COSTS

Average power sale prices, excluding TSPL, increased by 5% to US cents/kWh 5.1 per kWh. This was mainly due to better prices in the open access market.

During the year, the average generation cost was lower at US cents/kWh 3.5 per kWh (FY2019: US cents/kWh 4.1 per kWh), driven mainly by a decrease in coal prices and improved linkage materialisation.

(US cents/kWh)

Particulars	FY2020	FY2019	% change
Sales realisation[1]	5.1	4.8	5
Cost of production[1]	3.5	4.1	(15)
TSPL sales realisation[2]	5.3	5.9	(9)
TSPL cost of production[2]	3.8	4.4	(13)

(1) Power generation excluding TSPL

(2) TSPL sales realisation and cost of production is considered above, based on availability declared during the respective period

In FY2020, TSPL's average sales price was lower at US cents/kWh 5.3 per kWh (FY2019: US cents/kWh 5.9 per kWh), and power generation cost was lower at US cents/kWh 3.8 per kWh (FY2019: US cents/kWh 4.4 per kWh).

FINANCIAL PERFORMANCE

EBITDA for the year was 6% higher y-o-y at US$233 million mainly because of lower cost of production due to improved coal prices and supply in the domestic market, which resulted in higher linkage materialisation.

During FY2020, TSPL realised ~US$142 million from Punjab State Power Corporation Limited on account of GCV matter resolution basis Hon'ble Supreme Court order.

(US$ million, unless stated)

Particulars	FY2020	FY2019	% change
Revenue	827	934	(11)
EBITDA	233	219	6
EBITDA margin (%)	28	24	-
Depreciation and amortisation	81	86	(6)
Operating profit before special items	151	133	14
Share in Group EBITDA (%)	8	6	-
Capital expenditure	3	4	(19)
- Sustaining	3	4	(19)
- Growth	-	-	-

*Excluding one-offs

STRATEGIC PRIORITIES & OUTLOOK

During FY2021, we will remain focused on maintaining the plant availability of TSPL and achieving higher plant load factors at the BALCO & Jharsuguda IPPs and FGD compliances across the power segment.

Our focus and priorities will be to:

- Resolve pending legal issues and recover aged power debtors
- Achieve higher PLFs for the Jharsuguda and BALCO IPP
- Improve power plant operating parameters to deliver higher PLFs/ availability and reduce the non-coal cost

TSPL Facility, Side View

OPERATIONAL REVIEW IRON ORE

THE YEAR IN SUMMARY

Production of saleable ore at Karnataka stood at 4.51 wet million tonnes. With the order of the Central Empowered Committee (Supreme Court appointed body) in March 2020, our annual mining capacity has been increased upto 5.89 mtpa. In line with this the Government of Karnataka allocated the production quantity of 4.82 wet million tonnes for the current year FY2020 onwards.

Meanwhile, operations in Goa remained in suspension in FY2020 due to a statewide directive from the Supreme Court. However, we continue to engage with the government to secure a resumption of mining operations.

OCCUPATIONAL HEALTH & SAFETY

In our journey towards 'zero harm', Iron Ore of Business (IOB) had a fatality free FY2020. The LTIFR was 0.49 (FY 2019: 0.30). Reporting of leading indicators has significantly improved, post the launch of Safety Mobility App, which has a real-time incident-reporting feature.

IOB has implemented a series of initiatives to improve its safety performance, including the following: Deployment of more than 100 Safety Grid Owners across all units, focused training and certification programme by British Safety Council for Grid Owners, inclusion of business partners in Visible Felt Leadership schedules, '5S' audits at regular intervals, identification and periodic review of safety procedures of all critical safety tasks, development of level 2 Crane champions, auto sampling and alarm systems for confined space entries, and development of internal trainers on defensive driving to improve vehicle and driving standards.

Hand washing kits distributed to students at Jharkhand

Employees planting saplings at Amona temple

We have an attractive rewards and recognition scheme for safe performance. Additionally, there is an exclusive reward scheme for Grid Owners who have put exceptional effort in creating a safe workplace.

With the rising COVID-19 positive cases and deaths across the nation, top management team of IOB is dedicated to take preventive actions in order to restrict spread of the virus among our employees and business partners.

A central COVID-19 taskforce was constituted under the guidance of our CEO and unit-wise cross functional teams for implementation of all the preventive and precautionary measures. Travel policy was issued with directions to avoid any kind of personal and business travel unless completely unavoidable. Activities like cold fumigation for common areas were carried out. There were restrictions for the entry of visitors as well as employees coming from out station. We ensured necessary stock of medicines, PPEs as well as sanitisers, Hazmat suits, masks and. All meetings were carried out via conference call or telepresence.

Sesa Goa Iron Ore Value Added Business (VAB), was awarded the prestigious 'Gomant Sarvocha Suraksha Puraskar' at Green Triangle Safety awards for outstanding performance in occupational health & safety.

ENVIRONMENT

In our journey toward 'zero discharge', we recycle and reuse almost all the wastewater we generate at VAB except the non-contact type condenser cooling water of the power plant, which is cooled and treated for pH adjustment before discharging into the Mandovi river as per the consent to operate granted by Goa State Pollution Control Board (GSPCB).

At VAB, we have installed continuous emission monitoring systems in all the process stacks, which are connected to the State Pollution Control Board. New bag house with advanced design have been installed for reducing fugitive emission at the ladle dumping chamber of blast furnaces for efficient dust control mechanism. A storm water management plan has been executed by building multiple settling ponds across our Goa and Karnataka operations.

At Iron Ore Karnataka, the Company has constructed 38 check dams, seven settling ponds and two harvesting pits having a rainwater harvesting potential of 275,805 m^3 per annum. Additionally, the Company has de-silted 10 nearby village ponds, increasing their rainwater harvesting potential by 75,629 m^3 per annum.

In FY2020, ~3.6 Ha of mining dump slope has been covered with geotextiles to prevent soil erosion and mine reclamation with natural species of ~50,000 saplings has been done. At Karnataka operations, with an objective to reduce water consumption without affecting the effectiveness of our dust suppression measures, latest technologies like use of mist cannons, environment-friendly dust suppressants are used. These initiatives have helped us to save water by 12%.

At VAB, we have implemented projects to reduce thermal energy consumption through coke and coke breeze consumption and various electrical energy reduction projects, such as optimisation of compressed air, replacement of conventional lamp with LED lamps and other projects to reduce specific energy consumption.

Our VAB unit won 'Energy Efficient Unit Award' at CII National Energy Management Awards at Hyderabad.

IRON ORE

PRODUCTION PERFORMANCE

Particulars	FY2020	FY2019	% change
Production (dmt)			
Saleable ore	4.4	4.4	-
Goa	-	0.2	-
Karnataka	4.4	4.1	6
Pig iron (kt)	681	686	(1)
Sales (dmt)			
Iron ore	6.6	3.8	73
Goa	0.9	1.3	(33)
Karnataka	5.8	2.6	125
Pig iron (kt)	666	684	(3)

Employees with Pig Iron block at site

OPERATIONS

At Karnataka, production was 4.4 million tonnes, 6% higher y-o-y. Sales in FY2020 were 5.8 million tonnes, 125% higher y-o-y due to an increase in production and stock liquidation at Karnataka by 1.6 wet million tonnes. Production of pig iron was 681,000 tonnes in FY2020, less by 1% y-o-y.

Due to nationwide lockdown imposed by the Central Government because of the COVID-19 pandemic, we lost ~20,000 tonnes of pig iron production at VABs in March.

At Goa, mining was brought to a halt pursuant to the Supreme Court judgement dated 7 February 2018, directing all companies in Goa to stop mining operations with effect from 16 March 2018. We continue to engage with the government for a resumption of mining operations.

We bought 1.4 million tonnes of low-grade iron ore in auctions held by Goa government in August 2019. This ore was then beneficiated and ~0.9 million tonnes were exported, which further helped us to cover our fixed cost. Some of the ore was used to cater to the requirement of our pig iron plant at Amona.

Hot Metal from the Blast Furnace operation

FINANCIAL PERFORMANCE

In FY2020, revenue increased to US$489 million, 17% higher y-o-y mainly due to twofold increase in sales volume at Karnataka being partially offset by lower pig iron prices during the year. EBITDA increased to US$117 million compared to US$90 million in FY2019, mainly due to higher volumes at Karnataka.

(US$ million, unless stated)

Particulars	FY2020	FY2019	% change
Revenue	489	416	17
EBITDA	117	90	30
EBITDA margin (%)	24	22	-
Depreciation and amortisation	34	35	(3)
Operating profit before special items	83	55	52
Share in Group EBITDA (%)	4	3	-
Capital expenditure	10	1	-
- Sustaining	9	1	-
- Growth	1	0	--

STRATEGIC PRIORITIES & OUTLOOK

Looking ahead for the next 12 months our focus and priorities will be to:

- Bring about a resumption of mining operations in Goa through continuous engagement with the government and the judiciary
- Realigning and revamping all resources, assets, HEMMs for starting the mine operation
- Increase our footprint in iron ore by continuing to participate in auctions across the country, including Jharkhand
- Securing EC for expansion and debottlenecking of pig iron plant to increase production capacity by 1.7 LTPA
- Advocacy for removal of trade barrier/e-auction in Karnataka

Iron Ore mine at Codli

OPERATIONAL REVIEW STEEL

THE YEAR IN SUMMARY

Electrosteel Steels Limited (ESL) is an Integrated Steel Plant (ISP) in Bokaro, Jharkhand, with a design capacity of 2.5 mtpa. Its current operating capacity is 1.5 mtpa, with a diversified product mix of wire rod, rebar, DI pipe and pig iron.

During FY2020, ESL has achieved the record volume and lowest-ever cost during the year since acquisition, however EBITDA margin was lower as compared to previous period (US$78 per tonne vis-à-vis US$115 per tonne) on account of decline in steel prices.

Mobile Health Check- up in 25 villages

OCCUPATIONAL HEALTH & SAFETY

We, unfortunately, had one fatality on 28 February 2020 at Steel Melting Shop (SMS). On 22 February, Mr. Laxman Kumar, a signal man, met with an unfortunate accident and succumbed to his injuries on 28 February. Detailed internal and external investigations were undertaken to ascertain the root cause of the incidents and control measures have been put in place.

In terms of improvement of safety journey, the initiatives have been the following: positive isolation survey conducted for an entire plant by E-Square; LOTOV implementation in progress across site; Grid owner concept initiated to focus on HSE system is being implemented effectively; critical risk identified across plant, HAZOP studies are in progress; capability development under various modules, such as scaffolding safety, crane safety, defensive driving safety and others; overall 145 leaders were trained in MBRD to create awareness; celebrated month-long National Safety Day in the month of February; initiated Periodic Medical Examination (PME) and Pre-employment Examination of Employees/Workers; procured advanced life support ambulance; established OHC with all latest medical equipment inside the plant premises and other initiatives. The LTIFR for FY2020 was 0.38.

ESL's Leadership planting trees in the plant premises for a sustainable future

ENVIRONMENT

In Waste Management system, more than 100% utilisation of blast furnace granulated slag, fly ash to cement industries through long-term contracts and brick manufacturers, disposal of biomedical waste to Common Biomedical Waste Treatment Facility (CBWTF), selling of used oil and zinc dust to Pollution Control Board-authorised recyclers and re-processors are being ensured.

In Water Management, we treat 4,000 kl of effluent daily in effluent treatment plant and the water is being reutilised in several processes such as coke quenching, Blast Furnace (BF) slag granulation, 100% greenbelt development, fire fighting, sprinkling and in operations of lime and Dolo, DIP and others.

In Energy Management, usage of waste heat from coke oven, flue gas for generation of steam, which ultimately helps in power generation, reduction in auxiliary power consumption from 12% to 8% through improvement in station heat rate are being ensured.

Usage of LP steam in BF to minimise fuel requirement, LD gas and BF gas in several operations, such as reheating furnace of rolling mills, BF, DIP and lime and Dolo to reduce the fuel consumption, running of TG through steam generated from waste heat recovery are being undertaken.

In Air Emission Management, we are undertaking revamping of OG system in SMS to reduce fugitive emission, upgradation of air pollution control equipment to meet the norms stipulated by the regulatory authorities, installation of fixed sprinklers all along the haul roads and dry fog system in all the closed conveyors and deployment of mechanical sweepers for road sweeping.

STEEL

PRODUCTION PERFORMANCE

Particulars	FY2020	FY2019	% change
Production (kt)	1,231	1,199	3
Pig iron	167	142	18
Billet	27	39	(30)
TMT bar	468	441	6
Wire rod	413	427	(3)
Ductile iron pipes	155	150	3

V-DUCPIPE

OPERATIONS

There have been significant gains in operational efficiencies, such as optimisation of the coal mix in coke ovens and iron ore blending, shifting high grade ores to medium grades. Improved yields of the converters and finishing mills also added to the efficiency. Converter yield improved from 87.30% to 87.52% during the year.

During FY2020, we achieved 12,31,000 tonnes of saleable production during FY2020, up 3% y-o-y on account of improved availability of hot metal, better operational efficiency at converters and rolling mills.

The priority remains to enhance production of Value-Added Products (VAPs), i.e. TMT bar, wire rod and Di pipe. ESL maintained 85% of VAP sales, in line with priority.

Our Consent to Operate (CTO) for the steel plant at Bokaro, which was valid until December 2017, was not renewed by the State Pollution Control Board (SPCB). This was followed by the Ministry of Environment, Forests and Climate Change revoking the Environmental Clearance (EC) dated 21 February 2018.. Both the directions have since been stayed by the Hon'ble High Court of Jharkhand and the Company is in the process of regularising all alleged issues without prejudice basis with a view to bring an end to all disputes pertaining to the said statutory approvals. Due to the nationwide lockdown situation, all High Court hearings through a general order have been postponed and shall be taken up in due course.

PRICES

Average sales realisation decreased 13% y-o-y from US$572 per tonne in FY2019 to US$495 per tonne. Prices of iron and steel are influenced by several macro-economic factors. These include global economic slowdown, US-China trade war, supply chain destocking, government spend on infrastructure, the emphasis on developmental projects, demand-supply forces, the Purchasing Managers' Index (PMI) in India and production and inventory levels across the globe, specially in China.

Even though the NSR dipped by US$77 per tonne, we were able to maintain our EBITDA margin at US$78 per tonne for the year (against US$ 115 per tonne in FY2019) through better control over costs.

(US$ per tonne)

Particulars	FY2020	FY2019	% change
Pig irons	354	404	(12)
Billet	418	486	(14)
TMT	494	564	(12)
Wire rod	519	638	(19)
DI pipe	602	593	2
Average steel price (US$ per tonne)	**495**	**572**	**(13)**

Empowering Women to work in ESL

UNIT COSTS

Cost has decreased by 9% y-o-y from US$457 per tonne to US$ 418 per tonne in FY2020 mainly on account of softening of coking coal price during the year and operational efficiencies which were managed through improvement in key operational metrics.

Particulars	FY2020	FY2019	% change
Steel (US$ per tonne)	418	457	(9)

FINANCIAL PERFORMANCE

Revenue increased marginally by 1% to US$604 million (FY2019: US$600 million), primarily due to higher volume, offset by lower sales realisation. EBITDA decreased by 27% to US$83 million in line with sales partially offset by improved cost of production.

(US$ million, unless stated)

Particulars	FY2020	FY2019	% change
Revenue	604	600	1
EBITDA	83	113	(27)
EBITDA margin (%)	14	19	-
Depreciation and amortisation	34	28	23
Operating profit before special items	49	85	(43)
Share in Group EBITDA (%)	3	3	-
Capital expenditure	11	15	(27)
- Sustaining	11	15	(27)
- Growth	-	-	-

550
V-XEGA
ESL
550

V-XEGA

STRATEGIC PRIORITIES & OUTLOOK

Global steel markets at the time of writing remain uncertain, yet the focus is to operate within the highest of health and standards whilst improving efficiencies and unit costs wherever possible.

Specifically, areas of focus will be

- Ensure business continuity
- Cash preservation and deferring all 'good to go' capex
- Obtain clean Consent to Operate and environmental clearance
- Raw material securitisation through long-term contracts; approaching Free Trade Agreement (FTA) countries for coking coal
- Ensure zero harm and zero discharge, fostering a safety-centric culture
- To generate healthy EBITDA and Cash Profit

V-WIRRO

OPERATIONAL REVIEW
COPPER - INDIA/AUSTRALIA

THE YEAR IN SUMMARY

The copper smelter plant at Tuticorin was under shutdown for the whole of FY2020. We continue to engage with the government and relevant authorities to enable the restart of operations at Copper India.

We continued to operate our refinery and rod plant at Silvassa, catering to the domestic market.

OCCUPATIONAL HEALTH & SAFETY

The LTIFR was zero for FY2020 (FY2019: 0.15).

ENVIRONMENT

Copper Mines of Tasmania continued in care and maintenance awaiting a decision on restart. Meanwhile, a small dedicated team is maintaining the site and there were no significant safety or environmental incidents during the year. The site retained its ISO accreditation in safety, environment and quality management systems and the opportunity of a lull in production was used to review and further improve these systems.

OPERATIONS

The Tamil Nadu Pollution Control Board (TNPCB) vide order, dated 9 April 2018, rejected the consent renewal application of Vedanta Limited for its copper smelter plant at Tuticorin. It directed Vedanta not to resume production operations without formal approval/consent (vide order dated 12 April 2018), and directed the closure of the plant and the disconnection of electricity (vide order dated 23 May 2018).

Quality check of copper samples, Sterlite Copper

PRODUCTION PERFORMANCE

Particulars	FY2020	FY2019	% change
Production (kt)			
India – cathode	77	90	(14)

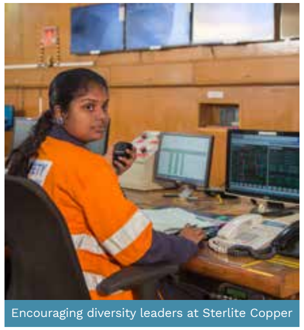
Contract workers at Refinery operations, Sterlite Copper

The Government of Tamil Nadu also issued an order dated 28 May 2018 directing the TNPCB to permanently close and seal the existing copper smelter at Tuticorin; this was followed by the TNPCB on 28 May 2018. Vedanta Limited filed a composite appeal before the National Green Tribunal (NGT) against all the above orders passed by the TNPCB and the Government of Tamil Nadu. In December 2018, NGT set aside the impugned orders and directed the TNPCB to renew the CTO. The order passed by the NGT was challenged by Tamil Nadu State Government. in Hon'ble Supreme Court.

The Hon'ble Supreme Court of India in its order dated 18 February 2019 allowed the appeal against NGT order and directed the Company to challenge all the orders cumulatively before the Hon'ble Madras High Court. The Company filed a writ petition before Madras High Court in February 2019 challenging orders of the State of Tamil Nadu and TNPCB. This petition was heard by Hon'ble Madras High Court from June 2019 to January 2020. The hearing in this matter has currently concluded and the matter is reserved for orders. The Bench assured that it will endeavour to deliver judgement as early as possible.

Meanwhile, the Company's Silvassa refinery and rod plant continues to operate as usual, enabling us to cater to the domestic market.

Our copper mine in Australia has remained under extended care and maintenance since 2013. However, we continue to evaluate various options for its profitable restart, given the government's current favourable support and prices.



Encouraging diversity leaders at Sterlite Copper

COPPER - INDIA /AUSTRALIA

PRICES

Global copper demand growth in FY2020 has been weaker than expected, reflecting a deterioration in the global macro-economic landscape. The prices declined due to weak demand in China and because of the US-China trade dispute, and supply chain de-stocking. Ex-China demand has remained weak from auto, electronics and consumer goods sectors.

Average LME copper prices decreased by 8% compared to FY2019.

Particulars	FY2020	FY2019	% change
Average LME cash settlement prices (US$ per tonne)	5,855	6,337	(8)

FINANCIAL PERFORMANCE

During the year, EBITDA was US$(40) million and revenue was US$1,278 million, a decrease of 17% on the previous year's revenue of US$1,537 million. The reduction in revenue was mainly due to lower Copper LME prices and lower volume. EBITDA loss increased to US$40 million on account of decrease in sales realisations by 8%.

(US$ million, unless stated)

Particulars	FY2020	FY2019	% change
Revenue	1,278	1,537	(17)
EBITDA	(40)	(36)	(12)
EBITDA margin (%)	(3)	(2)	-
Depreciation and amortisation	21	21	-
Operating profit before special items	(61)	(57)	7
Share in Group EBITDA (%)	(1)	(1)	-
Capital expenditure	15	37	(60)
- Sustaining	8	28	(71)
- Growth	7	9	(27)

STRATEGIC PRIORITIES & OUTLOOK

Over the following year our focus and priorities will be to:

- Engage with the government and relevant authorities to enable the restart of operations at Copper India
- Sustain operating efficiencies, reducing our cost profile
- Upgrade technology to ensure high-quality products and services that sustain market leadership and surpass customer expectations

CRANE-II SWL 24 T

Sterlite Copper Plant

PORT BUSINESS

VIZAG GENERAL CARGO BERTH (VGCB)

During FY2020, VGCB operations showed an increase of 22% in discharge and 23% in dispatch compared to FY2019. This was mainly driven by higher availability of imported coal and railway rakes in the region.

COILER UNIT

Copper bending at Sterlite Copper

GOVERNANCE

The Board is responsible for ensuring the long-term success of the Group by balancing the needs of its various stakeholders. Good governance plays a key role in the delivery of shareholder value and the Board remains committed to maintaining the highest standards of corporate governance and ethical business practices.

SECTION 172 STATEMENT

The following section serves as our 'Section 172(1) statement' and explains how the Board considers the interests of key stakeholders and the broader matters set out in s172 of the Companies Act, 2006 (s172), when performing their duty to promote the success of the Company under s172, the Board's engagement with those stakeholders and their influence on decision-making.

The Board's Approach to s172 and Decision-Making

The Board is ultimately responsible for the long-term success of the Group. It recognises that this is dependent on fostering good relationships with its key stakeholders in the pursuit of sustainable growth for the benefit of the Company's shareholders. The Board therefore considers the interests of and the impact of its decisions on the Group's key stakeholders as part of its decision-making process.

When making decisions, each Director ensures that he/she acts in the way he/she considers, in good faith, would most likely promote the Company's success for the benefit of its members as a whole, and in doing so, have regard (among other matters) to those set out in s172.

How the Board Operates

Vedanta Resources Limited is the parent company of the Vedanta Group. Through its subsidiaries, it holds its principal operating businesses such as Vedanta Limited and KCM.

It is the Board's view that good governance of the Group is best achieved by the delegation of authority from the Board to its operating subsidiaries. Accordingly, the Board has well-established arrangements for the delegation of authority to its operating subsidiaries, together with a schedule of matters, which are reserved for the Company's Board. Therefore, while the interests of the Group's stakeholders are considered by the Company's Board, at a business level, the interests of each business' stakeholders are considered by the boards of Vedanta Limited and its principal subsidiaries and of KCM. Details of the Company's governance framework and delegation of authority to the Board and Management committees, which is regularly reviewed to ensure it remains fit for purpose, can be found of Page 92.

For every strategic proposal, the primary focus of the Board is to promote the long-term success of the Group to the benefit of members and other stakeholders. Decision making by both the Company's Board, and under its delegated authorities to its principal operating subsidiaries, take into account the assessment of the impact of the decision of the long-term success of the Group to the benefit of its shareholders, with regard to other stakeholders.

The Company's Schedule of Matters Reserved for the Board is being revised to require principal operating subsidiaries to report back to the Company's Board on the consideration taken by the respective subsidiary boards of the s172 factors on all strategic decisions taken by them.

As Vedanta Limited is listed on the Bombay Stock Exchange and National Stock Exchange in India as well as the New York Stock Exchange, stringent compliance and reporting measures are in place to ensure good governance and to consider the interests of its key stakeholders.

The Role of the Chair

The chairman encourages open dialogue between the Directors and Management on all Board discussions. This includes constructive discussion, to assess the long-term impact for the Group including its stakeholders, of any strategic proposals presented to the Board.

Information

The associated briefing papers circulated to the Board for consideration and approval, detail potential impacts, if any, on the members and other stakeholders and the long-term consequences for the business.

The s172 assessment is performed internally by the management, and where required, the Board may request external assurance of the quality of information provided.

Policies and Practices

The Group has an established stakeholder engagement standard, which governs the procedure for identifying key stakeholders. A review of key stakeholders is undertaken every 3 years, and discussed by the Group Executive Committee. This will also be presented to the Board for consideration.

In line with the Group's delegated authority structure, stakeholder identification is undertaken at a Business Unit level. Vedanta's social responsibility performance standard aims to ensure effective engagement with all key stakeholders. Details on the Group's ongoing engagement with stakeholders can be found on Pages 38-39.

Training

The relevance of stakeholder considerations in the context of the Board's decision-making has long been a part of the Board, as they are aligned to the Group's vision, values and sustainability principles. We recognise the importance of keeping the interests of our stakeholders at the forefront of decision-making and continue to provide refresher training to Directors.

We have taken action to make the regular consideration of stakeholder interests a key part of the Group's business culture by providing training to the Board and the Company's senior management on the duties of the Directors and the new reporting requirements under s172 of Companies Act, 2006.

The Board and Company's senior management team have received briefings on the Directors' duties as outlined in s172 of Companies Act, 2006. These training briefings have also been cascaded to the management teams including those at the principal operating subsidiary, Vedanta Limited to ensure that delegated decision making adequately covers the impact assessment of these s172 factors and that stakeholder considerations are at the forefront of all strategic decisions.

Culture and Stakeholder Engagement

The Board is committed to maintaining strong relationships with its shareholders, bondholders and other stakeholders. The Group is working to continually improve its engagement with its various stakeholders.

The Group has a number of governance standards, which facilitate the pursuit of its goals and vision, with adherence to its purpose and values. The Group's stakeholder engagement standard and social responsibility performance standard ensure that the Group's stakeholders are at the forefront of its operations and decision-making. They also facilitate effective engagement with all key stakeholders. Further details on ongoing engagement with stakeholders can be found on Pages 38-39 of the Strategic Report.

All Group governance standards including the stakeholder engagement standard and social responsibility performance standards are rolled out across the Group and include new operating businesses following their acquisition by the Group in order to promote consistency across the Group.

Maintaining our Licence to Operate

Our licence to operate is dictated by our reputation and the way the Group is perceived by its stakeholders. The Board's leadership ensures that the management runs the businesses in an ethical and responsible manner in relation to all stakeholders. The Board has an established set of corporate values, which guide its decision-making process and operations. Further details of the Group's purpose and values can be found on Page 5.

The Group has a Code of Business Conduct and Ethics, a Supplier Code of Conduct and its Whistleblower Policy, which reinforce the Board's commitment to operating in an ethical manner in the pursuit of its goals. Furthermore, staff receive regular training updates on ethical practices including anti-bribery and corruption and anti-money laundering. The Group Internal Audit function regularly reports to the Board on the operation of the Whistleblower policy including remedial actions taken following the investigation of any complaints received.

Creating Value for our Stakeholders

The Group maintains ongoing dialogue with its stakeholders to understand their expectations and how their concerns can be addressed. Consideration of stakeholder interests forms a vital part of the Board's deliberations.

Details of what the Board considers are the key interests of the Group's stakeholders and the Group's actions in FY2020 to foster these interests can be found in the sustainability section on Pages 38-39.

The Board ensures that stakeholder considerations are taken into account in strategic decision-making by requiring that all strategic proposals coming to the Board include an analysis of stakeholder impacts, which form part of the discussions when making decisions. The Company Secretary provides support to the Board to ensure that sufficient consideration is given to stakeholder issues. In accordance with the Schedule of Matters Reserved for the Board, the principal operating subsidiaries will regularly report to the Board on the considerations taken for key strategic decisions.

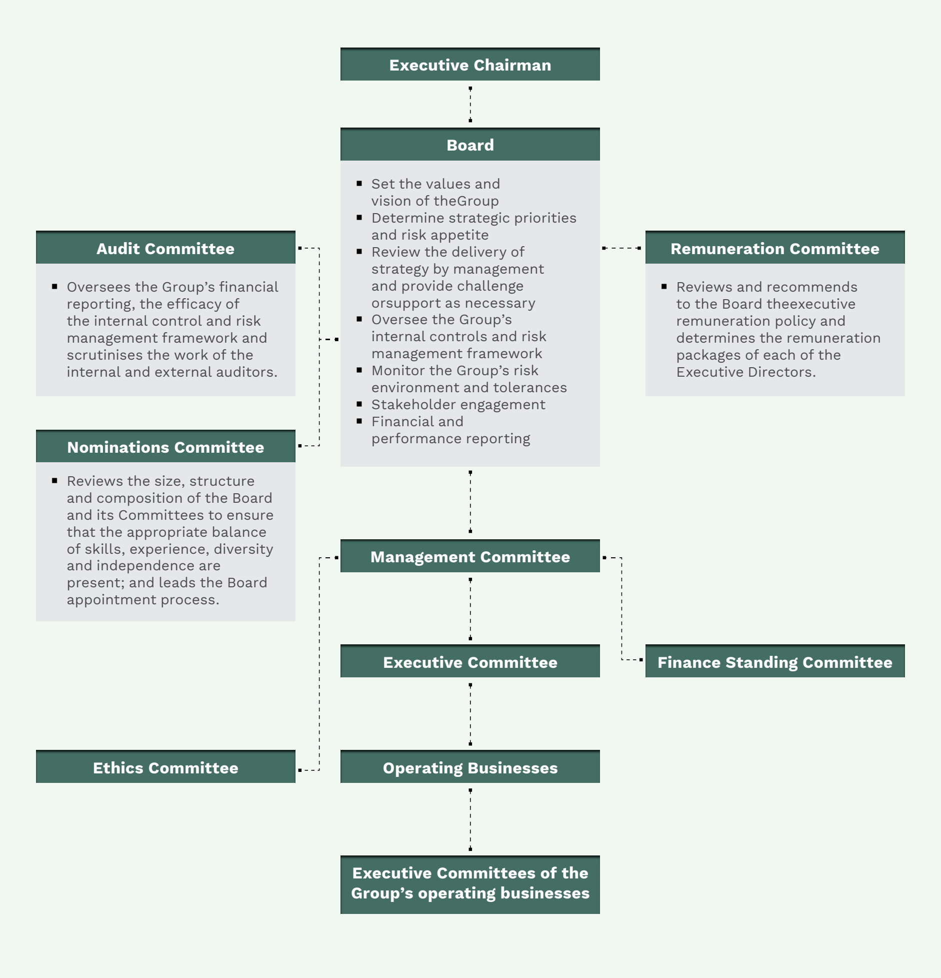
Making Strategic Decisions for a Better Future

The Company recently approved the acquisition of the minority share interest in one of the Company's principal subsidiaries, Vedanta Limited and the subsequent delisting of Vedanta Limited. Prior to doing so, the Board received information materials on the proposed transaction which outlined a consideration of the impact of the transaction on the Group's key stakeholders. The Board deliberated on and concluded that the transaction would promote the long-term success of the Company without any significant detrimental impact to key stakeholders. The Board of Vedanta Limited also considered the aforementioned proposal and concluded that it was to the benefit of its shareholders and would promote the long-term success of the company.

GOVERNANCE FRAMEWORK

The Company's Board of Directors collectively provide entrepreneurial leadership for the Group and strategic direction to management for the delivery of sustainable shareholder value.

The reporting structure, as shown below, between the Board, Board Committees and Management Committees forms the backbone of the Group's Corporate Governance framework. As part of its decision-making processes, the Board considers the long-term consequences of its decisions, the interests of various stakeholders including employees, the impact of the Group's operations on the environment and the need to conduct its business ethically. This is achieved through a prudent and robust risk management framework, internal controls and strong governance processes.



Executive Chairman

Board

- Set the values and vision of theGroup
- Determine strategic priorities and risk appetite
- Review the delivery of strategy by management and provide challenge orsupport as necessary
- Oversee the Group's internal controls and risk management framework
- Monitor the Group's risk environment and tolerances
- Stakeholder engagement
- Financial and performance reporting

Audit Committee

- Oversees the Group's financial reporting, the efficacy of the internal control and risk management framework and scrutinises the work of the internal and external auditors.

Remuneration Committee

- Reviews and recommends to the Board theexecutive remuneration policy and determines the remuneration packages of each of the Executive Directors.

Nominations Committee

- Reviews the size, structure and composition of the Board and its Committees to ensure that the appropriate balance of skills, experience, diversity and independence are present; and leads the Board appointment process.

Management Committee

Executive Committee

Finance Standing Committee

Ethics Committee

Operating Businesses

Executive Committees of the Group's operating businesses

BOARD

Comprised of six Directors, including the Executive Chairman, Executive Vice Chairman and four Non-Executive Directors.

BOARD COMMITTEES

The Board delegates certain responsibilities to committees, which operate within their defined terms of reference. The Board has three established committees, shown below (together, the Board Committees).

	Key Responsibilities
Nominations Committee	Reviews the size, structure and composition of the Board and its Committees to ensure the appropriate balance of skills, experience, diversity and independence are present; and leads the Board appointment process.
Audit Committee	Oversees the Group's financial reporting, the efficacy of the internal control and risk management framework and scrutinises the work of the internal and external auditors.
Remuneration Committee	Reviews and recommends to the Board the executive remuneration policy and determines the remuneration packages of each of the Executive Directors.

Following the establishment of a Sustainability Committee at Vedanta Limited, which oversees the Group's management of sustainability matters including HSE, employment practices, sustainable development engagement with the communities in which the Group operates, human rights and land access, the Company's Sustainability Committee was disbanded.

Each Board Committee has formally delegated duties included in its terms of reference, which are available on the Company's website at www.vedantaresources.com/boardcommittees.The Board Committees' terms of reference facilitate the effective operation of the relevant Board Committee. The chair of each of the Board Committees reports formally to the Board on their respective Committee's activities following each meeting. Additionally, from time to time, the Board Committees submit reports and recommendations to the Board on any matter, which they consider significant to the Group.

Only the members of each Board Committee have the right to attend its meetings. Other Directors, management and advisers may attend meetings at the invitation of the relevant Board Committee chair. The Group Company Secretary acts as Secretary to the Board, Audit, Nominations and Remuneration Committees and attends all their meetings to formally record each meeting.

At the invitation of the Audit Committee, members of the senior management team regularly attend Audit Committee meetings to report on issues and facilitate discussions with the external auditor. The external auditor attends Audit Committee meetings to ensure effective communication of matters relating to the external audit of the Group's full year and interim financial statements. The Audit Committee also meets with representatives from the external auditor without management being present bi-annually.

All Board Committees are authorised to obtain legal or other professional advice as necessary at the expense of the Company, to secure the attendance of external advisers at their meetings and to seek information from any employee of the Company, in order to perform their duties.

The Board's Responsibilities

- Set the values and vision of the Group;
- Determine strategic priorities and risk appetite;
- Review the delivery of strategy by management and provide challenge or support as necessary;
- Oversee the Group's internal controls and risk management framework;
- Monitor the Group's risk environment and tolerances;
- Stakeholder engagement; and
- Financial and performance reporting.

DIVISION OF RESPONSIBILITIES

There is a clear division between the functioning of the Board in providing effective oversight and the executive responsibility for the operation of the Company's business. The Board has an established policy which prescribes how it discharges its mandate. This policy sets out the roles and responsibilities of the Executive Chairman, Executive Vice Chairman, Chief Executive Officer, Senior Independent Director and Non-Executive Directors, which are summarised below:

The Role of the Executive Chairman

The Executive Chairman:

- Leads the Board and ensures that it discharges its responsibilities effectively;
- Develops succession plans for Board appointments for approval by the Board;
- Identifies strategic priorities and new business opportunities to enhance shareholder value;
- Promotes the highest standards of integrity, probity and governance;
- Chairs the Board meetings and facilitates the active engagement of all Directors;
- Oversees the Directors' induction, performance and ongoing development; and
- Engages with the Company's stakeholders to ensure that an appropriate balance is maintained between the various interests.

The Role of the Executive Vice Chairman

- Supports the Executive Chairman in executing the overall vision and strategy of the Group;
- Leads the Group's principal subsidiary, Vedanta Limited, as its Vice Chairman;
- Enhances and sustains the Group's overall HSE, people, digital and technology, ethics and compliance practices at global standards;
- Oversees stakeholder engagement in India and globally;
- Ensures effective execution of growth projects to deliver value; and
- Provides mentoring to some of the key corporate functions like the people function, management assurance and investor relations including key leadership development.

The role of the Management Committee

The Management Committee was established following the departure of the Company's Chief Executive Officer to oversee the day-to-day running of the Company and comprises of the Chief Financial Officer, Chief Human Resources Officer, Chief Commercial Officer and Chief Executive Officer, Vedanta Limited, under the guidance of the Executive Chairman.
The Management Committee:

- Ensures effective implementation of Board decisions;
- Develops operational business plans for the Board's approval;
- Overseas the senior management team in their delivery of the Group's operational business plans following Board approval;
- Provides oversight and management of all of the Group's operations, and performance including environmental, social, governance, health and safety, sustainability;
- Manages the Group's risk profile in line with the risk appetite set by the Board;
- Ensures that prudent and robust risk management and internal control systems are in place throughout the Group;
- Recommends annual budgets to the Board for approval; and
- Supports the Executive Chairman in maintaining effective communications with various stakeholders.

Non-Executive Directors

The Non-Executive Directors are responsible for helping to develop the Company's strategy and providing rigorous, objective and constructive challenge to create accountability and drive performance. Collectively, the current Non-Executive Directors have the appropriate balance of expertise and independent judgement, together with a good understanding of the Group's risk environment to enable them to provide effective oversight in the context of uncertainty and volatile markets.

MANAGEMENT COMMITTEES

The Executive Committee

The Executive Committee is responsible for the day-to-day running of the Group and meets monthly. It is responsible for implementing the strategy adopted by the Board, allocating resources in line with delegated authorities, managing risk and monitoring the operational and financial performance of the Group. Authority is delegated by the Executive Committee to the respective chief executive officer of each of the Group's businesses. During the year, the Company's CEO attended the Company's Board meetings to brief the Board on strategic and operational matters. Going forward, the CEO of the Group's principal operating subsidiary, Vedanta Limited, will report to the Board on all operational matters.

The Finance Standing Committee

The Finance Standing Committee has delegated authority from the Board for approval of certain matters including approval of financing arrangements and corporate guarantees below the financial threshold for Board approval. The Company Secretary updates the Board on the activities of the Finance Standing Committee at the subsequent Board meeting and the minutes of all Finance Standing Committee meetings are reviewed by the Board.

Key Matters Reserved for Board Consideration

The duties of the Board are set out in its terms of reference, including those matters specifically reserved for its consideration. The Board's terms of reference also set out those matters that must be reported to the Board, such as details of fatalities within the Group and the adoption or material amendment to the Group policies relating to business conduct, environment and health and safety.

The formal schedule of reserved matters is replicated in internal delegation of authorities within the Group to provide the businesses with flexibility to operate, whilst ensuring that strategic matters are always considered and decided by the Board. The Board reviews its schedule of reserved matters regularly.

Board Focus During the Year

Strategy

- Considered new business opportunities including approval for potential buyout of the minority interest in the Company's principal subsidiary, Vedanta Limited;
- Approved the unwinding of the structured investment deed by a Group subsidiary, Cairn India Holdings Limited;

Operational and Financial Performance

- Approved the Group's Business Plan FY2020-2021;
- Approved the change in the Company's status from a holding company to enable it to participate in trading with NALCO and other suppliers for the benefit of the Group;
- Reviewed the Group's operational performance, including safety and environment across its businesses, through updates from the Chief Executive Officer at each scheduled Board meeting;
- Received updates on the provisional liquidation of Konkola Copper Mines and approved arbitration proceedings and indemnification of the Company's Directors in respect of the same;
- Reviewed the fatalities across the Group and received updates on remedial actions taken to prevent recurrences including the restructuring of management incentives;
- Approval of brand fees payable by Electrosteel Steels Limited;
- Reviewed the Group's financial performance and debt management initiatives through updates from the Chief Financial Officer at each scheduled Board meeting;
- Reviewed the Group's Treasury position and considered Management's liability management proposals including the approval of a bond offering and associated interim financial statements;
- Approval of a parent company guarantee for its subsidiary Vedanta Limited to participate in the auction for 10 oil & gas blocks;
- Approved the consent solicitation of the Group's bond holders for revisions to certain financial covenants;
- Discussed the Group's operational and financial performance, reviewed its going concern status, and approved the going concern statements for inclusion in the Company's Annual Report 2019;
- Received updates on the significant accounting issues and approved the Group's Annual Report and full- and half-year financial results; and
- Declared dividends payable to the Company's shareholders.

Governance and Risk

- Reviewed the Group's progress on compliance with the Modern Slavery Act;
- Approval of the Company's Diversity & Inclusion Policy and review of the progress made towards the Group's diversity goals;
- Approval of the Payments to Governments' and Tax transparency reports;
- Reviewed the findings of the Board and Board Committee evaluation and agreed appropriate actions;
- Approved the change of the Company's registered office;
- Received updates from each of the Board Committees and; and
- Review of the Company's going concern position for the year ended 31 March 2020 and to the date of this Report.

EFFECTIVENESS

The Board is comprised of a majority of independent Non-Executive Directors for effective governance. This ensures that there is appropriate oversight and that no individual or small group of Directors can dominate the decision-making process. Each of the Non-Executive Directors is considered fully independent in character and judgement and free from any relationship or circumstance that could affect or appear to affect their independent judgement.

The Board operates in an open and collaborative manner to support and constructively challenge management to deliver operational success. The Directors harness their collectively wide-ranging expertise and experience to shape decision-making.

Board induction

On appointment to the Board, each Director undergoes a comprehensive induction programme that is tailored to their individual needs, but is intended to provide an introduction to the Group's operations, challenges and risks. Newly appointed Directors also receive an overview of their duties, corporate governance policies and Board processes.

Ongoing board training and development

The Board is committed to the continuing development of its Directors and they are offered training as required to assist them in the performance of their duties. There are also procedures in place to provide the Directors with appropriate and timely information, including receiving information between meetings regarding Group business development and financial performance. The Directors have access to the Company's professional advisers, where necessary, as well as to the Company Secretary, who is responsible for ensuring that Board procedures are followed. The Company Secretary is also responsible for advising the Board on governance matters.

ACCOUNTABILITY: AUDIT COMMITTEE

CURRENT COMPOSITION

Ravi Rajagopal (Chairman)
Geoffrey Green
Deepak Parekh
Edward T Story

The Directors who serve on the Audit Committee have the necessary qualifications and bring a wide range and depth of financial and commercial experience across various industries. Their collective knowledge, skills, experience and objectivity enables the Audit Committee to work effectively and to challenge management.

SUMMARY OF THE AUDIT COMMITTEE'S ACTIVITIES DURING THE YEAR

Area of Responsibility	Activities
Financial Reporting The Audit Committee oversees the integrity of the Company's financial reporting process to ensure that the information provided to the Company's shareholders and other stakeholders is fair, balanced and understandable and provides the information necessary to assess the Company's financial position, performance, business model and strategy. The Group has a comprehensive financial reporting system, which is reviewed and modified in line with the accounting standards to ensure that all published financial information is accurate.	During the year, the Audit Committee reviewed the preliminary announcement, Annual Report and financial statements for the Board's approval. As part of the process, it reviewed and challenged the key accounting and other judgements presented by the management. A detailed audit plan (the Audit Plan) was prepared by the external auditor EY, which was reviewed by the Audit Committee. The Audit Plan set out the audit scope, key audit risks identified, materiality issues, the client team working on the audit and the audit timetable. The audit scope covered the significant components of the audit and audit plans for each component and geographical location. Each of the key audit risks and the external auditor's response on how it will investigate these risks was considered by the Audit Committee. The Chairman and some members of the Audit Committee met regularly with the Company's external auditor to discuss the key accounting issues (further details on Pages 98-99) and going concern position of the Company (further details on Pages 130-132). In respect of this, the Committee considered the impact of KCM and the PSC extension and discussed these at length with management and the external auditor. As a result, and as supported by the high standard of reporting by management, the Audit Committee concluded that it has discharged its responsibilities effectively and recommended the Company's Annual Report and Accounts FY2020 to the Board for approval. The Audit Committee's other activities include: ▪ Six-monthly reviews of significant accounting issues and impact on the Group; ▪ Review and approval of the half-year report; ▪ Discussion on impairment reviews; ▪ Review of pending tax issues and the financial exposure to the Group; ▪ Review of Audit Committee Report for the Annual Report and Accounts FY2020; ▪ Review of legal cases and the associated risks arising to ensure that appropriate provisions are made and disclosed; ▪ Going concern assessment; and ▪ Review of the going concern basis for the preparation of the financial statements including working capital forecasts, monthly projections and funding requirements.
Internal Controls, Risk Management and Governance The Audit Committee reviews internal control and risk management processes and output from the regular review of risks carried out during the year by the internal audit function.	Vedanta's risk management framework serves to identify, assess and report on the principal and emerging risks facing the Group's businesses in a consistent manner. (Further details on the Group's risk management framework are on Pages 30-37 of the Strategic Report.) ▪ During the year ended 31 March 2020, the Audit Committee reviewed the internal control system in place to ensure that it remains effective. The review included a report on the risk matrix, significant risks and actions put in place to mitigate these risks. Any weaknesses identified by the review were addressed by enhanced procedures to strengthen the relevant controls and these are in turn reviewed at regular intervals; ▪ The Committee also continued to monitor the market conditions, risks and uncertainties relevant to the Group, reviewed the risk management framework and reported to the Board on relevant risks affecting the Group. The Committee received regular updates from management confirming that risks relevant to the Group were appropriately categorised, the potential impact to the Group and adequacy of resources allocated to manage the risks. The Committee has reviewed the Principal Risks and Uncertainties for the Group disclosed in the Annual Report and Accounts 2020 and consider them to be appropriate; ▪ Internal audit review including reviews of the internal control framework, changes to the control gradings within the Group and whistle-blower cases; ▪ Review of past project capex overruns and controls in place to minimise future occurrences; ▪ Review of the Group's risk management infrastructure, risk profile, significant risks, risk matrix and resulting action plans; ▪ Review of the KCM business; ▪ Review of reports from subsidiary company audit committees and the Risk Management Committee; ▪ Review of the Group's cyber security controls; and ▪ Receiving updates on upcoming corporate governance developments.
The Audit and External Auditor	▪ Review of the significant audit risks with the external auditor during interim review and year-end audit; ▪ Consideration of external audit findings and review of significant issues raised; ▪ Review of key audit issues and management's report; ▪ Review of the independence of the external auditor and the provision of non-audit services including non-audit fees paid to the external auditor; ▪ Review of the external auditor's performance and making recommendations in respect of the re-appointment of the external auditor; ▪ Review of the management representation letter; and ▪ Review of the audit plan, scope of the 2020 external audit of the financial statements and key risk areas for the 2020 audit.
Internal audit The Board has a zero-tolerance policy for corruption. Vedanta's Code of Business Conduct & Ethics contains guidelines for conducting the Company's business with the highest standards of business ethics. Vedanta also maintains a Supplier Code of Conduct which ensures that all its suppliers and service providers are also operating with the highest standards on business ethics. The Group's whistle-blower policy encourages employees of the Company, its subsidiaries and all external stakeholders to raise concerns about suspected wrongdoing within the Group in confidence. The whistle-blower policy also covers the requirements of the UK legislation in respect of slavery and human trafficking reporting.	▪ Receive updates from MAS on the Group's whistle-blower arrangements, including the outcome of investigations, for assurance that all reported whistle-blower incidents are appropriately investigated and actioned; ▪ Review of internal audit observations and monitoring of implementation of any corrective actions identified; ▪ Review of the performance of the internal audit function; and ▪ Review of 2019-2020 internal audit plan.

SIGNIFICANT ISSUES CONSIDERED BY THE AUDIT COMMITTEE

The preparation of financial statements requires management to make judgements, estimates and assumptions, that affect the application of accounting policies and the reported amount of assets, liabilities, income, expenses and disclosures of contingent liabilities at the date of these financial statements and the reported amount of revenues and expenses for the years presented. The Audit Committee reviews whether the Group's accounting policies are appropriate, and management's estimate and judgements applied in the financial statements are reasonable. The Audit Committee also reviewed the disclosures made in the financial statements. The views of the statutory auditor on these significant issues were also considered by the Audit Committee.

The significant issues that were considered by the Audit Committee in relation to the financial statements are outlined below:

Significant issues	How these issues were addressed
Impairment assessment of: ▪ Rajasthan Oil & Gas block including exploration and evaluation assets ▪ Copper operations in India ▪ Glass substrate business of AvanStrate ▪ Aluminum operations of Vedanta Limited ▪ Assets at Skorpion Zinc (pty) Limited (Skorpion) (More information is provided in Note 2(c) and Note 6 to the Financial Statements)	Impairment assessment of Rajasthan oil and gas block and KG block is considered a significant issue considering the significant decline in crude oil prices. Additionally, non-availability of unrestricted access is identified as an additional trigger relating to the KG OSN block. The Committee reviewed the significant assumptions including the oil price and discount rate. An impairment charge of US$1,906 million has been recognised against these assets. The Committee was updated on the status of legal proceedings in connection with the Copper India existing operations. The Committee was also briefed regarding the status of the expansion project. Considering the expansion project activities are on halt since May 2018, and the process will start only after reopening of existing plant and after obtaining all statutory approvals, the timing of which is uncertain, impairment charge of US$94 million has been recognised against the assets relating to the expansion project. Considering the significant changes in the market and economic environment in which ASI operates leading to decrease in demand and profitability in the glass substrate business, an impairment charge of US$72 million has been recognised. Impairment assessment of Aluminum operations in India is considered a significant issue considering decline in LME. The Committee reviewed the assumptions of LME and discount rate and stress tested for the delay in Refinery expansion by two years. Assets at Skorpion were put for impairment review considering the mine is approaching the end of life and slope failure in January, subsequent to which the mine and refinery were put into care and maintenance. The Committee was also informed that the impairment assessment approach and assumptions are consistent across all business segments. With the existence of sufficient headroom over carrying value of assets, including the sensitivity carried out under various scenarios, it was concluded that no impairment is required for copper existing operations in India, Aluminum operations of Vedanta Limited and assets at Skorpion.
Loss of Control over Konkola Copper Mines (KCM) (More information is provided in Note 3(e) to the financial statements)	On 21 May 2019, ZCCM Investments Holdings Plc (ZCCM), a company majority owned by the Government of Zambia, which owns 20.6% of the shares in KCM, filed a petition in the High Court of Zambia to wind up KCM (Petition) on 'just and equitable' grounds. ZCCM also obtained an ex parte order from the High Court of Zambia appointing a Provisional Liquidator (PL) of KCM pending the hearing of the Petition. On 11 June 2019, without any prior notice, ZCCM amended the Petition to include an additional ground for winding up KCM, based on allegations that KCM is unable to pay its debts. Consequent to the PL exercising almost all the functions of the Board of Directors, to the exclusion of the Board, the Committee agreed with the management conclusion on loss of control over KCM and its deconsolidation. The Committee reviewed the valuation carried out by an independent valuation expert and recognised the inherent estimation uncertainty in particular relating to the probability of success as well as percentage recovery.
Going Concern Basis of Accounting in Preparing the Financial Statements (More information is disclosed in Note 1(d) to the Financial Statements)	A detailed paper on going concern assessment, including sensitivity analysis and key assumptions used, was presented to the Audit Committee. The Committee discussed with management the risks, sensitivities and mitigations identified by management to ensure the Company has sufficient headroom to continue as a going concern. The Committee agreed with management that there is, however, material uncertainty in relation to this assessment, in relation to the Group and the Company.
Revenue Recognition across the business: ▪ Provisional pricing for sale of goods ▪ Oil & Gas revenue ▪ Power tariff with Grid Corporation of Odisha Limited (GRIDCO) ▪ Power Purchase Agreement with Punjab State Power Corporation Limited (PSPCL)	The Committee reviewed the process and compliance around the Group's revenue recognition policy and its consistent application. The Committee also sought management's view on revenue recognition principles. The Committee was satisfied that the cut-off procedures, transfer of risks and process followed for the pricing of goods were consistent and it concluded that these risks have been mitigated. The Committee reviewed the developments in the various disputes with GRIDCO and PSPCL. The receivables were reviewed for recoverability, together with revenue recognition in terms of the requirements of IFRS 15. The assessment was supported by the legal opinion from external legal counsel, wherever required. The Committee considered the revenue recognition and recoverability of receivables to be fairly stated in the financial statements.
Litigation, Environmental and Regulatory Risks (Additional information on these matters is disclosed in Note 33 to the Financial Statements)	A comprehensive legal paper was placed before the Committee for its consideration. The mitigating factors were discussed by the Committee with senior management. The Committee also reviewed the probable, possible and remote analysis carried out by management and disclosure of contingent liabilities in the financial statements. In all significant cases, management's assessment was supported by legal opinions from external legal counsel.
Taxation (Additional information on these matters is disclosed in Note 11 and Note 33 to the Financial Statements)	A comprehensive tax paper outlining taxation disputes in respect of withholding taxes following past acquisitions, eligibility of tax incentives and output taxes and other matters was placed before the Committee for its consideration. The Committee discussed these tax issues and reviewed the assessment of probable, possible and remote analysis and the process followed by management. The contingent liability disclosure was also reviewed by the Committee. In certain cases, views of tax experts supporting management's assessment was also provided to the Committee.
Recoverability of various tax balances (Refer Note 2(c) and Note11 to the Financial Statements)	The Committee reviewed the recoverability of deferred tax assets and other income tax receivables. The Committee also reviewed the MAT credit entitlement of US$481 million expected to be utilised in the fourteenth and fifteenth year (fifteen years from the year of origination being the maximum permitted carried forward period under the Statute). The Committee accepted management's assessment of the recoverability of these balances.
Disclosure of Special items (Refer Note 6 to the Financial Statements)	The Committee reviewed each of the items classified as special items and the related disclosures to ensure that the separate disclosure of these items in the financial statements was appropriate.

Qualification in Respect of Inventory Verification

The Group has a robust inventory verification process with all inventories being verified on a monthly basis under the presence of internal auditors and bulk inventory materials being verified by third party surveyors. Due to the enforcement from the Government of India of restrictions in response to COVID-19, EY could not perform the planned procedures surrounding the observation of physical counts of inventory in accordance with the UK International Standards on Auditing. However, for the purpose of the consolidated financial statements of Vedanta Limited (operating group of subsidiaries of the Company), subsequent to the Balance Sheet date, alternative procedures could be performed as a result of which under the Indian Auditing Standards, the clean audit opinion was issued on the consolidated financial statements of Vedanta Limited (there are no additional inventory items outside of the Vedanta Limited Group). However, as explained to the Company, these were not sufficient to satisfy the requirements under the UK International Standards on Auditing.

External Auditor

EY is the Company's external auditor. The Audit Committee reviews the external auditor's independence and assesses their ongoing effectiveness. The Audit Committee also determines the external auditor's remuneration on behalf of the Board and includes all the fees that the Company pays for audit, audit-related and non-audit services performed by EY.

Non-audit Services

The Group has a policy that governs the provision of non-audit services by the external auditor that specifies the services, which the external auditor is permitted to undertake. It also specifies non-audit services which EY is prohibited from undertaking in order to safeguard their objectivity as such services present a high risk of conflict and could undermine the external auditor's independence. The Audit Committee reviews the fees paid to the external auditor for non-audit services to ensure auditor independence is safeguarded. (A breakdown of the non-audit fees paid to EY is disclosed in Note 37 to the financial statements.)

DIRECTORS' REPORT

The Directors are pleased to present their annual report on the business of the Group, together with the financial statements and auditor's report, for the year ended 31 March 2020.

Information required by Schedule 7 of the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 as amended to be included in the Directors' Report but, which is instead included in the Strategic Report or elsewhere in the Annual Report, is set out in the table below.

Review of the business and future developments of the business of the Company	Strategic Report on Pages 2-89
Employment policies and employee involvement	Strategic Report on Pages 40-45

STRATEGIC REPORT

The Strategic Report has been prepared in accordance with the Companies Act, 2006 ('the Act') which requires the Company to set out a fair review of the business of the Group during the financial year, including an analysis of the position of the Group at the end of the financial year and the trends and factors likely to affect the future development, performance and position of the business. The Strategic Report on Pages 2 to 89 provides a comprehensive review of Vedanta's strategy, operations, its financial position and its business prospects, and is incorporated by reference into, and forms part of this Directors' report.

REVIEW OF BUSINESS AND FUTURE DEVELOPMENTS

Certain items that would ordinarily need to be included in this Directors' Report (including an indication of likely future developments in the business of the Company and the Group) have, as permitted, instead been discussed in the Strategic report. A review of the business and future developments of the Group is presented in the Strategic Report on Pages 2 to 89.

DIRECTORS' DECLARATION

The Directors' declaration on pages 104-105 is also incorporated into this Directors' report.

FORWARD LOOKING STATEMENTS

The Strategic Report and other sections of this Annual Report contain forward looking statements. By their nature, forward looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future and may be beyond the Company's ability to control or predict. Forward-looking statements and past performance are therefore not guarantees of future performance. The information contained in the Strategic Report has been prepared on the basis of information and knowledge available to the Directors at the date of preparation and the Company does not undertake to update or revise the content during the year ahead.

DIVIDENDS

The Directors are not recommending a final dividend for the year ended 31 March 2020. Two interim dividends; a first interim dividend of US cents 53.0 per ordinary share and second interim dividend of US cents 70.0 per ordinary share were paid on ordinary shares during the year. (2019: A final dividend of US cents 65 per ordinary share was paid for the year ended 31 March 2019.)

DIRECTORS

The Directors, as at the date of this Report, are Messrs Anil Agarwal, Navin Agarwal, Deepak Parekh, Geoffrey Green, Ravi Rajagopal and Edward T Story Jr. Detailed biographies for each of the Directors can be found on the Company's website at www.vedantaresources.com

The following directors resigned during the year or to the date of signing this Annual Report:

Ekaterina Zotova: 30 March 2020

Srinivasan Venkatakrishnan: 4 April 2020

Details of the remuneration of the Directors of the Company and service contracts are contained in the Directors' Remuneration Report on Pages 106-109.

DIRECTORS' AND OFFICERS' INDEMNITY

The Company had in place qualifying third party indemnity provisions for the benefit of its Directors and officers during the year, which remain in force as at the date of this report.

DIRECTORS' INDEMNITIES AND INSURANCE

Directors and Officers insurance cover is in place for all Directors to provide cover against certain acts or omissions on behalf of the Company.

A Deed of Indemnity was executed during the year ended 31 March 2020, indemnifying each of the Directors and the Company's Chief Financial Officer, in relation to certain losses and liabilities that they might incur in the course of acting on behalf of the Company. The Deed of Indemnity is a qualifying third-party indemnity provision as defined by Section 234 of the Companies Act, 2006 and at the date of this Report remains in force for those who were Directors of the Company during the year ended 31 March 2020.

The Deed of Indemnity and insurance cover would not provide any coverage in the event that a Director is proved to have acted fraudulently or dishonestly.

MATERIAL INTEREST IN SHARES

The shares of Vedanta Resources Limited are held by Volcan Investments Limited and its wholly owned subsidiary, Volcan Investments Cyprus Limited as follows:

Volcan Investments Limited: 187,488,092 shares – 65.73%

Volcan Investments Cyprus Limited: 97,758,606 shares – 34.27%

SHARE CAPITAL

As at 31 March 2020, the issued share capital of the Company was comprised of 285,246,698 ordinary shares of US$0.10 each and 50,000 deferred shares of £1 each.

RIGHTS AND OBLIGATIONS ATTACHING TO SHARES

The rights and obligations attaching to the ordinary and deferred shares are set out in the Articles. (Details of the issued share capital together with movements in the Company's issued share capital during the year are shown in Note 30 of the financial statements.)

Apart from the above, each ordinary share carries the right to one vote at general meetings of the Company. Holders of deferred shares are not entitled to attend, speak or vote at any general meeting of the Company, nor are they entitled to the payment of any dividend or to receive notice of general meetings.

Further details of the rights attaching to the deferred shares are set out in the Articles and summarised in Note 30 of the financial statements.

FINANCIAL INSTRUMENTS

An explanation of the Group's financial management objectives and policies, together with details of the Group's exposure to price risk, credit risk, liquidity and cash flow risk and foreign currency risk, appears in Note 25 to the financial statements.

BRANCHES

During the year and to the date of this report, the Company had opened a branch overseas, situated in Jharsuguda, Orissa, India.

EMPLOYEES

Information on the Group's employees and its policies with respect to employees can be found in the Sustainability Report section of the Strategic Report on Page 40. In summary, the Group's commitment to communication and dialogue with employees continues.

The existence of a Group-wide intranet enables engagement and communication with employees throughout the Group. It also helps management to share information, ideas and opportunities quickly and to achieve a common awareness on the part of all employees of the financial and economic factors affecting the performance of the Company. Employees have opportunities to voice their opinions and ask questions through the Group intranet and engage in question and answer sessions with the Executive Chairman.

SLAVERY AND HUMAN TRAFFICKING STATEMENT

The Group has published its slavery and human trafficking statement for the year ended 31 March 2020, in accordance with s54 of the Modern Slavery Act, 2015, which can be found on www.vedantaresources.com The statement outlines the steps taken by the Group to address the risk of slavery and human trafficking occurring within its operations and supply chains.

DIVERSITY AND INCLUSION POLICY

The Board has formalised its approach to diversity and inclusion with its approval of the Group's Diversity and Inclusion Policy. The policy reinforces the Group's commitment to promoting an inclusive environment, in which every member of its workforce feels valued and respected, with a zero tolerance of discrimination and harassment. While our commitment extends to embracing diversity in all its forms, including but not limited to, age, gender, ethnicity, abilities, sexual orientation and religious beliefs, the Group's is specifically focussing on improving the gender balance.

The objective of the Diversity and Inclusion Policy is to have a workforce which is representative of the countries and communities in which we operate and where every individual is valued, respected and empowered to utilise their different abilities and experiences to realise their full potential.

GENDER DIVERSITY

The Board is driving the efforts to address gender imbalances across the Group in a holistic way by addressing the barriers to female progression in a heavily male dominated industry. Our Group companies have adopted path breaking initiatives for redressing gender imbalance. We have well defined diversity hiring targets, as we hire from the market and premiere colleges across the globe. Our empanelled search firms are necessarily mandated to present diverse slates for staffing and recruitment. Internally, we ensure that the interview panels have the right diversity mix, ensuring fairness in our selection practices.

Every year, we recruit a large number of graduate engineer trainees, management trainees and associates for the Vedanta Leadership Development Programme, across the globe, at the entry level and we endeavour to appoint at least 50% female candidates through campus recruitment. This provides us a strong and solid base for developing future home-grown diverse leaders at Vedanta. During the year, 41.89% of the recruitment across the Group comprised of women, compared to 23.1% the previous year.

We also encourage the concept of 'second career opportunity' for women returning from sabbaticals and career breaks due to maternity or other family commitments. From time to time, hiring initiatives are launched, targeting this particular talent pool. Family friendly policies including enhanced maternity leave, paternity and adoption leave, benchmarked against global best practice, have been rolled out across our businesses in India, in excess of legal requirements and encourage the return of women to work.

Progress on measurable objectives

	FY2020	FY2019
Women in senior management	7.85%	6.51%
Women recruited during the year	41.89%	23.1%
Total full time female employees across the Group	10.93%	10.6%

POLITICAL DONATIONS

It is the Board's policy that neither the Company nor any of its subsidiary companies outside India may, under any circumstances, make donations or contributions to political organisations. Subsidiaries in India may make political donations or contributions as this is customary in India and permitted under local legislation. Any political donations made in India will be disclosed in the Company's Annual Report and Accounts.

The Company's subsidiary, Vedanta Limited purchased electoral bonds valued at US$16 million during the financial year ended 31 March 2020 (2019: US$10 million). Vedanta Limited also made contributions through an electoral trust valued at US$0.4 million during the year ended 31 March 2020 (2019 US$0.4 million).

GOING CONCERN

The Group has prepared the consolidated financial statements on a going concern basis. The Directors have considered a number of factors in concluding on their going concern assessment covering the period to 31 December 2021. They have taken note of the material uncertainties arising out of liquidity and covenant compliance considerations and the mitigating options available to the Group and Company to address them.

Notwithstanding the material uncertainties, the Directors have confidence in Group's ability to execute sufficient mitigating actions. The Directors have a reasonable expectation that the Group and Company will meet its commitments as they fall due over the going concern period. Accordingly, the Directors continue to adopt the going concern basis in preparing the Group's consolidated financial statements and Company's standalone financial statements.

For further information, please refer note 1(d) of the consolidated financial statements.

POST BALANCE SHEET EVENTS

- Following the year ended 31 March 2020, the Board approved the buyout of the minority interest in the shares of the Company's principal subsidiary, Vedanta Limited and the subsequent delisting of Vedanta Limited.
- As at 31 March 2020, the Group could not meet some of the covenant requirements of borrowings of US$3,248 million, presented under the current maturities of long-term borrowings. Subsequent to the balance sheet date, the Group has obtained a waiver on these covenant requirements for borrowings of US$2,574 million and is in the process of obtaining waivers for the rest of them.

Details of significant events since the balance sheet date are disclosed in Note 36 to the financial statements.

RESEARCH AND DEVELOPMENT

The Group's business units carry out research and development activities necessary to further their options.

AGREEMENTS: CHANGE OF CONTROL

There are a number of agreements that take effect, alter or terminate upon a change of control of the Company, (defined as a transfer of 35% shareholding) such as commercial contracts, bank loan agreements and capital market borrowing. The following are considered to be significant in terms of their likely impact on the business of the Group as a whole:

1. The US$670 million 8.25% bonds due 2021, US$1,000 million 6.375% bonds due in 2022, US$400 million 8% bonds due in 2023; US$500 million 7.125% bonds due in 2023, US$1,000 million 6.125% bonds due in 2024 and US$600million 9.25% bonds due in 2026, where a change of control together with a rating decline requires the Company to make an offer to purchase all of the outstanding bonds at 101% of the principal amount, together with any accrued and unpaid interest.
2. Under various other financing facilities entered into by the Group, where a change of control gives the majority lenders the right to declare the loans payable.

There are no agreements between the Company and any of its Directors or employees that provide for compensation for loss of office or employment that occurs because of a takeover bid.

GREENHOUSE GAS (GHG) EMISSIONS REPORTING

Climate risk is recognised as a global risk. Since the Paris Accord, significant efforts have been made by global communities to mitigate and adapt climate change impacts. Last year, at Vedanta, we formulated a Carbon Forum, under the leadership of our Power business head, to develop strategies and actions to manage climate related business risk. The forum is comprised of the chief operating officers of our businesses. The Group now has a Climate Related Risk Management Policy and Strategy in place. In addition to the Carbon Forum, climate related business risk is on the Group level risk register which enables us to review the progress made on climate related risk at the highest risk committee level of the organisation.

We calculate and report greenhouse gas inventory i.e. Scope 1 (process emissions and other direct emissions) and Scope 2 (purchased electricity) as defined under the World Business Council for Sustainable Development (WBCSD) and World Resource Institute (WRI) GHG protocols.

GHG Emissions (million TCO2e)	FY2020	FY2019	FY2018
Scope 1	57.45	55.12	51.1
Scope 2	1.81	3.51	1.2
Total	**59.26**	**58.63**	**52.3**

GHG Emissions (Tonnes of CO2)

	FY2020		FY2018	
Business	Scope 1	Scope 2	Scope 1	Scope 2
Zinc India	4,480,887	253,756	3,957,640	879,141
Zinc International	186,082	496,104	146,548	508,921
Oil & Gas	1,841,600	134,987	1,658,183	118,000
Iron Ore	1,750,789	762	1,951,258	265
Ports	Included in Iron Ore numbers		376	6,248
Copper India & Australia	119	1,152	30,571	48,600
Copper Zambia	-	-	155,840	4683
Aluminium	34,658,486	804,257	33,166,782	2,655,128
Power	11,804,528	2,775	13,342,185	777
Steel	2,719,295	113,155	3,795,249	-
Total	**57,441,787**	**1,806,948**	**58,204,632**	**4,221,764**

The GHG intensity ratio below expresses Vedanta's annual GHG emissions in relation to the Group's consolidated revenue.

GHG Intensity Ratio (Tonnes of CO2/Mn US$)

Business	FY2020	FY2019
Zinc India	1,847	1,637
Zinc International	1,547	1,672
Oil & Gas	1,106	939
Iron Ore	3,582	4,691
Ports	-	179
Copper India & Australia	1	52
Copper Zambia	-	148
Aluminium	9,454	8,564
Power	14,277	14,286
Steel	4,689	6,325
Consolidated Group	**5,025**	**4,449**

DISCLOSURE OF INFORMATION TO AUDITORS

In accordance with Section 418 of the Act, each Director who held office at the date of approval of this Directors' Report confirms that:

- so far as he/she is aware, there is no relevant audit information of which the Company's auditor is unaware; and
- he/she has taken all the steps that he/she ought to have taken as a Director to make himself/herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

STATEMENT OF DIRECTORS' RESPONSIBILITIES IN RESPECT OF THE STRATEGIC REPORT, DIRECTORS' REPORT AND FINANCIAL STATEMENTS

The Directors are responsible for preparing the Strategic Report, Directors' Report and the financial statements in accordance with UK law and regulations.

The Directors are required by the UK Companies Act, 2006 to prepare financial statements for each financial year that give a true and fair view of the financial position of the Group and the parent company and the financial performance and cash flows of the Group and parent Company for that period. Under that law they have elected to prepare the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) and applicable law and have elected to prepare the parent company financial statements in accordance with applicable United Kingdom law and United Kingdom accounting standards (United Kingdom generally accepted accounting practice), including FRS 101 'Reduced Disclosure Framework').

Under company law, the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs and of the profit or loss of the Group and Company for that period.

In preparing the parent company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether Financial Reporting Standard 101 'Reduced Disclosure Framework' has been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

In preparing the Group financial statements, IAS 1 requires that the Directors to:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the Group's financial position and financial performance; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and parent company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and parent company and enable them to ensure that the financial statements comply with the Companies Act, 2006. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Having made the requisite enquiries, so far as the Directors are aware, there is no relevant audit information (as defined by Section 418(3) of the Companies Act, 2006) of which the Company's auditors are unaware, and the Directors have taken all the steps they ought to have taken to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

The Directors are also responsible for preparing a Strategic Report and Directors' Report that comply with that law and those regulations. The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The Directors confirm that to the best of their knowledge:

- The consolidated financial statements, prepared in accordance with IFRS as adopted by the EU and in accordance with the provisions of the Companies Act, 2006, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group.
- The parent company financial statements, prepared in accordance with United Kingdom generally accepted accounting practice, give a true and fair view of the assets, liabilities and financial position of the Company.
- The Annual Report and Financial Statements, including the Strategic Report and Directors' Report, includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties that they face.

Signed on behalf of the Board,

Deepak Kumar
Company Secretary
Vedanta Resources Limited
Registered No: 4740415

REMUNERATION COMMITTEE REPORT

On behalf of the Board, I am pleased to present the Directors' Remuneration Report for the year ended 31 March 2020.

Srinivasan Venkatakrishnan joined the Company as Chief Executive Officer and a member of the Board on 31 August 2018, and has resigned from the position of Whole-Time Director & CEO w.e.f. close of business hours on 05 April 2020.

During the year, the Remuneration Committee took up various matters pertaining to the remuneration of the Executive Directors of the Company, which included determining the remuneration for the year 2019-20, approving the annual bonus to be paid to the executives and the long-term incentive design and grant of awards.

The Annual Report on Remuneration, which provides details of the remuneration earned by Directors in the past financial year has been produced in the relevant sections of the report.

Yours sincerely,

Geoffrey Green
Chairman of the Remuneration Committee

DIRECTORS' REMUNERATION POLICY REPORT

POLICY OVERVIEW

The key objective of the Group's broad remuneration policy is to ensure that competitive and fair awards are linked to key deliverables and are also aligned with market practice and investor expectations.

The Committee ensures that remuneration policies and practices are designed to attract, retain and motivate the Executive Directors and the senior management group, while focusing on the delivery of the Group's strategic and business objectives. The Committee is also focused on aligning the interests of the Executive Directors and the senior management group with the strategic goals of the company and the interest of the investors to build a sustainable performance culture.

When setting remuneration for the Executive Directors, the Committee considers the business performance, developments in the natural resources sector and, considering that the majority of the Group's operations are based in India, similar information for high-performing Indian companies.

In setting the policy for Executive Directors' remuneration, the Committee considers the pay and employment conditions across the Group, including annual base compensation increases across the general employee population and the overall spend on annual bonuses. Employees may be eligible to participate in the annual bonus arrangement and receive cash-based awards under the long term incentive plan provided by the Company's subsidiary, Vedanta Limited. Opportunities and performance metrics may vary by employee level, with specific business metrics incorporated, where possible.

The Committee does not formally consult with employees in respect of the design of the Executive Directors' Remuneration Policy, although the Committee will keep this under review.

There is a formal remuneration policy, which details the various elements of pay, performance measures and their linkage to objective and the maximum opportunity of each element for the Executive Directors.

A summary of remuneration policy for Directors is available on request from the Company Secretary.

SERVICE CONTRACTS FOR EXECUTIVE DIRECTORS

The Committee reviews the contractual terms for new Executive Directors to ensure these reflect best practice.

Mr Anil Agarwal is employed under a contract of employment with the Company for a rolling-term, but which may be terminated by not less than six months' notice. Provision is made in Mr Anil Agarwal's contract for payment to be made in lieu of notice on termination, which is equal to the base compensation.

Mr Navin Agarwal has a letter of appointment with the Company, which is a rolling contract and may be terminated by giving six months' notice. Mr Navin Agarwal has a contract of employment with Vedanta Limited, which expires on 31 July 2023, with a notice period of three months or base compensation in lieu thereof.

LETTERS OF APPOINTMENT FOR NON-EXECUTIVE DIRECTORS

The Non-Executive Directors have letters of appointment, which may be terminated by either party, giving three months' notice. The Non-Executive Directors' letters of appointment set out the time requirements expected of them in the performance of their duties. Non-Executive Directors are normally expected to spend at least 20 days per year in the performance of their duties for the Company. There is no provision in the letters of appointment of the Non-Executive Directors for compensation to be paid in the event of early termination.

ANNUAL REPORT ON REMUNERATION

MEMBERSHIP OF THE REMUNERATION COMMITTEE

The members of the Remuneration Committee who served during the year, all of whom are independent Non-Executive Directors, are as follows:

- Geoffrey Green (Chair)
- Deepak Parekh
- Katya Zotova (She stepped down from the Board on 31 March 2020.)

SUMMARY OF THE REMUNERATION COMMITTEE'S ACTIVITIES DURING THE YEAR

- Approval of Director Annual Salary increases and bonus pay-out
- Approval of Long-Term Incentive Plan Design and Awards for the Financial Year 2020

The committee's responsibilities are set out in its terms of reference, which are available on the Company's website at www.vedantaresources.com or on request from the Company Secretary.

The Committee has access to the remuneration advisor, as and when the advice is needed.

SINGLE TOTAL FIGURE FOR REMUNERATION

The table below summarises Directors' remuneration received during the year ended 31 March 2020 and the prior year, for comparison.

		Base compensation including salary or fees £000	Taxable Benefits £000	Pension £000	Annual bonus £000[8]	Long-term incentives £000[9]	Total
Executive Directors							
Anil Agarwal[1]	2019/20	1,656	7		988	-	2,651
	2018/19	1,656	112		1,016	1670	4,454
Navin Agarwal[2,3,]	2019/20	1,189	98	65	646	-	1,998
	2018/19	1,080	206	153	652	833	2,924
Srinivasan Venkatakrishnan[4,5,7]	2019/20	1,000	115	250	232	-	1,597
	2018/19	587	64	146	-	-	787
Non-Executive Directors[6]							
Geoffrey Green	2019/20	115					115
	2018/19	115					115
Ed Story	2019/20	95					95
	2018/19	95					95
Deepak Parekh	2019/20	133					133
	2018/19	133					133
Katya Zotova	2019/20	123					123
	2018/19	123					123
Ravi Rajagopal	2019/20	115					115
	2018/19	115					115

NOTES

1. Mr Anil Agarwal's taxable benefits in kind include provision of medical benefits in 2019-20; In 2018-19, taxable benefits in kind included provision of medical benefits; car and fuel in the UK for business purposes

2. Mr Navin Agarwal is based out of India and is drawing the majority of his remuneration in INR. For the financial year ended 31 March 2020, Mr Navin Agarwal received a Vedanta Limited salary of ₹1,70,617,952, Vedanta Resources Limited fees of £85,000, Hindustan Zinc Limited fees of ₹250,000 & Commission of ₹1,500,000. Additionally, Mr. Navin Agarwal has been paid gratuity amounting to ₹7,06,65,923 and leave encashment amounting to ₹1,25,20,955 during the year upon attaining the age of 58 as per company policy.

3. Mr Navin Agarwal's taxable benefits in kind include housing and related benefits and use of a car and driver.

4. Mr Srinivasan Venkatakrishnan's taxable benefits in kind include housing and related benefits, and medical benefits in UK. Also, 80% of the remuneration mentioned above was charged in the form of reimbursements to Vedanta Limited for the discharge of his responsibilities for Vedanta Limited.

5. In addition to the above remuneration paid to Srinivasan Venkatakrishnan the company also paid GBP387,520 and GBP669,510 as part of Buy-out awards under Deferred Cash Bonus and Long-Term Incentive Plan awards respectively which were forfeited by his previous employer at the time of leaving. This was part of the contract terms as approved by the committee at the time of joining.

6. Non-Executive Directors are reimbursed for expenses incurred while on Company business. No other benefits are provided to Non-Executive Directors.

7. All of the Group's pension schemes are based on cash contribution and do not confirm an entitlement to a defined benefit. Pension contributions are made into the Executive Vice Chairman and the Chief Executive Officer's personal pension schemes (or local provident fund) and will become payable on the retirement, normally at age 58. The Executive Chairman does not receive pension benefits.

8. Amounts shown in the table relate to the payment of the annual bonus made to the Executive Directors during the year relating to FY 2018-19. There is no Annual Bonus for FY2020 for Executive Directors.

9. The amount shown here pertains to Performance Share Plan (PSP) 2015 and PSP 2016, which came to an early closure on 3 September 2018 owing to delisting of Vedanta Resources Plc.

10. NIC Contribution as per the statutory requirement is made for all Executive and Non-Executive Directors.

11. The exchange rate applicable as at 31 March 2019 was Rs.91.7384 to £1 & US$1.3126 to £1 and at 31 March 2020 was Rs.90.1024 to £1 & US$1.2715 to £1

EXTERNAL APPOINTMENTS

The Board's policy on external appointments is that an Executive Director may, only with the prior approval of the Board, accept an appointment external to the Group.

None of the other Executive Directors currently receive fees for non-executive appointments with other companies.

PAYMENTS TO PAST DIRECTORS

No payments were made to past Executive Directors during the year ended 31 March 2020

PAYMENTS FOR LOSS OF OFFICE

No payments were made in respect of loss of office during the year ended 31 March 2020.

NON-EXECUTIVE DIRECTORS' FEES

As detailed in the Remuneration Policy, fees for the Non-Executive Directors are determined by the Board, based on the significant travel and time commitments, the risk profile of the Company and market practice for similar roles in international mining groups. A summary of the current fees is as follows:

Business	2018-19 £000	2019-20 £000
Board membership		
Non-Executive Director	85	85
Senior Independent Non-Executive Director	20	20
Committee membership		
Audit Committee Chairman	20	20
Remuneration Committee Chairman	20	20
Nominations Committee Chairman	-	-
Sustainability Committee Chairman	20	20
Member of Audit Committee	10	10
Member of Remuneration Committee	10	10
Member of Nominations Committee	7.5	7.5
Member of Sustainability Committee	10	10

APPROVAL OF THE DIRECTORS' REMUNERATION REPORT

The Directors' Remuneration Report, including both, the Directors' Remuneration Policy Report and the Annual Report on Remuneration, was approved by the Board on <<Date>>

Geoffrey Green
Chairman of the Remuneration Committee

INDEPENDENT AUDITOR'S **REPORT**

To the members of Vedanta Resources Limited

QUALIFIED OPINION

In our opinion, except for the possible effects of the matter described in the basis for qualified opinion section of our report:

- Vedanta Resources Limited's Group financial statements and parent company financial statements (the "financial statements") give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 March 2020 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act, 2006.

We have audited the financial statements of Vedanta Resources Limited which comprise:

Group	Parent company
the Consolidated Income Statement;	the Company Balance Sheet;
the Consolidated Statement of Comprehensive Income;	the Company Statement of Changes in Equity; and
the Consolidated Statement of Financial Position;	the related notes 1 to 13 to the Company financial statements, including a summary of significant accounting policies.
the Consolidated Cash Flow Statement;	
the Consolidated Statement of Changes in Equity; and	
Related notes 1 to 40 to the financial statements, including a summary of significant accounting policies	

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

BASIS FOR QUALIFIED OPINION

Due to the enforcement from the Government of India of restrictions in response to COVID-19, EY have been prevented from performing our planned procedures surrounding the observation of physical counts of inventory. We have been unable to satisfy ourselves through alternative audit procedures under UK International Standards on Auditing (UK) (ISAs (UK)) as to the accuracy of the inventory quantities held at 31 March 2020 within India, which are included in the Statement of Financial Position at $1,383 million of the total of $1,515 million. Consequently, we were unable to determine whether any adjustment to this amount was necessary. In addition, were any adjustment to the inventory balance to be required, the strategic report would also need to be amended.

We conducted our audit in accordance with ISAs (UK) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report below. We are independent of the Group and parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion.

MATERIAL UNCERTAINTY RELATING TO GOING CONCERN

We draw attention to note 1(d) 'Going Concern' in the financial statements, which indicates that the ability of the Group and Company to continue as a going concern is subject to a number of material uncertainties that may cast significant doubt on the Company's ability to continue as a going concern.

In the 21-month period to 31 December 2021, the Group has scheduled debt repayments of c.$6.6 billion, of which c.$2.2 billion are repayments to be made by the Company. In a plausible downside case, the Company, prior to receipt or payment of dividends, will have a funding shortfall that may be in the order of $2.5 billion in the period to 31 December 2021. In such a scenario, the rest of the Group will not be able fully to support the Company without access to the mitigating actions described below.

In addition, the Group is subject to certain restrictive financial covenants on its loan agreements and bonds. The Group has secured the necessary covenant waivers and relaxations to remediate breaches on a covenant at 31 March 2020 and any future potential breaches up to and including 31 March 2021. In a plausible downside case, the Group may require certain further covenant waivers or relaxations for loans for the period subsequent to 31 March 2021.

In the base case and plausible downside case forecasts, on which the Group's going concern conclusions are based, dividends of $150 million that would be paid to the Company's parent entities have been included. No further dividends are forecast within the going concern period. Any such dividends would not be paid, unless it were determined that, at a minimum, there were available legally distributable reserves, borrowings and other undertakings (including the necessary covenant waivers and other relaxations noted above) were not placed at risk and the going concern conclusion were not affected.

The Group and Company's ability to remain a going concern will therefore be dependent on its ability successfully to execute a number of mitigating actions as set out in note 1(d). Material uncertainties arise from the liquidity and covenant compliance matters described above, which are subject to the mitigations below:

- Whether the Group is able to execute and draw down term loans amounting to a total of $1.6 billion at Vedanta Limited level, for which the Group has secured sanction letters to date covering $0.9 billion from the relevant banks.
- Whether the Group receives, as necessary, additional covenant waivers and/or relaxations in relation to covenants not already waived or relaxed for the period from 31 March 2021 to 31 December 2021.
- Whether the Group is able to roll-over its short-term financing facilities, including commercial papers, working capital facilities, customer advances and supplier credit.
- Provision of an additional intercompany loan from an operating subsidiary of the Group to the Company.
- Execution of an off-take agreement with one or more third parties, including an advance payment for the Group's future production.
- The severity of the impact of the COVID-19 pandemic on the Group's expected future cash flows, resulting from the global policy response thereto and the associated economic impacts.

Our opinion is not modified in respect of these matters.

We describe below how our audit responded to the risk relating to going concern:

- The audit engagement partner increased his time directing and supervising the audit procedures on going concern.
- We engaged experienced internal restructuring specialists to support us in carrying out our going concern audit procedures. In particular, our restructuring specialists provided advice on the appropriateness of the assumptions and the reasonableness of the mitigations contained in management's forecasts, considering the Group's structure and the potential of its operating subsidiaries to pay dividends up the group. We also obtained detailed insights and feedback from our specialists in calibrating our own additional stress-testing of management's conservative case to reflect plausible downside scenarios to trading and other sensitive inputs, including the Group's levels of customer advances and supplier credit.
- We engaged specialists from EY Valuations and Business Modelling to provide assurance on the mathematical accuracy and integrity of management's models.
- Our audit procedures focussed on management's forecasting process and the key assumptions used in the Directors' assessment and cash flow model, including timing and quantum of upcoming debt maturities, dividend upstreaming, production profiles, commodity prices and operating costs.
- We agreed the debt facilities and arrangements available to the Group to underlying agreements and obtained external confirmation from debt providers for outstanding loan balances and the granting of waivers.
- For facilities under negotiation (and therefore substantially outside of management's control), we reviewed term sheets, draft agreements and other relevant documentation to establish the status of negotiations and expected terms.
- In assessing the potential for operating subsidiaries to upstream dividends, we considered the availability of cash and distributable reserves within those entities, as well as cash leakage to minority shareholders. We evaluated the ability of the Company to enforce dividend upstreaming and took into account in our analysis regulatory restrictions on intercompany loans to the Company, where applicable.
- We assessed the reasonableness of management's production profiles, by considering historic trends, recent production, capital expenditure (or deferral thereof), shutdowns, planned maintenance and the detailed insights of our local component audit teams.
- We verified that management's forecast commodity prices were aligned with the most recent market consensus, incorporating the impact on prices observed as a consequence of COVID-19. We applied our own additional trading sensitivities to management's conservative case, based on our evaluation of plausible downside risks, and considered the results in reaching our conclusion on going concern.
- We recalculated the Group's performance against financial covenants as at 31 March 2020 to ensure that covenant testing had been performed correctly in accordance with the Group's agreements with debtholders. We also recalculated the Group's forecast future performance under multiple scenarios to determine whether it would have headroom under its financial covenants at all covenant testing dates in the period to December 2021.

- We reviewed the disclosures made in the Annual Report and Accounts, as highlighted in the above section of our opinion covering going concern.

OVERVIEW OF OUR AUDIT APPROACH

Key audit matters	▪ Valuation of Konkola Copper Mines Plc (KCM) ▪ Production Sharing Contract (PSC) extension for the Rajasthan block ▪ Recoverability of property, plant & equipment and exploration & evaluation assets ▪ Management override of controls in relation to revenue recognition ▪ Claims and exposures relating to taxation and litigation ▪ Undisclosed related party transactions
Audit scope	▪ We performed an audit of the complete financial information of nine components and audit procedures on specific balances for a further six components. ▪ The components where we performed full or specific audit procedures accounted for 97% of EBITDA, 92% of revenue and 98% of total assets.
Materiality	▪ Overall Group materiality of $55 million which represents approximately 2% of EBITDA.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit, and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matters described in the basis for qualified opinion section and in the material uncertainty relating to going concern section above, we have determined the matters described below to be the key audit matters to be communicated in our report.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Valuation of Konkola Copper Mines Plc (KCM) Refer to the Audit Committee Report (page 98); Accounting policies (Page 157); and Note 3(e) of the Consolidated Financial Statements (page 159) As at 31 March 2020, the carrying value of KCM related receivables was $660 million (2019: $Nil) and the equity interest in KCM was $Nil (2019: $266 million) The Group has recognised a fair value loss of $771 million in respect of the receivables and the equity interest. We draw attention to note 3(e) of the accompanying IFRS financial statements which describes the uncertainty arising in respect of the valuation of KCM related receivables and equity interest, as a result of the liquidation proceedings initiated by KCM's minority shareholder ZCCM Investments Holdings Plc ("ZCCM"), against KCM. Our opinion is not modified in respect of this matter. In May 2019, the Group lost control over KCM after the appointment of a provisional liquidator following ZCCM's winding up petition. The valuation of KCM has been identified as a key audit matter due to the high level of estimation uncertainty involved when assessing the fair value of receivables and equity interests. There is uncertainty associated with the outcome and timings of the legal proceedings, as well as the counterparties' ability to make payment. An external specialist was engaged by management to carry out the fair value assessment. Due to the subjectivity and materiality of the amounts involved we have designated this as a key audit matter.	The audit procedures in relation to the fair value assessment of the equity interest and the recoverability of KCM receivables has been performed at a Group level by the Group team. **The procedures performed to address this key audit matter include:** ▪ We have obtained an understanding of the liquidation proceedings through enquiries with VRL management, VRL internal and external legal counsel. ▪ We enquired of external legal counsel to evaluate the likelihood of KCM's success in the legal proceedings. Together with the assistance of our internal valuation specialists, we considered if the legal counsel's assessment has been appropriately factored into the external specialist's valuation. ▪ We obtained a legal letter directly from the external legal counsel supporting their assessment of the matter. ▪ We evaluated the independence, objectivity and competence of the external valuation specialist and external legal counsel. ▪ We, together with our EY internal valuation specialists, critically examined the scope of work of the external valuation specialist. ▪ We, performed procedures to assess the reasonableness of the key assumptions and inputs used in the external specialists fair value assessment, through comparison with the prior year impairment model and mine plan. ▪ We engaged EY internal valuation specialists to consider the appropriateness of the methodology adopted by the external specialists. ▪ Our EY internal valuation specialists compared the key assumptions used to expectations, such as discount rate, COVID-19 impact, commodity price, the probability of the licence renewal, the weighted probability of litigation outcome and including key risks such as the enforceability of a successful claim and the uncertainty over the timing and outcome of the legal proceedings. ▪ We have audited the relevant disclosures in the financial statements and in particular whether those disclosures adequately described the uncertainties in relation to fair value of these assets.	Based on the evidence obtained and the audit procedures performed by both the audit team and internal valuation specialists, we conclude that the fair value determined is reasonable and the uncertainties surrounding the valuation are appropriately disclosed in the financial statements.
Production Sharing Contract (PSC) extension for the Rajasthan block Refer to the Audit Committee Report (page 98); and Note 2(c)(viii) of the Consolidated Financial Statements (page 154) We draw attention to note 2(c)(viii) of the accompanying IFRS financial statements which describes the circumstances in respect of the extension of the Production Sharing Contract for the Rajasthan oil block following the demands that have been raised to the Group. Our opinion is not modified in respect of this matter. The Production Sharing Contract (PSC) for the Rajasthan block expired on 14 May 2020. The Company received a letter from the Government of India granting the extension of the PSC for 10 years, subject to the resolution of audit exceptions identified by the Directorate General of Hydrocarbons (DGH). Management has concluded, based on the facts and circumstances, including court rulings, that the PSC has in effect been extended. Were the PSC not to be extended it would have a significant and pervasive impact on the Group financial statements. Due to continued uncertainty surrounding the licence extension we have considered this as a key audit matter.	**The procedures performed to address this key audit matter include:** ▪ We have read the original PSC agreement, as well as the PSC letter, which grants the Group an additional ten year extension, subject to certain conditions being met; ▪ We have inspected the high court ruling on the matter which granted the Group a ten year PSC extension; ▪ We have inspected documentation which informed management's assessment of the likelihood of the PSC extension being granted and the likelihood of any amount being paid as a result of the DGH demands; ▪ We have examined the communications between the Group and DGH/Ministry of petroleum and natural gas in relation to the audit exceptions; ▪ We have inspected the initial approval of costs by the Government of India pertaining to the DGH dispute demands; ▪ We have considered the adequacy of the relevant disclosures made within the financial statements to ensure that they appropriately reflect the Group's conclusion and relevant facts and circumstances.	Based on the evidence obtained and the audit procedures performed we are satisfied with the current accounting treatment and relevant disclosures adopted by the Group with respect to the PSC extension.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Recoverability of property, plant & equipment and exploration & evaluation assets Refer to the Audit Committee Report (pages 98-99); Accounting policies 2(a) (page 132) and 2(c) (page 151); and Note 6 of the Consolidated Financial Statements (page 168) The carrying value of property, plant and equipment ("PP&E") as at 31 March 2020 was $13,245 million (2019: $17,726 million) which includes Evaluation and Exploration ("E&E") assets amounting to $240 million (2019: $404 million). The associated DD&A charge in the year to 31 March 2020 was $1,412 million (2019: $1,380 million) and the impairment charge for the year ended 31 March 2020 was $2,072 million (2019: Nil) The recoverability of PP&E and E&E assets has been identified as a key audit matter due to: ▪ The significance of the carrying value of the assets being assessed. ▪ The size of recent impairment charges. ▪ The challenges in respect of the Group's licence to operate in certain jurisdictions. ▪ The complexity and significant judgement involved in auditing the inputs used specifically for the Group's estimation of reserves and resources at its Oil & Gas division. ▪ Our assessment that the recoverable amount of the Group's Cash Generating Units ("CGUs") involves significant judgements about the future cash flow forecasts, accentuated by commodity price volatility, and the discount rate applied. We focussed our efforts on those CGU's with impairment indicators. The key judgements centred on forecast production profiles/volumes, prices and discount rate assumptions. Indicators of impairment were identified in specific CGUs within the Oil & Gas, Copper, Aluminium & Power, Steel, Zinc International, BALCO and ASI divisions. However impairments were only recognised in the businesses mentioned as per note 6 of the financial statements.	These procedures were performed by the Group and component audit teams. The group team ensured consistency of approach and provided the Macroeconomic assumptions and provided oversight of the location-specific insights provided by component teams. **The procedures performed to address recoverability of property, plant & equipment and exploration & evaluation assets include:** ▪ We have obtained an understanding of the controls over the Group's impairment process. We then evaluated the design of these controls. ▪ Critically assessed through an analysis of internal and external factors impacting the entity, whether there were any indicators of impairment (or reversal of impairment) in line with IAS 36 for PP&E and IFRS 6 for E&E assets across the Group. ▪ Specifically, in relation to the CGUs where impairment indicators were identified, we have obtained and evaluated the valuation models used to determine the recoverable amount by challenging the key assumptions used by management including: ▪ Testing the integrity of the models together with their clerical accuracy. ▪ Compared forecasted volumes in relation to asset development plans. ▪ Critically assessing management's forecasting accuracy by comparing prior year forecasts to actual results and assessing the potential impact of any variances. ▪ Corroborating the price assumptions used in the models against external source data such as analyst consensus. ▪ Testing the appropriateness of the weighted average cost of capital used to discount the impairment models through engaging our internal valuations specialists. ▪ We have considered the adequacy of the related disclosures in the financial statements to ensure that they meet the requirements as per IAS 36. **The procedures performed to address the estimation of reserves include:** ▪ We have obtained an understanding of the controls over the Group's reserves estimation process. We then evaluated the design of these controls. ▪ We evaluated the professional qualifications and objectivity of both the Group's internal specialist engineers and the external specialists engaged to provide an independent reserves valuation. We also evaluated the independence of the external specialist.	Based on the evidence obtained and the audit procedures performed we consider that the impairment charge is fairly stated and that there are no further material impairments or impairment reversals in the Group. Based on the testing performed, we have not identified any significant errors in the oil and gas reserves estimates and concluded that the inputs and assumptions used to estimate proved reserves were reasonable. We conclude that the related disclosures as per IAS 36 and IFRS 6 are appropriately presented in the financial statements.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Estimation of Reserves and Resources (Vedanta Limited Oil and Gas division) Auditing the estimation of reserves and resources is complex as there is significant estimation uncertainty in assessing the quantities of the Group's Oil and Gas reserves and resources. The Group relies on the work of internal and external specialists, whose modelling takes into account a number of inputs, including initial estimates of reserves and resources, subsequent production curves, production costs and prices. Judgement is required to assess the appropriateness of the estimates used.	▪ Our internal reserve specialist ensured our audit approach was appropriate by evaluating the design of our procedures and participating in the meeting with management external specialists. ▪ We evaluated the completeness and accuracy of the inputs used in estimating the economic limit test for reserves determination by agreeing the inputs to source documentation. ▪ We compared the production profiles used in the impairment calculation to the external reserve reports. ▪ We compared the reserve estimations calculated by the Group to those provided by the independent external reserves specialist and reviewed significant discrepancies. We performed audit procedures over this risk area in twelve components (full and specific scope), which covered 98% of the risk amount.	
Management Override of controls in relation to revenue recognition For the year ended 31 March 2020 the Group recognised total revenue of $11,790 million (2019: $13,006 million). Revenue recognition has been identified as a key audit matter due to the diverse and complex revenue streams across the Group. We have identified the following key areas for consideration: ▪ Complex calculation of power tariff agreements with Grid Corporation of Odisha Limited ("GRIDCO") and Punjab State Power Corporation Limited ("PSPCL"). ▪ Complexity associated with the calculation of profit petroleum within the Vedanta Limited Oil and Gas division. ▪ Cut-off: the variety of terms that define when title, risk and rewards are transferred to the customer, as well as the high value of the transactions, give rise to the risk that revenue is not recognised in the correct period. ▪ Measurement: at the end of each reporting period there are a number of contracts that are either provisionally priced or subject to hedging arrangements through forward contracts. These calculations are based on estimations and susceptible to potential manipulation. The level of risk has remained consistent with the prior year.	We performed our audit procedures across the Group's revenue streams considering the revenue recognition policies. Our procedures were performed mainly by the component teams under the direction and supervision of the Group audit engagement team. **The procedures performed to address this key audit matter include:** ▪ Performed walkthroughs of the revenue recognition processes at each of the nine full and two specific scope components and considered the design effectiveness of key controls. ▪ For the components referred to above, tested the controls, including IT controls, over the revenue recognition process to confirm operating effectiveness. ▪ Inspected the term of all the agreements to assess the reasonability of the inputs used in the calculation of the power tariff in respect of the revenue recognised for GRIDCO and PSPCL. ▪ Inspected the terms of all the Vedanta Oil and Gas profit sharing agreements and tested the underlying cost recovery and profit petroleum calculation used by management by comparing to the terms of the agreements. ▪ Selected a sample of sales across the Group made pre and post year-end, agreeing the date of revenue recognition to third party support, such as bills of lading, to confirm sales are recognised according to contract conditions. ▪ Examined invoice samples with different shipping terms to ensure that revenue has been recognised appropriately, both pre and post year end.	Based on the on the evidence obtained and the audit procedures performed we consider revenue to be fairly stated in the financial statements and appropriate disclosures made in accordance with IFRS 15.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
	▪ Re-calculated the provisional pricing adjustments and validated the prices used to third party data. ▪ On a sample basis we recalculated sales revenues to ensure recognition is in accordance with the contract terms and rates, Group accounting manual and IFRS 15. For the zinc and lead price forwards taken out during the year we tested any resulting realised and unrealised loss, including the agreement of market forward rates used in determining the unrealised fair value loss at year end. ▪ We have considered the adequacy of the related disclosures in the financial statements to ensure that they are in accordance with IFRS 15. We performed audit procedures over this risk area in eight full scope and one specific scope components, where revenue was present, covering 92% of the revenue balance impacted by this risk.	
Claims and exposures relating to taxation and litigation Refer to the Audit Committee Report (pages 98-99); Accounting policies Note 2(a)(xviii) page 157; and Note 11 and 33 of the Consolidated Financial Statements The Group has disclosed in note 33 contingent liabilities related to tax and legal claims amounting to $3,225 million (2019: $2,914 million) of which $2,253 million (2019: $1,827 million) relates to tax cases. Taxation and litigation exposures have been identified as a key audit matter due to the large number of complex tax and legal claims across the Group, particularly in relation to the operations located in India. There is significant judgement required by management in assessing the exposure of each case, and thus a risk exists that such cases may not be adequately provided for or disclosed appropriately. There have been no significant developments during the current year regarding the ongoing tax litigations that are present within the Group. However, the Group's accounting treatment for tax exposures reflects the introduction of IFRIC 23 in the current year. We consider this risk a key audit matter because of the potential quantitative impact on the financial statements from the Group's exposures. Additionally, the treatment of taxation and litigation cases requires significant judgement due to the complexity of the cases, timescales for resolution and the need to negotiate with various authorities and other parties. The level of risk has remained consistent with the prior year.	Our procedures were performed centrally where cases impacted a number of components. For location specific issues, component teams undertook the majority of the procedures under the direction and supervision of the Group audit engagement team. **The procedures performed to address this key audit matter include:** ▪ Obtained the Group legal and tax summary and critically assessed management's position through discussions with those responsible for legal matters, tax and operational management, regarding both the probability of success in significant cases and the magnitude of any potential loss. ▪ Inspected external legal opinions (where considered necessary) and other evidence such as latest correspondence to corroborate management's assessment of the risk profile in respect of legal claims. ▪ Engaged internal tax specialists to appraise technically the tax positions taken by management with respect to local tax issues. ▪ Using our internal tax specialists ensured that management's assessment was consistent across the Group for similar cases, or that differences in positions were adequately justified. ▪ Considered the relevant disclosures made within the financial statements to ensure they appropriately reflect the facts and circumstances of the respective tax and legal exposures, and are in accordance with the requirements of IAS 37. We performed audit procedures over this risk area in nine full scope and two specific scope components, which covered 96.5% of the risk amount.	Based on the on the evidence obtained and the audit procedures performed we are satisfied that the accounting treatment in respect of potential tax exposures and legal cases is appropriate. We conclude that the related disclosures are appropriately presented in the financial statements.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Undisclosed related party transactions Refer Note 35 of the Consolidated Financial Statements (page 222) The Group's complex and decentralised structure and single controlling party give rise to the risk that related party transactions are not appropriately identified and/or disclosed, in accordance with IAS 24. The challenges facing the Group, including its limited headroom on debt covenants, and the difficult economic environment heighten the risk that related party transactions are executed, but not identified and/or disclosed. Judgement is required in establishing parameters to identify potentially unidentified related party transactions. In addition, we invested significant time and resources in customising audit procedures and utilising data analytics to verify the completeness and accuracy of the Group's related party disclosures. Based on this, we have determined the risk of undisclosed related party transactions to be a key audit matter.	These procedures were performed by the Group and component audit teams. **The procedures performed to address this key audit matter include:** ▪ We obtained an understanding of management's processes and controls for identifying related party transactions and evaluated the effectiveness of the control environment. ▪ We inspected bank and legal confirmations and minutes of board meetings to identify any undisclosed related parties and/or related party transactions. ▪ We inspected significant contracts with related parties within the Group, including entities relating to Volcan Investments Limited ("Volcan"). ▪ We analysed whistle-blowing reports made to those charged with governance for evidence of undisclosed related parties and/or related party transactions. ▪ We tested manual top-side adjustments, through inspection of supporting evidence such as invoices to identify any undisclosed related party transactions and evaluated the appropriateness of consolidation adjustments. ▪ We engaged specialists in our forensics department to perform procedures customised to identify a sample of unusual transactions that might require further investigation. Data analytics was used to carry out these procedures including testing the completeness of the Group's related party disclosures. ▪ We conducted a press coverage review to identify any indications of undisclosed related party transactions between Group entities and entities and/or individuals. ▪ We compared Volcan debt repayments as per external sources to private debt agreements with banks to identify any undisclosed debt or collateral in relation to Group entities and Volcan. ▪ We evaluated the Group and parent company's related party disclosures against the requirements of IAS 24. We performed audit procedures over the entire Group in relation to this risk.	We are satisfied that related party transactions are accounted for appropriately. Nothing has come to our attention which would indicate, that all required disclosures have not been included in the notes to the financial statements, in accordance with IAS 24.

In 2019, our auditor's report included two key audit matters that have not been reported as key audit matters in our 2020 report. These relate to: (1) Economic interest purchase from a related party, and (2) The recoverability of disputed receivables. We no longer consider economic interest purchase from a related party a key audit matter due to the absence of any such transaction involving the Group in the current year. We no longer consider the recoverability of disputed receivables to be a key audit matter as payment has been received against significant outstanding balances that existed in the previous year and for the balances that remain, we consider the risk to have reduced.

In the current year, we have added three key audit matters that were not reported as key audit matters in our 2019 report. These relate to: (1) Liquidation proceedings of Konkola Copper Mines Plc (KCM), (2) Production Sharing Contract (PSC) extension for the Rajasthan block, and (3) Undisclosed related party transactions.

AN OVERVIEW OF THE SCOPE OF OUR AUDIT

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each entity within the Group. Taken together, this enables us to form an opinion on the consolidated financial statements. We take into account size, risk profile, the organisation of the Group and effectiveness of Group wide controls, changes in the business environment and other factors such as recent internal audit results when assessing the level of work to be performed at each entity.

The Group has decentralised processes and controls over the key areas of our audit focus with responsibility lying with component management for the majority of estimation processes and significant risk areas. We have tailored our audit response accordingly and thus for the majority of our focus areas, audit procedures were undertaken by the component and Group audit teams.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, we selected, from the 57 reporting components of the Group, 17 components covering entities within India, South Africa and the United Kingdom. These components represent the principal business units within the Group.

Of the 17 components selected, we performed an audit of the complete financial information of 9 components ("full scope components") which were selected based on their size or risk characteristics. For 6 "specific scope components", we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile. For 1 component, procedures were performed at the component level that were specified by the Group engagement team in response to specific risk factors. For the remaining component review procedures were performed.

The reporting components where we performed audit procedures accounted for 97% (2019: 96%) of the Group's EBITDA, 92% (2019: 94%) of the Group's revenue and 98% (2019: 97%) of the Group's total assets. For the current year, the full scope components contributed 91% (2019: 93%) of the Group's EBITDA, 88% (2019: 90%) of the Group's revenue and 80% (2019: 90%) of the Group's total assets. The specific scope components contributed 7% (2019: 3%) of the Group's EBITDA, 4% (2019: 4%) of the Group's revenue and 18% (2019: 7%) of the Group's total assets. The decrease in total assets covered by full-scope procedures and the increase covered by specific scope procedures is due to the change in our scoping of the Vedanta Iron Ore division from full-scope in the prior year to specific scope in the current year. The audit scope of these components may not have included testing of all significant accounts of the component but will have contributed to the coverage of the specified significant accounts tested for the Group. We also instructed 1 component team to perform specified procedures over the recoverability of property, plant and equipment at ASI, a subsidiary of the Group, as described in the Risk section above.

Of the remaining 40 components that together represent 3% of the Group's EBITDA, none are individually greater than 2% of the Group's EBITDA. For these components, we performed other procedures, including analytical reviews, testing of consolidation adjustments and intercompany eliminations to respond to any potential risks of material misstatement to the Group financial statements.

We have obtained an understanding of the entity level controls of the Group as a whole, which assisted us in identifying and assessing risks of material misstatement due to fraud or error, as well as assisting us in determining the most appropriate audit strategy.

Changes from the prior year

In the current year, the scoping for Electrosteel Steels Limited has changed from specific scope to full scope. This primarily reflects the increasing contribution to Group EBITDA made by the business, according to which it has become significant due to size and risk. Vedanta Limited Power has changed from a full scope to a specific scope component for receivables, PP&E and tax as a result of the division's decreased contribution to the Group's EBITDA. The focus remains on these accounts, which we have judged to be significant based on risk. As a result of the continued shutdown of most of its business and consequently its limited contributions to the Group's metrics, Vedanta Limited Iron Ore has been reclassified from a full scope to a specific scope component for revenue, purchases, payables, receivables, PP&E and tax. These accounts reflect the areas we have assessed to be significant based on risk at the entity.

Integrated team structure

The overall audit strategy is determined by the Senior Statutory Auditor, Richard Addison. Whilst the Senior Statutory Auditor is based in the UK, the Group audit team functions as an integrated team with members from both the UK and India working together throughout the audit process. The team's composition reflects the fact that Group management and operations are concentrated in India. During this year's audit cycle, the Senior Statutory Auditor made two visits to India; a final planned visit to India at the end of the financial year was cancelled due to travel restrictions imposed as a result of COVID-19 (see COVID-19 Group team response, below). The Senior Statutory Auditor used his time in India to review the areas of significant risk and judgement in the audit and to hold discussions with India-based members of the Group audit team, and met with key representatives of the Indian component audit teams for certain full scope components to discuss the audit approach. While in India the Senior Statutory Auditor also used his time to attend a component specific full day workshop directly with component management, detailed discussions with the heads of various business functions as well as meetings with Group management.

Involvement with component teams

It was concluded that audit procedures on eight full scope components would be performed directly by the component audit teams and the procedures on one full scope component, the parent company, would be performed by the Group audit team. For the six specific scope components and one review scope component, where the work was performed by component auditors, the Group audit team determined the appropriate level of involvement to enable it to determine that sufficient, appropriate audit evidence had been obtained as a basis for its opinion on the Group as a whole.

The Group audit team shared detailed instructions with all component teams. These instructions covered the significant areas that were to be addressed by the component teams (which included the relative risks of material misstatement detailed above) and set out the information to be reported back to the Group audit team. As a result of COVID-19 the Group audit team and Senior Statutory auditor were unable to carry out site visits to any operational sites as initially planned, however alternative procedures as detailed below, were performed. As noted above, the UK-based members of the Group audit team made two visits to component teams in India during the current year. These visits involved key members of the Group audit team meeting with component teams to discuss and direct their planned audit approach, holding meetings with local management and reviewing procedures performed to date on Group risk areas. A final visit to India at the end of the Group's financial year was cancelled due to travel restrictions imposed in response to COVID-19.

COVID-19 Group audit team response

As a result of the COVID pandemic the Group audit team were unable to perform a final year end visit to India and carry out a rotational operational site visit as initially planned. The component audit teams were unable to adequately observe the year end stock count, as detailed above.

In order to compensate for the Group team's lack of physical presence in India and the ability to perform the planned site visit, the following compensating procedures were performed:

- The Group audit team was in ongoing communication, including planning and closing calls and video conferences, with all in-scope component teams. The Group team were able to perform a remote review of the components audit working papers and audit files (facilitated by the EY electronic audit file platform) and maintained responsibility for the scope and direction of the audit process. Group oversight included follow up of queries through on going communication facilitated by the use of technology.
- Component teams, including India based partners of the integrated Group team, conducted site visits at various points during the year, the details of which have been shared with the Group team. During one of the India trips the Senior Statutory Auditor attended a full day workshop with executive management of the Oil and Gas division.
- There was no decrease in the extent of interactions with Group management and the heads of relevant business functions and the quality of these meetings was maintained through the use of video conferencing.

The above gave us appropriate evidence for our opinion on the Group financial statements.

Our application of materiality

We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality

The magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined our preliminary materiality for the Group to be $55 million (2019: $68 million), which was approximately 2% (2019: 2%) of forecasted EBITDA. We believe that EBITDA provides us with an earnings-based measure that is significant to users of the financial statements; EBITDA is a key performance indicator for the Group and is also a key metric used by the Group in assessing management's performance.

Market and analyst commentary on the performance of the Group uses EBITDA as a key metric. In addition, external lenders use the measure to assess the Group's compliance with key restrictive covenants on its borrowings. The decrease in materiality relative to the previous year was due to a decline in Group EBITDA, which for the current year was $3,003 million (2019: $3,456 million).

We determined materiality for the Parent Company to be $17.56 million (2019: $14.86 million), which is 1% (2019: 1%) of Equity.

During the course of our audit, we reassessed our preliminary materiality in the context of the Group's performance. We noted that actual Group EBITDA was in excess of the EBITDA used in our original materiality assessment, however we have conducted our audit using the lower materiality as originally determined.

Performance materiality

The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

We set performance materiality at 50% (2019: 50%) of our planning materiality, namely $27 million (2019: $35 million). This was based on our overall risk assessment of the audit, our assessment of the Group's control environment and the number, size and nature of individual misstatements (corrected and uncorrected) identified in prior periods.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated to components was $4.1 million to $ 16.4 million (2019: $6.7 million to $20.1 million).

Reporting threshold

An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of $2.7 million (2019: $3.4 million), which is set at 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

Other information

The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

As described in the basis for qualified opinion section of our report, we were unable to satisfy ourselves concerning the inventory quantities of $1,515 million held at 31 March 2020. We have concluded that where the other information refers to the inventory balance or related balances such as cost of sales, it may be materially misstated for the same reason.

Qualified opinions on other matters prescribed by the Companies Act, 2006

Except for the possible effects of the matter described in the basis for qualified opinion section of our report, in our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

Except for the matter described in the basis for qualified opinion section of our report, in the light of the knowledge and understanding of the Group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

Arising solely from the limitation on the scope of our work relating to inventory, referred to above:

- we have not obtained all the information and explanations that we considered necessary for the purpose of our audit; and
- we were unable to determine whether adequate accounting records have been kept.

We have nothing to report in respect of the following matters in relation to which the Companies Act, 2006 requires us to report to you if, in our opinion:

- returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement set out on page 104 and 105, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group and parent 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 the directors either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the 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 ISAs (UK) 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 financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at https://www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act, 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Richard Addison (Senior Statutory Auditor)
for and on behalf of Ernst & Young LLP,
Statutory Auditor
London
10 August 2020

CONSOLIDATED INCOME STATEMENT

for the year ended 31 March 2020

(US$ million)

		Year ended 31 March 2020			Year ended 31 March 2019*		
Particulars	Note	Before Special items	Special items (Note 6)	Total	Before Special items	Special items (Note 6)	Total
Revenue	5	11,790	-	11,790	13,006	-	13,006
Cost of sales		(9,611)	24	(9,587)	(10,451)	-	(10,451)
Gross profit		**2,179**	**24**	**2,203**	**2,555**	**-**	**2,555**
Other operating income		142	-	142	225	-	225
Distribution costs		(257)	-	(257)	(244)	-	(244)
Administrative expenses		(473)	(17)	(490)	(460)	-	(460)
Impairment (charge)/reversal [net]	6	-	(2,072)	(2,072)	-	38	38
Operating profit/(loss)		**1,591**	**(2,065)**	**(474)**	**2,076**	**38**	**2,114**
Investment revenue	7	382	12	394	533	-	533
Finance costs	8	(1,179)	-	(1,179)	(1,213)	9	(1,204)
Other gains and (losses) [net]	9	(87)	-	(87)	(75)	-	(75)
Profit/(loss) before taxation from continuing operations (a)		**707**	**(2,053)**	**(1,346)**	**1,321**	**47**	**1,368**
Net (expense)/tax credit (b)	11	**(411)**	**781**	**370**	**(595)**	**(16)**	**(611)**
Profit/(loss) for the year from continuing operations (a+b)		**296**	**(1,272)**	**(976)**	**726**	**31**	**757**
Loss after tax for the year from discontinued operations	3(e)	-	(771)	(771)		(333)	(333)
Profit/(loss) for the year		**296**	**(2,043)**	**(1,747)**	**726**	**(302)**	**424**
Attributable to:							
Equity holders of the parent		(202)	(1,366)	(1,568)	11	(248)	(237)
Non-controlling interests		498	(677)	(179)	715	(54)	661
Profit/(loss) for the year		**296**	**(2,043)**	**(1,747)**	**726**	**(302)**	**424**

* Restated refer Note 1(b)

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 March 2020

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019*
(Loss)/Profit for the year	**(1,747)**	**424**
Items that will not be reclassified subsequently to income statement:		
Remeasurement of net defined benefit plans (note 27)	(30)	(6)
Tax effects on net defined benefit plans	10	4
Loss on fair value of financial asset investment	(10)	(6)
Total (a)	**(30)**	**(8)**
Items that may be reclassified subsequently to income statement:		
Exchange differences arising on translation of foreign operations	(652)	(608)
Gains of cash flow hedges recognised during the year	18	16
Tax effects arising on cash flow hedges	(6)	(7)
Gains on cash flow hedges recycled to income statement	(4)	(28)
Tax effects arising on cash flow hedges recycled to income statement	2	9
Total (b)	**(642)**	**(618)**
Other comprehensive loss for the year (a+b)	**(672)**	**(626)**
Total comprehensive loss for the year	**(2,419)**	**(202)**
Attributable to:		
Equity holders of the parent	(1,802)	(484)
Non-controlling interests	(617)	282
Total comprehensive loss for the year	**(2,419)**	**(202)**

* Restated refer Note 1(b)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

for the year ended 31 March 2020

(US$ million)

Particulars	Note	As at 31 March 2020	As at 31 March 2019
ASSETS			
Non-current assets			
Goodwill	14	12	12
Intangible assets	15	100	108
Property, plant and equipment	16	13,005	17,322
Exploration and evaluation assets	16	240	404
Leasehold land		-	63
Financial asset investments	17	12	707
Non-current tax assets	11(d)	354	504
Other non-current assets	18	1,548	1,010
Financial Instruments (derivatives)	25	0	-
Deferred tax assets	11(c)	1,114	778
		16,385	**20,908**
Current assets			
Inventories	19	1,515	2,060
Trade and other receivables	18	1,102	1,504
Financial instruments (derivatives)	25	93	11
Current tax assets		1	1
Short-term investments	20	4,385	4,164
Cash and cash equivalents	21	705	1,133
		7,801	**8,873**
Total assets		**24,186**	**29,781**
Liabilities			
Current liabilities			
Borrowings	22(a)	10,186	5,456
Trade and other payables	24	5,719	6,878
Financial instruments (derivatives)	25	13	66
Retirement benefits	27	15	17
Provisions	26	32	38
Current tax liabilities		26	61
		15,991	**12,516**
Net current liabilities		**(8,190)**	**(3,643)**
Non-current liabilities			
Borrowings	22(a)	4,909	10,524
Trade and other payables	24	232	244
Financial instruments (derivatives)	25	6	14
Deferred tax liabilities	11(c)	397	776
Retirement benefits	27	22	71
Provisions	26	356	371
Non-equity non-controlling interests	23	-	12
		5,922	**12,012**
Total liabilities		**21,913**	**24,528**
Net assets		**2,273**	**5,253**
Equity			
Share capital	30	29	29
Share premium		202	202
Hedging reserve		(95)	(98)
Other reserves		(331)	(97)
Retained earnings		(3,068)	(964)
Equity attributable to equity holders of the parent		**(3,263)**	**(928)**
Non-controlling interests	31	5,536	6,181
Total equity		**2,273**	**5,253**

Financial Statements of Vedanta Resources Limited (formerly Vedanta Resources plc) with registration number 4740415 were approved by the Board of Directors on 10 August 2020 and signed on their behalf by

Ravi Rajagopal
Director

CONSOLIDATED CASH FLOW STATEMENT

for the year ended 31 March 2020

(US$ million)

Particulars	Note	Year ended 31 March 2020	Year ended 31 March 2019*
Operating activities			
Profit/(Loss) before taxation from continuing operations		(1,346)	1,368
Adjustments for:			
Depreciation and amortisation		1,412	1,380
Investment revenues		(394)	(533)
Finance costs		1,179	1,204
Other (gains) and losses (net)		87	75
Loss on disposal of PP&E		8	9
Write-off of unsuccessful exploration costs		-	7
Share-based payment charge		10	18
Impairment charge/(reversal) (net)		2,072	(38)
Other special items		(7)	-
Operating cash flows before movements in working capital		**3,021**	**3,490**
Decrease/(Increase) in inventories		292	(67)
Increase in receivables		(713)	(421)
Increase in payables		352	767
Cash generated from operations		**2,952**	**3,769**
Dividend received		2	6
Interest received		130	159
Interest paid		(1,136)	(1,237)
Income taxes paid (net of refunds)		(165)	(547)
Dividends paid		(536)	(113)
Cash Flows from operating activities (Continuing activities)		**1,247**	**2,037**
Net cash from Operating Activities (Discontinued operations)		3	(153)
Net cash inflow from operating activities		**1,250**	**1,884**
Cash flows from investing activities			
Consideration paid for business acquisition (net of cash and cash equivalents acquired)	3(b)	(5)	(752)
Purchases of property, plant and equipment, intangibles, exploration and evaluation assets		(1,104)	(1,291)
Proceeds on disposal of property, plant and equipment, intangibles, exploration and evaluation assets		21	18
Proceeds from redemption of short-term investments	22(b)	15,178	12,588
Purchases of short-term investments	22(b)	(15,460)	(11,949)
Proceeds from sale of financial asset investments	22(b)	428	-
Payments toward financial asset investments	22(b)	(63)	(254)
Amount paid against guarantees issued on behalf of KCM		(251)	-
Reduction in cash and cash equivalents from discontinued operations		(1)	-
Cash Flows from investing activities (Continuing activities)		**(1,257)**	**(1,640)**
Net cash from Investing Activities (Discontinued operations)		(4)	(35)
Net cash (used in) investing activities		**(1,261)**	**(1,675)**
Cash flows from financing activities			
Issue of ordinary shares		-	1
Payment for acquiring non-controlling interest		(15)	-
Dividends paid to non-controlling interests of subsidiaries		(101)	(1,028)
Share purchase by subsidiary		-	(21)
Sale of treasury shares		-	19
Exercise of stock options in subsidiary		0	1
Repayment of working capital loan (net)	22(b)	(1,604)	(90)
Proceeds from other short-term borrowings	22(b)	317	1,324
Repayment of other short-term borrowings	22(b)	(551)	(2,296)
Proceeds from long-term borrowings	22(b)	4,294	2,856
Repayment of long-term borrowings	22(b)	(2,650)	(370)
Payment of lease liabilities		(45)	-
Cash Flows from financing activities (Continuing activities)		**(355)**	**396**
Net cash from Financing Activities (Discontinued operations)		-	(229)
Net cash (used in)/from financing activities		**(355)**	**167**
Net (decrease)/increase in cash and cash equivalents		**(366)**	**376**
Effect of foreign exchange rate changes		(62)	(42)
Cash and cash equivalents at beginning of the year		**1,133**	**799**
Cash and cash equivalents at end of the year	**21 & 22(b)**	**705**	**1,133**

* Restated refer Note 1(b)

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 March 2020

FOR THE YEAR ENDED 31 MARCH 2020

(US$ million)

	Attributable to equity holders of the parent							
Particulars	Share capital (Note 30)	Share premium	Hedging reserve	Other reserves[1]	Retained earnings	Total	Non-controlling interests	Total equity
At 1 April 2019	**29**	**202**	**(98)**	**(97)**	**(964)**	**(928)**	**6,181**	**5,253**
Loss for the year	-	-	-	-	(1,568)	(1,568)	(179)	(1,747)
Other comprehensive income/(loss) for the year	-	-	3	(237)	-	(234)	(438)	(672)
Total comprehensive income/(loss) for the year	**-**	**-**	**3**	**(237)**	**(1,568)**	**(1,802)**	**(617)**	**(2,419)**
Transfers	-	-	-	(14)	14	-	-	-
Dividends paid/payable (note 13)	-	-	-	-	(537)	(537)	(101)	(638)
Derecognition of Non-controlling interest pertaining to KCM (refer note 3(e))	-	-	-	-	-	-	86	86
Acquisition of Non-controlling interest of ESL	-	-	-	17	-	17	(33)	(16)
Change in fair value of put option liability/ conversion option asset/derecognition of non-controlling interest	-	-	-	-	(16)	(16)	12	(4)
Other changes in non-controlling interests[2]	-	-	-	-	3	3	8	11
At 31 March 2020	**29**	**202**	**(95)**	**(331)**	**(3,068)**	**(3,263)**	**5,536**	**2,273**

1. Other reserves comprise the currency translation reserve, merger reserve, investment revaluation reserve, debenture redemption reserve, capital redemption reserve and the general reserves established in the statutory accounts of the Group's subsidiaries.

2. Includes share-based payment charge by subsidiaries and exercise of stock options of subsidiary.

FOR THE YEAR ENDED 31 MARCH 2019

(US$ million)

	Attributable to equity holders of the parent									
Particulars	Share capital (Note 30)	Share premium	Treasury Shares	Share-based payment reserves	Hedging reserve	Other reserves[1]	Retained earnings	Total	Non-controlling interests	Total equity
At 1 April 2018	**30**	**202**	**(558)**	**13**	**(93)**	**155**	**(79)**	**(330)**	**6,870**	**6,540**
Profit/(loss) for the year	-	-	-	-	-	-	(237)	(237)	661	424
Other comprehensive loss for the year	-	-	-	-	(5)	(242)	-	(247)	(379)	(626)
Total comprehensive income/(loss) for the year	**-**	**-**	**-**	**-**	**(5)**	**(242)**	**(237)**	**(484)**	**282**	**(202)**
Transfers	-	-	-	-	-	(10)	10	-	-	-
Dividends paid (note 13)	-	-	-	-	-	-	(113)	(113)	(1,008)	(1,121)
Sale/cancellation of treasury shares	(2)	-	557	-	-	-	(536)	19	-	19
Exercise of stock options	1	-	1	(19)	-	-	18	1	-	1
Recognition of share-based payment	-	-	-	6	-	-	-	6	-	6
Non-controlling interest on business combination	-	-	-	-	-	-	-	-	29	29
Change in fair value of put option liability/conversion option asset/ derecognition of non-controlling interest	-	-	-	-	-	-	(15)	(15)	5	(10)
Other changes in non-controlling interests[2]	-	-	-	-	-	-	(12)	(12)	3	(9)
At 31 March 2019	**29**	**202**	**-**	**-**	**(98)**	**(97)**	**(964)**	**(928)**	**6,181**	**5,253**

1. Other reserves comprise the currency translation reserve, merger reserve, investment revaluation reserve, debenture redemption reserve, capital redemption reserve and the general reserves established in the statutory accounts of the Group's subsidiaries.

2. Includes purchase of shares by Vedanta Limited through ESOP trust for its stock options and share-based payment charge by subsidiaries.

OTHER RESERVES COMPRISE

(US$ million)

	Currency translation reserve	Merger reserve[2]	Financial asset investment revaluation reserve	Capital Reserve	Other reserves[3]	Total
At 1 April 2018	**(2,142)**	**4**	**14**	**12**	**2,267**	**155**
Exchange differences on translation of foreign operations	(238)	-	-	-	-	(238)
Loss on fair value of financial asset investments	-	-	(3)	-	-	(3)
Remeasurements	-	-	-	-	(1)	(1)
Transfer from/(to) retained earnings[1]	-	-	-	-	(10)	(10)
At 1 April 2019	**(2,380)**	**4**	**11**	**12**	**2,256**	**(97)**
Exchange differences on translation of foreign operations	(225)	-	-	-	-	(225)
Loss on fair value of financial asset investments	-	-	(5)	-	-	(5)
Remeasurements	-	-	-	-	(7)	(7)
Acquisition of Non-controlling interest of ESL	-	-	-	17	-	17
Transfer from/(to) retained earnings[1]	-	-	-	-	(14)	(14)
At 31 March 2020	**(2,605)**	**4**	**6**	**29**	**2,235**	**(331)**

(1) Transfer to other reserve during the year ended 31 March 2020 includes withdrawal of US$14 million from debenture redemption reserve (31 March 2019: US$12 million of debenture redemption reserve).

(2) The merger reserve arose on incorporation of the Company during the year ended 31 March 2004. The investment in Twin Star had a carrying amount value of US$20 million in the accounts of Volcan. As required by the Companies Act, 1985, Section 132, upon issue of 156,000,000 Ordinary shares to Volcan, Twin Star's issued share capital and share premium account have been eliminated and a merger reserve of US$4 million arose, being the difference between the carrying value of the investment in Twin Star in Volcan's accounts and the nominal value of the shares issued to Volcan.

(3) Other reserves includes legal reserves of US$4 million (31 March 2019: US$4 million), debenture redemption reserve of US$130 million (31 March 2019 US$144 million) and balance mainly includes general reserve and capital redemption reserve. Debenture redemption reserve is required to be created under the Indian Companies Act from annual profits until such debentures are redeemed. Legal reserve is required to be created by Fujairah Gold by appropriation of 10% of profits each year until the balance reaches 50% of the paid up share capital. This reserve is not available for distribution except in circumstances stipulated by the Articles of Incorporation. Under the erstwhile Indian Companies Act, 1956, general reserve was created in relation to Group's Indian subsidiaries through an annual transfer of net income to general reserve at a specified percentage in accordance with applicable regulations. The purpose of these transfers is to ensure that the total dividend distribution is less than total distributable reserves for that year. The said requirement was dispensed with w.e.f. 1 April 2013 and there are no restrictions of use of these reserves.

GROUP OVERVIEW

Vedanta Resources Limited ((“Vedanta” or “VRL” or “Company”) formerly known as Vedanta Resources plc or “VRPLC”) is a company incorporated and domiciled in the United Kingdom. Registered address of the company is 8th Floor, 20 Farringdon Street, London, EC4A 4AB. Vedanta and its consolidated subsidiaries (collectively, the “Group”) is a diversified natural resource group engaged in exploring, extracting and processing minerals and oil and gas. The Group engages in the exploration, production and sale of zinc, lead, silver, copper, aluminium, iron ore and oil & gas and have a presence across India, South Africa, Namibia, Ireland, Australia, Liberia and UAE. The Group is also in the business of commercial power generation, steel manufacturing and port operations in India and manufacturing of glass substrate in South Korea and Taiwan.

Buy back and delisting of Vedanta Resources plc Shares

On 31 July 2018, Volcan Investments (“Volcan”) and Vedanta announced that they had reached agreement on the terms of a recommended cash offer (the "Offer") by Volcan for the remaining issued and to-be-issued share capital of Vedanta not currently owned by Volcan.

The Volcan Offer was declared unconditional in all respects on 3 September 2018 and Volcan announced that Vedanta had applied for its shares to be cancelled from listing on the Official List of the UK Listing Authority and to trading on the main market for listed securities of the London Stock Exchange, such cancellation took effect on 1 October 2018.

At the General Meeting of Vedanta shareholders held on 1 October 2018, the resolution put to shareholders in relation to the re-registration of VRPlc as a private limited company was duly passed on a poll. Re-registration of VRPlc as a private limited company became effective on 29 October 2018 pursuant to which the name has been changed to Vedanta Resources Limited.

Following the delisting of the Company’s shares from the Official list of the London Stock Exchange, 6,904,995 ordinary shares of US 10 Cents each, which were issued on the conversion of certain convertible bonds issued by one of Vedanta's subsidiaries and held through a global depositary receipt (GDR), were redeemed and the GDR listing was cancelled.

Details of Group’s various businesses are as follows.

- Zinc India business is owned and operated by Hindustan Zinc Limited (“HZL”).
- Zinc international business is comprised of Skorpion mine and refinery in Namibia operated through THL Zinc Namibia Holdings (Proprietary) Limited (“Skorpion”), Lisheen mine in Ireland operated through Vedanta Lisheen Holdings Limited (“Lisheen”) (Lisheen mine ceased operations in December 2015) and Black Mountain Mining (Proprietary) Limited (“BMM”), whose assets include the operational Black Mountain mine and the Gamsberg mine located in South Africa.
- The Group’s oil and gas business is owned and operated by Vedanta Limited and its subsidiary, Cairn Energy Hydrocarbons Limited and consists of exploration, development and production of oil and gas.
- The Group’s iron ore business is owned by Vedanta Limited, and by two wholly owned subsidiaries of Vedanta Ltd. i.e. Sesa Resources Limited and Sesa Mining Corporation Limited and consists of exploration, mining and processing of iron ore, pig iron and metallurgical coke and generation of power for captive use. Pursuant to Honourable Supreme Court order, operations in the state of Goa are currently suspended. The Group’s iron ore business includes Western Cluster Limited (“WCL”) in Liberia which has iron ore assets and is wholly owned by the Group. WCL’s assets include development rights to Western Cluster and a network of iron ore deposits in West Africa. WCL’s assets have been fully impaired.
- The Group's copper business comprises three operations divided into two segments, namely (i) Copper India/Australia, comprising Vedanta Limited’s custom smelting operations in India (including captive power plants at Tuticorin in Southern India) and (ii) Copper Zambia comprising Konkola Copper Mines plc’s (“KCM”) mining and smelting operations in Zambia. Due to the ongoing litigations in relation to the Zambian operations, the Group believes that it has lost control over KCM and has accordingly deconsolidated the same (refer note 3(b)(iii) for further details).

  The Group’s copper business in India has received an order from Tamil Nadu Pollution Control Board (“TNPCB”) on 9 April 2018, rejecting the Group’s application for renewal of consent to operate under the Air and Water Acts for the 400,000 tpa copper smelter plant in Tuticorin for want of further clarification and consequently the operations were suspended. The Group has filed an appeal with TNPCB Appellate authority against the said order. During the pendency of the appeal, TNPCB through its order dated 23 May 2018 ordered for disconnection of electricity supply and closure of our copper smelter plant. Post such order, the state government on 28 May 2018 ordered the permanent closure of the plant. (Refer Note 3(a)(vii))

  In addition, the Group owns and operates the Mt. Lyell copper mine in Tasmania, Australia through its subsidiary, CMT and a precious metal refinery and copper rod plant in Fujairah, UAE through its subsidiary Fujairah Gold FZC. The operations of Mt Lyell copper mine were suspended in January 2014 following a mud slide incident and were put into care and maintenance since 9 July 2014 following a rock fall incident in June 2014.
- The Group’s Aluminium business is owned and operated by Vedanta Limited and by Bharat Aluminium Company Limited (“BALCO”). The aluminium operations include a refinery and captive power plant at Lanjigarh and a smelter and captive power plants at Jharsuguda both situated in the State of Odisha in India. BALCO’s partially integrated aluminium operations are comprised of two bauxite mines, captive power plants, smelting and fabrication facilities in central India.
- The Group’s power business is owned and operated by Vedanta Limited, BALCO, and Talwandi Sabo Power Limited (“TSPL”), a wholly owned subsidiary of Vedanta Limited, which are engaged in the power generation business in India. Vedanta Limited power operations include a thermal coal-based commercial power facility of 600 MW at Jharsuguda in the State of Odisha in Eastern India. BALCO power operations included 600 MW (2 units of 300 MW each) thermal coal-based power plant at Korba, of which a unit of 300 MW was converted to be used for captive consumption vide order from Central Electricity Regulatory Commission (CERC) dated 1 January 2019. Talwandi Sabo Power Limited (“TSPL”) power operations include 1,980 MW (three units of 660 MW each) thermal coal-based commercial power facilities. Power business also includes the wind power plants commissioned by HZL and a power plant at MALCO Energy Limited (“MEL”) (under care and maintenance) situated at Mettur Dam in State of Tamil Nadu in southern India.
- The Group’s other activities include Electrosteel Steels Limited (“ESL”) acquired on 4 June 2018. ESL is engaged in the manufacturing and supply of billets, TMT bars, wire rods and ductile iron pipes in India.

The Group’s other activities also include Vizag General Cargo Berth Private Limited (“VGCB”) and Maritime Ventures Private Limited (“MVPL”). Vizag port project includes mechanisation of coal handling facilities and upgradation of general cargo berth for handling coal at the outer harbour of Visakhapatnam Port on the east coast of India. VGCB commenced operations in the fourth quarter of fiscal year 2013. MVPL is engaged in the business of rendering logistics and other allied services *inter alia* rendering stevedoring, and other allied services in ports and other allied sectors. The Group’s other activities also include AvanStrate Inc. (“ASI”). ASI is involved in manufacturing of glass substrate in South Korea and Taiwan.

1. BASIS OF PREPARATION AND BASIS OF MEASUREMENT OF FINANCIAL STATEMENTS

a) Basis of preparation

The consolidated financial statements have been prepared in accordance with those parts of the Companies Act, 2006 applicable to companies reporting under International Financial Reporting Standards (IFRS) and IFRS as adopted by the European Union and related interpretations.

These financial statements have been prepared in accordance with the accounting policies, set out below and were consistently applied to all periods presented unless otherwise stated.

These financial statements are approved for issue by the Board of Directors on 10 August 2020.

These financial statements are presented in US dollars being the functional currency of the Company and all values are rounded off to the nearest million except when indicated otherwise. Amounts less than US$0.5 million have been presented as "0".

b) Restatement/Reclassification

Due to the ongoing litigation with respect to the Zambian operations, it has been classified as discontinued operations from the current year in accordance with IFRS 5. Consequently, the figures of previous year of the Zambian operations in the Consolidated Income Statement, Cash Flow statement and the corresponding notes have been restated. The profit/(loss) after tax from discontinued operations and Cash flows from discontinued operations have been disclosed separately in the respective statements. Refer note 3(e) for further details.

c) Basis of Measurement

The consolidated financial statements have been prepared using historical cost convention and on an accrual method of accounting, except for certain financial assets and liabilities which are measured at fair value as explained in the accounting policies below.

d) Going concern

Introduction

The Group has prepared the consolidated financial statements on a going concern basis. The Directors have considered a number of factors in concluding on their going concern assessment.

The developments surrounding the COVID-19 virus have had a profound impact on the operational and financial performance of the Group. There is inherent uncertainty as to the short- and medium-term effects of the virus and the situation evolves on a daily basis. The virus and associated uncertainty have therefore had a significant impact on the Directors' assessment of the ability of the Group and Company to continue as a going concern.

The Group monitors and manages its funding position and liquidity requirements throughout the year and routinely forecasts its future cash flows and financial position. The key assumptions for these forecasts include production profiles, commodity prices and financing activities. The Directors are confident that the Group will be able to ensure production is not materially impacted by the COVID-19 virus, that the Group will be able to roll-over or obtain external financing as required and that prices will remain within their expected range. The Directors have considered the Group's ability to continue as a going concern in the period to 31 December 2021 ("the going concern period") under both a base case and a downside case.

The downside case assumes, amongst other sensitivities, a decrease in key commodity prices, delayed ramp-up and re-opening of projects, nil receipt or rollover of uncommitted financing and additional capex.

Payment of dividends by the Company to its parent companies could affect the above going concern cases. The forecasts on which the going concern assumption is based include dividends of $150 million from the Company to its parent companies but such dividends would not be paid, unless it is determined that, at a minimum, there were available legally distributable reserves, borrowings and other undertakings were not placed at risk and the going concern conclusion were not affected.

Material uncertainties

The liquidity and covenant compliance considerations described below constitute material uncertainties which may cast significant doubt on the Group and Company's ability to continue as a going concern. The financial statements do not contain the adjustments that would result if the company was unable to continue as a going concern.

Under the downside case, the Company is forecast to have a funding shortfall in the order of $2.5 billion within the going concern period. The Group's ability to support the Company's funding requirements is dependent on rollover of existing facilities and access to further financing. Execution of these facilities is not wholly within management's control and this therefore creates material uncertainties, as detailed further below.

In addition, the Company was in breach of a financial covenant as at 31 March 2020, for which it has secured the necessary covenant waivers and relaxations. However, the Company remains subject to financial covenants and, under the downside case, is forecast to require further covenant waivers or relaxation of its financial covenants for periods subsequent to 31 March 2021. Receipt of these waivers or relaxations is not wholly within management's control and this therefore creates an additional material uncertainty, as detailed further below.

- **Liquidity**

  The Group is required to make repayments under its financing arrangements as its obligations fall due. Within the 21-month going concern period, the Group has scheduled debt repayments of c.$6.6 billion, of which c.$2.2 billion are repayments to be made by the Company. Due to leakage to minority shareholders, the financial support required from the Group's operating subsidiaries to the Company may create a funding shortfall at the operating subsidiaries in the order of $1 billion. This shortfall could be increased by in excess of $2 billion were additional sensitivities to be applied to the downside case's EBITDA forecasts and to such assumptions as supplier credit and customer advances.

  Management intends to reduce the extent of dividends required from subsidiaries by extending an additional intercompany loan from an operating subsidiary to the Company. In addition, management plans to resolve the forecast liquidity shortfall at operating subsidiary level through execution of term loans amounting to $1.6 billion, combined with rollover of short-term uncommitted financing and additional financing arrangements, as described below. Although management has a high degree of confidence that these financing arrangements will be concluded, they are not currently legally committed and are therefore subject to uncertainty.

- **Covenant Compliance**

  The Group's financing facilities, including bank loans and bonds, contain covenants requiring the Group to maintain specified financial ratios. These include, amongst others, debt service ratios, asset to borrowings ratios and total outside liabilities to net worth ratios. As at 31 March 2020, the Group was in breach of a net debt to EBITDA ratio included within its covenants for a number of facilities which has resulted in relevant debt being reclassified as current. In addition, the Group forecasts, under its downside case, further breaches of the same ratio and two other ratios within the going concern period, for which waivers have been obtained for the period to 31 March 2021, as set out below.

  The Group has secured the necessary covenant waivers and relaxations remediating the covenants breached at 31 March 2020. The Group has also received covenant waivers or relaxations from all its lenders for covenant testing dates up to and including 31 March 2021. Management notes that the Group has previously obtained covenant waivers, including in response to the appointment of a provisional liquidator at KCM. Additionally, the Group has recently successfully amended the covenants for its listed bonds. The Directors of the Group are confident that they will be able to execute mitigating actions (see below) to ensure that the Group avoids, or secures waivers or relaxations for, any further breaches of its covenants during the going concern period. However, further waivers or relaxations would potentially be required for the period subsequent to 31 March 2021 and receipt thereof is inherently subject to uncertainty.

Mitigating actions

The mitigating options available to the Group and Company to address the material uncertainties in relation to going concern include:

- Provision of an intercompany loan of up to $1.0 billion from an operating entity of the Group to the Company. The Company currently has an agreement in place amounting to $475 million for an intercompany loan from the operating entity. The Directors believe that the existing agreement provides a precedent demonstrating that an additional $525 million loan could be provided by the same operating entity, as required, and that such an option would be wholly within management's control.
- Execution and drawdown of a bilateral $0.2 billion term loan and a syndicated $1.4 billion term loan at Vedanta Limited level. The Group has received sanction letters indicating approval for loans amounting to a total of $0.9 billion, comprising the entirety of the bilateral facility and half of the syndicated facility, which relates to the portion to be provided by the public sector bank leading the syndicate. Final execution and drawdown of the loan is subject to completion of standard administrative processes. The Group is also in the process of organising the syndication of the remaining $0.7 billion with other Indian banks. The agreements are not at present legally binding and there therefore remains uncertainty as to the ability of the Group to draw down the funds.
- Execution of an off-take agreement covering certain future production and amounting potentially to c.$1 billion. The Group is currently negotiating

with a number of interested bidders an off-take agreement, under which the Group would receive an advance payment in return for supply of certain future production. However, no agreement has been concluded and there is a therefore uncertainty as to the Group's ability to access these funds.

- Extension of working capital facilities and rollover of commercial papers. As at 31 March 2020, the Group had unutilised working capital facilities amounting to c.$1.3 billion and commercial papers in issue amounting to c.$1.0 billion. These facilities are not committed for the full duration of the going concern period to December 2021, but rather must be extended or rolled over. There is therefore a risk that, in adverse market conditions, the Group would not be able to extend or roll over these facilities. However, the Directors assess that the Group has a strong record of extending and rolling over these short-term facilities and has historically had significantly higher levels of commercial papers in issue.
- Access to supplier credit and customer advances. As at 31 March 2020, the Group had c.$1.4 billion of supplier's credit and c.$1.0 billion of advances from customers. These financing arrangements are integral to the business of certain Group divisions, but are not committed for the full duration of the going concern period. There is therefore a risk that the Group will not be able to access these financing arrangements in the future. Nevertheless, the Directors note that the Group has in the past consistently obtained supplier credit and customer advances at current levels.
- Take-private of Vedanta Limited. As set out in note 36 to the consolidated financial statements, the Group made an offer on 12 May 2020 to buy out the interests of minority shareholders in Vedanta Limited and the Group is currently in negotiations to obtain external financing to fund the buy-out. Depending on the date of execution of any take-private and the repayment profile of any future financing secured, there is potential upside for the Group through a reduction in the leakage to minority shareholders on the payment of dividends.

Conclusion

Notwithstanding the material uncertainties described above, the Directors have confidence in Group's ability to execute sufficient mitigating actions. Based on these considerations, the Directors have a reasonable expectation that the Group and the Company will meet its commitments as they fall due over the going concern period. Accordingly, the Directors continue to adopt the going concern basis in preparing the Group's consolidated financial statements and Company's standalone financial statements.

e) Parent Company financial statements

The financial statements of the parent company, Vedanta Resources Limited, incorporated in the United Kingdom, have been prepared in accordance with FRS 101 and UK company law. The Company financial statements and associated notes have been presented separately.

2(A) ACCOUNTING POLICIES

(i) Basis of consolidation

Subsidiaries:

The consolidated financial statements incorporate the results of the Company and all its subsidiaries (the "Group"), being the entities that it controls. Control is evidenced where the Group has power over the investee, is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Power is demonstrated through existing rights that give the ability to direct relevant activities, which significantly affect the entity's returns.

The financial statements of subsidiaries are prepared for the same reporting year as the Company. Where necessary, adjustments are made to the financial statements of subsidiaries to align the accounting policies in line with accounting policies of the Group.

For non-wholly owned subsidiaries, a share of the profit/(loss) for the financial year and net assets is attributed to the non-controlling interests as shown in the consolidated income statement, consolidated statement of comprehensive income and consolidated statement of financial position.

Liability for put option issued to non-controlling interests which do not grant present access to ownership interest to the Group is recognised at present value of the redemption amount and is reclassified from equity. At the end of each reporting period, the non-controlling interests subject to put option is derecognised and the difference between the amount derecognised and present value of the redemption amount, which is recorded as a financial liability, is accounted for as an equity transaction.

For acquisitions of additional interests in subsidiaries, where there is no change in control, the Group recognises a reduction to the non-controlling interest of the respective subsidiary with the difference between this figure and the cash paid, inclusive of transaction fees, being recognised in equity. Similarly, upon dilution of controlling interests the difference between the cash received from sale or listing of the subsidiary shares and the increase to non-controlling interest is also recognised in equity. The results of subsidiaries acquired or disposed off during the year are included in the consolidated income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Intra-Group balances and transactions, and any unrealised profits arising from intra-Group transactions, are eliminated. Unrealised losses are eliminated unless costs cannot be recovered.

Joint arrangements

A Joint arrangement is an arrangement of which two or more parties have joint control. Joint control is considered when there is contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Investments in joint arrangements are classified as either joint operations or joint venture. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. 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. 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 arrangement.

The group has both joint operations and joint ventures.

Joint operations

The Group has Joint operations within its Oil and gas segment. It participates in several unincorporated joint operations which involve the joint control of assets used in oil and gas exploration and producing activities. The Group accounts for its share of assets, liabilities, income and expenditure of joint operations in which the Group holds an interest. Liabilities in unincorporated joint operations where the Group is the operator, is accounted for at gross values (including share of other partners) with a corresponding receivable from the venture partners. These have been included in the consolidated financial statements under the appropriate headings.

Details of joint operations are set out in note 38.

Joint venture

The Group accounts for its interest in joint venture using the equity method, after initially being recognised at cost in the consolidated statement of financial position. Goodwill arising on the acquisition of joint venture is included in the carrying value of investments in joint venture.

Investments in associates:

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. Investments in associates are accounted for using the equity method. Goodwill arising on the acquisition of associates is included in the carrying value of investments in associate.

Equity method of accounting

Under the equity method of accounting applicable for investments in associates and joint ventures, investments are initially recorded at the cost to the Group and then, in subsequent periods, the carrying value is adjusted to reflect the Group's share of the post-acquisition profits or losses of the investee, and the Group's share of other comprehensive income of the investee, other changes to the investees net assets and is further adjusted for impairment losses, if any. Dividend received or receivable from associate and joint ventures are recognised as a reduction in carrying amount of the investment.

The consolidated income statement and consolidated statement of comprehensive income include the Group's share of investee's results, except where the investee is generating losses, share of such losses in excess of the Group's interest in that investee are not recognised. Losses recognised under the equity method in excess of the Group's investment in ordinary shares are applied to the other components of the Group's interest that forms part of Group's net investment in the investee in the reverse order of their seniority (i.e. priority in liquidation).

If the Group's share of losses in an associate or joint venture equals or exceeds, its interests in the associate or joint venture, the Group discontinues the recognition of further losses. Additional losses are provided for, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate/joint venture.

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

Unrealised gains arising from transactions with associates are eliminated against the investment to the extent of the Group's interest in these entities. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment of the asset transferred. Accounting policies of equity accounted investees is changed where necessary to ensure consistency with the policies adopted by the Group.

The carrying amount of equity accounted investments are tested for impairment in accordance with the policy described in note 2 (a)(xi) below.

(ii) Business combinations

Business combinations are accounted for under the acquisition method. The acquiree's identifiable assets, liabilities and contingent liabilities that meet the conditions for recognition under IFRS 3 are recognised at their fair value at the acquisition date, except certain assets and liabilities required to be measured as per the applicable standards.

Excess of fair value of purchase consideration and the acquisition date non-controlling interest over the acquisition date fair value of identifiable assets acquired and liabilities assumed is recognised as goodwill. Goodwill arising on acquisitions is reviewed for impairment annually. Where the fair values of the identifiable assets and liabilities exceed the purchase consideration, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the surplus is credited to the consolidated income statement in the period of acquisition. Where it is not possible to complete the determination of fair values by the date on which the first post-acquisition financial statements are approved, a provisional assessment of fair value is made and any adjustments required to those provisional fair values are finalised within 12 months of the acquisition date.

Those provisional amounts are adjusted through goodwill during the measurement period, or additional assets or liabilities are recognised to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised at that date. These adjustments are called as measurement period adjustments. The measurement period does not exceed twelve months from the acquisition date.

Any non-controlling interest in an acquiree is measured at fair value or as the non-controlling interest's proportionate share of the acquiree's net identifiable assets. This accounting choice is made on a transaction by transaction basis.

Acquisition expenses are charged to the consolidated income statement.

If the Group acquires a group of assets in a company that does not constitute a business combination in accordance with IFRS 3 'Business Combinations', the cost of the acquired group of assets is allocated to the individual identifiable assets acquired based on their relative fair value.

Common control transactions

A business combination involving entities or businesses under common control is a business combination in which all of the combining entities or businesses are ultimately controlled by the same party or parties both before and after the business combination and the control is not transitory. The transactions between entities under common control are scoped out of IFRS 3 and there is no authoritative literature for these transactions under IFRS. As a result, the Group adopted accounting principles similar to the pooling-of-interest method based on the predecessor values. The assets and liabilities of the acquired entity are recognised at the book values recorded in the ultimate parent entity's consolidated financial statements. The components of equity of the acquired companies are added to the same components within Group equity except that any share capital and investments in the books of the acquiring entity is cancelled and the differences, if any, is adjusted in the opening retained earnings/capital reserve. The Company's shares issued in consideration for the acquired companies are recognised from the moment the acquired companies are included in these financial statements and the financial statements of the commonly controlled entities would be combined, retrospectively, as if the transaction had occurred at the beginning of the earliest reporting period presented. However, the prior years' comparative information is only adjusted for periods during which the entities were under common control.

(iii) Revenue recognition

Sale of goods/rendering of services (Including revenue from contracts with customers)

The Group's revenue from contracts with customers is mainly from the sale of copper, aluminium, iron ore, zinc, oil and gas, power, steel, glass substrate and port operations. Revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer which usually is on delivery of the goods to the shipping agent at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. Revenue is recognised net of discounts, volume rebates, outgoing sales taxes/goods and service tax and other indirect taxes. Revenues from sale of by-products are included in revenue.

Certain of the Group's sales contracts provide for provisional pricing based on the price on the London Metal Exchange (LME) and crude index, as specified in the contract. Revenue in respect of such contracts is recognised when control passes to the customer and is measured at the amount the entity expects to be entitled – being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, provisional pricing features are accounted in accordance with IFRS 9 'Financial Instruments' rather than IFRS 15 'Revenue from contracts with customers' and therefore the IFRS 15 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration adjusted post transfer of control are included in total revenue from operations on the face of the Consolidated Income Statement and disclosed by way of note to the financial statements. Final settlement of the price is based on the applicable price for a specified future period. The Group's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represent the Group's share in the revenue from sale of such products, by the joint operations, and is recognised as and when control in these products gets transferred to the customers. In computing its share of revenue, the Group excludes government's share of profit oil which gets accounted for when the obligation in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at a rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

Where the Group acts as a port operator, revenues relating to operating and maintenance phase of the port contract are measured at the amount that Group expects to be entitled to for the services provided.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs part of its obligation by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration when that right is conditional on the Group's future performance.

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is received. The advance payments received plus a specified rate of return/discount, at the prevailing market rates, is settled by supplying respective goods over a period of up to twenty four months under an agreed delivery schedule as per the terms of the respective agreements. As these are contracts that the Group expects, and has the ability, to fulfil through delivery of a non-financial item, these are presented as advance from customers and are recognised as revenue as and when control of respective commodities is transferred to customers under the agreements. The fixed rate of return/discount is treated as finance cost. The portion of the advance where either the Group does not have a unilateral right to defer settlement beyond 12 months or expects settlement within 12 months from the balance sheet date is classified as current liability.

Interest income

Interest income from debt instruments is recognised using the effective interest rate method. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of a financial asset. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options) but does not consider the expected credit losses.

Dividends

Dividend income is recognised in the consolidated income statement only when the right to receive payment is established, provided it is probable that the economic benefits associated with the dividend will flow to the Group, and the amount of the dividend can be measured reliably.

(iv) Special items

Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior years. Also, tax charges related to Special items and certain one-time tax effects are considered Special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with IFRS. The determination as to which items should be disclosed separately requires a degree of judgement.

(v) Property, plant and equipment

Mining properties and leases

When a decision is taken that a mining property is viable for commercial production (i.e. when the Group determines that the mining property will provide sufficient and sustainable return relative to the risks and the Group decided to proceed with the mine development), all further pre-production primary development expenditure other than that on land, buildings, plant, equipment and capital work-in-progress is capitalised as property, plant and equipment under the heading "Mining properties and leases" together with any amount transferred from "Exploration and evaluation" assets. The costs of mining properties and leases include the costs of acquiring and developing mining properties and mineral rights.

The stripping cost incurred during the production phase of a surface mine is deferred to the extent the current period stripping cost exceeds the average period stripping cost over the life of mine and recognised as an asset if such cost provides a benefit in terms of improved access to ore in future periods and certain criteria are met. When the benefit from the stripping costs are realised in the current period, the stripping costs are accounted for as the cost of inventory. If the costs of inventory produced and the stripping activity asset are not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset. The group uses the expected volume of waste compared with the actual volume of waste extracted for a given value of ore/mineral production for the purpose of determining the cost of the stripping activity asset.

Deferred stripping costs are included in mining properties within property, plant and equipment and disclosed as a part of mining properties. After initial recognition, the stripping activity asset is depreciated on a unit of production method over the expected useful life of the identified component of the ore body.

In circumstances where a mining property is abandoned, the cumulative capitalised costs relating to the property are written off in the period in which it occurs i.e. when the Group determines that the mining property will not provide sufficient and sustainable returns relative to the risks and the Group decides not to proceed with the mine development.

Commercial reserves are proved and probable reserves as defined by the 'JORC' Code, 'MORC' code or 'SAMREC' Code. Changes in the commercial reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

The estimates of hydrocarbon reserves and resources have been derived in accordance with the Society of Petroleum Engineers "Petroleum Resources Management System (2018)".

Oil and gas assets-(developing/producing assets)

For oil and gas assets a successful efforts based accounting policy is followed. Costs incurred prior to obtaining the legal rights to explore an area are expensed immediately to the consolidated income statement.

All costs incurred after the technical feasibility and commercial viability of producing hydrocarbons has been demonstrated are capitalised within property, plant and equipment - development/producing assets on a field-by-field basis. Subsequent expenditure is capitalised only where it either enhances the economic benefits of the development/producing asset or replaces part of the existing development/producing asset. Any remaining costs associated with the part replaced are expensed.

Net proceeds from any disposal of development/producing assets are credited against the previously capitalised cost. A gain or loss on disposal of a development/producing asset is recognised in the consolidated income statement to the extent that the net proceeds exceed or are less than the appropriate portion of the net capitalised costs of the asset.

Exploration and evaluation assets

Exploration and evaluation expenditure incurred prior to obtaining the mining right or the legal right to explore are expensed as incurred.

Exploration and evaluation expenditure incurred after obtaining the mining right or the legal right to explore, are capitalised as exploration and evaluation assets (property, plant and equipment) and stated at cost less impairment, if any. Exploration and evaluation assets are transferred to the appropriate category of property, plant and equipment when the technical feasibility and commercial viability has been determined. Exploration and evaluation assets are assessed for impairment and impairment loss, if any, is recognised prior to reclassification.

Exploration expenditure includes all direct and allocated indirect expenditure associated with finding specific mineral resources which includes depreciation and applicable operating costs of related support equipment and facilities and other costs of exploration activities:

- Acquisition costs – costs associated with acquisition of licences and rights to explore, including related professional fees.
- General exploration costs – costs of surveys and studies, rights of access to properties to conduct those studies (e.g. costs incurred for environment clearance, defence clearance, etc.), and salaries and other expenses of geologists, geophysical crews and other personnel conducting those studies.
- Costs of exploratory drilling and equipping exploratory and appraisal wells.

Exploration expenditure incurred in the process of determining oil and gas exploration targets is capitalised within "exploration and evaluation assets" and subsequently allocated to drilling activities. Exploration drilling costs are initially capitalised on a well-by-well basis until the success or otherwise of the well has been established. The success or failure of each exploration effort is judged on a well-by-well basis. Drilling costs are written off on completion of a well unless the results indicate that hydrocarbon reserves exist and there is a reasonable prospect that these reserves are commercial.

Following appraisal of successful exploration wells, if commercial reserves are established and technical feasibility for extraction demonstrated, then the related capitalised exploration costs are transferred into a single field cost centre within property, plant & equipment – development/producing assets (oil and gas properties) after testing for impairment. Where results of exploration drilling indicate the presence of hydrocarbons which are ultimately not considered commercially viable, all related costs are written-off to the consolidated income statement.

Expenditure incurred on the acquisition of a licence interest is initially capitalised on a licence-by-licence basis. Costs are held undepleted, within exploration and evaluation assets until such time as the exploration phase on the licence area is complete or commercial reserves have been discovered.

Net proceeds from any disposal of an exploration asset are initially credited against the previously capitalised costs. Any surplus/deficit is recognised in the consolidated income statement.

Other property, plant and equipment

The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing an asset to working condition and location for its intended use. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as separate items (major components) of property, plant and equipment. All other expenses on existing property, plant and equipment, including day-to-day repair and maintenance expenditure and cost of replacing parts, are charged to the consolidated income statement for the period during which such expenses are incurred.

Gains and losses on disposal of an item of property, plant and equipment computed as the difference between the net disposal proceeds and the carrying amount of the asset is included in the consolidated income statement when the asset is derecognised. Major inspection and overhaul expenditure is capitalised, if the recognition criteria are met.

(vi) Assets under construction

Assets under construction are capitalised in the assets under construction account. At the point when an asset is capable of operating in the manner intended by management, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset and any obligatory decommissioning costs are capitalised until the period of commissioning has been completed and the asset is ready for its intended use.

(vii) Depreciation, depletion and amortisation expense

Mining properties and other assets in the course of development or construction, freehold land and goodwill are not depreciated or amortised.

Mining properties

The capitalised mining properties are amortised on a unit-of-production basis over the total estimated remaining commercial proved and probable reserves of each property or Group of properties and are subject to impairment review. Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future capital expenditure required to access the commercial reserves. Changes in the estimates of commercial reserves or future capital expenditure are dealt with prospectively.

Oil and gas assets

All expenditures carried within each field are amortised from the commencement of production on a unit of production basis, which is the ratio of oil and gas production in the period to the estimated quantities of commercial reserves at the end of the period plus the production in the period, generally on a field-by-field basis or group of fields which are reliant on common infrastructure.

Commercial reserves are proven and probable oil and gas reserves, which are defined as the estimated quantities of crude oil, natural gas and natural gas liquids which geological, geophysical and engineering data demonstrate with a specified degree of certainty to be recoverable in future years from known reservoirs and which are considered commercially producible.

Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future field development costs required to access the commercial reserves. Changes in the estimates of commercial reserves or future field development costs are dealt with prospectively.

Other assets

Depreciation on Property, plant and equipment is calculated using the straight-line method (SLM) to allocate their cost, net of their residual values, over their estimated useful lives (determined by the management) as given below. Management's assessment takes into account, inter alia, the nature of the assets, the estimated usage of the assets, the operating conditions of the assets, past history of replacement and maintenance support.

Estimated useful life of assets are as follows:

Buildings operations and administration	3-60 years
Plant and machinery	15-40 years
Railway sidings	
15 years	
Office equipment	3–6 years
Furniture and fixtures	8-10 years
Vehicles	8-10 years

Major inspection and overhaul costs are depreciated over the estimated life of the economic benefit to be derived from such costs. The carrying amount of the remaining previous overhaul cost is charged to the consolidated income statement if the next overhaul is undertaken earlier than the previously estimated life of the economic benefit.

The Group reviews the residual value and useful life of an asset at least at each financial year end and, if expectations differ from previous estimates, the change is accounted for as a change in accounting estimate.

(viii) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Subsequently, intangibles assets are measured at cost less accumulated amortisation and accumulated impairment losses, if any.

The Group recognises port concession rights as "Intangible Assets" arising from a service concession arrangement, in which the grantor controls or regulates the services provided and the prices charged, and also controls any significant residual interest in the infrastructure such as property, plant and equipment, irrespective whether the infrastructure is existing infrastructure of the grantor or the infrastructure is constructed or purchased by the Group as part of the service concession arrangement. Such an intangible asset is recognised by the Group initially at cost determined as the fair value of the consideration received or receivable for the construction service delivered and is capitalised when the project is complete in all respects. Port concession rights are amortised on straight-line basis over the balance of licence period. The concession period is 30 years from the date of the award. Any addition to the port concession rights are measured at fair value on recognition. Port concession rights also include certain property, plant and equipment in accordance with IFRIC 12 "Service Concession Arrangements".

Intangible assets are amortised over their estimated useful life on a straight-line basis. Software is amortised over the estimated useful life ranging from 2-5 years. Amounts paid for securing mining rights are amortised over the period of the mining lease ranging from 16-25 years. Technological know-how and acquired brand are amortised over the estimated useful life of 10 years.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the consolidated income statement when the asset is derecognised.

The amortisation period and the amortisation method are reviewed at least at each financial year end. If the expected useful life of the asset is different from previous estimates, the change is accounted for prospectively as a change in accounting estimate.

(ix) Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. 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 not depreciated and are measured at the lower of carrying amount and fair value less costs to sell. Such assets and disposal groups are presented separately on the face of the consolidated statement of financial position.

(x) Impairment

Non-financial assets

Impairment charges and reversals are assessed at the level of cash-generating units. A cash-generating unit (CGU) is the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or group of assets.

The Group assesses at each reporting date, whether there is an indication that an asset may be impaired. The Group conducts an internal review of asset values annually, which is used as a source of information to assess for any indications of impairment or reversal of previously recognised impairment losses. Internal and external factors, such as worse economic performance than expected, changes in expected future prices, costs and other market factors are also monitored to assess for indications of impairment or reversal of previously recognised impairment losses.

If any such indication exists or in case of goodwill where annual testing of impairment is required then an impairment review is undertaken, the recoverable amount is calculated, as the higher of fair value less costs of disposal and the asset's value in use.

Fair value less costs of disposal is the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the group and not applicable to entities in general. Fair value for mineral and oil and gas assets is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal, using assumptions that an independent market participant may take into account. These cash flows are discounted at an appropriate post-tax discount rate to arrive at the net present value.

Value in use is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal. The cash flows are discounted 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 estimates of future cash flows have not been adjusted. Value in use is determined by applying assumptions specific to the Group's continued use and cannot take into account future development. These assumptions are different to those used in calculating fair value and consequently the value in use calculation is likely to give a different result to a fair value calculation.

The carrying amount of the CGU is determined on a basis consistent with the way the recoverable amount of the CGU is determined. The carrying value is net of deferred tax liability recognised in the fair value of assets acquired in the business combination.

If the recoverable amount of an asset or CGU is estimated to be less than it's carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount. An impairment loss is recognised in the consolidated income statement.

Any reversal of the previously recognised impairment loss is limited to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had previously been recognised except if initially attributed to goodwill.

Exploration and evaluation assets:

In assessing whether there is any indication that an exploration and evaluation asset may be impaired, the Group considers, as a minimum, the following indicators:

- the period for which the Group has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the Group has decided to discontinue such activities in the specific area;
- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale; and
- reserve information prepared annually by external experts.

When a potential impairment is identified, an assessment is performed for each area of interest in conjunction with the group of operating assets (representing a cash-generating unit) to which the exploration and evaluation assets is attributed. Exploration areas in which reserves have been discovered but require major capital expenditure before production can begin, are continually evaluated to ensure that commercial quantities of reserves exist or to ensure that additional exploration work is under-way or planned. To the extent that capitalised expenditure is no longer expected to be recovered, it is charged to the consolidated income statement.

(xi) Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(a) Financial Assets – Recognition & subsequent measurement

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e. the date that the Group commits to purchase or sell the asset.

For purposes of subsequent measurement, financial assets are classified in four categories:

Debt instruments at amortised cost

A 'debt instrument' is measured at amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the Effective Interest Rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in interest income in consolidated income statement. The losses arising from impairment are recognised in consolidated income statement.

Debt instruments at fair value through other comprehensive income (FVOCI)

A 'debt instrument' is classified as at FVOCI if both of the following criteria are met:

a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and

b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognised in other comprehensive income (OCI). However, interest income, impairment losses and reversals and foreign exchange gain or loss are recognised in the consolidated income statement. On derecognition of the asset, cumulative gain or loss previously recognised in other comprehensive income is reclassified from the equity to consolidated income statement. Interest earned whilst holding fair value through other comprehensive income debt instrument is reported as interest income using the EIR method.

Debt instruments at fair value through profit or loss (FVTPL)

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorisation as at amortised cost or as FVOCI, is classified as at FVTPL.

In addition, the Group may elect to designate a debt instrument, which otherwise meets amortised cost or FVOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). The Group has not designated any debt instrument as at FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes being recognised in consolidated income statement.

Equity instruments

All equity investments in the scope of IFRS 9 are measured at fair value. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which IFRS 3 applies are classified as at FVTPL. For all other equity instruments, the Group may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The Group makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the Group decides to classify an equity instrument as at FVOCI, then all fair value changes on the instrument, excluding dividends, are recognised in the OCI. There is no recycling of the amounts from OCI to profit and loss, even on sale of investment. However, the Group may transfer the cumulative gain or loss within equity. For equity instruments which are classified as FVTPL, all subsequent fair value changes are recognised in the consolidated income statement.

(b) Financial Assets – Derecognition

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

(c) Impairment of financial assets

In accordance with IFRS 9, the Group applies expected credit loss ("ECL") model for measurement and recognition of impairment loss on the following financial assets:

i) Financial assets that are debt instruments, and are measured at amortised cost e.g. loans, debt securities and deposits

ii) Financial assets that are debt instruments and are measured as at FVOCI

iii) Trade receivables or any contractual right to receive cash or another financial asset that result from transactions that are within the scope of IFRS 15.

The Group follows 'simplified approach' for recognition of impairment loss allowance on trade receivables, contract assets and lease receivables. The application of simplified approach does not require the Group to track changes in credit risk. Rather, it recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

At each reporting date, for recognition of impairment loss on other financial assets and risk exposure, the Group determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the Group reverts to recognising impairment loss allowance based on 12-month ECL.

Lifetime ECL are the expected credit losses resulting from all possible default events over the expected life of a financial instrument. The 12-month ECL is a portion of the lifetime ECL which results from default events that are possible within 12 months after the reporting date.

ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original EIR.

ECL impairment loss allowance (or reversal) during the year is recognised as income/expense in consolidated income statement. The consolidated statement of financial position presentation for various financial instruments is described below:

i) Financial assets measured at amortised cost: ECL is presented as an allowance, i.e., as an integral part of the measurement of those assets. The Group does not reduce impairment allowance from the gross carrying amount.

ii) Debt instruments measured at FVOCI: Since financial assets are already reflected at fair value, impairment allowance is not further reduced from its value. Rather, ECL amount is presented as 'accumulated impairment amount' in the OCI.

For assessing increase in credit risk and impairment loss, the Group combines financial instruments on the basis of shared credit risk characteristics with the objective of facilitating an analysis that is designed to enable significant increases in credit risk to be identified on a timely basis.

The Group does not have any purchased or originated credit-impaired (POCI) financial assets, i.e. financial assets which are credit impaired on purchase/origination.

(d) Financial liabilities – Recognition and Subsequent measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, or as loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value, and in the case of financial liabilities at amortised cost, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the consolidated income statement.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied. For liabilities designated as FVTPL, fair value gains/losses attributable to changes in own credit risk are recognised in OCI. These gains/losses are not subsequently transferred to consolidated income statement. However, the Group may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the consolidated income statement. The Group has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (Loans and Borrowings and Trade and Other payables)

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in consolidated income statement when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the consolidated income statement.

(e) Financial liabilities – Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the consolidated income statement.

(f) Embedded Derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss.

If the hybrid contract contains a host that is a financial asset within the scope of IFRS 9, the Group does not separate embedded derivatives. Rather, it applies the classification requirements contained in IFRS 9 to the entire hybrid contract. Derivatives embedded in all other host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value though profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in Consolidated Income Statement, unless designated as effective hedging instruments.

(g) 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.

(h) Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

(i) Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

In order to hedge its exposure to foreign exchange, interest rate, and commodity price risks, the Group enters into forward, option, swap contracts and other derivative financial instruments. The Group does not hold derivative financial instruments for speculative purposes.

Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives are taken directly to consolidated income statement, except for the effective portion of cash flow hedges, which is recognised in OCI and later reclassified to consolidated income statement when the hedge item affects profit or loss or treated as basis adjustment if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment.
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm commitment.
- Hedges of a net investment in a foreign operation.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting. The documentation includes the Group's risk management objective and strategy for undertaking hedge, the hedging/economic relationship, the hedged item or transaction, the nature of the risk being hedged, hedge ratio and how the Group will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

(i) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in consolidated income statement immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in consolidated income statement. Hedge accounting is discontinued when the Group revokes the hedge relationship, the hedging instrument or hedged item expires or is sold, terminated, or exercised or no longer meets the criteria for hedge accounting.

(ii) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in OCI in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the consolidated income statement.

Amounts recognised in OCI are transferred to consolidated income statement when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised in OCI are transferred to the initial carrying amount of the non-financial asset or liability.

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognised in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

(iii) Hedges of a net investment

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, are accounted for in a way similar to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognised in OCI while any gains or losses relating to the ineffective portion are recognised in the consolidated income statement. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is reclassified to the consolidated income statement (as a reclassification adjustment).

(iv) Financial guarantees

Financial guarantees issued by the Group on behalf of related parties are designated as 'Insurance Contracts'. The Group assesses at the end of each reporting period whether its recognised insurance liabilities (if any) are adequate, using current estimates of future cash flows under its insurance contracts. If that assessment shows that the carrying amount of its insurance liabilities is inadequate in the light of the estimated future cash flows, the entire deficiency is recognised in consolidated income statement.

(xii) Leases

The Group assesses at contract inception, all arrangements to determine whether they are, or contain, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

(a) Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's 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 net investment outstanding in respect of the lease.

(b) Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities towards future lease payments and right-of-use assets representing the right to use the underlying assets.

(i) Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date when the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. The right-of-use assets are also subject to impairment.

Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets as described in (vii) above.

(ii) Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (and, in some instances, in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is generally not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g. changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

The Group's lease liabilities are included in Trade and other payables.

(iii) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of equipment (i.e. those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

(xiii) Inventories

Inventories and work-in-progress are stated at the lower of cost and net realisable value.

Cost is determined on the following basis:

- Purchased copper concentrate is recorded at cost on a first-in, first-out ("FIFO") basis; all other materials including stores and spares are valued on weighted average basis; except in Oil and Gas business where stores and spares are valued on a FIFO basis.
- Finished products are valued at raw material cost plus costs of conversion, comprising labour costs and an attributable proportion of manufacturing overheads based on normal levels of activity and are moved out of inventory on a weighted average basis (except in copper business where FIFO basis is followed); and
- By-products and scrap are valued at net realisable value.

Net realisable value is determined based on estimated selling price, less further costs expected to be incurred for completion and disposal.

(xiv) Government grants

Grants and subsidies from the government are recognised when there is reasonable assurance that (i) the Group will comply with the conditions attached to them, and (ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognised as income on a systematic basis in the consolidated income statement over the periods necessary to match them with the related costs, which they are intended to compensate.

Government grants relating to tangible fixed assets are deducted in calculating the carrying amount of the assets and recognised in the consolidated income statement over the expected useful lives of the assets concerned as a reduced depreciation expense.

When loans or similar assistance are provided by governments or related institutions, with an interest rate below the current applicable market rate, the effect of this favourable interest is regarded as a government grant. The loan or assistance is initially recognised and measured at fair value and the government grant is measured as the difference between the initial carrying value of the loan and the proceeds received. The loan is subsequently measured as per the accounting policy applicable to financial liabilities.

(xv) Taxation

Tax expense represents the sum of current tax and deferred tax.

Current tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the reporting date and includes any adjustment to tax payable in respect of previous years.

Subject to the exceptions below, deferred tax is provided, using the balance sheet method, on all temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes and on carry forward of unused tax credits and unused tax losses:

- Tax payable on the future remittance of the past earnings of subsidiaries where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future;
- Deferred income tax is not recognised on initial recognition as well as on the impairment of goodwill which is not deductible for tax purposes or on the initial recognition of an asset or liability in a transaction that is not a business combination, and at the time of the transaction, affects neither the accounting profit nor taxable profit (tax loss); and
- Deferred tax assets (including MAT credit entitlement) are recognised only to the extent that it is more likely than not that they will be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. Tax relating to items recognised outside consolidated income statement is recognised outside consolidated income statement (either in other comprehensive income or equity).

The carrying amount of deferred tax assets (including MAT credit entitlement) is reviewed at each reporting date and is adjusted to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Deferred tax is provided on temporary differences arising on acquisitions that are categorised as Business Combinations. Deferred tax is recognised at acquisition as part of the assessment of the fair value of assets and liabilities acquired. Subsequently deferred tax is charged or credited in the consolidated income statement/other comprehensive income as the underlying temporary difference is reversed.

(xvi) Retirement benefit schemes

The Group operates or participates in a number of defined benefits and defined contribution schemes, the assets of which (where funded) are held in separately administered funds.

For defined benefit schemes, the cost of providing benefits under the plans is determined by actuarial valuation each year separately for each plan using the projected unit credit method by third party qualified actuaries.

Remeasurement including, effects of asset ceiling and return on plan assets (excluding amounts included in interest on the net defined benefit liability) and actuarial gains and losses arising in the year are recognised in full in other comprehensive income and are not recycled to the consolidated income statement.

Past service costs are recognised in the consolidated income statement on the earlier of:

- the date of the plan amendment or curtailment, and
- the date that the Group recognises related restructuring costs.

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset at the beginning of the period. Defined benefit costs are split into current service cost, past service cost, net interest expense or income and remeasurement, and gains and losses on curtailments and settlements.

Current service cost and past service costs are recognised within cost of sales and administrative expenses and distribution expenses. Net interest expense or income is recognised within finance costs.

For defined contribution schemes, the amount charged to the consolidated income statement in respect of pension costs and other post-retirement benefits is the contributions payable in the year, recognised as and when the employee renders related services.

(xvii) Share-based payments

Certain employees (including executive directors) of the Group receive part of their remuneration in the form of share-based payment transactions, whereby employees

render services in exchange for shares or rights over shares (‘equity-settled transactions’).

The cost of equity-settled transactions with employees is measured at fair value of share awards at the date at which they are granted. The fair value of share awards is determined with the assistance of an external valuer and the fair value at the grant date is expensed on a proportionate basis over the vesting period based on the Group’s estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each reporting date up to the vesting date at which point the estimate is adjusted to reflect the current expectations.

The resultant increase in equity is recorded in share-based payment reserve.

In case of cash-settled transactions, a liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognised in employee benefits expense. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The fair value is determined with the assistance of an external valuer.

(xviii) Provisions, contingent liabilities and contingent assets

The assessments undertaken in recognising provisions and contingencies have been made in accordance with the applicable IFRS.

Provisions represent liabilities for which the amount or timing is uncertain. Provisions are recognised when the Group has a present obligation (legal or constructive), as a result of past events, and it is probable that an outflow of resources, that can be reliably estimated, will be required to settle such an obligation. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Unwinding of the discount is recognised in the consolidated income statement as a finance cost. Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of Group or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in extremely rare cases where there is a liability that cannot be recognised because it cannot be measured reliably. The Group does not recognise a contingent liability but discloses its existence in the consolidated financial statements.

Contingent assets are not recognised but disclosed in the financial statements when an inflow of economic benefit is probable.

The Group has significant capital commitments in relation to various capital projects which are not recognised in the consolidated statement of financial position.

(xix) Restoration, rehabilitation and environmental costs

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine or oil fields. Such costs, discounted to net present value, are provided for and a corresponding amount is capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are charged to the consolidated income statement over the life of the operation through the depreciation of the asset and the unwinding of the discount on the provision. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes to lives of operations, new disturbance and revisions to discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate. The unwinding of the discount is shown as a finance cost in the consolidated income statement.

Costs for restoration of subsequent site damage which is caused on an ongoing basis during production are provided for at their net present value and charged to the consolidated income statement as extraction progresses. Where the costs of site restoration are not anticipated to be material, they are expensed as incurred.

(xx) Accounting for foreign currency transactions and translations

The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. For all principal operating subsidiaries, the functional currency is normally the local currency of the country in which it operates with the exception of oil and gas business operations which have a US Dollar functional currency as that is the currency of the primary economic environment in which they operate. The financial statements are presented in US Dollars.

In the financial statements of individual group companies, transactions in currencies other than the respective functional currencies are translated into their functional currencies at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in other currencies are translated into functional currencies at exchange rates prevailing on the reporting date. Non-monetary assets and liabilities denominated in other currencies and measured at historical cost or fair value are translated at the exchange rates prevailing on the dates on which such values were determined.

All exchange differences are included in the consolidated income statement except those where the monetary item is designated as an effective hedging instrument of the currency risk of designated forecasted sales or purchases, which are recognised in the other comprehensive income.

Exchange differences which are regarded as an adjustment to interest costs on foreign currency borrowings, are capitalised as part of borrowing costs in qualifying assets.

For the purposes of consolidation of financial statements, items in the consolidated income statement of those businesses for which the US dollar is not the functional currency are translated into US dollars at the average rates of exchange during the year/exchange rates as on the date of transaction. The related consolidated statement of financial position is translated into US dollars at the rates as at the reporting date. Exchange differences arising on translation are recognised in the consolidated statement of comprehensive income. On disposal of such entities the deferred cumulative exchange differences recognised in equity relating to that particular foreign operation are recognised in the consolidated income statement.

(xxi) Buyers' credit/Suppliers' credit

The Group enters into arrangements whereby banks and financial institutions make direct payments to suppliers for raw materials and project materials. The banks and financial institutions are subsequently repaid by the Group at a later date providing working capital timing benefits. These are normally settled up to twelve months (for raw materials) and up to 36 months (for project and materials). Where these arrangements are with a maturity of up to twelve months, the economic substance of the transaction is determined to be operating in nature and these are recognised as operational buyers' credit/suppliers' credit (under Trade and other payables). Where these arrangements are with a maturity beyond twelve months and up to thirty six months, the economic substance of the transaction is determined to be financing in nature, and these are presented within borrowings in the consolidated statement of financial position. Interest expense on these are recognised in the finance cost.

(xxii) Current and non-current classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current/non-current classification. An asset is classified as current when it satisfies any of the following criteria:

- it is expected to be realised in, or is intended for sale or consumption in, the Group's normal operating cycle;
- it is held primarily for the purpose of being traded;
- it is expected to be realised within 12 months after the reporting date; or
- it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting date.

All other assets are classified as non-current.

A liability is classified as current when it satisfies any of the following criteria:

- it is expected to be settled in the Group's normal operating cycle;
- it is held primarily for the purpose of being traded;
- it is due to be settled within 12 months after the reporting date; or
- the Group does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current only.

(xxiii) Borrowing costs

Borrowing cost includes interest expense as per effective interest rate (EIR) and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost.

Borrowing costs directly relating to the acquisition, construction or production of a qualifying capital project under construction are capitalised and added to the project cost during construction until such time that the assets are substantially ready for their intended use i.e. when they are capable of commercial production. Borrowing costs relating to the construction phase of a service concession arrangement is capitalised as part of the cost of the intangible asset. Where funds are borrowed specifically to finance a qualifying capital project, the amount capitalised represents the actual borrowing costs incurred. Where surplus funds are available out of money borrowed specifically to finance a qualifying capital project, the income generated from such short-term investments is deducted from the total capitalised borrowing cost. If any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing then becomes part of general borrowing. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the year.

All other borrowing costs are recognised in the consolidated income statement in the year in which they are incurred.

Capitalisation of interest on borrowings related to construction or development projects is ceased when substantially all the activities that are necessary to make the assets ready for their intended use are complete or when delays occur outside of the normal course of business.

EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial liability or a shorter period, where appropriate, to the amortised cost of a financial liability. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options).

(xxiv) Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of financial position comprise cash at bank and in hand and short-term money market deposits which have a maturity of three months or less from the date of acquisition, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above and additionally includes unpaid dividend account.

2(B) APPLICATION OF NEW AND REVISED STANDARDS

The Group has adopted, with effect from 1 April 2019, the following new and revised standards and interpretations. Their adoption has not had any significant impact on the amounts reported in the consolidated financial statements.

IFRS 16 – Leases

IFRS 16, Leases, replaces the existing standard on accounting for leases, IAS 17, with effect from 1 April 2019. This standard introduces a single lessee accounting model and requires a lessee to recognise a 'right of use asset' (ROU) and a corresponding 'lease liability' for all leases. Lease costs are to be recognised in the consolidated income statement over the lease term in the form of depreciation on the ROU asset and finance charges representing the unwinding of the discount on the lease liability. In contrast, the accounting requirements for lessors remain largely unchanged.

The Group acts as a lessee in lease arrangements mainly involving plant and machinery, office premises and other properties. The Group has elected to apply the modified retrospective approach on transition, and accordingly the comparative numbers have not been restated. For contracts in place as at 1 April 2019, the Group has continued to apply its existing definition of leases as under IAS 17 ("grandfathering"), instead of reassessing whether existing contracts are or contain a lease at that date. Further, the Group has elected to avail the exemption in IFRS 16 from applying the requirements of IFRS 16 to short-term leases of all assets that have a lease term of 12 months or less and leases for which the underlying asset is of low value. The lease payments associated with these leases are recognised as an expense on a straight-line basis over the lease term.

Refer note 16 for impact of ROU assets and note 24 for lease liabilities.

Previous period accounting policies: Leases

Determining whether an arrangement contains lease

At inception of an arrangement, the Group determines whether the arrangement is or contains a lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

At inception or on reassessment of an arrangement that contains lease, the Group separates payments and other consideration required by the arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset; subsequently the liability is reduced as payments are made and an imputed finance cost on the liability is recognised using the Group's incremental borrowing rate.

Group as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the consolidated income statement, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Group's policy on the general borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognised as an expense in the consolidated income statement on a straight-line basis over the lease term.

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's 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 net investment outstanding in respect of the lease.

IFRIC 23 – Uncertainty over Income Tax Treatments

IFRIC 23 clarifies how to apply the recognition and measurement requirements in IAS 12 Income Taxes when there is uncertainty over income tax treatments. The clarification did not have a material effect on the Group's financial statements so far as the recognition and measurement of income taxes is concerned. A consequential impact of the clarification is on the disclosure of contingent liabilities. The Group previously used to consider only those cases/matters for contingent liabilities wherever demand has been raised by the authorities/initial assessment has been completed. The contingent liabilities have now been extrapolated to other years where a similar issue exists, but formal demand has not been raised by tax authorities. Considering the impact of IFRIC 23, the amounts of Income Tax disputes disclosed in note 11 and 33 of these financial statements would have been higher by US$561 million as on 1 April 2019, as against the hitherto followed practice. As per the transitional provisions of IFRIC 23, the Group has not restated comparative information.

Other Amendments

A number of other minor amendments to existing standards also became effective on 1 April 2019 and have been adopted by the Group. The adoption of these new accounting pronouncements did not have a material impact on the accounting policies, methods of computation or presentation applied by the Group.

Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are not expected to have a significant impact on the Group's financial statements. The Group has not early adopted any amendment, standard or interpretation that has been issued but is not yet effective.

2(C) SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of consolidated financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions, that affect the application of accounting policies and the reported amounts of assets, liabilities, income, expenses and disclosures of contingent assets and liabilities at the date of these consolidated financial statements and the reported amounts of revenues and expenses for the years presented. These judgements and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ materially from the amounts included in the financial statements.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and future periods affected.

The information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements are as given below:

I. Significant Estimates:

(i) Impact of COVID-19

The outbreak of novel Coronavirus (COVID-19) pandemic globally and in India and the consequent lockdown restrictions imposed by national governments is causing significant disturbance and slowdown of economic activity across the globe. The commodity prices including oil have seen significant volatility with downward price pressures due to major demand centres affected by lockdown.

The Group is in the business of metals and mining, oil & gas and generation of electricity which are considered as either essential goods and services or were generally allowed to continue to carry out the operations with adequate safety measures. The Group has taken proactive measures to comply with various regulations/ guidelines issued by the Government and local bodies to ensure safety of its workforce and the society in general.

The Group has considered possible effects of COVID-19 on the recoverability of its property, plant and equipment (PPE), inventories, loans and receivables, etc. in accordance with IFRS. The Group has considered forecast consensus, industry reports, economic indicators and general business conditions to make an assessment of the implications of the Pandemic. The Group has also performed sensitivity analysis on the key assumptions identified based on the internal and external information, which are indicative of future economic condition. Based on the assessment, the Group has recorded necessary adjustments, including impairment to the extent the carrying amount exceeds the recoverable amount and has disclosed the same as special item in these financial statements (refer note 6).

The actual effects of COVID-19 could be different from what is presently assessed and would be known only in due course of time.

(ii) Oil and Gas reserves

Significant technical and commercial judgements are required to determine the Group's estimated oil and natural gas reserves. Oil and Gas reserves are estimated on a proved and probable entitlement interest basis. Proven and probable reserves are estimated using standard recognised evaluation techniques. The estimate is reviewed annually. Future development costs are estimated taking into account the level of development required to produce the reserves by reference to operators, where applicable and internal engineers.

Net entitlement reserves estimates are subsequently calculated using the Group's current oil price and cost recovery assumptions, in line with the relevant agreements.

Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or oil and gas prices could impact the depletion rates, carrying value of assets (refer note 16) and environmental and restoration provisions.

(iii) Carrying value of exploration and evaluation oil and gas assets

The recoverability of a project is assessed under IFRS 6. Exploration assets are assessed by comparing the carrying value to higher of fair value less cost of disposal or value in use, if impairment indicators exist. Change to the valuation of exploration assets is an area of judgement. Further details on the Group's accounting policies on this are set out in accounting policy above. The amounts for exploration and evaluation assets represent active exploration projects. These amounts will be written off to the consolidated income statement as exploration costs unless commercial reserves are established, or the determination process is not completed and there are no indications of impairment. The outcome of ongoing exploration, and therefore whether the carrying value of exploration and evaluation assets will ultimately be recovered, is inherently uncertain. Details of impairment charge/ reversal and the assumptions used and carrying values are disclosed in note 6 and note 16 respectively.

(iv) Carrying value of developing/producing oil and gas assets

Management performs impairment tests on the Group's developing/producing oil and gas assets where indicators of impairment are identified in accordance with IAS 36.

The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/ assumptions	Basis
Future production	proved and probable reserves, production facilities, resource estimates and expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Discount to price	management's best estimate based on historical prevailing discount and updated sales contracts
Extension of PSC	granted till 2030 on the expected commercial terms (Refer note 2(c)(I)(viii)
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/CGU

Any subsequent changes to cash flows due to changes in the above-mentioned factors could impact the carrying value of the assets.

Details of impairment charge/reversal and the assumptions used and carrying values are disclosed in note 6 and note 16 respectively.

(v) Mining properties and leases

The carrying value of mining property and leases is arrived at by depreciating the assets over the life of the mine using the unit of production method based on proved and probable reserves. The estimate of reserves is subject to assumptions relating to life of the mine and may change when new information becomes available. Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or commodity prices could thus impact the carrying values of mining properties and leases and environmental and restoration provisions.

Management performs impairment tests when there is an indication of impairment. The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/ assumptions	Basis
Future production	proved and probable reserves, resource estimates (with an appropriate conversion factor) considering the expected permitted mining volumes and, in certain cases, expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Exchange rates	management best estimate benchmarked with external sources of information
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/CGU

Details of impairment charge/reversal and the assumptions used and carrying values are disclosed in note 6 and note 16 respectively.

(vi) Recoverability of deferred tax and other income tax assets

The Group has carry forward tax losses, unabsorbed depreciation and MAT credit that are available for offset against future taxable profit. Deferred tax assets are recognised only to the extent that it is probable that taxable profit will be available against which the unused tax losses or tax credits can be utilised. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets. This requires assumptions regarding future profitability, including the additional volume from the expansion projects in oil and gas and aluminium businesses, which is inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets and consequential impact in the consolidated income statement.

The total deferred tax assets recognised in these financial statement (refer note 11) includes MAT credit entitlements of US$1,220 million (Previous year US$1,492 million) which needs to be utilised within a period of fifteen years from year of origination. Of the said amount US$481 million is expected to be utilised in the fourteenth and the fifteenth year.

Additionally, the Group has tax receivables on account of refund arising on account of past amalgamation and relating to various tax disputes. The recoverability of these receivables involve application of judgement as to the ultimate outcome of the tax assessment and litigations. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific tax law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision (refer note 11(d)).

(vii) Copper - India

Existing Plant:

In an appeal filed by the Group against the closure order of the Tuticorin Copper smelter by Tamil Nadu Pollution Control Board ("TNPCB"), the appellate authority National Green Tribunal ("NGT") passed an interim order on 31 May 2013 allowing the copper smelter to recommence operations and appointed an Expert Committee to submit a report on the plant operations. Post the interim order, the plant recommenced operations on 23 June 2013. Based on Expert Committee's report on the operations of the plant stating that the plant's emission were within prescribed standards and based on this report, NGT ruled on 8 August 2013 that the Copper smelter could continue its operations and recommendations made by the Expert Committee be implemented in a time bound manner. The Group has implemented all of the recommendations. TNPCB has filed an appeal against the order of the NGT before the Supreme Court of India.

In the meanwhile, the application for renewal of Consent to Operate (CTO) for existing copper smelter, required as per procedure established by law was rejected by TNPCB in April 2018. Vedanta Limited has filed an appeal before the TNPCB Appellate Authority challenging the Rejection Order. During the pendency of the appeal, there were protests by a section of local community raising environmental concerns and TNPCB vide its order dated 23 May 2018 ordered closure of existing copper smelter plant with immediate effect. Further, the Government of Tamil Nadu, issued orders dated 28 May 2018 with a direction to seal the existing copper smelter plant permanently. The company believes these actions were not taken in accordance with the procedure prescribed under applicable laws. Subsequently, the Directorate of Industrial Safety and Health passed orders dated 30 May 2018, directing the immediate suspension and revocation of the Factory Licence and the Registration Certificate for the existing smelter plant.

The company has appealed this before the National Green Tribunal (NGT). NGT vide its order on 15 December 2018 has set aside the impugned orders and directed the TNPCB to pass fresh orders for renewal of consent and authorisation to handle hazardous substances, subject to appropriate conditions for protection of environment in accordance with law.

The State of Tamil Nadu and TNPCB approached Supreme Court in Civil Appeals on 2 January 2019 challenging the judgement of NGT dated 15 December 2018 and the previously passed judgement of NGT dated 8 August 2013. The Supreme Court vide its judgement dated 18 February 2019 set aside the judgements of NGT dated 15 December 2018 and 8 August 2013 on the basis of maintainability alone and directed the company to file an appeal in High court.

The company has filed a writ petition before Madras High Court challenging the various orders passed against the company in 2018 and 2013. Continuous hearings were conducted from June 2019 to January 2020. Rejoinder and sur-rejoinder arguments on behalf of all the parties concluded on 8 January 2020 and the orders have been reserved for Judgement.

Further, in October 2019, the company has filed a writ petition in Madras High court for allowing access to plant to undertake essential care and maintenance as due to lack of care and maintenance in the last 18 months, several structures such as pipelines, cable trays etc. are in corroded state and likely to get damaged. Management believes that assessment of physical damage, if any, can be carried out once it gets access to the plant. However, the same is not expected to be material.

As per the company's assessment, it is in compliance with the applicable regulations and expects to get the necessary approvals in relation to the existing operations.

The company has carried out an impairment analysis for existing plant assets during the year ended 31 March 2020 considering the key variables and concluded that there exists no impairment. The company has done an additional sensitivity analysis with commencement of operations of the existing plant in FY 2022-23 and noted that the recoverable amount of the assets would still be in excess of their carrying values.

The carrying value of the assets as at 31 March 2020 is US$260 million (US$284 million as at 31 March 2019).

Expansion Plant:

Separately, the company has filed a fresh application for renewal of the Environmental Clearance for the proposed Copper Smelter Plant 2 (Expansion Project) dated 12 March 2018 before the Expert Appraisal Committee of the MoEF wherein a sub-committee was directed to visit the Expansion Project site prior to prescribing the Terms of Reference.

In the meantime, the Madurai Bench of the High Court of Madras in a Public Interest Litigation held vide its order dated 23 May 2018 that the application for renewal of the Environmental Clearance for the Expansion Project shall be processed after a mandatory public hearing and in the interim, ordered the company to cease construction and all other activities on site for the proposed Expansion Project with immediate effect. The Ministry of Environment and Forests (MoEF) has delisted the expansion project since the matter is sub-judice. Separately, SIPCOT vide its letter dated 29 May 2018, cancelled 342.22 acres of the land allotted for the proposed Expansion Project. Further the TNPCB issued orders on 7 June 2018 directing the withdrawal of the Consent to Establish (CTE) which was valid till 31 March 2023.

The company has approached Madras High Court by way of writ petition challenging the cancellation of lease deeds by SIPCOT pursuant to which an interim stay has been granted. The company has also filed Appeals before the TNPCB Appellate Authority challenging withdrawal of CTE by the TNPCB, the matter is pending for adjudication.

Impairment recognised during the year

For the expansion plant, the project activities are on halt since May 2018. Further, the project environment clearance (EC) for the expansion plant expired on 31 December 2018 and fresh application has been filed before the competent authority, however, the process will start only after reopening of the existing plant and after obtaining all statutory approvals, the timing of which is uncertain.

Keeping in view the above factors and the fact that value in use cannot be reasonably ascertained, the company has carried out recoverability assessment of the items of property, plant and equipment, capital work-in-progress (CWIP) and capital advances using fair value less cost of disposal method. Based on the realisable value estimate of US$38 million, the company has recognised an impairment of US$94 million (comprising of CWIP balances of US$61 million, capital advances of US$28 million and other property plant and equipment of US$5 million) during the year.

Property, plant and equipment of US$197 million and inventories of US$69 million, pertaining to existing and expansion plant, could not be physically verified, anytime during the year, as the access to the plant is presently restricted. However, since operations are suspended and access to the plant restricted, any difference between book and physical quantities is unlikely to be material.

(viii) PSC Extension

Rajasthan Block

On 26 October 2018, the Government of India (GoI), acting through the Directorate General of Hydrocarbons (DGH) granted its approval for a ten-year extension of the Production Sharing Contract (PSC) for the Rajasthan Block (RJ), with effect from 15 May 2020 subject to certain conditions. The GoI had granted the extension under the Pre-NELP Extension Policy, the applicability whereof to PSC for Rajasthan Block is sub-judice and pending before the Hon'ble Delhi High Court. This policy entails additional 10% profit petroleum payment to GoI. In the ongoing proceedings in Delhi High court, GoI have agreed for ad-hoc arrangement not to seek the 10% additional profit petroleum till 1 September 2020. The next date of hearing is scheduled on 20 August 2020.

The key conditions stated by DGH and the Group's position is detailed below:

a) Submission of Audited Accounts and End of year statement:

Condition regarding submission of audited accounts and End of Year Statement for adoption by Management Committee of the Block has been delinked by DGH vide letter dated 3 December 2019 as a pre-condition to PSC extension.

b) Profit Petroleum:

DGH has raised a demand for the period up to 31 March 2017 for Government's additional share of Profit oil based on its computation of disallowance of cost incurred over the initially approved Field Development Plan (FDP) of pipeline project for US$202 million and retrospective re-allocation of certain common costs between Development Areas (DAs) of Rajasthan Block aggregating to US$364 million, representing the Group's share.

Subsequently, the company in January 2020 received notifications from DGH on audit exceptions arising out of its audit for the FY 2017-18, which comprises of the consequential effects on profit oil due to the aforesaid matters and certain new matters on cost allowability plus interest aggregating to US$645 million, representing the Group's share, which have been responded to by the Group.

The company believes that it has sufficient as well as reasonable basis (pursuant to PSC provisions & approvals), supported by legal advice, for having claimed such costs and for allocating common costs between different DAs. In the company's opinion, these computations of the aforesaid demand/audit exceptions are not appropriate and the accounting adjustments sought for issues pertaining to Year 2007 and onwards are based on assumptions that are not in consonance with the approvals already in place. The company's view is also supported by independent legal opinion and the company has been following the process set out in PSC to resolve these aforesaid matters. Thus, the company sought for appointment of a sole expert for opining on the audit exceptions by a letter dated 14 November 2019 and thereafter on 14 May 2020, company has issued a notice of Arbitration proceeding on the above matters and is confident of resolution of matters in its favour.

The Government of India (GoI) has responded to company's notice of arbitration on 29 June 2020 and raised claims of US$1,031 million (representing audit exceptions notified by DGH up to FY 2017-18) plus consequential impact until the expiry of the current PSC on 14 May 2020.

GoI has nominated their arbitrator and the company has notified GoI about proceeding with appointment of the presiding arbitrator as per the PSC.

Further to above stated letter from GoI on 26 October 2018, in view of pending non-finalisation of the Addendum to PSC, the extraordinary situation prevailing on account of COVID-19 and non-finalisation of issues including the aforesaid DGH demand, the GoI granted, vide letter dated 14 May 2020, permission to the Group to continue petroleum operations in Rajasthan block, till the execution of the Addendum to PSC or for a period of three months from 15 May 2020, whichever is earlier.

In our view, above-mentioned condition linked to PSC extension is untenable and has not resulted in creation of any liability and cannot be a ground for non-extension. In addition, all necessary procedures prescribed in the PSC including appropriate dispute resolution process, in respect of the stated audit observation have also been satisfied. Accordingly, in our view, all the conditions of the PSC extension approval granted vide DGH letter dated 26 October 2018 stands addressed and no material liability would devolve upon the Group.

An adverse decision from the Government of India on the PSC extension could result in a substantial loss of value and could have a material adverse effect on Vedanta's results of operations and financial condition.

Ravva Block

The Government of India (GoI) has granted its approval for a ten-year extension of PSC for Ravva Block with effect from 28 October 2019, in terms of the provision of the "Policy on the Grant of the extension to Production Sharing Contract Signed by Government awarding small, medium-sized and discovered field to private joint ventures" dated 28 March 2016. The PSC addendum recording this extension has been executed by all parties.

The Ravva Extension Policy, amongst others, provides for an increased share of profit petroleum of 10% for the GoI during the extended term of the Ravva PSC and payment of royalty and cess as per prevailing rate in accordance with the PNG Rules, 1959 and OIDB Act. Under the Ravva PSC, the company's oil and gas business is entitled to recover 100% of cost of production and development from crude oil and natural gas sales before any profit is allocated among the parties.

(ix) Impact of Taxation Laws (Amendment) Act, 2019

Pursuant to the introduction of Section 115BAA of the Indian Income Tax Act, 1961, which is effective 1 April 2019, companies in India have the option to pay corporate income tax at the rate of 22% plus applicable surcharge and cess as against the earlier rate of 30% plus applicable surcharge and cess, subject to certain conditions like, the company has to forego all benefits like tax holidays, brought forward losses generated through tax incentives/additional depreciation and outstanding MAT credit. Considering all the provisions under Section 115BAA and based on the expected timing of exercising of the option under Section 115BAA, the Group has re-measured its deferred tax balances leading to a deferred tax credit of US$233 million on deferred tax balances as at 31 March 2019 being recognised during the financial year. This computation required assessment of assumptions regarding future profitability, which is inherently uncertain. To the extent assumptions regarding future profitability change, there can be increase or decrease in the amounts recognised.

(x) Flue-gas desulfurisation (FGD) implementation

Ministry of Environment, Forest and Climate Change (MOEF&CC) has revised emission norms for coal-based power plants in India. Accordingly, both captive and independent coal-based power plants in India are required to comply with these revised norms for reduction of sulphur oxide (SOx) emissions for which the current plant infrastructure is to be modified or new equipments have to be installed. Timelines for compliance to the revised norm for various plants in the Group range from December 2019 to March 2022.

Different power plants are at different stages of the implementation process.

Status of Implementation at TSPL

TSPL for which the last date of compliance was 31 December 2019, has issued Letter of Intent (LOI) to the successful bidder and continues to operate the plant in absence of any directions from Central Pollution Control Board (CPCB) or MOEF&CC. TSPL is confident that authorities would take considerate stand in view of stringent timelines and earnest efforts taken by the plant to meet the environmental norms. TSPL has received show cause notice from Punjab Pollution Control Board (PPCB), which was favourably disposed of by PPCB with a recommendation to CPCB for extension of timeline. Subsequently, a show cause notice has been issued by CPCB to TSPL and other power plants which were required to meet 31 December 2019 deadline. CPCB vide notice published on its website, has imposed environment compensation penalty of ₹ 18 lakhs per month per non-compliant unit and any further directions based on the periodic review of compliance status. The impact of this penalty for the year ended 31 March 2020 is not material.

Subsequently, TSPL has filed its reply to CPCB to extend the timeline and revoke the environment compensation notice. The company has also paid Rs 54 lacs under protest.

Status of Implementation at other Plants

The timeline prescribed for captive power plants of Vedanta Limited, Balco & HZL was June 2020. While Vedanta Limited and Balco have issued Letter of Intent (LOI) to the successful bidder, HZL is in the process of issuing the LOI. Group's respective operations have been engaging with the concerned authorities to extend the timeline for compliance. In the event, the request for extension of timeline is not accepted, this could impact the operations of power plants and associated operations, the impact of which cannot be determined with reasonable certainty. In the absence of any direction from concerned authorities, the power plants are continuing its operations.

(xi) Electrosteel Steels Limited had filed application for renewal of Consent to Operate ('CTO') on 24 August 2017 for the period of five years which was denied by Jharkhand State Pollution Control Board ('JSPCB') on 23 August 2018. Hon'ble High Court of Jharkhand has granted stay on 25 August 2018 against said order of denial of CTO by JSPCB and the stay has been extended by the Court to allow the operations till next date of hearing. Hon'ble High Court has also extended stay against order of Ministry of Environment, Forest and Climate Change (MOEF&CC) dated 20 September 2018 in respect of revocation of environmental clearance (EC) till next date of hearing. In December 2019, ESL has been granted the stage I forest clearance by MOEF&CC. The company is working out appropriate solution to secure the revised EC in due course and does not expect a material liability in this regard.

(xii) Assessment of impairment at Avanstrate Inc (ASI)

Significant changes in the market and economic environment in which ASI operates has led to decrease in demand and profitability in the glass substrate business. Accordingly, the Group had assessed the recoverable value of all its assets and liabilities which led to a non-cash impairment charge during the year ended 31 March 2020 (refer note 6).

The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/ assumption	Basis
Future sales volume	existing customer relationships, unperformed contracts and expected wins
Commodity prices	management's best estimate
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/CGU

The projections of future sales volume are based on the existing customer relationships, unperformed contracts and revenue from contracts with new customers which are in the advanced stage of discussions or are probable wins based on management judgement. Any subsequent changes to cash flows due to changes in the above-mentioned factors could impact the carrying value of the assets.

(xiii) Assessment of impairment of assets at Skorpion Zinc (Pty) Limited (Skorpion)

Skorpion is an integrated Zinc facility in Namibia, Africa comprising of an open-pit mine and refinery. Skorpion is approaching its end of life on the mine (LOM), the remaining ore is expected to take 8 months to mine and a further 8 months to be processed through the refinery. Due to a slope failure in January 2020 the mine and the refinery were put into care and maintenance in order for a new mine plan to be developed. Considering the uncertainty around the future operations of refinery, an impairment trigger was identified as of 31 March 2020. The Group has carried out an impairment analysis over the remaining book value of the mining and refining assets as at 31 March 2020 considering the available ore only from the existing mine and concluded that there exists no impairment. The Group has carried out sensitivity analysis on key assumptions including LME prices, Exchange rates, discount rate and inflation.

Based on sensitivity analysis, the recoverable amount is still expected to exceed the carrying value as at 31 March 2020 of US$76 million.

The refinery is built to process oxide based ores only which are available from the in-house mine. Post expiry of mine life, the Group intends to convert the refinery to be able to process both sulphide and oxide ore to continue Skorpion as a custom refinery through procurement of ore from other Group entities or other external parties. Capital work-in-progress with a carrying value of US$10 million has been incurred to date on the conversion.

(xiv) Assessment of impairment of assets at Aluminium division

Considering lower sales realisation, an impairment trigger has been identified in the aluminium division of Vedanta Limited. The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/ assumption	Basis
Future production	proved and probable reserves, production facilities, resource estimates and expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/CGU

The Group has carried out impairment analysis, based on value in use approach, considering the key variables and concluded that there exists no impairment. The Group has carried out sensitivity analysis on key assumptions including commodity price, discount rate and delay in expansion of refinery. Based on sensitivity analysis, the recoverable amount is still expected to exceed the carrying value of US$3,263 million as at 31 March 2020.

(xv) Discontinued operations - Copper Zambia (KCM)

The investment in KCM and loans, receivables and obligations of KCM towards the Group recognised following its deconsolidation were fair valued during the year. The Group employed third-party experts to undertake the valuations using the income approach method. In this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of these assets. The resulting valuation is adjusted to reflect a number of factors, including the uncertainty and risks inherent in litigation and recovery. Details of significant estimates are disclosed in note 3(e).

II. Significant Judgements:

(i) Determining whether an arrangement contains a lease

The Group has ascertained that the Power Purchase Agreement (PPA) entered into between one of the Subsidiary and a State Grid qualifies to be an operating lease under IFRS 16 "Leases". Accordingly, the consideration receivable under the PPA relating to recovery of capacity charges towards capital cost have been recognised as operating lease rentals and in respect of variable cost that includes fuel costs, operations and maintenance etc. is considered as revenue from sale of products/services.

Significant judgement is required in segregating the capacity charges due from State Grid, between fixed and contingent payments. The Group has determined that since the capacity charges under the PPA are based on the number of units of electricity made available by its Subsidiary which would be subject to variation on account of various factors like availability of coal and water for the plant, there are no fixed minimum payments under the PPA, which requires it to be accounted for on a straight-line basis. The contingent rents recognised are disclosed in notes 4, 5 & 33(E)(ii).

(ii) Contingencies

In the normal course of business, contingent liabilities may arise from litigation, taxation and other claims against the Group. A provision is recognised when the Group has a present obligation as a result of past events, and it is probable that the Group will be required to settle that obligation.

Where it is management's assessment that the outcome cannot be reliably quantified or is uncertain the claims are disclosed as contingent liabilities unless the likelihood of an adverse outcome is remote. Such liabilities are disclosed in the notes but are not provided for in the financial statements.

When considering the classification of a legal or tax cases as probable, possible or remote there is judgement involved. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific applicable law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision.

Although there can be no assurance regarding the final outcome of the legal proceedings, the Group does not expect them to have a materially adverse impact on the

Group's financial position or profitability. These are set out in note 33.

(iii) Revenue recognition and receivable recovery in relation to the power division

In certain cases, the Group's power customers are disputing various contractual provisions of Power Purchase Agreements (PPA). Significant judgement is required in both assessing the tariff to be charged under the PPA in accordance with IFRS 15 and to assess the recoverability of withheld revenue currently accounted for as receivables.

In assessing this critical judgement management considered favourable external legal opinions the Group has obtained in relation to the claims and favourable court judgements in the related matter. In addition the fact that the contracts are with government owned companies implies the credit risk is low. Refer note 18.

(iv) Special items

Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior periods. Also, tax charges related to Special items and certain one-time tax effects are considered Special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with IFRS.

The determination as to which items should be disclosed separately requires a degree of judgement. The details of special items is set out in note 6.

3. Business Combination and others

a) Ferro Alloys Corporation Limited – business combination (proposed)

Pursuant to the order dated 30 January 2020 of the National Company Law Tribunal (NCLT), Vedanta Limited is implementing the approved Resolution Plan for acquisition of Ferro Alloys Corporation Limited ("FACOR") which was under liquidation as per the Insolvency and Bankruptcy Code 2016 (including all amendments for the time being in force). The closing of the transaction requires certain substantive actions to be taken whereupon the transaction would qualify for accounting under IFRS 3 Business Combinations.

FACOR is a company in the business of producing Ferro Alloys and owns a Ferro Chrome plant with capacity of 72,000 TPA, two operational Chrome mines and 100 MW of Captive Power Plant through its subsidiary, FACOR Power Limited (FPL). The consideration payable for the acquisition of FACOR on debt and cash free basis under the approved Resolution Plan is US$1 million as well as equivalent of cash balance in FPL as Upfront Payment and zero coupon, secured and unlisted Non-Convertible Debentures of aggregate face value of US$36 million to the Financial Creditors payable equally over 4 years commencing March 2021.

b) Global Coke – business combination

On 28 July 2019, Vedanta Limited acquired Sindhudurg plant of Global Coke Limited which was under liquidation as per the Insolvency and Bankruptcy Code 2016 (including all amendments for the time being in force) for a cash consideration of US$5 million. The assets acquired mainly included Land, Building and Plant & Machinery of similar value as the cash consideration. The acquisition complements backward integration opportunity for company's existing pig iron division and also increase the company's footprint in met coke market in south western part of India. Detailed disclosure of fair value of the identifiable assets and liabilities of Sindhudurg plant has not been provided as the same is not material.

Acquisition costs related to the same were not material.

c) Electrosteel Steels Limited

During the previous year ended 31 March 2019, the Group, through its subsidiary Vedanta Star Limited (VSL) acquired control over Electrosteel Steels Limited (ESL). Based on completion of the closing conditions, the Group concluded the acquisition date as 4 June 2018. ESL has been included in "Others" segment. If ESL had been acquired at the beginning of the previous year, revenue and profit before taxation of the Group for the year ended 31 March 2019 would have been US $ 13,102 million and US$1,364 million respectively.

During the current year, Hon'ble National Company Law Tribunal, Kolkata Bench vide its Order dated 31 January 2020 approved the Scheme of Amalgamation of VSL with ESL. Post the amalgamation becoming effective on 25 March 2020, Vedanta Limited directly holds 95.49% in ESL.

d) Acquisition of new hydrocarbon blocks

In August, 2018, Vedanta Limited was awarded 41 hydrocarbon blocks out of 55 blocks auctioned under the open acreage licensing policy (OALP) by Government of India (GOI). The blocks awarded to Vedanta Limited comprise of 33 onshore and 8 offshore blocks. Vedanta Limited will share a specified proportion of the net revenue from each block with GOI and has entered into 41 separate revenue sharing contracts (RSC) on 1 October 2018.

The bid cost of US$551 million represents Vedanta Limited's total committed capital expenditure on the blocks for the committed work programmes during the exploration phase. Vedanta Limited has provided bank guarantees for minimum work programme commitments amounting to US$303 million for the 41 exploration blocks. These have been disclosed in note 33.

In March 2019, the company has been awarded 2 Contract Areas out of total 25 Contract Areas auctioned under Round II of the Discovered Small Field Policy (DSF) by Government of India (GOI). Both the Contract Areas awarded are on land fields. The Group will share a specified proportion of the revenue from each block with GOI and has entered into 2 separate Revenue Sharing Contracts (RSC) on 07 March 2019. There is no commitment for minimum work programme in these blocks.

In July 2019, the company has been awarded 10 hydrocarbon blocks out of 32 blocks awarded under round II & III of Open Acreage Licensing Policy (OALP) by Government of India (GoI). The blocks awarded to the Group comprise of 7 onshore and 3 offshore blocks. To effect the transaction, the company has entered into revenue sharing contracts ("RSCs") with the GoI on 16 July 2019. The bid cost of US$235 million represents the Group's estimated cost of committed work programme in the blocks during the initial exploration phase. The company has provided bank guarantees for minimum work programme commitments amounting to US$69 million for the 10 exploration blocks.

(e) Discontinued operations – Copper Zambia (KCM):

On 21 May 2019, ZCCM Investments Holdings Plc (ZCCM), a company majority owned by the Government of the Republic of Zambia (GRZ), which owns 20.6% of the shares in Konkola Copper Mines Plc (KCM), filed a petition in the High Court of Zambia to wind up KCM (Petition) on "just and equitable" grounds. ZCCM also obtained an ex-parte order from the High Court of Zambia appointing a Provisional Liquidator (PL) of KCM pending the hearing of the Petition. On 11 June 2019, without any prior notice, ZCCM amended the Petition to include an additional ground for winding up KCM, based on allegations that KCM is unable to pay its debts.

As a result of the appointment of the PL following ZCCM's ex parte application, the PL is currently exercising almost all the functions of the Board of Directors, to the exclusion of the Board.

The Group not only disputes the allegations and opposes the Petition, but also maintains that the complaints brought by ZCCM are in effect "disputes" between the shareholders. Per the KCM Shareholders' Agreement, the parties (including ZCCM and the Government of the Republic of Zambia) have agreed that any disputes must be resolved through international arbitration seated in Johannesburg, South Africa, applying the UNCITRAL Arbitration Rules; not the Zambian courts. Consequently, the Group maintains that the action brought by ZCCM before the Zambian High Court should not be heard until the dispute has been resolved in arbitration in accordance with the KCM Shareholders' Agreement.

Arbitration Application

Following the filing of the Petition, Vedanta Resources Holdings Limited (VRHL) and Vedanta Resources Limited (VRL or Company) commenced the dispute resolution procedures prescribed by the KCM Shareholders' Agreement, and have initiated arbitration consistent with their position that ZCCM is in breach of the KCM Shareholders' Agreement by reason of its actions in seeking to wind up KCM before the Zambian High Court and applying for the appointment of the PL, as opposed to pursuing its alleged grievances through arbitration under the KCM Shareholders' Agreement. As part of the dispute resolution process under the KCM Shareholders' Agreement, VRHL obtained injunctive relief from the High Court of South Africa requiring ZCCM to withdraw the Petition such that the PL is discharged from office and declaring ZCCM to be in breach of the arbitration clause in the KCM Shareholders' Agreement. ZCCM was further prohibited by the High Court of South Africa from taking any further steps to wind up KCM until the conclusion of the arbitration. ZCCM had sought leave to appeal to the Supreme Court of South Africa, which was granted, and the matter is pending to be heard.

The arbitration proceedings against ZCCM continue and a sole arbitrator has been appointed. The hearing is currently scheduled to take place in early 2021. Arbitration awards are enforceable in Zambia under the New York Convention.

Proceedings in the Zambian Courts

VRHL has also made a number of applications before the Zambian High Court in connection with the Petition, including an application for a stay of the Petition, pending the determination of the arbitration. Although, this application was dismissed at first instance by the High Court, VRHL was granted leave to appeal to the Zambian Court of Appeal. The appeal hearing is listed for 25 August 2020. In the meantime, the Petition remains stayed.

CONSOLIDATED
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An Order given by the Zambian High Court staying certain of the PL's powers (i.e. those relating to the PL's ability to sell assets and make compromises with creditors) was set aside until the Petition returns to the High Court, subject to the outcome of the appeals to the Zambian Court of Appeal. The PL has given evidence in the Zambian High Court that he would not be able to sell assets (beyond that which is necessary to carry on KCM's ordinary business) without seeking the Court's approval. Notwithstanding this, on 10 September 2019, the PL caused KCM to enter into a consent order disposing of certain surface rights owned by KCM. On 28 November 2019, VRHL and KCM (acting through the lawyers appointed by the directors of KCM) obtained an ex-parte injunction restraining the PL from taking action to implement the consent order, halting the sale of surface rights and preventing any sale of the land itself. A challenge to the ex-parte injunction has been heard and the ruling has been reserved.

In connection with the response to the Petition, VRL has provided to the Board of KCM a commitment to provide certain financial support to KCM. This commitment is subject to certain conditions, including the dismissal of the Petition and discharge of the PL. Additionally since the conditions to the funding support were not satisfied by 30 September 2019, VRL has reserved the right to withdraw the offer set out in the letter.

At the date of approval of these financial statements, the PL remains in office and the Petition remains stayed.

Notice of Deemed Transfer of Shares

On 14 July 2020, ZCCM served a notice entitled "Notice of Deemed Transfer of Shares" on VRL and VRHL (Notice). The Notice is stated to be given under clause 10.1.2 of the KCM Shareholders' Agreement, notifying VRL and VRHL of various alleged breaches of the KCM Shareholders' Agreement having a Material Adverse Effect (as defined in the KCM Shareholders' Agreement) or other material breaches of the SHA, and requiring VRL and VRHL to remedy the notified breaches within 30 days, and reserving its rights in the event VRHL does not or cannot remedy the breaches within that time period to treat the event as deemed service by VRHL of an irrevocable offer under clause 10.2 to sell its shares in KCM to ZCCM at 'Fair Value'. Fair Value is to be determined in accordance with a mechanism set out in the KCM Shareholders' Agreement. If ZCCM thereafter notifies VRHL that it wishes to exercise these rights, VRHL will be deemed to have served an exit notice under clause 9.6 of the Shareholders' Agreement, giving rise to the application of a number of the exit provisions under the Shareholders' Agreement, including the requirement to make payment of budgeted capex for the succeeding 12 month period and any capital expenditure underspend in previous financial years on a cumulative basis, as determined by KCM's auditors.

VRL and VRHL intend to challenge the Notice in accordance with the provisions of the Shareholders' Agreement, and note that the effectiveness and validity of the Notice is to be determined by the arbitrator as part of the arbitration proceedings referred to above before any further steps can be taken by ZCCM to acquire VRHL's shares in KCM pursuant to the mechanism in clause 10 of the KCM Shareholders' Agreement.

Accounting Considerations – loss of control

Since all the significant decision-making powers, including carrying on the business of KCM and taking control over all the assets of KCM, rests with the PL, the Group believes that the appointment of PL has caused loss of its control over KCM. Accordingly, the Group has deconsolidated KCM with effect from 21 May 2019 and has presented the same in the income statement as a discontinued operation. This has also resulted in derecognition of non-controlling interests in KCM of US$86 million. The loss with respect to KCM operations along with the loss on fair valuation of the Group's interest in KCM has been presented as a special item in the income statement.

The Group has total exposure of US$1,952 million (including equity investment in KCM of US$266 million) to KCM in the form of loans, receivables, investments and amounts relating to the guarantees issued by VRL, which have been accounted for at fair value on initial recognition and disclosed under non-current assets in the Consolidated Statement of Financial Position.

Recognising the uncertainty inherent to the litigation, the Group believes, based on the legal advice it has obtained, that it is probable that it will succeed with its appeal to the Zambian Court of Appeal, which would result in the Petition being stayed until the outcome of the arbitration and the Group believes at some stage the Petition will be dismissed and the PL discharged.

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i) The profit/(loss) from discontinued operations i.e. KCM:

(US$ million)

Particulars	For the year ended 31 March 2020*	For the year ended 31 March 2019
Revenue	94	1,025
Cost of sales	(160)	(1,081)
Gross loss	**(66)**	**(56)**
Other operating income	1	4
Distribution costs	(3)	(32)
Administrative expenses	(12)	(81)
Operating loss	**(80)**	**(165)**
Investment revenue	(11)	(53)
Finance costs	(9)	(54)
Loss before taxation (a)	**(100)**	**(272)**
Net tax credit/(expense) (b)	**23**	**(61)**
Loss after tax from discontinued operations (a+b)	**(77)**	**(333)**

* Till the date of appointment of PL i.e. 21 May 2019

ii) Loss on deconsolidation:

On loss of control of KCM all assets and liabilities of KCM have been derecognised at their carrying value on the date of loss of control, 21 May 2019. On deconsolidation, the investment in KCM and the loans, receivables and obligations of KCM towards the Group have been recognised on the balance sheet at their fair value, at the date of loss of control. The resulting loss on deconsolidation, recognised in special items in the consolidated income statement, has been calculated as shown in the table below.

(US$ million)

Particulars	As at 21 May 2019
Fair value of assets recognised on deconsolidation:	
Investment in KCM (Original cost of investment: US$266 million)	-
Loans, receivables and obligations of KCM towards the Group*	693
Total (a)	**693**
Assets derecognised on deconsolidation:	
External Net assets of KCM (refer note iii below)	**1,268**
Non-controlling Interest	86
External Net assets of KCM attributable to the Group (b)	**1,354**
Loss on deconsolidation (a) – (b)	**(661)**

*consists of unsecured loans advanced by the Group of US$265 million, which is past due, secured borrowings of KCM where the Group has provided guarantee to the lenders/creditors of US$355 million, monies advanced for goods and other receivables of US$73 million (Refer note 18).

iii) The carrying amount of assets and liabilities:

(US$ million)

Particulars	External	VRL Group*	Total
Property, plant and equipment	1,470	-	1,470
Other non-current assets	68	-	68
Trade and other receivables	240	-	240
Total assets	**1,778**	**-**	**1,778**
Borrowings	-	1,187	1,187
Trade and other payables	510	499	1,009
Total liabilities	**510**	**1,686**	**2,196**
Net assets/(liabilities) of KCM	**1,268**	**(1,686)**	**(418)**

* Loans, receivables and obligations of KCM towards the Group

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

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iv) The profit/(loss) from discontinued operations i.e. KCM including loss on its deconsolidation has been presented below:

(US$ million)

Particulars	Year ended 31 March 2020
Loss after tax from discontinued operations (refer note i above)	(77)
Loss on deconsolidation (refer note ii above)	(661)
Fair value change during the year (refer note v below)	(33)
Total	**(771)**

Key sources of estimation uncertainty

The investment in KCM and loans, receivables and obligations of KCM towards the Group recognised following deconsolidation of the subsidiary are initially recognised at fair value on the date of loss of control. Subsequently, the equity investment in KCM is measured at fair value through profit or loss and the loans, receivables and obligations of KCM towards the Group are measured at amortised cost, subject to impairment.

The Group employed third-party experts ("Expert") to undertake valuations of the investment in KCM and loans, receivables and obligations of KCM towards the Group at the date of loss of control, 21 May 2019, and at 31 March 2020. The income approach method was applied for the purposes of the valuation. In this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of these assets. The resulting valuation is adjusted to reflect a number of factors, including the uncertainty and risks inherent in litigation and recovery. The third-party valuation provides a range of reasonable fair values, based on which management calculated the fair value to be recognised in the financial statements as the mid-point of the range.

Cash flow projections are based on financial budgets and life of mine plans on a going concern basis, and are sensitive to changes in input assumptions. Input assumptions into the valuation that involve management judgement include:

- The expectation that the large-scale mining licence expiring in 2025 will be extended to the end of the life of mine under the Mines & Mineral Development Act on payment of requisite fees and submission of the proposed programme of mining operation for the period of renewal. We believe this licence renewal process is in line with globally accepted procedural requirement to be followed by a mining company backed by a robust life of mine plan and as such, would get extended for the next permissible period post fulfilment of procedural requirement in ordinary course of business.
- Expected delay between success of the litigation proceedings and receipt of any amounts due.
- Liquidity of the market in the event of a sale of KCM, which has been considered through benchmarking the resulting valuation against other recent transactions for similar mines.
- The discount rate used to discount the cash flow projection, which has been calculated on a post-tax basis at 12.125%, using the input of third-party expert.

The key sources of estimation uncertainty, to which the valuation is most sensitive, are:

- The long-term copper price. Copper prices are based on the median of analyst forecasts.
- Throughput at the Konkola concentrator. The timing of ramp up of through put at the Konkola concentrator is based on internal management forecasts. The forecasts incorporate management experience and expectations as well as the risks associated therewith (for example availability of required fleets, skill sets for level developments at critical areas).
- The probability of achieving an award or positive settlement outcome in respect of the litigation proceedings. As discussed above, the Group believes, based on the legal advice it has obtained, that it is probable that it will succeed with its appeal to the Zambian Court of Appeal, which would result in the Petition being stayed until the outcome of the arbitration and the Group believes at some stage the Petition will be dismissed and the appointment of the PL discharged. The probability used in the valuation is based on the Expert's assumption based on external legal advice that it is probable that the Group will succeed with its appeal to the Zambian Court of Appeal and benchmarked using external data on historical outcomes for similar claims.
- The potential proportion of the claim value that may be expected to be recovered in the event of achieving an award or positive settlement outcome. This includes the ability of ZCCM to make payments in the event of a successful award or settlement outcome.

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Where discounted cash flow models based on management's assumptions are used, the resulting fair value measurements are considered to be at level 3 in the fair value hierarchy, as defined in IFRS 13 Fair Value Measurement, as they depend to a significant extent on unobservable valuation inputs.

v) Fair value measurements

The valuation of the investment in KCM and the loans, receivables and obligations of KCM towards the group is determined using discounted future cash flows and adjusted to reflect Expert's current views on litigation risk and other unobservable inputs as described below. These assets are considered to be level 3 in the fair value hierarchy. Quantitative information about the significant unobservable inputs used in level 3 fair value measurements are set out in the table below:

(US$ million, unless stated otherwise)

	Fair value at			
Financial asset	31 March 2020	21 May 2019	Significant unobservable inputs	Relationship of unobservable inputs to fair value
Investments and Loans, receivables and obligations of KCM towards the Group	660	693	Probability of achieving an award or positive settlement outcome in respect of litigation proceedings	A decrease in probability of success would decrease the fair value. A 10% decrease in the probability of success, with no change to any other inputs, would decrease the fair value by US$80 million. We have used a 10% assumption to calculate our exposure as it represents a change in the probability of success that we deem to be reasonably probable.
			Potential proportion of the claim value that may expected to be recovered in the event of achieving an award or positive settlement outcome	A decrease in the recovery percentage would decrease the fair value. A 10% decrease in the recovery percentage, with no change to any other inputs, would decrease the fair value by US$132 million. We have used a 10% assumption to calculate our exposure as it represents a change in the recovery probability that we deem to be reasonably probable.
			Copper price Long-term price of US$6,559/tonne (31 March 2020) and US$6,503/tonne (21 May 2019)	A decrease in the copper price would decrease the fair value. A 10% reduction in the copper price, with no change to any other inputs, would decrease the fair value by US$302 million. We have used a 10% assumption to calculate our exposure as it represents the annual copper price movement that we deem to be reasonably probable (on an annual basis over the long run).

4. SEGMENT INFORMATION

The Group is a diversified natural resources Group engaged in exploring, extracting and processing minerals and oil and gas. The Group produces zinc, lead, silver, copper, aluminium, iron ore, oil and gas and commercial power and have a presence across India, Zambia, South Africa, Namibia, UAE, Ireland, Australia, Liberia, Japan, South Korea and Taiwan. The Group is also in the business of port operations and manufacturing of glass substrate and steel.

The Group's reportable segments defined in accordance with IFRS 8 are as follows:

- Zinc- India
- Zinc-International
- Oil & Gas
- Iron Ore
- Copper-India/Australia
- Aluminium
- Power

'Others' segment mainly comprises of port/berth, steel and glass substrate business and those segments which do not meet the quantitative threshold for separate reporting.

Each of the reportable segments derives its revenues from these main products and hence these have been identified as reportable segments by the Group's chief operating decision maker ("CODM").

Management monitors the operating results of reportable segments for the purpose of making decisions about resources to be allocated and for assessing performance. Segment performance is evaluated based on the EBITDA of each segment. Business segment financial data includes certain corporate costs, which have been allocated on an appropriate basis. Inter-segment sales are charged based on prevailing market prices except for power segment sales to aluminium segment amounting to US$ Nil million for the year ended 31 March 2020 (31 March 2019: US$10 million), which were at cost.

The following tables present revenue and profit information and certain asset and liability information regarding the Group's reportable segments for the years ended 31 March 2020 and 31 March 2019. Items after operating profit are not allocated by segment.

(a) Reportable segments

Year ended 31 March 2020

(US$ million)

Particulars	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India/Australia	Aluminium	Power	Others	Elimination	Total operations
REVENUE										
Sales to external customers	2,563	441	1,787	487	1,277	3,746	827	662	-	11,790
Inter-segment sales	-	-	-	2	0	5	-	13	(20)	-
Segment revenue	**2,563**	**441**	**1,787**	**489**	**1,277**	**3,751**	**827**	**675**	**(20)**	**11,790**
Segment Result										
EBITDA(1)	1,230	54	1,032	117	(40)	281	232	97	-	3,003
Depreciation and amortisation(2)	319	90	566	34	21	233	81	68	-	1,412
Operating profit/(loss) before special items	**911**	**(36)**	**466**	**83**	**(61)**	**48**	**151**	**29**	**-**	**1,591**
Investment revenue										382
Finance costs										(1,179)
Other gains and (losses) [net]										(87)
Special items										(2,053)
Loss before taxation from continuing operations										**(1,346)**
Segments assets	2,762	692	2,079	461	879	6,560	2,333	1,072	-	16,838
Financial asset investments										12
Deferred tax assets										1,114
Short-term investments										4,385
Cash and cash equivalents										705
Tax assets										355
Others										777
TOTAL ASSETS										**24,186**
Segment liabilities	637	164	1,344	164	606	2,396	214	207	-	5,732
Borrowings										15,095
Current tax liabilities										26
Deferred tax liabilities										397
Others										663
TOTAL LIABILITIES										**21,913**
Other segment information										
Additions to property, plant and equipment, exploration and evaluation assets and intangible assets	651	107	642	15	31	200	10	44	-	1,700
Impairment charge(3)	-	-	1,906	-	94	-	-	72	-	2,072

Year ended 31 March 2019

(US$ million)

Particulars	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India/Australia	Aluminium	Power	Others	Elimination	Total operations
REVENUE										
Sales to external customers	2,955	392	1,892	415	1,537	4,180	924	711	-	13,006
Inter-segment sales	-	-	-	1	0	3	10	7	(21)	-
Segment revenue	**2,955**	**392**	**1,892**	**416**	**1,537**	**4,183**	**934**	**718**	**(21)**	**13,006**
Segment Result										
EBITDA(1)	1,516	100	1,100	90	(36)	316	219	151	-	3,456
Depreciation and amortisation(2)	(268)	(61)	(611)	(35)	(21)	(240)	(86)	(58)	-	(1,380)
Operating profit/(loss) before special items	**1,248**	**39**	**489**	**55**	**(57)**	**76**	**133**	**93**	**-**	**2,076**
Investment revenue										533
Finance costs										(1,213)
Other gains and (losses) [net]										(75)
Special items										47
Profit before taxation from continuing operation										**1,368**

(US$ million)

Particulars	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India/Australia	Copper-Zambia	Aluminium	Power	Others	Elimination	Total operations
Segments assets	2,704	872	3,983	547	1,074	1,844	7,432	2,635	1,270	-	22,361
Financial asset investments											707
Deferred tax assets											778
Short-term investments											4,164
Cash and cash equivalents											1,133
Tax assets											505
Others											133
TOTAL ASSETS											**29,781**
Segment liabilities	733	197	1,421	190	585	578	2,909	243	207	-	7,063
Borrowings											15,980
Current tax liabilities											61
Deferred tax liabilities											776
Others											648
TOTAL LIABILITIES											**24,528**
Other segment information											
Additions to property, plant and equipment, exploration and evaluation assets and intangible assets	522	228	550	5	39	39	245	8	776	-	2,412
Impairment reversal(3)	-	-	38	-	-	-	-	-	-	-	38

(1) EBITDA is a non-IFRS measure and represents earnings before special items, depreciation, amortisation, other gains and losses, interest and tax.

(2) Depreciation and amortisation is also provided to the chief operating decision maker on a regular basis.

(3) Included under special items (Note 6).

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(b) Geographical segmental analysis

The Group's operations are located in India, Zambia, Namibia, South Africa, UAE, Liberia, Ireland, Australia, Japan, South Korea and Taiwan. The following table provides an analysis of the Group's revenue by region in which the customer is located, irrespective of the origin of the goods.

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019*
India	7,652	8,465
China	380	542
UAE	116	145
Malaysia	1,079	696
Others	2,563	3,158
Total	**11,790**	**13,006**

* Restated refer Note 1(b)

The following is an analysis of the carrying amount of non-current assets, excluding deferred tax assets, derivative financial assets, financial asset investments and other non-current financial assets analysed by the geographical area in which the assets are located:

(US$ million)

	Carrying amount of non-current assets	
Particulars	As at 31 March 2020	Year ended 31 March 2019
India	13,091	16,094
Zambia (refer note 3(e))	-	1,534
Namibia	100	144
South Africa	498	605
Taiwan	155	176
Others	145	147
Total	**13,989**	**18,700**

Information about major customer

No customer contributed 10% or more to the Group's revenue during the year ended 31 March 2020 and 31 March 2019.

Disaggregation of revenue

Below table summarises the disaggregated revenue from contracts with customers:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Zinc Metal	2,223	2,437
Lead Metal	490	563
Silver Bars	349	367
Oil	1,539	1809
Gas	112	75
Iron ore	209	99
Pig Iron	316	294
Metallurgical coke	8	8
Copper Products	1,037	1,330
Aluminium Products	3,589	4,017
Power	622	682
Steel Products	534	600
Others	529	604
Revenue from contracts with customers*	**11,557**	**12,885**
Revenue from contingent rents (refer note 33E(ii))	236	242
Gains/(losses) on provisionally priced contracts under IFRS 9 (refer note 5)	(183)	(121)
JV partner's share of the exploration costs approved under the OM (refer note 5)	180	-
Total Revenue	**11,790**	**13,006**

*Includes revenues from sale of services aggregating to US$30 million (FY2018-19: US$31 million) which is recorded over a period of time and the balance revenue is recognised at a point in time.

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5. TOTAL REVENUE

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Sale of products[a,b]	11,524	12,733
Sale of services[a]	30	31
Revenue from contingent rents (refer note 33E(ii))	236	242
Total Revenue	**11,790**	**13,006**

a) Revenue from sale of products and from sale of services for the year ended 31 March 2020 includes revenue from contracts with customers of US$11,557 million (FY2018-19: US$12,885 million) and a net loss on mark-to-market of US$183 million (FY 2018-19: US$121 million) on account of gains/losses relating to sales that were provisionally priced as the beginning of the respective year with the final price settled in the subsequent year, gains/losses relating to sales fully priced during the respective year, and marked to market gains/losses relating to sales that were provisionally priced as at the beginning of the respective year.

b) Government of India (GoI) vide Office Memorandum ("OM") No. O-19025/10/2005-ONG-DV dated 1 February 2013 allowed for Exploration in the Mining Lease Area after expiry of Exploration period and prescribed the mechanism for recovery of such Exploration Cost incurred. Vide another Memorandum dated 24 October 2019, GoI clarified that all approved Exploration costs incurred on Exploration activities, both successful and unsuccessful, are recoverable in the manner as prescribed in the OM and as per the provisions of PSC. Accordingly, during the current year, the Group has recognised revenue of US$180 million, for past exploration costs, through increased share in the joint operations revenue as the Group believes that cost recovery mechanism prescribed under OM for profit petroleum payable to GOI is not applicable to its Joint operation partner, view which is also supported by an independent legal opinion. However, the Joint operation partner carries a different understanding and the matter is pending resolution.

c) Majority of the Group's sales are against advance or are against letters of credit/cash against documents/ guarantees of banks of national standing. Where sales are made on credit, the amount of consideration does not contain any significant financing component as payment terms are within three months.

As per the terms of the contract with its customers, either all performance obligations are to be completed within one year from the date of such contracts or the Group has a right to receive consideration from its customers for all completed performance obligations. Accordingly, the Group has availed the practical expedient available under paragraph 121 of IFRS 15 and dispensed with the additional disclosures with respect to performance obligations that remained unsatisfied (or partially unsatisfied) at the balance sheet date. Further, since the terms of the contract directly identify the transaction price for each of the completed performance obligations, in all material respects, there are no elements of transaction price which have not been included in the revenue recognised in the financial statements.

Further, there is no material difference between the contract price and the revenue from contract with customers.

6. SPECIAL ITEMS

(US$ million)

Particulars	Year ended 31 March 2020 Special items	Tax effect of Special items	Special items after tax	Year ended 31 March 2019 Special items	Tax effect of Special items	Special items after tax
Revision of Renewable Purchase Obligation (RPO)[5]	24	(8)	16	-	-	-
Gross profit special items (a)	**24**	**(8)**	**16**	**-**	**-**	**-**
Impairment (charge)/reversal of oil and gas assets[1]	(1,906)	742	(1,164)	38	(13)	25
Impairment (charges) of copper CWIP & capital advances[2]	(94)	33	(61)	-	-	-
Impairment (charge) of ASI assets[3]	(72)	11	(61)	-	-	-
Total impairment reversal/ (charge) (net) (b)	**(2,072)**	**786**	**(1,286)**	**38**	**(13)**	**25**
Provision on Iron ore assets[4] (c)	(17)	6	(11)	-	-	-
Operating special items (a+b+c)	**(2,065)**	**784**	**(1,281)**	**38**	**(13)**	**25**
Financing special items[8]	-	-	-	9	(3)	6
Investment Revenue Special item[7]	12	(3)	9	-	-	-
Loss on Discontinued Operations[6]	(771)	-	(771)	(333)	-	(333)
Total of Special items	**(2,824)**	**781**	**(2,043)**	**(286)**	**(16)**	**(302)**

1. During the year ended 31 March 2020 and 31 March 2019, the Group has recognised impairment charge of US$1,906 and reversal of US$38 million respectively, on its assets in the oil and gas segment comprising of:

I. Impairment charge of US$1,795 million relating to Rajasthan oil and gas block ("RJ CGU") triggered by the significant fall in the crude oil prices. Of this charge, US$1,648 million impairment charge has been recorded against oil and gas producing facilities and US$147 million impairment charge has been recorded against exploration intangible assets under development. The valuation remains dependent on price and further deterioration in long-term prices may result in additional impairment.

For oil & gas assets, CGU's identified are on the basis of a production sharing contract (PSC) level, as it is the smallest group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or group of assets.

The recoverable amount of the RJ CGU, US$1,405 million, was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy. Also, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US$38 per barrel for the next one year and scales up to long-term nominal price of US$57 per barrel three years thereafter derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2% per annum. The cash flows are discounted using the post-tax nominal discount rate of 10.35% derived from the post-tax weighted average cost of capital after factoring the risks ascribed to the successful implementation of key growth projects. Additionally, in computing the recoverable value, the effects of market participant's response on production sharing contract matters have also been appropriately considered (refer note 2(c)(I)(viii) for PSC extension matters). Based on the sensitivities carried out by the Group, change in crude price assumptions by US$1/bbl and changes to discount rate by 1% would lead to a change in recoverable value by US$45 million and US$66 million respectively.

II. Impairment charge of US$36 million relating to KG-ONN-2003/1 CGU mainly due to the reduction in crude oil price forecast.

The recoverable amount of the CGU, US$20 million was determined based on fair value less cost of disposal approach, a level-3 valuation technique in the fair value hierarchy as described in above paragraph. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for oil price as described in above paragraph. The cash flows are discounted using the post-tax nominal discount rate of 11.1% derived from the post-tax weighted average cost of capital. The sensitivities around change in crude price and discount rate are not material to the financial statements.

III. In exploration block KG-OSN-2009/3, the Group had represented to DGH to grant a 12-month excusable delay along with unfettered and unrestricted access to the block. Based on the said representation, the DGH granted an extension of up to 4 December 2020. However, in view of the ongoing restricted access to the block and low oil price outlook, the carrying value of US$75 million has been impaired.

IV. During the year ended 31 March 2019, the Group has recognised net impairment reversal of US$38 million in respect of Oil & Gas Block KG-ONN-2003/1 (CGU) on booking of commercial reserves and subsequent commencement of commercial production. The impairment reversal has been recorded against Oil & Gas producing facilities. The recoverable amount of the Group's share in KG-ONN-2003/1 (CGU) was determined to be US$30 million. The recoverable amount of the KG-ONN-2003/1 CGU was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US $ 62 per barrel for the year ended 31 March 2019 and scales up to long-term nominal price of US $ 65 per barrel by year ended 31 March 2022 derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2.5% per annum. The cash flows are discounted using the post-tax nominal discount rate of 11.8% derived from the post-tax weighted average cost of capital. The sensitivities around change in crude price and discount rate are not material to the financial statements.

2. Refer note 2(c)(I)(vii).

3. During the year ended 31 March 2020, the Group has recognised impairment charge of US$72 million on the assets of AvanStrate Inc (ASI) mainly due to the significant changes in the market and economic environment in which ASI operates leading to decrease in demand and profitability in the glass substrate business. The charge relates to ASI business in Japan, Taiwan and Korea classified in the 'others' segment. Given the significant interdependence of these entities on each other, these are considered as a single cash-generating unit.

The net recoverable value of assets and liabilities has been assessed at US$205 million based on the value in use approach. Based on the sensitivities carried out by the Group, decrease in volume assumptions by 1% would lead to decrease in recoverable value by US$2 million and increase in discount rate by 1% would lead to a decrease in recoverable value by US$6 million.

4. During the year, a parcel of land relating to the Iron Ore business having carrying value of US$17 million was reclassified from freehold land to other financial asset due to an ongoing legal dispute relating to title of the land. Subsequently, during the year, the financial asset was fully provided for impairment and recognised under special items.

5. During the current year, Vedanta Limited has restated its Renewable Power Obligation (RPO) liability pursuant to Odisha Electricity Regulatory Commission (OERC) notification dated 31 December 2019 which clarified that for CPP's commissioned before 1 April 2016, RPO should be pegged at the RPO obligation applicable for 2015-16. Based on the notification, liability of Vedanta Limited's Jharsuguda and Lanjigarh plants have been revised and US$24 million reversal relating to previous years has been recognised under special items.

6. Refer note 3(e).

7. On the contempt petition filed by TSPL, the Hon'ble Supreme Court of India vide its order dated 7 August 2019 allowed gross calorific value (GCV) on as received basis (ARB) and actual cost of coal in the Energy Charge Formula and directed Punjab State Power Corporation Limited (PSPCL) to make the payments within 8 weeks. Pursuant to the order, PSPCL has paid US$142 million in September 2019 and October 2019. TSPL has booked an interest of US$20 million due to the delay in receipt of payment as per the Supreme Court order dated 7 March 2018 allowing the interest on delay in payment. Of this interest of US$12 million pertaining to period prior to 31 March 2019 is booked as special item and amount of US$8 million for current period is booked in investment income.

8. During the year ended 31 March 2019, the Group had partly reversed the provision for interest of US$9 million for dues towards a vendor pursuant to the Honourable Supreme Court of India order.

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

7. INVESTMENT REVENUE

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Net gain on financial assets held at fair value through profit or loss (FVTPL)*	97	265
Interest Income:		
Interest income – financial assets held at FVTPL	140	129
Interest income – bank deposits at amortised cost	33	22
Interest income – loans and receivables at amortised cost	67	85
Interest income – others	4	17
Investment Revenue – Special item	12	-
Dividend Income:		
Dividend income – financial assets held at FVTPL	7	6
Foreign exchange gain (net)	7	27
Net Gain/(loss) arising on qualifying hedges and non-qualifying hedges	27	(18)
Total	**394**	**533**

*Includes loss of US$51 million (31 March 2019: mark to market gain of US$149 million) relating to structured investment (Refer note 35).

8. FINANCE COSTS

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Interest expense – financial liabilities at amortised cost	1,245	1,253
Other finance costs (including bank charges)	61	63
Total interest cost	**1,306**	**1,316**
Unwinding of discount on provisions (note 26)	14	13
Net interest on defined benefit arrangements	3	3
Special items (note 6)	-	(9)
Capitalisation of finance costs/borrowing costs (note 16)	(144)	(119)
Total	**1,179**	**1,204**

All borrowing costs are capitalised using rates based on specific borrowings and general borrowings with the interest rate of 7.49% (8.0% for 31 March 2019) per annum for the year ended 31 March 2020.

9. OTHER GAINS AND (LOSSES) (NET)

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Foreign exchange loss (net)	(79)	(65)
Change in fair value of financial liabilities measured at fair value	(1)	(1)
Net loss arising on qualifying hedges and non-qualifying hedges	(7)	(9)
Total	**(87)**	**(75)**

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

10(a). PROFIT/(LOSS) FOR THE YEAR HAS BEEN STATED AFTER CHARGING/(CREDITING):

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Depreciation & amortisation	1,412	1,380
Costs of inventories recognised as an expense	3,186	3,677
Auditor’s remuneration for audit services (note 37)	4	3
Research and development	1	1
Net Loss on disposal of Property plant and equipment	8	9
Provision for receivables	15	(0)
Impairment charge/(reversal) of oil & gas assets (refer note 6)	1,906	(38)
Impairment of other assets (refer note 6)	166	-
Employee costs (note 28)	388	451

10(b). EXCHANGE GAIN/(LOSS) RECOGNISED IN THE CONSOLIDATED INCOME STATEMENT:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Cost of sales	(60)	(43)
Investment revenue (refer note 7)	34	9
Other gains and losses (refer note 9)	(86)	(74)
Total	**(112)**	**(108)**

11. TAX

(a) Tax charge/(credit) recognised in Consolidated Income Statement (including on special items)

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Current tax:		
Current tax on profit for the year	258	554
Credit in respect of current tax for earlier years	-	(1)
Total current tax (a)	**258**	**553**
Deferred tax:		
Origination and reversal of temporary differences	153	42
(Credit)/Charge in respect of Special items (Refer Note 6)	(781)	16
Total deferred tax (b)	**(628)**	**58**
Total Income tax (benefit)/expense for the year((a)+(b))	**(370)**	**611**
(Loss)/Profit before tax from continuing operations	**(1,346)**	**1,368**
Effective Income tax rate (%)	**27.5%**	**44.7%**

Tax (benefit)/expense

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Tax effect on special items	(781)	16
Tax expense – others	411	595
Net tax (benefit)/expense	**(370)**	**611**

(b) A reconciliation of income tax expense/(credit) applicable to profit/(loss) before tax at the Indian statutory income tax rate to income tax expense/(credit) at the Group’s effective income tax rate for the year indicated are as follows.

Given majority of the Group’s operations are located in India, the reconciliation has been carried out from Indian statutory income tax rate.

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
(Loss)/Profit before tax from continuing operations	**(1,346)**	**1,368**
Indian statutory income tax rate	34.944%	34.944%
Tax at statutory income tax rate	**(470)**	**478**
Disallowable expenses	30	60
Non-taxable income	(20)	(27)
Tax holidays and similar exemptions	(70)	(116)
Effect of tax rate differences of subsidiaries operating at other tax rates	55	(22)
Tax on distributable reserve of/dividend from subsidiary	276	158
Unrecognised tax assets (Net)	66	83
Change in deferred tax balances due to change in tax law*	(251)	-
Capital Gains subject to lower tax rate	(39)	(16)
Credit in respect of earlier years	-	(1)
Other permanent differences	53	14
Total	**(370)**	**611**

*Deferred tax charge for the year ended 31 March 2020 includes deferred tax credit of US$233 million on deferred tax balances as at 31 March 2019 being recognised during the current year (Refer Note 2(c)(I)(ix)).

Certain businesses of the Group within India are eligible for specified tax incentives which are included in the table above as tax holidays and similar exemptions. Most of such tax exemptions are relevant for the companies operating in India. These are briefly described as under:

The location based exemption

In order to boost industrial and economic development in undeveloped regions, provided certain conditions are met, profits of newly established undertakings located in certain areas in India may benefit from tax holiday under Section 80IC of the Income Tax Act, 1961. Such tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, and 30% of profits for the subsequent five years. This deduction is available only for units established up to 31 March 2012. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

In the current year, undertaking at Pantnagar, which is part of Hindustan Zinc Limited (Zinc India), is the only unit eligible for deduction at 30% of taxable profit.

The location based exemption: SEZ Operations

In order to boost industrial development and exports, provided certain conditions are met, profits of undertaking located in Special Economic Zone ('SEZ') may benefit from tax holiday. Such tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, 50% of profits for five years thereafter and 50% of the profits for further five years provided the amount allowable in respect of deduction is credited to Special Economic Zone Re-Investment Reserve account. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

The Group has setup SEZ Operations in its aluminium division of Vedanta Limited (where no benefit has been drawn).

Sectoral Benefit - Power Plants and Port Operations

To encourage the establishment of infrastructure certain power plants and ports have been offered income tax exemptions of up to 100% of profits and gains for any ten consecutive years within the 15 year period following commencement of operations subject to certain conditions under Section 80IA of the Income Tax Act, 1961. The Group currently has total operational capacity of 8.4 Giga Watts (GW) of thermal based power generation facilities and wind power capacity of 274 Mega Watts (MW) and port facilities. However, such undertakings would continue to be subject to MAT provisions.

The Group has power plants which benefit from such deductions, at various locations of Hindustan Zinc Limited (where such benefits have been drawn), Talwandi Sabo Power Limited, Vedanta Limited and Bharat Aluminium Company Limited (where no benefit has been drawn).

The Group operates a zinc refinery in Export Processing Zone, Namibia which has been granted tax exempt status by the Namibian government.

In addition, the subsidiaries incorporated in Mauritius are eligible for tax credit to the extent of 80% of the applicable tax rate on foreign source income.

The total effect of such tax holidays and exemptions was US$70 million for the year ended 31 March 2020 (31 March 2019: US$116 million).

(c) Deferred tax assets/liabilities

The Group has accrued significant amounts of deferred tax. The majority of the deferred tax liability represents accelerated tax relief for the depreciation of property, plant and equipment, the depreciation of mining reserves and the fair value uplifts created on acquisitions, net of losses carried forward by Vedanta Limited and unused tax credits in the form of MAT credits carried forward in Vedanta Limited, Cairn Energy Hydrocarbons Limited and Hindustan Zinc Limited. Significant components of Deferred tax (assets) and liabilities recognised in the Consolidated Statement of financial position are as follows:

For the year ended 31 March 2020:

(US$ million)

Significant components of deferred tax (assets)/liabilities	Opening balance as at 1 April 2019	Charged/ (credited) to Income Statement	Charged/ (credited) to other comprehensive income	Discontinued operations	Exchange difference transferred to translation of foreign operation	Closing balance as at 31 March 2020
Property, plant and equipment, Exploration and Evaluation and other intangible assets	2,442	(860)	-	427	(964)	1,045
Voluntary retirement scheme	(5)	1	-	-	-	(4)
Employee benefits	(17)	-	(10)	-	2	(25)
Fair value of derivative asset/liability	(8)	(9)	4	-	1	(12)
Fair valuation of other asset/liability	130	13	-	-	(3)	140
MAT credit entitlement	(1,492)	167	-	-	104	(1,221)
Unabsorbed depreciation and business losses	(879)	(130)	-	(244)	521	(732)
Other temporary differences	(173)	190	-	(69)	144	92
Total	**(2)**	**(628)**	**(6)**	**114**	**(195)**	**(717)**

For the year ended 31 March 2019:

(US$ million)

Significant components of deferred tax (assets)/liabilities	Opening balance as at 1 April 2018	Charged/ (credited) to Income Statement	Charged/ (credited) to other comprehensive income	Discontinued operations	Exchange difference transferred to translation of foreign operation	Closing balance as at 31 March 2019
Property, plant and equipment, Exploration and Evaluation and other intangible assets	2,484	135	-	(22)	(155)	2,442
Voluntary retirement scheme	(6)	-	-	-	1	(5)
Employee benefits	(27)	-	(4)	-	14	(17)
Fair value of derivative asset/liability	(9)	6	(2)	-	(3)	(8)
Fair valuation of other asset/liability	145	(21)	-	-	6	130
MAT credit entitlement	(1,705)	110	-	-	103	(1,492)
Unabsorbed depreciation and business losses	(914)	(158)	-	80	113	(879)
Other temporary differences	(136)	(14)	-	3	(26)	(173)
Total	**(168)**	**58**	**(6)**	**61**	**(53)**	**(2)**

Deferred tax assets and liabilities have been offset where they arise in the same taxing jurisdiction with a legal right to offset current income tax assets against current income tax liabilities but not otherwise. Accordingly, the net deferred tax (assets)/liability has been disclosed in the Consolidated Statement of financial position as follows:

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Deferred tax assets	(1,114)	(778)
Deferred tax liabilities	397	776
Net Deferred tax (assets)/Liabilities	**(717)**	**(2)**

Recognition of deferred tax assets on MAT credits entitlement is based on the respective legal entity's present estimates and business plans as per which the same is expected to be utilised within the stipulated fifteen year period from the date of origination (Refer Note 2(c)(I)(vi)).

Deferred tax assets in the Group have been recognised to the extent there are sufficient taxable temporary differences relating to the same taxation authority and the same taxable entity which are expected to reverse. For certain components of the Group, deferred tax assets on carry forward unused tax losses have been recognised to the extent of deferred tax liabilities on taxable temporary differences available. It is expected that any reversals of the deferred tax liability would be offset against the reversal of the deferred tax asset at respective entities.

Unused tax losses/unused tax credit for which no deferred tax asset has been recognised amount to US$5,193 million and US$4,129 million as at 31 March 2020 and 31 March 2019 respectively.

As at 31 March 2020

(US$ million)

Unused tax losses/Unused tax credit	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total
Unutilised business losses	143	550	657	2,098	3,448
Unabsorbed depreciation	-	-	-	1,072	1,072
Unutilised R&D credit	-	-	-	1	1
Unabsorbed interest allowance*	-	-	-	672	672
Total	**143**	**550**	**657**	**3,843**	**5,193**

As at 31 March 2019

(US$ million)

Unused tax losses/Unused tax credit	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total
Unutilised business losses	389	812	88	1,679	2,968
Unabsorbed depreciation	-	-	-	975	975
Unutilised R&D credit	-	-	-	1	1
Unabsorbed interest allowance*	-	-	-	185	185
Total	**389**	**812**	**88**	**2,840**	**4,129**

* As per UK's corporate interest restriction rules, the disallowed interest expense for any year can be carried forward and claimed in future years for unlimited life subject to specified conditions

No deferred tax assets have been recognised on these unused tax losses/unused tax credit as there is no evidence that sufficient taxable profit will be available in future against which these can be utilised by the respective entities.

MAT credits are taxes paid to Indian tax authorities which can be offset against future tax liabilities, subject to certain restrictions, within a period of 15 years from the year of origination. The Group recognises MAT assets only to the extent it expects to realise the same within the prescribed period.

Further, the Group has unused MAT credit amounting to US$57 million as at 31 March 2020 and 31 March 2019. Such tax credits have not been recognised on the basis that recovery is not probable in the foreseeable future. Unrecognised MAT credit expires, if unutilised, based on the year of origination as follows:

(US$ million)

Year of Expiry	As at 31 March 2020	As at 31 March 2019
2022	15	15
2023	2	2
2024	7	7
2025	7	7
2026	15	15
2027	9	9
2028	1	1
2029	1	1
Total	**57**	**57**

The Group has not recognised any deferred tax liabilities for taxes that would be payable on the Group's share in unremitted earnings of certain of its subsidiaries because the Group controls when the liability will be incurred and it is probable that the liability will not be incurred in the foreseeable future. The amount of unremitted earnings is US$3,312 million and US$4,260 million as at 31 March 2020 and 31 March 2019 respectively.

(d) Non-current tax assets

Non-current tax assets of US$354 million (31 March 2019: US$504 million) mainly represents income tax receivable from Indian Tax authorities by Vedanta Limited relating to the refund arising consequent to the Scheme of Amalgamation & Arrangement made effective in August 2013 pursuant to approval by the jurisdiction High Court and receivables relating to matters in tax disputes in Group companies including tax holiday claim.

(e) The tax department had raised demands on account of remeasurement of certain tax incentives, as described below, under Sections 80IA and 80 IC of the Income Tax Act. During the current year, based on the favourable orders from Income Tax Appellate Tribunal relating to AY09-10 to AY12-13, the Commissioner of Income Tax (Appeals) has allowed these claims for AY14-15 to AY15-16, which were earlier disallowed and has granted refund of amounts deposited under protest. Against the Tribunal order, department had filed an appeal in Hon'ble Rajasthan High Court in financial year 17-18 which is yet to be admitted. As per the view of external legal counsel, Department's appeal seeks re-examination of facts rather than raising any substantial question of law and hence it is unlikely that appeal will be admitted by the High Court. Due to this there is a strong prima facie case that ITAT order will stand confirmed and department's appeal would be dismissed. The amount involved in this dispute as at 31 March 2020 is US$1,412 million (31 March 2019: US$870 million) plus applicable interest up to the date of settlement of the dispute.

CONSOLIDATED
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for the year ended 31 March 2020

12. UNDERLYING ATTRIBUTABLE PROFIT/(LOSS) FOR THE YEAR

Underlying earnings is an alternative earnings measure, which the management considers to be a useful additional measure of the Group's performance. The Group's Underlying profit/loss is the profit/loss for the year after adding back special items, other losses/(gains) [net] (note 9) and their resultant tax (including taxes classified as special items) & non-controlling interest effects and (Gain)/loss on discontinued operations. This is a Non-IFRS measure.

(US$ million)

Particulars	Note	Year ended 31 March 2020	Year ended 31 March 2019
Loss for the year attributable to equity holders of the parent		(1,568)	(237)
Special items	6	2,053	(47)
Other (gains)/losses [net]	9	87	75
Tax effect of special items (including taxes classified as special items) and other gains/(losses) [net]		(799)	(1)
Non-controlling interest on special items and other gains/(losses)		(684)	(16)
(Gain)/loss on discontinued operations	3(e)	771	333
Non-controlling interest on loss after tax from discontinued operations		(30)	(69)
Underlying attributable (loss)/profit for the year		(170)	38

13. DIVIDENDS

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Amounts recognised as distributions to equity holders:		
Equity dividends on ordinary shares:		
1st Interim Dividend for 2019-20: 53.0 US cents per share	152	-
2nd Interim dividend for 2019-20: 70.0 US cents per share**	200	-
Final dividend paid for 2018-19: 65.0 US cents per share (2017-18: 41.0 US cents per share)	185	114*
Proposed for approval by shareholders:		
Final Dividend for 2018-19: 65.0 US cents per share	-	185

* This includes US$1 million dividend on equity shares held by a separate investment trust holding treasury shares of the Company.

**$ 1 Mn is payable as at 31 March 2020

14. GOODWILL

(US$ million)

	As at 31 March 2020	As at 31 March 2019
At 1 April	12	12
Impairment during the year	-	-
At 31 March	**12**	**12**

Goodwill is allocated for impairment testing purposes to the following CGU's.

- US $12 million Copper India (As at 31 March 2020 & 31 March 2019)

The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired.

The Company has undertaken an impairment review of goodwill of US$12 million as at 31 March 2020. The carrying amount of goodwill allocated to the relevant cash generating unit is considered to be insignificant in comparison with the total carrying value of the cash generating unit. The carrying amount of goodwill was evaluated using the higher of Fair value less cost of disposal ('FVLCD') or value in use based on discounted future cash flows of the cash generating unit to which the goodwill pertains and comparing this to the total carrying value of the relevant cash generating units. It was determined that the carrying amount of goodwill is not impaired and nor was impairment indicated following a reasonably possible change in a key assumption.

CONSOLIDATED
NOTES TO THE FINANCIAL STATEMENTS
for the year ended 31 March 2020

15. INTANGIBLE ASSETS

Intangible assets include Port concession rights to operate a general cargo berth for handling coal at the outer harbour of the Visakhapatnam port on the east coast of India, software licences, technological know-how, acquired brand and others.

(US$ million)

	Port concession rights(1)	Software licence	Others(2)	Total
Cost				
As at 1 April 2018	**92**	**18**	**44**	**154**
Addition	0	1	0	1
Disposals/Adjustments	(0)	(0)	-	(0)
Acquisition through business combination (note 3(a))	-	0	-	0
Exchange differences	(5)	(2)	(2)	(9)
As at 1 April 2019	**87**	**17**	**42**	**146**
Addition	1	1	1	3
Discontinued operations	-	(11)	-	(11)
Transfers	-	-	5	5
Exchange differences	(8)	(2)	-	(10)
As at 31 March 2020	**80**	**5**	**48**	**133**
Accumulated amortisation				
As at 1 April 2018	**17**	**13**	**1**	**31**
Charge for the year	3	3	4	10
Disposals/Adjustments	(0)	0	-	(0)
Exchange differences	(1)	(1)	(1)	(3)
As at 1 April 2019	**19**	**15**	**4**	**38**
Charge for the year	3	2	4	9
Discontinued operations	-	(11)	-	(11)
Exchange differences	(1)	(2)	-	(3)
As at 31 March 2020	**21**	**4**	**8**	**33**
Net book value				
As at 1 April 2018	**75**	**5**	**43**	**123**
As at 1 April 2019	68	2	38	108
As at 31 March 2020	59	1	40	100

(1) Vizag General Cargo Berth Private Limited (VGCB), a special purpose vehicle, was incorporated for the coal berth mechanisation and upgrades at Visakhapatnam port. VGCB is wholly owned by Vedanta Limited. The project is to be carried out on a design, build, finance, operate, transfer basis and the concession agreement between Visakhapatnam Port and VGCB was signed in June 2010. In October 2010, VGCB was awarded with the concession after fulfilling conditions stipulated as a precedent to the concession agreement. Visakhapatnam Port has provided, in lieu of licence fee an exclusive licence to VGCB for designing, engineering, financing, constructing, equipping, operating, maintaining, and replacing the project/project facilities and services. The concession period is 30 years from the date of the award of the concession. The capacity of upgraded berth would be 10.18 mmtpa and the Visakhapatnam Port would be entitled to receive 38.10% share of the gross revenue as royalty. VGCB is entitled to recover a tariff from the user(s) of the project facilities and services as per its tariff notification. The tariff rates are linked to the Wholesale Price Index (WPI) and would accordingly be adjusted as specified in the concession agreement every year. The ownership of all infrastructure assets, buildings, structures, berths, wharfs, equipment and other immovable and movable assets constructed, installed, located, created or provided by VGCB at the project site and/or in the port's assets pursuant to concession agreement would be with VGCB until expiry of this concession agreement. The cost of any repair, replacement or restoration of the project facilities and services shall be borne by VGCB during the concession period. VGCB has to transfer all its rights, titles and interest in the project facilities and services free of cost to Visakhapatnam Port at the end of the concession period. The project is in commercial operations since 2013.

(2) Others include technological know-how and acquired brand relating to acquisition of AvanStrate Inc.

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

16. PROPERTY, PLANT AND EQUIPMENT

(US$ million)

	Mining property and leases	Freehold Land and buildings	Plant and equipment	Assets under construction	Oil & Gas properties[4]	ROU Assets	Others	Total Property, plant and equipment	Exploratory and evaluation assets[5]	Grand Total
Cost										
At 1 April 2018	**3,180**	**1,806**	**14,275**	**2,379**	**10,089**		**128**	**31,857**	**9,815**	**41,672**
Additions	164	73	281	602	468		26	1,614	79	1,693
Transfers	321	167	441	(967)	8,468		38	8,468	(8,468)	-
Unsuccessful Exploration cost	-	-	-	-	-		-	-	(7)	(7)
Reclassification	-	-	-	1	-		-	1	-	1
Disposals/Adjustments	(8)	(2)	(169)	(17)	(2)		(7)	(205)	-	(205)
Acquisition through business combination (note 3(c))	-	134	517	66	-		1	718	-	718
Exchange differences	(216)	(122)	(774)	(160)	-		(10)	(1,282)	-	(1,282)
At 1 April 2019	**3,441**	**2,056**	**14,571**	**1,904**	**19,023**	**-**	**176**	**41,171**	**1,419**	**42,590**
ROU assets as at 1 April 2019	-	-	(2)	-	-	83	-	81	-	81
Additions	210	52	284	408	465	154	22	1,595	97	1,692
Transfers[2]	98	(9)	121	(237)	32	-	5	10	(32)	(22)
Unsuccessful Exploration cost	-	-	-	-	-	-	-	-	-	-
Disposals/Adjustments	(18)	(1)	(107)	(142)	(2)	(32)	(5)	(307)	(7)	(314)
Discontinued operations[1]	(805)	(99)	(2,208)	(18)	-	-	(34)	(3,164)	-	(3,164)
Acquisition through business combination (note 3(b))	-	3	2	-	-	-	-	5	-	5
Exchange differences	(289)	(153)	(997)	(145)	-	(6)	(17)	(1,607)	(0)	(1,607)
At 31 March 2020	**2,637**	**1,849**	**11,664**	**1,770**	**19,518**	**199**	**147**	**37,784**	**1,477**	**39,261**
Accumulated depreciation, amortisation and impairment										
At 1 April 2018	**2,258**	**431**	**4,631**	**124**	**8,970**	**-**	**42**	**16,456**	**7,489**	**23,945**
Charge for the year	219	66	568	-	609	-	15	1,477	-	1,477
Disposals/Adjustments	-	(1)	(96)	-	(2)	-	(7)	(106)	-	(106)
Transfers	-	-	(3)	-	6,474	-	3	6,474	(6,474)	-
Reclassification	-	-	1	-	-	-	-	1	-	1
Impairment/(impairment reversal) of assets (note 6)	-	-	-	-	(38)	-	-	(38)	-	(38)
Exchange differences	(119)	(34)	(253)	(3)	-	-	(6)	(415)	-	(415)
At 1 April 2019	**2,358**	**462**	**4,848**	**121**	**16,013**	**-**	**47**	**23,849**	**1,015**	**24,864**
ROU assets as at 1 April 2019	-	-	(0)	-	-	0	-	-	-	-
Charge for the year	250	73	486	-	563	15	24	1,411	-	1,411
Disposals/Adjustments	-	-	(57)	-	-	(4)	(4)	(65)	-	(65)
Discontinued operations[1]	(377)	(68)	(1,216)	-	-	-	(33)	(1694)	-	(1694)
Transfers	-	-	(1)	-	-	-	1	-	-	-
Impairment/(impairment reversal) of assets (note 6)	-	2	73	89	1,683	3	-	1,850	222	2,072
Exchange differences	(171)	(45)	(335)	(11)	-	-	(10)	(572)	-	(572)
At 31 March 2020	**2,060**	**424**	**3,798**	**199**	**18,259**	**14**	**25**	**24,779**	**1,237**	**26,016**
Net book value										-
At 1 April 2018	922	1,375	9,644	2,255	1,119	-	86	15,401	2,326	17,727
At 1 April 2019	1,083	1,594	9,723	1,783	3,010	-	129	17,322	404	17,726
At 31 March 2020	577	1,425	7,866	1,571	1,259	185	122	13,005	240	13,245

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

1. Net block of property, plant and equipment as on 1 April 2019 includes US$1,470 million pertaining to KCM, which has been deducted as a result of loss of control over KCM during the period. (Refer note 3(e))

2. A parcel of land aggregating to US$17 million relating to Iron Ore business has been reclassified during the year, due to existing litigation, to Financial Assets and later impaired (Refer note 6) and US$5 million transferred to intangible assets from "Asset under construction".

3. During the year ended 31 March 2020, interest and foreign exchange losses capitalised was US$144 million (31 March 2019: US$119 million).

4. Oil and Gas Properties includes development assets under construction of carrying value US$648 million (31 March 2019: US$1,517 million).

5. Oil & Gas properties and exploration and evaluation assets net block includes share of jointly owned assets with the joint venture partners US$1,555 million (31 March 2019 US$3,331 million). Consequent to the Rajasthan PSC extension as detailed in note 2(c)(I)(viii), in the previous year the group has recomputed it's reserves till 2030 and has classified exploration cost of US$1,994 million to property, plant and equipment.

Disclosure of Right of Use (ROU) Assets as per IFRS 16 "Leases"

(US$ million)

	Land and Building	Plant and Equipment	Total
For the FY 2019-20			
ROU asset as at 1 April 2019	79	4	83
Additions	59	95	154
Deductions	(28)	-	(28)
Depreciation	(12)	(3)	(15)
Impairment	(3)	-	(3)
Exchange difference	(4)	(2)	(6)
Net book value as at 31 March 2020	**91**	**94**	**185**

17. FINANCIAL ASSET INVESTMENTS

Financial asset investments represent investments classified and accounted for at fair value through profit or loss or through other comprehensive income (refer note 25).

Financial Asset Investments

(US$ million)

	As at 31 March 2020	As at 31 March 2019
At 1 April 2019	707	25
(Sale)/purchase of structured investment (refer note 35)	(639)	541
Movements in fair value (including on investments purchased during the year)	(61)	143
Investment in Bonds*	7	-
Exchange difference	(2)	(2)
At 31 March 2020	**12**	**707**

*Reclassified during the year from short-term investments

Financial asset investment represents quoted investments in equity shares and other investments that present the Group with an opportunity for returns through dividend income and gains in value. These securities are held at fair value. These are classified as non-current as at 31 March 2020 and 31 March 2019.

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

18. OTHER NON-CURRENT ASSETS AND TRADE AND OTHER RECEIVABLES

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
Particulars	**Non-Current**	**Current**	**Total**	**Non-Current**	**Current**	**Total**
Bank Deposits[2]	5	-	5	3	-	3
Site restoration assets	83	-	83	79	-	79
Trade Receivables[1]	416	361	777	533	593	1,126
Others[4]	164	124	288	108	55	163
Trade receivables from related parties	-	14	14	-	5	5
Cash call/receivables from joint operations	-	183	183	-	298	298
Receivable from KCM[5]	602	-	602	-	-	-
Financial (A)	**1,270**	**682**	**1,952**	**723**	**951**	**1,674**
Balance with Government authorities	74	131	205	120	208	328
Advance for supplies	-	189	189	-	221	221
Others[3]	146	100	246	167	124	291
Receivable from KCM[5]	58	-	58	-	-	-
Non-financial (B)	**278**	**420**	**698**	**287**	**553**	**840**
Total (A+B)	**1,548**	**1,102**	**2,650**	**1,010**	**1,504**	**2,514**

The credit period given to customers ranges from zero to 90 days.

(1) In July 2017, the Appellate Tribunal for Electricity dismissed the appeal filed by one of the Group's subsidiaries, Talwandi Sabo Power Limited (TSPL) with respect to the interpretation of how the calorific value of coal and costs associated with it should be determined. However, APTEL had allowed payment of shunting and unloading charges. TSPL filed an appeal before the Honourable Supreme Court, which by an order dated 7 March 2018 has decided the matter in favour of TSPL. PSPCL had not paid the due amount as per the direction of the Supreme court. Therefore, TSPL filed its contempt petition before the Supreme court. Hon'ble Supreme Court vide its order dated 7 August 2019 allowed GCV as received basis (ARB) and actual cost of coal in the Energy Charge Formula. PSPCL was directed to make the payments within 8 weeks. PSPCL has paid $ 123 million in September 2019 and further $ 18 million in October 2019. The company has booked an interest of $ 18 million due to the delay in receipt of payments basis the order of Supreme Court dated 7 March 2018. TSPL has also filed a second contempt petition on 13 November 2019 in Supreme Court regarding the remaining amount receivable from PSCPL which is under adjudication. The outstanding trade receivables including interest in relation to this dispute as at 31 March 2020 is US$52 million (31 March 2019: US$164 million).

In another matter relating to assessment of whether there has been a change in law following the execution of the Power Purchase Agreement, the Appellate Tribunal for Electricity has dismissed the appeal in July 2017 filed by TSPL. TSPL filed an appeal before the Honourable Supreme Court to seek relief which is yet to be listed. The outstanding trade receivables in relation to this dispute and other matters as at 31 March 2020 is US$173 million (US$154 million as at 31 March 2019). The Group, based on external legal opinion and its own assessment of the merits of the case, remains confident that it is highly probable that the Supreme court will uphold TSPL's appeal and has thus continued to treat these balances as recoverable.

Additionally, at Vedanta Limited there were certain disputes with Grid Corporation of Odisha (GRIDCO) relating to computation of tariffs and differential revenues recognised with respect to tariffs pending finalisation by the Odisha state regulatory commission (OERC). During the previous year the said disputes were settled. However, GRIDCO has raised certain claims on the company in respect of short supply of power for which a provision of $29 million has been made. A Minutes of Meeting (MOM) has been signed with GRIDCO and subsequently Vedanta Limited has received payment of US$8 million in March 2019. Based on short supply debit note raised by GRIDCO and adjudication on power tariff computation disputes by APTEL, GRIDCO has withheld US$180 million, which the company is confident of recovering. On 22 June 2020, OERC has pronounced the order on short supply compensation calculation methodology which is largely in favour of Vedanta Limited. As per the order, both parties have to reconcile and settle the matter in two months from the date of the order. Based on the said order the Group does not expect any material change to the provision already recognised.

(2) Includes US$3 million (31 March 2019: US$3 million) under lien with banks and US$1 million (31 March 2019: US$0 million) under margin money.

(3) Includes claim receivables, advance recoverable (oil and gas business), prepaid expenses, export incentive receivables and others.

(4) Includes claims receivables, advance recoverable (oil and gas business) and others. It also includes advance profit petroleum US$43 million (31 March 2019: US$43 million) (refer note 34(ii)).

(5) Refer footnote 3(e). Out of total receivables from KCM of US$660 million, US$58 million is on account of advance for supplies and hence classified as non-financial.

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

19. INVENTORIES

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Raw materials and consumables	901	1,369
Work-in-progress	445	454
Finished goods	169	237
Total	**1,515**	**2,060**

Inventory held at net realisable value amounted to US$315 million (31 March 2019: US$642 million). The write down of inventories amounts to US$16 million (31 March 2019: US$40 million) and this has been charged to the Consolidated Income Statement.

20. SHORT-TERM INVESTMENTS

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Bank deposits[1]	1,101	122
Other investments	3,284	4,042
Total	**4,385**	**4,164**

(1) Includes US$34 million (31 March 2019: US$28 million) on lien with banks, US$19 million (31 March 2019: US$19 million) of margin money, US$23 million (31 March 2019: US$47 million) maintained as debt service reserve account and US$8 million (31 March 2019: US$9 million) of restricted funds held as collateral in respect of closure costs.

Bank deposits are made for periods of between three months and one year depending on the cash requirements of the companies within the Group and earn interest at the respective fixed deposit rates.

Other investments include mutual fund investments and investment in bonds which are recorded at fair value with changes in fair value reported through the consolidated income statement. These investments do not qualify for recognition as cash and cash equivalents due to their maturity period and risk of change in value of the investments. Refer Note 25 for further details.

21. CASH AND CASH EQUIVALENTS

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Cash and cash equivalents consist of the following		
Cash at bank and in hand	321	620
Short-term deposits	371	441
Restricted cash and cash equivalents[1]	13	72
Total	**705**	**1,133**

(1) Restricted cash and cash equivalents includes US$13 million (31 March 2019: US$15 million) kept in a specified bank account to be utilised solely for the purposes of payment of dividends to non-controlling shareholders, which is being carried as a current liability. Restricted cash and cash equivalents further include US$ Nil million (31 March 2019: US$57 million) kept in short-term deposits under lien with banks as margin money.

Short-term deposits are made for periods of between one day and three months, depending on the immediate cash requirements of the Group, and earn interest at the respective short-term deposit rates.

22(a) BORROWINGS

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Current borrowings consist of:		
Banks and financial institutions	1,644	4,132
Total short-term borrowings	**1,644**	**4,132**
Add: Current maturities of long-term borrowings	8,542	1,324
Current borrowings (A)	**10,186**	**5,456**
Non-current borrowings consist of:		
Banks and financial institutions	7,099	6,585
Non-convertible bonds	4,141	3,142
Non-convertible debentures	2,191	2,034
Redeemable Preference shares	0	0
Others	20	87
Total long-term borrowings	**13,451**	**11,848**
Less: Current maturities of long-term borrowings	(8,542)	(1,324)
Non-current borrowings (B)	**4,909**	**10,524**
Total (A+B)	**15,095**	**15,980**

The Group has discounted trade receivables on recourse basis US$4 million (31 March 2019: US$196 million). Accordingly, the monies received on this account are shown as borrowings as the trade receivables do not meet de-recognition criteria. The Group facilities are subject to certain financial and non-financial covenants. The primary covenants which must be complied with include fixed charge cover ratio, net borrowing to EBITDA ratio, total net assets to borrowings ratio and EBITDA to net interest expense ratio.

As at 31 March 2020, the Group could not meet one of the covenant requirements of borrowings of US$3,248 million. Further, as per the terms of the bond agreement, in case any acceleration notice is served by any of these lenders, the Group would not satisfy the requirement of IAS 1 of unconditional right to defer payment beyond one year from the balance sheet date in case of non-convertible bonds of US$4,140 million. Subsequent to the balance sheet date, the Group has obtained a waiver on the covenant requirements.

Accordingly, non-current portion of US$6,276 million of borrowings have been reclassified under the current maturities of long-term borrowings.

Details of the Non-convertible bonds and Non-convertible debentures issued by the Group have been provided below (carrying value):

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Non-Convertible Bonds:		
0.28 % bonds due October 2032	20	18
9.25% bonds due April 2026	596	-
6.12 % bonds due August 2024	994	993
7.13 % bonds due June 2023	495	495
7.99 % bonds due April 2023	398	-
6.38 % bonds due July 2022	996	995
8.25 % bonds due June 2021	642	641
	4,141	**3,142**

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Non-Convertible Debentures		
9.20% due February 2030	267	-
9.20% due December 2022	100	-
8.75% due June 2022	170	-
8.90% due December 2021	120	-
8.75% due September 2021	33	36
9.18% due July 2021	134	145
9.27% due July 2021	134	144
8.50% due June 2021	221	238
8.75% due April 2021	33	36
8.50% due April 2021	314	340
8.55% due April 2021	134	145
9.00% due November 2020*	20	29
8.25% due September 2020	57	62
7.85% due August 2020	67	72
9.45% due August 2020	267	289
7.90% due July 2020	40	43
8.70% due April 2020	80	87
7.80% due December 2020***	-	72
8.00% due June 2020**	-	29
7.95% due April 2020**	-	43
7.50% due November 2019	-	29
8.20% due November 2019	-	43
8.25% due October 2019	-	43
7.75% due September 2019	-	36
8.65% due September 2019	-	22
7.60% due May 2019	-	51
	2,191	**2,034**

* The debenture holders of these NCDs and the company have put and call option at the end of 1 year from the respective date of the allotment of the NCDs.

** Put option was exercised by the NCD holders, basis which NCDs became due for repayment.

*** Repaid during the year.

Security Details

The Group has taken borrowings in various countries towards funding of its acquisitions, capital expenditure and working capital requirements. The borrowings comprise of funding arrangements from various banks and financial institutions taken by the parent and subsidiaries. Out of the total borrowings of US$15,095 million (31 March 2019: US$15,980 million) shown above, total secured borrowings are US$6,421 million (31 March 2019: US$6,547 million) and unsecured borrowings are US$8,674 million (31 March 2019: US$9,433 million). The details of security provided by the Group in various countries, to various lenders on the assets of Parent and subsidiaries are as follows:

(US$ million)

Facility Category	Security details	As at 31 March 2020	As at 31 March 2019
Working Capital Loans (grouped under banks and financial institutions)	First pari passu charge on all rights, title, claim and benefit in all the whole of the current assets of Vedanta Limited, both present and future, including stock and raw material, stock in process, semi finished and finished goods, stores and spares not relating to plant and machinery (consumable stores and spares)	0	-
	First pari passu charge on current assets of Vedanta Limited	0	-
	Secured by hypothecation of inventory of Vedanta Limited including other movables like book debts and bills outstanding	1	-
	Secured by receivables on sale of crude oil of Vedanta Limited	1	-
	Secured by hypothecation of stock of raw materials, work-in-progress, semi-finished, finished products, consumable stores and spares, bills receivables, book debts and all other movables, both present and future in BALCO. The charges rank pari passu among banks under the multiple banking arrangements for fund based facilities	47	18
	Secured by a first pari passu charge on all present and future inventories, book debts and all other current assets of TSPL	33	40
	Other secured working capital loans		161
External commercial borrowings (grouped under banks and financial institutions)	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	45	45
	The facility is secured by first pari passu charge on all movable project assets related to 1200 MW power project and 3.25 LTPA smelter project both present and future along with secured lenders at BALCO	37	50
Non-convertible debentures	First pari passu charge over the immovable property (excluding of leasehold land and coal block assets) of BALCO. First pari passu charge on the hypothecated assets (excluding current assets) of BALCO	40	72
	Secured by way of first pari passu charge on the specific movable and/or immovable Fixed Assets of VGCB, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of Bonds outstanding at any point of time	57	61
	Secured by the whole of the movable fixed assets of (i) Alumina Refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha and (ii) Aluminium Smelter having output of 1.6 MTPA along with 1215 (9*135) MW CPP at Jharsuguda, Odisha	657	-
	Secured by way of "movable fixed assets" in relation to the 1.6 MTPA Aluminium Smelter alongwith 1215 MW (135MW * 9) captive power plant located in Jharsuguda and 1 MTPA Alumina Refinery alongwith 90 MW Co-generation power plant located at Lanjigarh in Odisha State and shall include all present movable plant and machinery, machinery spares, tools and accessories, fixtures, mechanical and electrical equipments, machinery and all other movable fixed assets and all estate, right, title, interest, property, claims and demands whatsoever in relation to assets	267	289

(US$ million)

Facility Category	Security details	As at 31 March 2020	As at 31 March 2019
	Secured by a first pari passu charge on the whole of the present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location	535	578
	Secured by way of first ranking pari passu charge on movable fixed assets in relation to the Lanjigarh Refinery Expansion Project (having capacity beyond 2 MTPA and up to 6 MTPA) situated at Lanjigarh, Odisha. The Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of Vedanta Limited along with 90 MW power plant in Lanjigarh and all its related capacity expansions	147	181
	Secured by way of first pari passu charge on all present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of debentures outstanding at any point of time	134	145
	Secured by first pari passu charge on movable and/or immovable fixed assets of TSPL with a minimum asset cover of 1 time during the tenure of NCD	354	470
	Other secured non-convertible debentures	-	239
Term loan from banks (grouped under banks and financial institutions)	Secured by first pari passu charge on fixed assets of TSPL both present and future	426	524
	First pari passu charge by way of hypothecation/equitable mortgage on the movable/immovable assets of the Aluminium division comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with 1215 (9x135) MW CPP at Jharsuguda, Odisha, both present and future	452	738
	Secured by a pari passu charge by way of hypothecation of all the movable fixed assets of Vedanta Limited pertaining to its Aluminium division project consisting of (i) alumina refinery having output of 1 MTPA (Refinery) along with co-generation captive power plant with aggregate capacity of 90 MW at Lanjigarh, Odisha (Power Plant); and (ii) aluminium smelter having output of 1.6 MTPA along with 1215 (9x135) MW CPP at Jharsuguda, Odisha (Smelter) (the Refinery, Power Plant and Smelter). Also, a first pari passu charge by way of equitable mortgage on the land pertaining to the mentioned project of aluminium division	386	513
	Secured by a pari passu charge by way of hypothecation on the movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project. Lanjigarh Refinery Expansion Project shall specifically exclude 1 MTPA alumina refinery of the company along with 90 MW power plant in Lanjigarh and all its related expansions	61	70
	Secured by a pari-passu charge by way of hypothecation on the movable fixed assets of Vedanta Limited pertaining to its Aluminium division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	184	251
	First pari passu charge by way of hypothecation/equitable mortgage on the movable/immovable assets of the Aluminium division of Vedanta Limited comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with 1215 (9x135) MW CPP at Jharsuguda, Odisha and additional charge on Lanjigarh Expansion project, both present and future	152	171

(US$ million)

Facility Category	Security details	As at 31 March 2020	As at 31 March 2019
	Secured by a pari passu charge by way of hypothecation/equitable mortgage of the movable/immovable fixed assets of Vedanta Limited pertaining to its Aluminium division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	399	431
	Secured by charge on Cairn Energy Hydrocarbons Limited's (CEHL) all banks accounts, cash & investments, all receivables and current assets (but excluding any shares issued to CEHL by its subsidaries, all of its right, title and interest in and to Production Sharing Contract and all of its fixed assets of any nature)	493	379
	Pledge of 49% of shares & other securities and rights to any claims held by THL Zinc Limited in and against BMM	54	60
	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	30	30
	Secured by first pari passu charge on all present and future movable fixed assets including but not limited to plant & machinery, spares, tools and accessories of BALCO (excluding coal block assets) by way of a deed of hypothecation.	216	140
	Secured by first pari passu charge on all present and future movable fixed assets including but not limited to plant & machinery, spares, tools and accessories of BALCO by way of hypothecation.	173	-
	First ranking pari passu charge by way of hypothecation/mortgage on all fixed/immovable assets of Electrosteel Steels Limited but excluding any current assets or pledge over any shares	451	488
	Secured by pari passu charge on the whole of the movable fixed assets of 1.6 MTPA Aluminium smelter including 1215 MW power plant of Vedanta Limited situated at Jharsuguda and movable fixed assets of 1 MTPA Alumina refinery including 90 MW thermal power plant (operating capacity) situated at Lanjigarh, including movable plant and machinery, machinery spares, tools and accessories, condensers, generators, cooling systems, pumps, tanks, transformers and all other equipment's, furniture, fittings, fixtures, vehicles and all other movable fixed assets both present and future	67	-
	Secured by first pari passu charge by way of hypothecation over all the movable assets(save and except Current Assets) of Vedanta Limited, present or future, pertaining to Lanjigarh refinery expansion project beyond 1.7 MTPA to 6.0 MTPA located at Lanjigarh Odisha including but not limited to plant and machinery, machinery spares, tools and accessories in relation to aforementioned expansion project. Among others, the Lanjigarh Refinery Expansion Project shall specifically exclude the alumina refinery up to 1.7 MTPA of the company along with 90 MW power plant in Lanjigarh and all its related expansions	98	-
	Secured by charge on investment of Vedanta Limited in INR bonds	139	-
	Secured by first pari passu charge by way of whole of the movable fixed assets of (i) Alumina Refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90MW at Lanjigarh, Odisha and (ii) Aluminium Smelter having output of 1.6 MTPA along with 1215 (9*135) MW CPP at Jharsuguda, Odisha	199	-
	Other secured term loans	-	326

(US$ million)

Facility Category	Security details	As at 31 March 2020	As at 31 March 2019
Others (grouped under banks and financial institutions)	Secured by Fixed asset (rare metals) of AvanStrate	76	75
	First charge by way of hypothecation on the entire stocks of raw materials, semi-finished and finished goods, consumable stores and spares and such other movables including book-debts, bills whether documentary or clean, outstanding monies, receivables and all other current assets of Vedanta limited, both present and future, ranking pari passu with other participating banks	10	-
Project buyers credit from banks (grouped under banks and financial institutions)	Other secured project buyer's credit	-	2
Total		**6,421**	**6,547**

22(b). MOVEMENT IN NET DEBT[1]

(US$ million)

	Cash and cash equivalents	Short-term investments	Financial asset investment net of related liabilities and derivatives[1]	Total cash and short-term investments	Short-term borrowing	Long-term borrowing*	Total Net Debt
					Debt carrying value	Debt carrying value	
At 1 April 2018	798	4,808	-	5,606	(3,607)	(11,587)	(9,588)
Cash flow from continuing operations[3]	758	(639)	254	373	1,062	(2,486)	(1,051)
Cash flow from discontinued operations	(417)	-	-	(417)	137	92	(188)
Net debt on acquisition through business combination	36	46	-	82	(1)	-	81
Other non-cash changes[2]	-	187	137	324	(1,978)	1,927	273
Foreign exchange currency translation differences	(42)	(238)	-	(280)	255	206	181
At 1 April 2019	**1,133**	**4,164**	**391**	**5,688**	**(4,132)**	**(11,848)**	**(10,292)**
Cash flow from continuing operations[3]	(364)	282	(365)	(447)	1,838	(1,644)	(253)
Cash flow from discontinued operations (note 3(e))	(1)	-	-	(1)	-	-	(1)
Derecognition due to discontinued operation (note 3(e))	(1)	-	-	(1)	128	22	149
Other non-cash changes[2]	-	185	(26)	159	372	(439)	92
Foreign exchange currency translation differences	(62)	(246)	-	(308)	150	458	300
At 31 March 2020	**705**	**4,385**	**-**	**5,090**	**(1,644)**	**(13,451)**	**(10,005)**

* Includes current maturities of long-term borrowings of US$8,542 million as at 31 March 2020 (31 March 2019: US$1,324 million)

1. Net debt is a Non-IFRS measure and represents total debt after fair value adjustments under IAS 32 and IFRS 9 as reduced by cash and cash equivalents, short-term investments and structured investment, net of the deferred consideration payable for such investments (referred above as Financial asset investment net of related liabilities) (refer note 35), if any

2. Other non-cash changes comprise of amortisation of borrowing costs, foreign exchange difference on net debt. It also includes US$159 million (31 March 2019: US$324 million) of fair value movement in investments and accrued interest on investments.

3. Consists of net repayment of working capital loan, proceeds and repayments of short-term and long-term borrowings.

23. NON-EQUITY NON-CONTROLLING INTERESTS

As at 31 March 2019, non-equity non-controlling interests amounts to US$12 million, being deferred shares in KCM held by ZCCM. The deferred shares have no voting rights or rights to KCM's dividends, but are entitled on a winding up to a return of up to US$0.99 per share once all of KCM's ordinary shares have received a distribution equal to their par value and any share premium created on their issue and which remains distributable to them.

The deferred shares are held at historic cost, being the fair value attributed to them at the time of initial acquisition of KCM in the year ended 31 March 2005. They are classified as non-current liabilities as they are repayable only on the winding up of KCM, for an amount different than the pro rata share of net assets upon liquidation. The shares have been valued at US$0.99 per share, which is the maximum amount payable to the deferred shareholders. These deferred shares have not been discounted as the effect would not be material.

During the current financial year ended 31 March 2020, the net assets of KCM including above balance have been deconsolidated (refer note 3(e)).

24. TRADE AND OTHER PAYABLES

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
Particulars	**Non-Current**	**Current**	**Total**	**Non-Current**	**Current**	**Total**
Operational buyers' credit/suppliers' credit	-	1,361	1,361	-	1,173	1,173
Lease Liability(4)	36	62	98	-	-	-
Dividend payable to NCI	-	13	13	-	24	24
Trade payables	-	1,061	1,061	-	1,680	1,680
Liabilities for capital expenditure	108	788	896	7	864	871
Profit petroleum Payable	-	92	92	-	148	148
Other payables(1)	32	808	840	189	1,024	1,213
Security deposits and retentions	0	27	27	2	23	25
Put option liability with non-controlling interests(2)	33	-	33	29	-	29
Financial (A)	**209**	**4,212**	**4,421**	**227**	**4,936**	**5,163**
Statutory liabilities	-	422	422	-	484	484
Advance from customers(3)	23	1,055	1,078	17	1,408	1,425
Other payables	0	30	30	-	50	50
Non-financial (B)	**23**	**1,507**	**1,530**	**17**	**1,942**	**1,959**
Total (A+B)	**232**	**5,719**	**5,951**	**244**	**6,878**	**7,122**

Trade payables are majorly non-interest bearing and are normally settled up to 180 days terms.

Operational buyers' credit/suppliers' credit are interest-bearing liabilities and are normally settled within a period of twelve months. These represent arrangements whereby operational suppliers of raw materials are paid by financial institutions, with the Group settling with the institutions at a later date.

The fair value of trade and other payables is not materially different from the carrying value presented.

(1) Includes US$ Nil million (31 March 2019: US$299 million) of deferred consideration payable as at 31 March 2020 in relation to purchase of structured investment. (Refer note 35)

(2) The non-controlling shareholders of ASI have an option to offload their shareholding to the Group. The option is exercisable at any time within the period of three years following the fifth anniversary of the date of shareholders' agreement (22 December 2017) at a price higher of US$0.757 per share and the fair market value of the share. Therefore, the liability is carried at higher of the two. Subsequent changes to the put option liability are treated as equity transaction and hence accounted for in equity.

(3) Advance from customers are contract liabilities to be settled through delivery of goods. The amount of such balances as on 1 April 2019 was US$1,425 million (1 April 2018: US$952 million). During the current year, the Group has refunded US$92 million (FY 2018-19: US$148 million) to the customers and recognised revenue of US$1,198 million (FY 2018-19: US$547 million) out of such opening balances. All other changes are either due to receipt of fresh advances or exchange differences.

(4) Movement in Lease liabilities is as follows:

	(US$ million)
At 1 April 2019	**17**
Additions during the year	154
Interest on lease liabilities	4
Payments made	(45)
Deletions	(32)
At 31 March 2020	**98**

25. FINANCIAL INSTRUMENTS

Financial Assets and Liabilities:

The following tables present the carrying value and fair value of each category of financial assets and liabilities as at 31 March 2020 and 31 March 2019:

(US$ million)

As at 31 March 2020	Fair value through profit or loss	Fair value through other comprehensive income	Derivatives designated as hedging instruments	Amortised cost	Total carrying value	Total fair value
Financial Assets						
Financial instruments (derivatives)	37	-	56	-	93	93
Financial asset investments held at fair value	7	5	-	-	12	12
Short-term investments						
- Bank deposits	-	-	-	1,101	1,101	1,101
- Other investments	3,284	-	-	-	3,284	3,284
Cash and cash equivalents	-	-	-	705	705	705
Other non-current assets and trade and other receivables	7	-	-	1,945	1,952	1,952
Total	**3,335**	**5**	**56**	**3,751**	**7,147**	**7,147**

(US$ million)

As at 31 March 2020	Fair value through profit or loss	Derivatives designated as hedging instruments	Amortised cost	Others*	Total carrying value	Total fair value
Financial Liabilities						
Financial instruments (derivatives)	6	13	-	-	19	19
Trade and other payables	69	-	4,319	33	4,421	4,421
Borrowings	-	-	15,095	-	15,095	12,563
Total	**75**	**13**	**19,414**	**33**	**19,535**	**17,003**

*Represents put option liability accounted for at fair value.

(US$ million)

As at 31 March 2019	Fair value through profit or loss	Fair value through other comprehensive income	Derivatives designated as hedging instruments	Amortised cost	Total carrying value	Total fair value
Financial Assets						
Financial instruments (derivatives)	5	-	6	-	11	11
Financial asset investments held at fair value**	690	17	-	-	707	707
Short-term investments						
- Bank deposits	-	-	-	122	122	122
- Other investments	4,042	-	-		4,042	4,042
Cash and cash equivalents	-	-	-	1,133	1,133	1,133
Other non-current assets and trade and other receivables	35	-	-	1,639	1,674	1,674
Total	**4,772**	**17**	**6**	**2,894**	**7,689**	**7,689**

** Includes structured investment (refer note 35).

(US$ million)

As at 31 March 2019	Fair value through profit or loss	Derivatives designated as hedging instruments	Amortised cost	Others*	Total carrying value	Total fair value
Financial Liabilities						
Financial instruments (derivatives)	79	1	-	-	80	80
Trade and other payables	221	-	4,913	29	5,163	5,163
Borrowings	-	-	15,980	-	15,980	15,873
Total	**300**	**1**	**20,893**	**29**	**21,223**	**21,116**

*Represents put option liability accounted for at fair value

Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The below tables summarise the categories of financial assets and liabilities as at 31 March 2020 and 31 March 2019 measured at fair value:

(US$ million)

	As at 31 March 2020		
Particulars	Level 1	Level 2	Level 3
Financial assets			
At fair value through profit or loss			
- Short-term investments	1,016	2,268	-
- Financial asset investments held at fair value	-	-	7
- Financial instruments (derivatives)	-	37	-
- Other non-current assets and trade and other receivables	-	7	-
At fair value through other comprehensive income			
- Financial asset investments held at fair value	4	-	1
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	56	-
Total	**1,020**	**2,368**	**8**
Financial liabilities			
At fair value through profit or loss			
- Financial instruments (derivatives)	-	6	-
- Trade and other payables	-	69	-
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	13	-
Trade and other payables- Put option liability with non-controlling interest	-	-	33
Total	**-**	**88**	**33**

(US$ million)

	As at 31 March 2019		
Particulars	Level 1	Level 2	Level 3
Financial assets			
At fair value through profit or loss			
- Short-term investments	939	3,091	12
- Financial asset investments held at fair value*	-	690	-
- Financial instruments (derivatives)	-	5	-
- Other non-current assets and trade and other receivables		35	
At fair value through other comprehensive income			
- Financial asset investments held at fair value	15	-	2
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	6	-
Total	**954**	**3,827**	**14**
Financial liabilities			
At fair value through profit or loss			
- Financial instruments (derivatives)	-	79	-
- Trade and other payables		221	
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	1	-
Trade and other payables - Put option liability with non-controlling interest	-	-	29
Total	**-**	**301**	**29**

* Includes structured investment (refer note 35).

The below table summarises the fair value of borrowings and Loans, receivables and obligations relating to KCM which are carried at amortised cost as at 31 March 2020 and 31 March 2019:

(US$ million)

	As at 31 March 2020		As at 31 March 2019	
Particulars	Level 1	Level 2	Level 1	Level 2
Borrowings	1,568	10,995	3,068	12,805
Total	**1,568**	**10,995**	**3,068**	**12,805**

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
Particulars	Level 1	Level 2	Level 3	Level 2	Level 3	Level 1
Loans, receivables and obligations of KCM towards the Group	-	-	660	-	-	
Total	**-**	**-**	**660**	**-**	**-**	

The changes in Level 3 items for the year ended 31 March 2020 and 31 March 2019 are set out in the table below:

Loans, receivables and obligations of KCM towards the Group

(US$ million)

1 April 2018	-
1 April 2019	-
On deconsolidation of KCM	693
Fair value change during the year	(33)
31 March 2020	**660**

The fair value of the financial assets and liabilities are at the amount that would be received to sell an asset and paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used to estimate the fair values:

- Investments traded in active markets are determined by reference to quotes from the financial institutions; for example: Net asset value (NAV) for investments in mutual funds declared by mutual fund house. For other listed securities traded in markets which are not active, the quoted price is used wherever the pricing mechanism is same as for other marketable securities traded in active markets. Other current investments and structured investments are valued by referring to market inputs including quotes, trades, poll, primary issuances for securities and/or underlying securities issued by the same or similar issuer for similar maturities and movement in benchmark security, etc.
- Financial assets forming part of Trade and other receivables, cash and cash equivalents (including restricted cash and cash equivalents), bank deposits, financial liabilities forming part of trade and other payables and short-term borrowings: Approximate their carrying amounts largely due to the short-term maturities of these instruments.
- Other non-current financial assets and financial liabilities: Fair value is calculated using a discounted cash flow model with market assumptions, unless the carrying value is considered to approximate to fair value.
- Long-term fixed-rate and variable rate borrowings: Listed bonds are fair valued based on the prevailing market price. For all other long-term fixed-rate and variable-rate borrowings, either the carrying amount approximates the fair value, or fair value has been estimated by discounting the expected future cash flows using a discount rate equivalent to the risk-free rate of return adjusted for the appropriate credit spread.
- Quoted financial asset investments: Fair value is derived from quoted market prices in active markets.
- Derivative financial assets/liabilities: The Group enters into derivative financial instruments with various counterparties. Interest rate swaps, foreign exchange forward contracts and commodity forward contracts are valued using valuation techniques, which employs the use of market observable inputs. The most frequently applied valuation techniques by the Group include forward pricing and swap models, using present value calculations. The models incorporate various inputs including the foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. Commodity contracts are valued using the forward LME rates of commodities actively traded on the listed metal exchange i.e. London Metal Exchange, United Kingdom (UK).

For all other financial instruments, the carrying amount is either the fair value, or approximates the fair value.

The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationship and the value of other financial instruments recognised at fair value.

The estimated fair value amounts as at 31 March 2020 have been measured as at that date. As such, the fair values of these financial instruments subsequent to reporting date may be different than the amounts reported at each year-end.

There were no significant transfers between level 1, level 2 and level 3 during the current year.

Risk management framework

The Group's businesses are subject to several risks and uncertainties including financial risks.

The Group's documented risk management polices act as an effective tool in mitigating the various financial risks to which the businesses are exposed to in the course of their daily operations. The risk management policies cover areas such as liquidity risk, commodity price risk, foreign exchange risk, interest rate risk, counterparty credit risk and capital management.

Risks are identified at both the corporate and individual subsidiary level with active involvement of senior management. Each operating subsidiary in the Group has in place risk management processes which are in line with the Group's policy. Each significant risk has a designated 'owner' within the Group at an appropriate senior level. The potential financial impact of the risk and its likelihood of a negative outcome are regularly updated.

The risk management process is coordinated by the Management Assurance function and is regularly reviewed by the Group's Audit Committee. The Audit Committee is aided by the other committees of the Board including the Risk Management Committee, which

meets regularly to review risks as well as the progress against the planned actions. Key business decisions are discussed at the periodic meetings of the Executive Committee. The overall internal control environment and risk management programme including financial risk management is reviewed by the Audit Committee on behalf of the Board.

The risk management framework aims to:

- improve financial risk awareness and risk transparency
- identify, control and monitor key risks
- identify risk accumulations
- provide management with reliable information on the Group's risk situation
- improve financial returns

Treasury management

Treasury management focuses on liability management, capital protection, liquidity maintenance and yield maximisation. The treasury policies are approved by the Committee of the Board. Daily treasury operations of the subsidiary companies are managed by their respective finance teams within the framework of the overall Group treasury policies. Long-term fund raising including strategic treasury initiatives are managed jointly by the business treasury team and the central team at corporate treasury while short-term funding for routine working capital requirements is delegated to subsidiary companies. A monthly reporting system exists to inform senior management of the Group's investments and debt position, exposure to currency, commodity and interest rate risk and their mitigants including the derivative position. The Group has a strong system of internal control which enables effective monitoring of adherence to Group's policies. The internal control measures are effectively supplemented by regular internal audits.

The investment portfolio at the Group is independently reviewed by CRISIL Limited and Group portfolio has been rated as Tier I or "Very Good" meaning highest safety. The investments are made keeping in mind safety, liquidity and yield maximisation.

The Group uses derivative instruments to manage the exposure in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts, interest rate and currency swaps and these are in line with the Group's policies.

Equity price risk

As at 31 March 2019, the Group held economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, having fair value of US$690 million. The instrument is exposed to equity price movements of AA Plc, subject to a put option embedded therein (Refer note 35).

Set out below is the impact of 10% increase/decrease in equity prices on pre-tax profit/(loss) for the year and pre-tax equity as a result of changes in value of the investment:

For the year ended 31 March 2019:

(US$ million)

Financial asset investment	Total Exposure (fair value)	Effect on pre-tax profit/(loss) of a 10% increase in the equity price	Effect on pre-tax equity of a 10% increase in the equity price	Effect on pre-tax profit/(loss) of a 10% decrease in the equity price	Effect on pre-tax equity of a 10% decrease in the equity price
Structured investment	690	60	-	(28)	-

The above sensitivities are based on change in price of the underlying equity shares of AA plc and provide the estimated impact of the change on profit and equity assuming that all other variables remain constant.

There are no material equity risk exposures as at 31 March 2020.

Commodity Price risk

The Group is exposed to the movement of base metal commodity prices on the London Metal Exchange. Any decline in the prices of the base metals that the Group produces and sells will have an immediate and direct impact on the profitability of the businesses. As a general policy, the Group aims to sell the products at prevailing market prices. The commodity price risk in import of input commodities such as Copper Concentrate & Alumina, for our Copper and Aluminium business respectively, is hedged on back-to back basis ensuring no price risk for the business. Hedging is used primarily as a risk management tool and, in some cases, to secure future cash flows in cases of high volatility by entering into forward contracts or similar instruments. The hedging activities are subject to strict limits set out by the Board and to a strictly defined internal control and monitoring mechanism. Decisions relating to hedging of commodities are taken at the Executive Committee level, basis clearly laid down guidelines.

Whilst the Group aims to achieve average LME prices for a month or a year, average realised prices may not necessarily reflect the LME price movements because of a variety of reasons such as uneven sales during the year and timing of shipments.

The Group is also exposed to the movement of international crude oil price and the discount in the price of Rajasthan crude oil to Brent price.

Financial instruments with commodity price risk are entered into in relation to following activities:

- economic hedging of prices realised on commodity contracts
- cash flow hedging of revenues, forecasted highly probable transactions.

Aluminium

The requirement of the primary raw material, alumina, is partly met from own sources and the rest is purchased primarily on negotiated price terms. Sales prices are linked to the LME prices. At present the Group on selective basis hedges the aluminium content in outsourced alumina to protect its margins.

The Group also enters into hedging arrangements for its aluminium sales to realise average month of sale LME prices.

Copper

The Group's custom smelting copper operations at Tuticorin is benefitted by a natural hedge except to the extent of a possible mismatch in quotational periods between the purchase of concentrate and the sale of finished copper. The Group's policy on custom smelting is to generate margins from Refining charges or "Rc", improving operational efficiencies, minimising conversion cost, generating a premium over LME on sale of finished copper, sale of by-products and from achieving import parity on domestic sales. Hence, mismatches in quotational periods are managed to ensure that the gains or losses are minimised. The Group hedges this variability of LME prices through forward contracts and tries to make the LME price a pass-through cost between purchases of anodes/blisters and sales of finished products, both of which are linked to the LME price.

Rc is a major source of income for the Indian copper smelting operations. Fluctuation in Rc is influenced by factors including demand and supply conditions prevailing in the market for mine output. The Group's copper business has a strategy of securing a majority of its anodes/blisters requirement under long-term contracts with mines.

Zinc, lead and silver

The sales prices are linked to the LME prices. The Group also enters into hedging arrangements for its Zinc, Lead and Silver sales to realise average month of sale LME prices.

Zinc International

Raw material for zinc and lead is mined in Namibia and South Africa with sales prices linked to the LME prices.

Iron ore

The Group sells its Iron Ore production from Goa on the prevailing market prices and from Karnataka through e-auction route as mandated by State Government of Karnataka in India.

Oil and Gas

The prices of various crude oils are based upon the price of the key physical benchmark crude oil such as Dated Brent, West Texas Intermediate, and Dubai/Oman etc. The crude oil prices move based upon market factors like supply and demand. The regional producers price their crude basis these benchmark crude with a premium or discount over the benchmark based upon quality differential and competitiveness of various grades.

Natural gas markets are evolving differently in important geographical markets. There is no single global market for natural gas. This could be owing to difficulties in large-scale transportation over long distances as compared to crude oil. Globally, there are three main regional hubs for pricing of natural gas, which are USA (Henry Hub Prices), UK (NBP Price) and Japan (imported gas price, mostly linked to crude oil).

Provisionally priced financial instruments

On 31 March 2020, the value of net financial liabilities linked to commodities (excluding derivatives) accounted for on provisional prices was US$59 million (31 March 2019: asset of US$45 million). These instruments are subject to price movements at the time of final settlement and the final price of these instruments will be determined in the financial year beginning 1 April 2020.

Set out below is the impact of 10% increase in LME prices on pre-tax profit/(loss) for the year and pre-tax equity as a result of changes in value of the Group's commodity financial instruments:

For the year ended 31 March 2020:

(US$ million)

Commodity price sensitivity	Total Exposure	Effect on pre-tax profit/(loss) of a 10% increase in the LME	Effect on pre-tax equity of a 10% increase in the LME
Copper	(137)	(14)	-

For the year ended 31 March 2019:

(US$ million)

Commodity price sensitivity	Total Exposure	Effect on pre-tax profit/(loss) of a 10% increase in the LME	Effect on pre-tax equity of a 10% increase in the LME
Copper	(21)	(2)	-

The above sensitivities are based on volumes, costs, exchange rates and other variables and provide the estimated impact of a change in LME prices on profit and equity assuming that all other variables remain constant. A 10% decrease in LME prices would have an equal and opposite effect on the Group's financial statements.

The impact on pre-tax profit/(loss) mentioned above includes the impact of a 10% increase in closing copper LME for provisionally priced copper concentrate purchased at Vedanta Limited Copper division custom smelting operations of US$10 million (31 March 2019: US$11 million), which is pass through in nature and as such will not have any impact on the profitability.

Financial risk:

The Group's Board approved financial risk policies include monitoring, measuring and mitigating the liquidity, currency, interest rate and counterparty risk. The Group does not engage in speculative treasury activity but seeks to manage risk and optimise interest and commodity pricing through proven financial instruments.

(a) Liquidity risk

The Group requires funds both for short-term operational needs as well as for long-term investment programmes mainly in growth projects. The Group is currently forecasting to generate sufficient cash flows from the current operations which together with the available cash and cash equivalents and short-term investments provide liquidity both in the short-term as well as in the long-term (refer note 1(d)). Anticipated future cash flows, together with undrawn fund based committed facilities of US$424 million, and cash and short-term investments of US$5,090 million as at 31 March 2020, are expected to be sufficient to meet the liquidity requirement of the Group in the near future.

During FY2020, Moodys downgraded Corporate Family Rating of Vedanta Resources from Ba3 to B1 (and the rating of senior unsecured notes from B2 to B3) and subsequently placed the rating under review for downgrade in March 2020 on account of expectation of weaker credit metrics in low commodity price environment in wake of COVID-19. On 28 July 2020, Moody's confirmed Vedanta Resources Limited's B1 Corporate Family Rating and B3 rating on the senior unsecured notes of the company and changed the outlook on the rating to negative from ratings under review for downgrade. The confirmation of the ratings is driven by Moody's expectation of stretched credit profile in fiscal year 2021 in wake of COVID-19 pandemic and recovery in credit metrics appropriate for current rating in fiscal year 2022. The negative outlook takes into account heightened refinancing risk in challenging market conditions. Further to the downgrade of VRL by S&P to B/Stable in November 2019, S&P downgraded the ratings to B- with stable outlook in March 2020 on account of weakened liquidity and increased refinancing risk due to volatility in commodity prices.

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The Group remains committed to maintaining a healthy liquidity, a low gearing ratio, deleveraging and strengthening our balance sheet. The maturity profile of the Group's financial liabilities based on the remaining period from the balance sheet date to the contractual maturity date is given in the table below. The figures reflect the contractual undiscounted cash obligation of the Group:

At 31 March 2020

(US$ million)

Payment due by period	< 1 year	1-3 years	3-5 years	> 5 years	Total
Trade and other payables[1]	3,882	152	0	-	4,034
Bank and other borrowings[2]	5,600	6,262	4,571	1,981	18,414
Lease liability	62	16	9	11	98
Derivative liabilities	13	6	-	-	19
Total	**9,557**	**6,436**	**4,580**	**1,992**	**22,565**

At 31 March 2019

(US$ million)

Payment due by period	< 1 year	1-3 years	3-5 years	> 5 years	Total
Trade and other payables[1]	4,748	172	29	-	4,949
Bank and other borrowings[2]	6,481	6,098	3,914	2,900	19,393
Derivative liabilities	66	14	-	-	80
Total	**11,295**	**6,284**	**3,943**	**2,900**	**24,422**

1. Excludes accrued interest which has been included with borrowings.
2. Includes current and non-current borrowings and committed interest payments.

As at 31 March 2020, the Group could not meet one of the covenant requirements of borrowings of US$3,248 million. Further, as per the terms of the bond agreement, in case any acceleration notice is served by any of these lenders, the Group would not satisfy the requirement of IAS 1 of unconditional right to defer payment beyond one year from the balance sheet date in case of non-convertible bonds of US$4,140 million. Subsequent to the balance sheet date, the Group has obtained a waiver on the covenant requirements.

Accordingly, non-current portion of US$6,276 million of borrowings have been reclassified under the current maturities of long-term borrowings. Given all waivers have been subsequently received, for the liquidity risk disclosure, the above-mentioned borrowings along with contractual interest of US$1,360 million has been presented based on original contractual maturity.

At 31 March 2020, the Group had access to following funding facilities:

(US$ million)

As at 31 March 2020	Total facility	Drawn	Undrawn
Fund/Non-fund based	11,767	10,280	1,487

(US$ million)

As at 31 March 2019	Total facility	Drawn	Undrawn
Fund/Non-fund based	13,176	10,952	2,224

Collateral

The Group has pledged financial instruments with carrying amount of US$2,887 million and inventories with carrying amount of US$1,138 million as per the requirements specified in various financial facilities in place. The counterparties have an obligation to release the securities to the Group when financial facilities are surrendered.

(b) Foreign currency risk

Fluctuations in foreign currency exchange rates may have an impact on the consolidated income statement, the consolidated statements of change in equity, where any transaction references more than one currency or where assets/liabilities are denominated in a currency other than the functional currency of the respective consolidated entities.

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Considering the countries and economic environment in which the Group operates, its operations are subject to risks arising from the fluctuations primarily in the US dollar, Australian dollar, Namibian dollar, AED, ZAR, GBP, INR, JPY and Euro against the functional currencies of its subsidiaries.

Exposures on foreign currency loans are managed through the Group wide hedging policy, which is reviewed periodically to ensure that the results from fluctuating currency exchange rates are appropriately managed. The Group strives to achieve asset liability offset of foreign currency exposures and only the net position is hedged.

The Group's presentation currency is the US dollar. The majority of the assets are located in India and the Indian Rupee is the functional currency for the Indian operating subsidiaries except for Oil and Gas business operations which have a US dollar functional currency. Natural hedges available in the business are identified at each entity level and hedges are placed only for the net exposure. Short-term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns, where cost of the project is calculated taking into account the hedge cost. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed.

The following analysis is based on the gross exposure as at the reporting date which could affect the consolidated income statement. The exposure summarised below is mitigated by some of the derivative contracts entered into by the Group as disclosed under the section on "Derivative financial instruments".

The carrying amount of the Group's financial assets and liabilities in different currencies are as follows:

(US$ million)

	As at 31 March 2020		As at 31 March 2019	
Particulars	Financial Assets	Financial liabilities	Financial Assets	Financial liabilities
USD	2,331	11,143	2,108	10,548
INR	4,717	8,081	4,764	10,049
Others	99	311	817	626
Total	**7,147**	**19,535**	**7,689**	**21,223**

The Group's exposure to foreign currency arises where a Group company holds monetary assets and liabilities denominated in a currency different to the functional currency of that entity, with USD (US Dollar) being the major non-functional currency of the Group's main operating subsidiaries.

The foreign exchange rate sensitivity is calculated by the aggregation of the net foreign exchange rate exposure with a simultaneous parallel foreign exchange rates shift in the currencies by 10 % against the functional currencies of the respective entities.

Set out below is the impact of a 10% strengthening in the functional currencies of the respective entities on pre-tax profit/(loss) and pre-tax equity arising as a result of the revaluation of the Group's foreign currency monetary financial assets/liabilities:

(US$ million)

	For the year ended 31 March 2020		
Particulars	Closing exchange rate	Effect on pre-tax profit/(loss) of 10% strengthening in currency	Effect on pre-tax equity of 10% increase in currency
USD	74.8109	177	-

(US$ million)

	For the year ended 31 March 2019		
Particulars	Closing exchange rate	Effect on pre-tax profit/(loss) of 10% strengthening in currency	Effect on pre-tax equity of 10% increase in currency
USD	69.1713	149	-

A 10% weakening of the functional currencies of the respective entities would have an equal and opposite effect on the Group's financial statements.

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

(c) Interest rate risk

At 31 March 2020, the Group's net debt of US$10,005 million (31 March 2019: US$10,292 million net debt) comprises debt of US$15,095 million (31 March 2019: US$15,980 million) offset by cash, cash equivalents and short-term investments of US$5,090 million (31 March 2019: US$5,688 million).

The Group is exposed to interest rate risk on short-term and long-term floating rate instruments and on the refinancing of fixed rate debt. The Group's policy is to maintain a balance of fixed and floating interest rate borrowings and the proportion of fixed and floating rate debt is determined by current market interest rates. The borrowings of the Group are principally denominated in Indian Rupees and US dollars with mix of fixed and floating rates of interest. The USD floating rate debt is linked to US dollar LIBOR and INR Floating rate debt to Bank's base rate. The Group has a policy of selectively using interest rate swaps, option contracts and other derivative instruments to manage its exposure to interest rate movements. These exposures are reviewed by appropriate levels of management on a monthly basis.

The Group invests cash and short-term investments in short-term deposits and debt mutual funds, some of which generate a tax-free return, to achieve the Group's goal of maintaining liquidity, carrying manageable risk and achieving satisfactory returns.

Floating rate financial assets are largely mutual fund investments which have debt securities as underlying assets. The returns from these financial assets are linked to market interest rate movements; however the counterparty invests in the agreed securities with known maturity tenure and return and hence has manageable risk.

The exposure of the Group's financial assets to interest rate risk is as follows:

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
Particulars	**Floating rate financial assets**	**Fixed rate financial assets**	**Non-interest bearing financial assets**	**Floating rate financial assets**	**Fixed rate financial assets**	**Non-interest bearing financial assets**
Financial assets	1,618	4,171	1,358	2,120	2,676	2,893

The exposure of the Group's financial liabilities to interest rate risk is as follows:

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
Particulars	**Floating rate financial liabilities**	**Fixed rate financial liabilities**	**Non-interest bearing financial liabilities**	**Floating rate financial liabilities**	**Fixed rate financial liabilities**	**Non-interest bearing financial liabilities**
Financial liabilities	7,413	9,119	3,003	7,753	9,447	4,023

Considering the net debt position as at 31 March 2020 and the investment in bank deposits, corporate bonds and debt mutual funds, any increase in interest rates would result in a net loss and any decrease in interest rates would result in a net gain. The sensitivity analysis below has been determined based on the exposure to interest rates for financial instruments at the balance sheet date.

The below table illustrates the impact of a 0.5% to 2.0% movement in interest rate of floating rate financial assets/ liabilities (net) on profit/(loss) and equity assuming that the changes occur at the reporting date and has been calculated based on risk exposure outstanding as of date. The year end balances are not necessarily representative of the average debt outstanding during the year. This analysis also assumes that all other variables, in particular foreign currency rates, remain constant.

(US$ million)

Increase in interest rates	**Effect on pre-tax profit/(loss) during the year ended 31 March 2020**	**Effect on pre-tax profit/(loss) during the year ended 31 March 2019**
0.5%	(29)	(28)
1.0%	(58)	(56)
2.0%	(116)	(112)

A reduction in interest rates would have an equal and opposite effect on the Group's financial statements.

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

(d) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults.

The Group is exposed to credit risk from trade receivables, contract assets, cash and cash equivalents, short-term investments and other financial instruments.

The Group has clearly defined policies to mitigate counterparty risks. For short-term investments, counterparty limits are in place to limit the amount of credit exposure to any one counterparty. This, therefore, results in diversification of credit risk for our mutual fund and bond investments. For derivative and financial instruments, the Group attempts to limit the credit risk by only dealing with reputable banks and financial institutions.

Credit risk on receivables is limited as almost all credit sales are against letters of credit and guarantees of banks of national standing. Moreover, given the diverse nature of the Group's businesses trade receivables are spread over a number of customers with no significant concentration of credit risk. No single customer accounted for 10% or more of revenue on a consolidated basis in any of the years presented. The history of trade receivables shows a negligible provision for bad and doubtful debts. Therefore, the Group does not expect any material risk on account of non-performance by any of our counterparties.

The Group's maximum gross exposure to credit risk as at 31 March 2020 is US$7,147 million (31 March 2019: US$7,689 million).

Of the year end trade and other receivable balance the following, though overdue, are expected to be realised in the normal course of business and hence, are not considered impaired as at:

(US$ million)

	31 March 2020	**31 March 2019**
Neither past due nor impaired	997	972
Past due but not impaired		
- Less than 1 month	106	129
- Between –1-3 months	191	49
- Between –3-12 months	223	76
- Greater than 12 months	347	366
Total	**1,864**	**1,592**

Receivables are deemed to be past due or impaired with reference to the Group's normal terms and conditions of business. These terms and conditions are determined on a case to case basis with reference to the customer's credit quality and prevailing market conditions. Receivables that are classified as 'past due' in the above table are those that have not been settled within the terms and conditions that have been agreed with that customer.

The credit quality of the Group's customers is monitored on an ongoing basis. Where receivables have been impaired, the Group actively seeks to recover the amounts in question and enforce compliance with credit terms.

Movement in allowances for Financial Assets (other non-current assets and trade and other receivables)

Particulars	**(US$ million)**
As at 1 April 2018	**150**
Allowance made during the year	7
Reversals/write-off during the year	(7)
Foreign Exchange difference	1
As at 31 March 2019	**151**
Allowance made during the year	37
Reversals/write-off during the year	(5)
Foreign Exchange difference	(10)
As at 31 March 2020	**173**

Derivative financial instruments

The Group uses derivative instruments as part of its management of exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts and these are subject to the Group guidelines and policies.

The fair value of all derivatives are separately recorded on the balance sheet within other financial assets (derivatives) and other financial liabilities (derivatives), current and non-current. Derivatives that are designated as hedges are classified as current or non-current depending on the maturity of the derivative.

The use of derivatives can give rise to credit and market risk. The Group tries to control credit risk as far as possible by only entering into contracts with reputable banks and financial institutions. The use of derivative instruments is subject to limits, authorities and regular monitoring by appropriate levels of management. The limits, authorities and monitoring systems are periodically reviewed by management and the Board. The market risk on derivatives is mitigated by changes in the valuation of the underlying assets, liabilities or transactions, as derivatives are used only for risk management purposes.

Cash flow hedges

The Group enters into forward exchange and commodity price contracts for hedging highly probable forecast transaction and account for them as cash flow hedges and states them at fair value. Subsequent changes in fair value are recognised in consolidated statement of comprehensive income until the hedged transaction occurs, at which time, the respective gain or losses are reclassified to the consolidated income statement. These hedges have been effective for the year ended 31 March 2020.

The Group uses foreign exchange contracts from time to time to optimise currency risk exposure on its foreign currency transactions. The Group hedged part of its foreign currency exposure on capital commitments during fiscal year 2020. Fair value changes on such forward contracts are recognised in the consolidated statement of comprehensive income.

The majority of cash flow hedges taken out by the Group during the year comprise non-derivative hedging instruments for hedging the foreign exchange rate of highly probable forecast transactions and commodity price contracts for hedging the commodity price risk of highly probable forecast transactions.

The cash flows related to above are expected to occur during the year ending 31 March 2021 and consequently may impact the consolidated income statement for that year depending upon the change in the commodity prices and foreign exchange rates movements. For cash flow hedges regarded as basis adjustments to initial carrying value of the property, plant and equipment, the depreciation on the basis adjustments made is expected to affect the consolidated income statement over the expected useful life of the property, plant and equipment.

Fair value hedges

The fair value hedges relate to forward covers taken to hedge currency exposure and commodity price risks.

The Group's sales are on a quotational period basis, generally one month to three months after the date of delivery at a customer's facility. The Group enters into forward contracts for the respective quotational period to hedge its commodity price risk based on average LME prices. Gains and losses on these hedge transactions are substantially offset by the amount of gains or losses on the underlying sales. Net gains and losses are recognised in the consolidated income statement.

The Group uses foreign exchange contracts from time to time to optimise currency risk exposure on its foreign currency transactions. Fair value changes on such forward contracts are recognised in the consolidated income statement.

Non-qualifying/economic hedge

The Group enters into derivative contracts which are not designated as hedges for accounting purposes, but provide an economic hedge of a particular transaction risk or a risk component of a transaction. Hedging instruments include copper, aluminium and zinc future contracts on the LME and certain other derivative instruments. Fair value changes on such derivative instruments are recognised in the consolidated income statement.

The fair value of the Group's open derivative positions as at 31 March 2020, recorded within financial instruments (derivative) is as follows:

(US$ million)

	As at 31 March 2020		As at 31 March 2019	
Particulars	**Liability**	**Asset**	**Liability**	**Asset**
Current				
Cash flow hedges				
And other – Commodity contracts	-	15	1	0
- Interest rate swap	0	-	-	-
- Forward foreign currency contracts	-	0	0	5
Fair value hedges				
- Commodity contracts	1	13	-	0
- Forward foreign currency contracts	6	28	-	1
Non-Qualifying hedges				
- Commodity contracts	3	1	11	1
- Forward foreign currency contracts	3	36	53	4
- Other (Foreign currency swap)	0	0	1	0
Total	**13**	**93**	**66**	**11**
Non-current				
Cash flow hedges				
- Interest rate swap	1	-	-	-
Fair value hedges				
- Forward foreign currency contracts	5	0	14	-
Total	**6**	**0**	**14**	**-**
Grand Total	**19**	**93**	**80**	**11**

26. PROVISIONS

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
Particulars	**Current**	**Non-Current**	**Total**	**Current**	**Non-Current**	**Total**
Provision for restoration, rehabilitation and environmental	3	355	358	2	369	371
Provision for employee benefits	22	1	23	29	2	31
Others	7	0	7	7	-	7
Total	**32**	**356**	**388**	**38**	**371**	**409**

(US$ million)

As at 31 March 2020	Restoration, rehabilitation and environmental	Other
As at 1 April 2018	**351**	**7**
Additions	3	0
Utilised	(2)	-
Unused amounts reversed	(1)	-
Unwinding of discount (note 8)	13	-
Revision in estimates	23	-
Exchange differences	(16)	(0)
Acquisition through business combination (net of disposal)	0	-
As at 1 April 2019	**371**	**7**
Additions	10	0
Utilised	(2)	-
Unused amounts reversed	-	-
Unwinding of discount (note 8)	14	-
Revision in estimates	(7)	-
Exchange differences	(12)	(0)
Discontinued operations (refer note 3(e))	(16)	-
As at 31 March 2020	**358**	**7**

Restoration, rehabilitation and environmental

The provisions for restoration, rehabilitation and environmental liabilities represent the management's best estimate of the costs which will be incurred in the future to meet the Group's obligations under existing Indian, Australian, Namibian, South African and Irish law and the terms of the Group's mining and other licences and contractual arrangements.

Within India, the principal restoration and rehabilitation provisions are recorded within Cairn India where a legal obligation exists relating to the oil and gas fields, where costs are expected to be incurred in restoring the site of production facilities at the end of the producing life of an oil field. The Group recognises the full cost of site restoration as a liability when the obligation to rectify environmental damage arises.

These amounts are calculated by considering discount rates within the range of 2% to 10% and become payable on closure of mines and are expected to be incurred over a period of one to thirty years. The discount rates at major units are in the range of 2% to 10% at Zinc International with lower range at operations in Ireland and higher range at operations in African Countries, 2% to 3% at Oil & Gas division.

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production from a producing field.

Others

Others mainly include provision for disputed cases and claims.

27. RETIREMENT BENEFITS

The Group participates in defined contribution and benefit plans, the assets of which are held (where funded) in separately administered funds.

For defined contribution plans the amount charged to the consolidated income statement is the total amount of contributions payable in the year.

For defined benefit plans, the cost of providing benefits under the plans is determined by actuarial valuation separately each year for each plan using the projected unit credit method by independent qualified actuaries as at the year end. Re-measurement gains and losses arising in the year are recognised in full in Consolidated Statement of Comprehensive Income for the year.

(i) Defined contribution plans

The Group contributed a total of US$12 million and US$17 million for the year ended 31 March 2020 and 31 March 2019 respectively, to the following defined contribution plans.

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Employer's contribution to Recognised Provident fund and family pension fund	9	8
Employer's contribution to superannuation and National Pension Scheme	3	2
	12	**10**

Indian pension plans

Central recognised provident fund

In accordance with the 'The Employees Provident and Miscellaneous Provisions Act, 1952', employees are entitled to receive benefits under the Provident Fund. Both the employee and the employer make monthly contributions to the plan at a predetermined rate (12% for the year ended 31 March 2020 and 31 March 2019) of an employee's basic salary. All employees have an option to make additional voluntary contributions. These contributions are made to the fund administered and managed by the Government of India (GOI) or to independently managed and approved funds. The Group has no further obligations under the fund managed by the GOI beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

Family Pension Fund

The Pension Fund was established in 1995 and is managed by the Government of India. The employee makes no contribution to this fund but the employer makes a contribution of 8.33% of salary each month subject to a specified ceiling per employee. This is provided for every permanent employee on the payroll.

At the age of superannuation, contributions ceases and the individual receives a monthly payment based on the level of contributions through the years, and on their salary scale at the time they retire, subject to a maximum ceiling of salary level. The Government funds these payments, thus the Group has no additional liability beyond the contributions that it makes, regardless of whether the central fund is in surplus or deficit.

Superannuation

Superannuation, another pension scheme applicable in India, is applicable only to executives above certain grade. However, in case of oil & gas (applicable from the second year of employment) and Iron Ore Segment, the benefit is applicable to all executives. Vedanta Limited and each relevant Indian subsidiary holds policy with the Life Insurance Corporation of India ("LIC"), to which each of these entities contributes a fixed amount relating to superannuation and the pension annuity is met by the LIC as required, taking into consideration the contributions made. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

National Pension Scheme

National Pension Scheme is a retirement savings account for social security and welfare applicable for executives covered under the superannuation benefit of Vedanta Limited and each relevant Indian subsidiary, on a choice basis. It was introduced to enable employees to select the treatment of superannuation component of their fixed salaries and avail the benefits offered by National Pension Scheme launched by Government of India. Vedanta Limited and each relevant entity holds a corporate account with one of the pension fund managers authorised by the Government of India to which each of the entity contributes a fixed amount relating to superannuation and the pension annuity will be met by the fund manager as per rules of National Pension Scheme. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated statement of profit and loss in the year they are incurred.

Australian pension Scheme

The Group also participates in defined contribution superannuation schemes in Australia. The contribution of a proportion of an employee's salary into a superannuation fund is a compulsory legal requirement in Australia. The employer contributes, into the employee's fund of choice 9.5% of the employee's gross remuneration where the employee is covered by the industrial agreement and 12.50% of the basic remuneration for all other employees. All employees have an option to make additional voluntary contributions. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

Zambian Pension Scheme

The Konkola Copper Mines (KCM) Pension Scheme is applicable to full-time permanent employees of KCM (subject to the fulfilment of certain eligibility criteria). The management of the scheme is vested in the trustees consisting of representatives of the employer and the members. The employer makes a monthly contribution of 5% to the KCM Pension Scheme and the member makes monthly contribution of 5%.

All contributions to the KCM Pension Scheme in respect of a member cease to be payable when the member attains normal retirement age of 55 years, or upon leaving the service of the employer, or when the member is permanently medically incapable of performing duties in the service of the employer. Upon such cessation of contribution on the grounds of normal retirement, or being rendered medically incapable of performing duties, or early voluntary retirement, the member is entitled to receive his accrued pension. The member is allowed to commute his/her accrued pension subject to certain rules and regulations.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated income statement (refer note 3(e)).

Skorpion Zinc Provident Fund, Namibia

The Skorpion Zinc Provident Fund is a defined contribution fund and is compulsory to all full time employees under the age of 60. The contribution to the fund is a fixed percentage of 9% per month of pensionable salary, whilst the employee contributes 7% with the option of making additional contributions, over and above the normal contribution, up to a maximum of 12%.

Normal retirement age is 60 years and benefit payable is the member's fund credit which is equal to all employer and employee contributions plus interest. The same applies when an employee resigns from Skorpion Zinc. The Fund provides disability cover which is equal to the member's fund credit and a death cover of 2 times annual salary in the event of death before retirement.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated income statement in the year they are incurred.

Black Mountain (Pty) Limited, South Africa Pension & Provident Funds

Black Mountain Mining (Pty) Ltd has two retirement funds, both administered by Alexander Forbes, a registered financial service provider. The purpose of the funds is to provide retirement and death benefits to all eligible employees. Group contributes at a fixed percentage of 10.5% for up to supervisor grade and 15% for others.

Membership of both funds is compulsory for all permanent employees under the age of 60 years.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated income statement in the year they are incurred.

(ii) Defined benefit plans

(a) Contribution to provident fund trust (the "trusts") of Iron ore division, Bharat Aluminium Company Limited (BALCO), Hindustan Zinc Limited (HZL), Sesa Resources Limited (SRL) and Sesa Mining Corporation Limited (SMCL)

The provident funds of Iron ore division, BALCO, HZL, SRL and SMCL are exempted under Section 17 of The Employees Provident Fund and Miscellaneous Provisions Act, 1952. Conditions for grant of exemption stipulates that the employer shall make good deficiency, if any, between the return guaranteed by the statute and actual earning of the Fund. Based on actuarial valuation in accordance with IAS 19 and Guidance note issued by Institute of Actuaries of India for interest rate guarantee of exempted provident fund liability of employees, there is no interest shortfall that is required to be met by Iron ore division, BALCO, HZL, SRL and SMCL as at 31 March 2020 and 31 March 2019. Having regard to the assets of the fund and the return on investments, the Group does not expect any deficiency in the foreseeable future. The Group contributed a total of US$7 million & US$10 million for the years ended 31 March 2020 and 2019 respectively in relation to the independently managed and approved funds.

The present value of obligation and the fair value of plan assets of the trust are summarised below.

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Fair value of plan assets of trusts	313	317
Present value of defined benefit obligation	(307)	(306)
Net liability arising from defined benefit obligation	**-**	**-**

Percentage allocation of Plan assets of the trust

Assets by Category	As at 31 March 2020	As at 31 March 2019
Government Securities	61.68%	53.1%
Debentures/Bonds	36.67%	45.7%
Equity	1.65%	1.2%
Fixed Deposits	0.0%	0.0%

The remeasurement loss of US$22 million (31 March 2019: Nil) has been charged to Other Comprehensive Income (OCI) during the year.

(b) Post-Retirement Medical Benefits:

The Group has a scheme of medical benefits for employees at BMM and BALCO subsequent to their retirement on completion of tenure including retirement on medical grounds and voluntary retirement on contributory basis. The scheme includes employee's spouses as well. Based on an actuarial valuation conducted as at year-end, a provision is recognised in full for the benefit obligation. The obligation relating to post-retirement medical benefits as at 31 March 2020 was US$11 million (31 March 2019: US$9 million). The obligation under this plan is unfunded. The Group considers these amounts as not material and accordingly has not provided further disclosures as required by IAS 19 'Employee benefits'. The remeasurement loss/(gain) and net interest on the obligation of post-retirement medical benefits of US$2 million (31 March 2019: US$0 million) and US$1 million (31 March 2019: US$1 million) for the year ended 31 March 2020 have been recognised in other comprehensive income and finance cost respectively.

(c) Other Post-employment Benefits:

India - Gratuity Plan

In accordance with the Payment of Gratuity Act of 1972, Vedanta Limited and its Indian subsidiaries contributes to a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. The Gratuity Plan provides a lump sum payment to vested employees at retirement, disability or termination of employment being an amount based on the respective employee's last drawn salary and the number of years of employment with the Group.

Based on actuarial valuations conducted as at year end using the projected unit credit method, a provision is recognised in full for the benefit obligation over and above the funds held in the Gratuity Plan. For entities where the plan is unfunded, full provision is recognised in the consolidated statements of financial position.

The iron ore and oil & gas division of Vedanta Limited, SRL, SMCL and HZL have constituted a trust recognised by Indian Income Tax Authorities for gratuity to employees, contributions to the trust are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life Insurance Company Limited and HDFC Standard life insurance.

Zambia

Specified permanent employees of KCM are entitled to receive medical and retirement severance benefits. This comprises two months' basic pay for every completed year of service with an earliest service start date of 1 July 2004. Under this scheme, benefits are provided based on final pensionable pay and a full actuarial valuation of the scheme is carried out on an annual basis. The accruals are not contributed to any fund and are in the form of provisions in KCM's accounts.

On the death of an employee during service, a lump sum amount is paid to his or her dependants. This amount is equal to sixty months' basic pay for employees who joined before 1 April 2000 and thirty months' basic pay for employees who joined on or after 1 April 2000. For fixed term contract employees, the benefit payable on death is thirty months' basic pay (refer note 3(e)).

Principal actuarial assumptions

Principal actuarial assumptions used to determine the present value of Other post-employment benefit plan obligation are as follows:

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Discount rate	6.80%	7.8% to 17.0%
Expected rate of increase in compensation level of covered employees	2.0%-15.0%	2.0%-15.0%

Assumptions regarding mortality for Indian entities are based on mortality table of 'Indian Assured Lives Mortality (2012-2014) published by the Institute of Actuaries of India.

Assumptions regarding mortality for KCM are based on World Health Organisation Life Tables for 1999 applicable to Zambia which has been taken as a reference point. Based on this a mortality table which is appropriate for the workers of Konkola Copper Mines plc has been derived. (Refer note 3(e))

Amount recognised in the Consolidated Statement of Financial Position consists of:

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Fair value of plan assets	59	56
Present value of defined benefit obligation	(85)	(135)
Net liability arising from defined benefit obligation	**(26)**	**(79)**

Amounts recognised in Consolidated income statement in respect of Other post-employment benefit plan are as follows:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Current service cost	6	6
Net Interest cost	2	2
Components of defined benefit costs recognised in consolidated income statement	**8**	**8**

Amounts recognised in the Consolidated Statement of Comprehensive Income in respect of Other post-employment benefit plan are as follows:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Remeasurement of the net defined benefit obligation:		
Actuarial losses arising from changes in demographic assumptions	0	0
Actuarial losses/(gains) arising from changes in financial assumptions	2	(1)
Actuarial losses/(gains) arising from experience adjustments	4	7
Actuarial (gains)/losses on plan assets (excluding amounts included in net interest cost)	(0)	0
Components of defined benefit costs recognised in consolidated statement of comprehensive income – losses/(gains)	**6**	**6**

The movement of the present value of Other post-employment benefit plan obligation is as follows:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Opening balance	(135)	(122)
Acquired in business combination	-	(2)
Discontinued operations (refer note 3(e))	50	(9)
Current service cost	(6)	(6)
Benefits paid	12	16
Interest cost	(6)	(6)
Actuarial (losses)/gains arising from changes in assumptions	(6)	(6)
Foreign currency translation	6	-
Closing balance	**(85)**	**(135)**

The movement in the fair value of Other post-employment benefit plan assets is as follows:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Opening balance	56	52
Acquired in business combination	-	2
Contributions received	12	12
Benefits paid	(9)	(11)
Remeasurement gain/(loss) arising from return on plan assets	0	(0)
Interest income	4	4
Foreign currency translation	(4)	(3)
Closing balance	**59**	**56**

The above plan assets have been invested in the qualified insurance policies.

The actual return on plan assets was US$4 million and US$4 million for the year ended 31 March 2020 and 31 March 2019 respectively.

The weighted average duration of the defined benefit obligation is 15 years and 15 years as at 31 March 2020 and 31 March 2019 respectively.

The company expects to contribute US$8 million to the funded Gratuity plan during the year ending 31 March 2021.

Sensitivity analysis for Defined Benefit Plan

Below is the sensitivity analysis determined for significant actuarial assumptions for the determination of defined benefit obligations and based on reasonably possible changes of the respective assumptions occurring at the end of reporting year while holding all other assumptions constant.

(US$ million)

	Increase/(Decrease) in defined benefit obligation
Discount rate	
Increase by 0.50%	(3)
Decrease by 0.50%	3
Change in salary assumption	
Increase by 0.50%	3
Decrease by 0.50%	(3)

The above sensitivity analysis may not be representative of the actual benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

In presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using the projected unit credit method at the end of reporting period, which is the same as that applied in calculating the defined obligation liability recognised in the consolidated statement of financial position.

Risk analysis

Group is exposed to a number of risks in the defined benefit plans. Most significant risks pertaining to defined benefits plans and management estimation of the impact of these risks are as follows:

Investment risk

Most of the Indian defined benefit plans are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life (ICICI) and HDFC Standard Life. Group does not have any liberty to manage the fund provided to LIC, ICICI prudential and HDFC Standard Life.

The present value of the defined benefit plan obligation is calculated using a discount rate determined by reference to Government of India bonds for Group's Indian operations. If the return on plan asset is below this rate, it will create a plan deficit.

Interest risk

A decrease in the interest rate on plan assets will increase the net plan obligation.

Longevity risk/Life expectancy

The present value of the defined benefit plan obligation is calculated by reference to the best estimate of the mortality of plan participants both during and at the end of the employment. An increase in the life expectancy of the plan participants will increase the plan obligation.

Salary growth risk

The present value of the defined benefit plan obligation is calculated by reference to the future salaries of plan participants. An increase in the salary of the plan participants will increase the plan obligation.

28. EMPLOYEE NUMBERS AND COSTS

Average number of persons employed by the Group in the year*

(US$ million)

Class of business	Year ended 31 March 2020	Year ended 31 March 2019
Zinc	**5,698**	**5,905**
- India	4,213	4,325
- International	1,485	1,580
Iron ore	2,617	2,688
Copper	**966**	**7,525**
- India/Australia	966	1,113
- Zambia (refer note 3(e))	-	6,412
Aluminium	6,473	6,784
Power	226	98
Oil & Gas	1,573	1,847
Other	2,894	3,080
	20,447	**27,927**

Costs incurred during the year in respect of Employees and Executive Directors recognised in Consolidated Income Statement

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Salaries and wages	441	496
Defined contribution pension scheme costs (refer note 27)	12	10
Defined benefit pension scheme costs (refer note 27)	13	16
Share- based payments charge (refer note 29)	10	21
Voluntary retirement scheme cost	2	-
Less: cost allocated/directly booked in joint ventures	(90)	(92)
	388	**451**

*Non IFRS measure

29. SHARE-BASED PAYMENTS

Employee share schemes

The Group aims to provide superior rewards for outstanding performance and a high proportion of 'at risk' remuneration for Executive Directors. Three employee share schemes were approved by shareholders on Listing in 2003. In 2014, the Board introduced a Performance Share Plan ('PSP') which is the primary arrangement under which share-based incentives are provided to the Executive Directors and the wider management group. In 2015, the Board also introduced a Deferred Share Bonus Plan (DSBP). In 2016, Vedanta Limited (subsidiary of Vedanta Resources Limited) introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders.

The Vedanta Resources Long-Term Incentive Plan (the 'LTIP') and Employee Share Ownership Plan (the 'ESOP') and Performance Share Plan (the 'PSP')

The maximum value of shares that can be conditionally awarded to an Executive Director in a year is 150% of annual salary. The maximum value of shares that can be awarded to members of the wider management group is calculated by reference to the grade average CTC and individual grade of the employee. The performance conditions attaching to outstanding awards are as follows:

Performance Share Plan (the 'PSP')

Dependent on the level of employee, part of these awards will be subject to a continued service condition only with the remainder measured in terms of Total Shareholder Return ('TSR') (being the movement in a company's share price plus reinvested dividends), compared over the performance period with the performance of the companies as defined in the scheme from the grant date. The extent to which an award vests will depend on the Company's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. The awards granted under PSP plans are either equity-settled or cash-settled. The equity settled plans have an exercise price of 10 US cents per share and the performance period is three years, with no re-testing being allowed. In the cash-based scheme, business performance set against business plan for the financial year is included as an additional condition.

Employee Share Ownership Plan (the 'ESOP')

The awards under this plan are measured in terms of business performance set against business plan for the financial year comprising operational deliverables, enabler parameters and sustainability performance specific to each company. The vesting schedule is graded over three years and varies from company to company.

The exercise price of the awards is 10 US cents per share and the performance period is one year. The exercise period is six months from the date of vesting.

The Vedanta Resources Long-Term Incentive Plan (the 'LTIP')

The awards under this plan are measured in terms of Total Shareholder Return ('TSR') (being the movement in a company's share price plus reinvested dividends), compared over the performance period with the performance of the companies as defined in the scheme from the grant date. The extent to which an award vests will depend on the Company's TSR rank against a group of peer companies ("Adapted Comparator Group") at the end of the performance period and as moderated by the Remuneration Committee. The exercise price of the awards is 10 US cents per share and the performance period is three years, with no re-testing being allowed.

The Vedanta Resources Deferred Share Bonus Plan (the DSBP)

Under this plan, a portion of the annual bonus is deferred into shares and the awards granted under this scheme are not subject to any performance conditions, but only to service conditions being met. The vesting schedule is staggered over a period of one to three years. In case of DSBP, the shares are purchased from open market and allotted to employees, officers and directors. As on 31 March 2019, there are no options outstanding under the DSBP scheme.

In general, the awards will be settled in equity. The awards are accounted for in accordance with the requirements applying to equity settled share-based payment transactions. The fair value of each award on the day of grant is equal to the average of the middle market quotations of its share price for 5 dealing days before the grant date.

The details of share options for the year ended 31 March 2019 is presented below:

Year of Grant	Exercise Period	Exercise price US cents per share	Options outstanding 1 April 2018	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding at 31 March 2019
2014	17 November 2017– 17 May 2018	10	483,340	-	(28,547)	-	(454,793)	-
2015	1 January 2018 – 1 July 2018	10	8,845	-	-	-	(8,845)	-
2015	30 December 2018 – 30 June 2019	10	4,499,326	-	(167,587)	(1,125,804)	(3,205,935)	-
2016	12 May 2019 – 12 November 2019	10	32,000	-	(7,422)	-	(24,578)	-
2016	11 November 2019 – 11 May 2020	10	371,944	-	(132,776)	(155,277)	(83,891)	-
2017	2 March 2020 – 2 September 2020 (cash-based plan)	-	627,660	-	(328,097)	(155,351)	(144,212)	-
2017	14 November 2020 – 14 May 2021 (cash-based plan)	-	780,180	-	(566,222)	(169,392)	(44,566)	-
2017	14 November 2020 – 14 May 2021	10	300,670	-	(219,942)	(80,728)	-	-
			7,103,965	**-**	**(1,450,093)**	**(1,686,552)**	**(3,966,820)**	**-**

During the previous year, through a cash offer all the outstanding equity settled options were bought back by Vedanta Resources Limited's parent, Volcan Investments Limited. All the TSR based options were vested based on the TSR performance from the date of grant to the date on which buy-back offer on these options went unconditional. For the service condition related options, no. of options were prorated as per remaining period left till the date of actual vesting except for options issued in December 2015 which got vested in full. For options outstanding under DSBP all options were vested in full. On account of delisting of the Company, the cash-based options were also early settled. The accelerated charge on account of early settlement of both the equity settled and cash settled options was recognised in the consolidated income statement.

Hence, as at 31 March 2019, no options were exercisable at the year end. The weighted average share price for the share options exercised during the year ended 31 March 2019 was GBP 9. The weighted average maturity period for the options outstanding as on 31 March 2019 was Nil.

Most of the share-based awards of the Group are equity-settled as defined by IFRS 2 "Share-based Payment". The fair value of these awards has been determined at the date of grant of the award allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of awards that will eventually vest as a result of non-market conditions, is expensed on a straight-line basis over the vesting period. Where an award is cash-settled the fair value is recalculated at each reporting date until the liability is settled.

The fair values were calculated using the Stochastic valuation model with suitable modifications to allow for the specific performance conditions of the respective

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schemes. The inputs to the model include the share price at date of grant, exercise price, expected volatility, expected dividends, expected term and the risk-free rate of interest. Expected volatility has been calculated using historical return indices over the period to date of grant that is commensurate with the performance period of the award. The volatilities of the industry peers have been modelled based on historical movements in the return indices over the period to date of grant which is also commensurate with the performance period for the option. The history of return indices is used to determine the volatility and correlation of share prices for the comparator companies and is needed for the Stochastic valuation model to estimate their future TSR performance relative to the Company's TSR performance. All options are assumed to be exercised immediately after vesting.

The Group recognised total expenses of US$6 million (including expenses on DSBP of US$1 million) related to equity settled share-based payment transactions in the year ended 31 March 2019.

The total expense recognised on account of cash settled share-based plan during the year ended 31 March 2019 was US$0 million and the carrying value of cash settled share-based compensation liability as at 31 March 2019 was Nil.

The Vedanta Limited Plans

Employee Stock Option Scheme (ESOS) 2016

During the year 2016, Vedanta Limited (subsidiary of Vedanta Resources Limited) introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders. The maximum value of shares that can be conditionally awarded to an Executive Committee in a year is 125% of annual salary. The maximum value of options that can be awarded to members of the wider management group is calculated by reference to the grade average CTC and individual grade of the employee. The performance conditions attached to the award is measured by comparing company's performance in terms of TSR over the performance period with the performance of the companies as defined in the scheme. The extent to which an award vests will depend on the Vedanta Limited's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. Dependent on the level of employee, part of these awards will be subject to a continued service condition only with the remainder measured in terms of TSR. Further in some schemes under the plan, business performance set against business plan for the financial year is included as an additional condition.

Options granted during the year ended 31 March 2020 includes business performance based, sustained individual performance based and market performance based stock options. Business performances will be measured using Volume, Cost, Net Sales Realisation, EBITDA, free cash flow or a combination of these for the respective business/SBU entities.

The exercise price of the options is ₹ 1 per share and the performance period is three years, with no re-testing being allowed.

The details of share options for the year ended 31 March 2020 and 31 March 2019 is presented below:

Financial Year of Grant	Exercise Period	Options outstanding 1 April 2019	Options granted during the year	Options forfeited during the year	Options exercised during the year*	Options outstanding 31 March 2020	Options exercisable 31 March 2020
2016-17	15 December 2019 – 14 June 2020	6,508,226	-	4,819,269	620,441	1,068,516	1,068,516
2017-18	1 September 2020 – 28 February 2021	8,274,393	-	1,246,468	-	7,027,925	-
2017-18	16 October 2020 – 15 April 2021	11,126	-	-	-	11,126	-
2017-18	1 November 2020 – 30 April 2021	27,638	-	27,638	-	-	-
2018-19	1 November 2021 – 30 April 2022	13,566,200	-	2,146,154	-	11,420,046	-
2018-19	Cash settled	3,847,494	-	1,610,550	-	2,236,944	-
2019-20	29 November 2022 – 28 May 2023	-	16,713,640	832,310	-	15,881,330	-
2019-20	Cash settled	-	4,097,030	140,990	-	3,956,040	-
		32,235,077	**20,810,670**	**10,823,379**	**620,441**	**41,601,927**	**1,068,516**

*excludes 58,420 options exercised during the year regarding which the transaction could not be completed before 31 March 2020 and hence, the corresponding shares were not transferred to the concerned employees.

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Financial Year of Grant	Exercise Period	Options outstanding 1 April 2018	Options granted during the year	Options forfeited during the year	Options exercised during the year	Options outstanding 31 March 2019	Options exercisable 31 March 2019
2016-17	15 December 2019 – 14 June 2020	7,098,602	-	590,376	-	6,508,226	-
2017-18	1 September 2020 – 28 February 2021	9,617,340	-	1,342,947	-	8,274,393	-
2017-18	16 October 2020 – 15 April 2021	11,570	-	444	-	11,126	-
2017-18	1 November 2020 – 30 April 2021	28,740	-	1,102	-	27,638	-
2018-19	1 November 2021 – 30 April 2022	-	13,793,980	227,780	-	13,566,200	-
2018-19	Cash settled	-	3,889,980	42,486	-	3,847,494	-
		16,756,252	**17,683,960**	**2,205,135**	**-**	**32,235,077**	**-**

The fair value of all awards has been determined at the date of grant of the award allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of awards that will eventually vest as a result of non-market conditions, is expensed on a straight-line basis over the vesting period.

Business Performance-Based and Sustained Individual Performance-Based Options:

The fair value of stock options following these types of vesting conditions have been estimated using the Black-Scholes-Merton Option Pricing model. The value arrived at under this model has been then multiplied by the expected % vesting based on business performance conditions (only for business performance-based options) and the expected multiplier on account of sustained individual performance (for both type of options). The inputs used in the Black-Scholes-Merton Option Pricing model include the share price considered as of the valuation date, exercise price as per the scheme/plan of the options, expected dividend yield (estimated based on actual/expected dividend trend of the company), expected tenure (estimated as the remaining vesting period of the options), the risk-free rate (considered as the zero coupon yield as of the valuation date for a term commensurate with the expected tenure of the options) and expected volatility (estimated based on the historical volatility of the return in company's share prices for a term commensurate with the expected tenure of the options). The exercise period of 6 months post vesting period has not been considered as the options are expected to be exercised immediately post the completion of the vesting period.

Total Shareholder Returns-Based Options:

The fair value of stock options following this type of vesting condition has been estimated using the Monte Carlo Simulation method. This method has been used to simulate the expected share prices for Vedanta Limited and the companies of the comparator group over the vesting period of the options. Based on the simulated prices, the expected pay-off at the end of the vesting period has been estimated and present valued to the valuation date. Further, based on the simulated share prices and expected dividends the relative rank of Vedanta Limited's share price return has been estimated vis-à-vis the Indian and Global Group of the comparator group. This rank has been used to estimate expected % vesting of the options under this type of vesting condition. The inputs to the monte carlo simulation method include expected tenure (estimated as the remaining vesting period of the options), the risk-free rate (considered as the zero coupon yield as of the valuation date for a term commensurate with the expected tenure of the options), expected dividend yield (estimated based on the actual dividend trend of the companies), expected volatility (estimated based on the historical volatility of the return in the company's share prices for a term commensurate with the expected tenure of the options). The exercise period of 6 months post the vesting period has not been considered as the options are expected to be exercised immediately post the completion of the vesting period.

The assumptions used in the calculations of the charge in respect of the ESOS awards granted during the year ended 31 March 2020 and 31 March 2019 are set out below:

(US$ million)

Particulars	Year ended March 2020 ESOS 2019	Year ended March 2019 ESOS November 2018
Number of instruments	4,097,030 (cash settled) 16,713,640 (equity settled)	3,889,980 (cash settled) 13,793,980 (equity settled)
Exercise price	₹ 1	₹ 1
Share price at the date of grant	₹ 144.60	₹ 195.0
Contractual life	3 years	3 years
Expected volatility	36.64%	44.3%
Expected option life	3 years	3 years
Expected dividends	7.96%	6.5%
Risk free interest rate	5.68%	7.7%
Expected annual forfeitures	10%p.a.	10%p.a.
Fair value per option granted (Non-market performance based and market performance based)	₹ 102.30/ ₹ 72.12	₹ 159.9/ ₹ 96.3

Weighted average share price at the date of exercise of stock options was ₹ 126.02 (2019: NA)

The weighted average remaining contractual life for the share options outstanding was 2.28 years (2019: 2.32 years).

The Group recognised total expenses of US$10 million (2019: US$12 million) related to equity settled share-based plans under the above scheme in the year ended 31 March 2020.

The Group has awarded certain other cash settled option plans indexed to shares of its subsidiaries. As the amounts under these plans are not material, accordingly no further disclosures have been provided.

The total expense recognised on account of these cash settled option plans during the year ended 31 March 2020 is US$3 million (2019: US$3 million) and the carrying value of cash settled share-based compensation liability as at 31 March 2020 is US$7 million (2019: US$5 million).

Out of the total expense pertaining to equity settled and cash settled options for the year ended 31 March 2020, the Group has capitalised US$3 million (2019: US$0 million) expense for the year ended 31 March 2020.

30. SHARE CAPITAL

(US$ million)

	As at 31 March 2020		As at 31 March 2019	
Shares in issue	Number	Paid up amount (US$ million)	Number	Paid up amount (US$ million)
Ordinary shares of 10 US cents each	285,246,698	29	285,246,698	29
Deferred shares of £1 each	50,000	0	50,000	0
Total	**285,296,698**	**29**	**285,296,698**	**29**

Rights and obligations attaching to shares

The rights and obligations attaching to the ordinary and deferred shares are set out in the Articles.

Each ordinary share carries the right to one vote at general meetings of the Company and is entitled to dividends. The Company did not issue any shares during the year ended 31 March 2020.

The holders of deferred shares do not have the right to receive notice of any general meeting of the Company nor the right to attend, speak or vote at any such general meeting. The deferred shares have no rights to dividends and, on a winding-up or other return of capital, entitle the holder only to the payment of the amounts paid on such shares after repayment to the holders of Ordinary Shares of the nominal amount paid up on the Ordinary Shares plus the payment of £100,000 per Ordinary Share. Of the 50,000 deferred shares, one deferred share was issued at par and has been fully paid, and 49,999 deferred shares were each paid up as to one-quarter of their nominal value.

31. NON-CONTROLLING INTERESTS ('NCI')

The Group consists of a parent Company, Vedanta Resources Limited, incorporated in UK and a number of subsidiaries held directly and indirectly by the Group which operate and are incorporated around the world. Note 39 to the financial statements lists details of the interests in the subsidiaries.

Non-controlling interests that are material to the Group relate to Hindustan Zinc Limited (HZL), Cairn India Holdings Limited (CIHL) and its subsidiaries and Vedanta Limited.

As at 31 March 2020 and 31 March 2019, NCIs hold an economic interest of 67.33%, 49.67%, 74.33%, 62.76% and 49.67% respectively in HZL, CIHL and its wholly owned subsidiaries, Bharat Aluminium Company Limited (BALCO), Black Mountain Mining (BMM) and Vedanta Limited. In ASI (partly owned subsidiary of CIHL), the NCI's economic interest is 74.01%.

Principal place of business of HZL, CIHL and its subsidiaries and Vedanta Limited is set out under note 39.

The table below shows summarised financial information of subsidiaries of the Group that have material non-controlling interests. The amounts are presented before intercompany elimination.

(US$ million)

	Year ended 31 March 2020					Year ended 31 March 2019***				
Particulars	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total
Profit/(loss) Attributable to NCI	643	(308)	(447)	(67)	(179)	748	98	330	(515)	661
Equity Attributable to NCI**	3,662	668	4,988	(3,782)	5,536	3,312	1,096	5,826	(4,053)	6,181
Dividends paid/ payable to NCI	-	-	(101)	-	(101)	(512)	-	(496)	-	(1,008)

* Others consist of investment subsidiaries of Vedanta Limited, other individual non-material subsidiaries and consolidation adjustments.

** US$5 million (31 March 2019: US$17 million) gain attributable to NCI of CIHL and its subsidiaries transferred to put option liability. Refer note 24.

***Restated. Refer note 1(b).

(US$ million)

	As at 31 March 2020					As at 31 March 2019				
Particulars	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total
Non-current assets	2,856	1,400	16,400	(4,271)	16,385	2,932	3,031	18,635	(3,690)	20,908
Current assets	3,317	1,258	2,614	612	7,801	3,119	1,117	3,284	1,353	8,873
Current liabilities	709	544	5,859	8,879	15,991	1,108	1,061	7,039	3,308	12,516
Non-current liabilities	25	782	3,112	2,003	5,922	24	871	3,150	7,967	12,012
Net assets	**5,439**	**1,332**	**10,043**	**(14,541)**	**2,273**	**4,919**	**2,216**	**11,730**	**(13,612)**	**5,253**

*Others consist of investment subsidiaries of Vedanta Limited, Vedanta Resources Limited, other individual non-material subsidiaries and consolidation adjustments.

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(US$ million)

	As at 31 March 2020					As at 31 March 2019***				
Particulars	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total
Revenue	2,587	874	4,998	3,331	11,790	2,981	969	5,442	3,614	13,006
Profit/(loss) for the year	955	(578)	(899)	(1,225)	(1,747)	1,111	217	664	(1,568)	424
Other comprehensive income/(loss)**	(14)	-	(6)	(0)	(20)	5	-	(17)	(6)	(18)
Net cash inflow/(outflow) from operating activities	982	282	703	(717)	1,250	1,259	148	1,645	(1,168)	1,884
Net cash inflow/(outflow) from investing activities	(445)	(350)	(287)	(179)	(1,261)	(173)	114	(540)	(1,076)	(1,675)
Net cash inflow/(outflow) from financing activities	(272)	(198)	(666)	781	(355)	(1,368)	(46)	(807)	2,388	167

* Others consist of Investment subsidiaries of Vedanta Limited, Vedanta Resources Limited, other Individual non-material subsidiaries and consolidation adjustments.

** Excluding exchange differences arising on translation of foreign operations.

***Restated. Refer note 1(b).

The effect of changes in ownership interests in subsidiaries that did not result in a loss of control is as follows:

(US$ million)

For the year ended 31 March 2020	HZL	CIHL and its subsidiaries	Vedanta Limited	Others	Total
Other changes in non-controlling interests	-	-	8	(33)	(25)

(US$ million)

For the year ended 31 March 2019	HZL	CIHL and its subsidiaries	Vedanta Limited	Others	Total
Other changes in non-controlling interests	-	-	3	-	3

32. CAPITAL MANAGEMENT

The Group's objectives when managing capital are to safeguard continuity, maintain a strong credit rating and healthy capital ratios in order to support its business and provide adequate return to shareholders through continuing growth.

The Group sets the amount of capital required on the basis of annual business and long-term operating plans which include capital and other strategic investments. The funding requirement is met through a mixture of equity, internal accruals and other borrowings.

The Group monitors capital using a gearing ratio, being the ratio of net debt as a percentage of total capital.

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Total equity	2,273	5,253
Net debt	10,005	10,292
Total capital	12,278	15,545
Gearing Ratio	**81%**	**66%**

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The increase in the gearing ratio compared to 2019 is primarily due to impairment losses booked during current year.

33. COMMITMENTS, GUARANTEES, CONTINGENCIES AND OTHER DISCLOSURES

A. Commitments

The Group has a number of continuing commitments in the normal course of business including:

Exploratory mining commitments;

Oil and gas commitments;

Mining commitments arising under production sharing agreements; and

Completion of the construction of certain assets.

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Capital commitments contracted but not provided	1,413	2,003

Estimated amount of contracts remaining to be executed on capital accounts and not provided for:

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Oil & Gas sector		
Cairn India	421	797
Aluminium sector		
Lanjigarh Refinery (Phase II)	210	209
Jharsuguda 1.25 MTPA smelter	55	67
Zinc sector		
Zinc India (mines expansion, solar and smelter)	122	280
Gamsberg mining & milling project	17	26
Copper sector		
Tuticorin Smelter 400 KTPA*	373	404
Others	215	220
Total	**1,413**	**2,003**

*Currently contracts are under suspension under the force majeure clause as per the contract.

Committed work programme (Other than capital commitment):

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Oil & Gas sector		
Cairn India (OALP - New Oil and Gas blocks)	781	551

B. Guarantees

The aggregate amount of indemnities and other guarantees on which the Group does not expect any material losses, was US$866 million (31 March 2019: US$1,120 million).

The Group has given guarantees in the normal course of business as stated below:

Guarantees and bonds advanced to the customs authorities in India of US$63 million relating to the export and payment of import duties on purchases of raw material and capital goods (31 March 2019: US$98 million).

Guarantees issued for Group's share of minimum work programme commitments of US$388 million (31 March 2019: US$342 million).

Guarantee issued against liabilities for structured investment (refer note 35 for details of the transactions) worth US$277 million as of 31 March 2019 (relinquished during the year due to liquidation of these investment)

Guarantees of US$7 million issued under bid bond for placing bids (31 March 2019: US$78 million).

Bank guarantees of US$15 million (31 March 2019: US$17 million) has been provided by the Group on behalf of Volcan Investments Limited to Income tax department, India as a collateral in respect of certain tax disputes.

Other guarantees worth US$393 million (31 March 2019: US$308 million) issued for securing supplies of materials and services, in lieu of advances received from customers, litigation, for provisional valuation of custom duty and also to various agencies, suppliers and government authorities for various purposes. The Group does not anticipate any liability on these guarantees.

Cairn PSC/RSC guarantee to Government

The Group has provided guarantees for the Cairn India Group's obligation under the Production Sharing Contract ('PSC') and Revenue Sharing Contract ('RSC').

C. Export Obligations

The Indian entities of the Group have export obligations of US$512 million (31 March 2019: US$467 million) on account of concessional rates of import duty paid on capital goods under the Export Promotion Capital Goods Scheme and under the Advance Licence Scheme for the import of raw material laid down by the Government of India.

In the event of the Group's inability to meet its obligations, the Group's liability would be US$81 million (31 March 2019: US$78 million) plus applicable interest.

The Group has given bonds of US$227 million (31 March 2019: US$225 million) to custom authorities against these export obligations.

D. Contingencies

The Group discloses the following legal and tax cases as contingent liabilities.

Hindustan Zinc Limited: Department of Mines and Geology

The Department of Mines and Geology of the State of Rajasthan issued several show cause notices in August, September and October 2006 to HZL, totalling US$45 million as at 31 March 2020 (31 March 2019: US$48 million). These notices alleged unlawful occupation and unauthorised mining of associated minerals other than zinc and lead at HZL's Rampura Agucha, Rajpura Dariba and Zawar mines in Rajasthan during the period from July 1968 to March 2006. HZL believes it is unlikely that the claim will lead to a future obligation and thus no provision has been made in the financial statements. HZL had filed appeals (writ petitions) in the High Court of Rajasthan in Jodhpur. The High Court restrained the Department of Mines and Geology from undertaking any coercive measures to recover the penalty. In January 2007, the High Court issued another order granting the Department of Mines and Geology additional time to file their reply and also ordered the Department of Mines and Geology not to issue any order cancelling the lease. The case is yet to be listed in the Rajasthan High Court.

Vedanta Limited: Income tax

In March 2014, Vedanta Limited (notice was served on Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) received a show cause notice from the Indian Tax Authorities ('Tax Authorities') for not deducting withholding tax on the payments made to Cairn UK Holdings Limited (CUHL), for acquiring shares of Cairn India Holdings Limited (CIHL), as part of their internal reorganisation. The Tax Authorities have stated in the notice that a short-term capital gain has accrued to CUHL on transfer of the shares of CIHL to Vedanta Limited, in the financial year 2006–2007, on which tax should have been withheld by Vedanta Limited. Pursuant to this, various replies were filed with the Tax Authorities. After several hearings, the Income Tax Authority, in March 2015, issued an order holding Vedanta Limited as 'assessee in default' and raised a demand totalling US$2,740 million (including interest of US$1,370 million). Vedanta Limited had filed an appeal before the First Appellate Authority, Commissioner of Income Tax (Appeals) which vide order dated 3 July 2017 confirmed the tax demand against Vedanta Limited. Vedanta Limited has challenged the Commissioner of Income Tax's (Appeals) order before the Income Tax Appellate Tribunal (ITAT).

Vedanta Limited also filed a writ petition before the Delhi High Court wherein it has raised several points for assailing the aforementioned Income Tax Authority's order. The matter came up for hearing on 5 February 2020 before Delhi High Court but adjourned and the next date of hearing is 28 September 2020.

Separately CUHL, on whom the primary liability of tax lies, had received an Order from the ITAT in the financial year 2016-17 holding that the transaction is taxable in view of the clarification made in the Act but also acknowledged that being a retrospective transaction, interest would not be levied. Hence affirming a demand of US$1,370 million excluding the interest portion that had previously been claimed. The tax department has appealed this order before the Delhi High Court. As a result of the above order from ITAT, the Group considers the risk in respect of the interest portion of claim to be remote. Further, as per the recent recovery notice dated 12 October 2018 received from the Tax Recovery Officer (TRO) appointed for CUHL, tax demand of CUHL of approx. US$668 million along with interest is outstanding. Further, in the said notice, tax department had also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. Accordingly, amount aggregating to US$81 million has been paid to the TRO on 26 October 2018 thus reducing the liability to US$587 million. Vedanta Limited has also paid interim dividend of US$1 million to the TRO. Accordingly, the Group has revised the contingent liability to US$586 million (31 March 2019: US$634 million). In the event, the case is finally decided against the Company, the demand payable along with interest as per the above-mentioned order would be US$2,740 million, of which only US$586 million is considered as possible. Separately, but in connection with this litigation, the Company has filed a Notice of Claim against the Government of India ('GOI') under the UK India Bilateral Investment Treaty (the BIT). The International Arbitration Tribunal passed a favourable order on jurisdiction and Transparency and hearing on merits have been completed in May 2019 and order will be passed in due course. The Government of India has challenged the jurisdiction and Transparency orders of Arbitration Tribunal before the High Court of Singapore. The Singapore High court heard the Transparency matter on 24 February 2020 and passed favourable order and held that it will take up the Jurisdiction issue after receiving Tribunal's award on merits. GOI has appealed the above High Court order before Singapore Supreme Court.

Ravva Joint Operations arbitration proceedings

ONGC Carry

The Ravva Production Sharing Contract (PSC) obliges the contractor parties to pay a proportionate share of ONGC's exploration, development, production and contract costs in consideration for ONGC's payment of costs related to the construction and other activities it conducted in Ravva prior to the effective date of the Ravva PSC (the ONGC Carry). The question as to how the ONGC Carry is to be recovered and calculated, along with other issues, was submitted to an International Arbitration Tribunal in August 2002 which rendered a decision on the ONGC Carry in favour of the contractor parties (including Vedanta Limited (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited)) whereas four other issues were decided in favour of Government of India (GOI) in October 2004 (Partial Award). The GOI then proceeded to challenge the ONGC Carry decision before the Malaysian courts, as Kuala Lumpur was the seat of the arbitration. The Federal Court of Malaysia upheld the Partial Award. As the Partial Award did not quantify the sums, therefore, contractor parties approached the same Arbitration Tribunal to pass a Final Award in the subject matter since it had retained the jurisdiction to do so. The Arbitral Tribunal was reconstituted and the Final Award was passed in October 2016 in Vedanta Limited's favour. GOI's challenge of the Final Award has been dismissed by the Malaysian High Court and the next appellate court in Malaysia i.e. Malaysian Court of Appeal. GOI then filed an appeal at Federal Court of Malaysia. The matter was heard on 28 February 2019 and the Federal Court dismissed GOI's leave to appeal. Vedanta Limited has also filed for the enforcement of the Partial Award and Final Award with Delhi High Court.

Base Development Cost

Ravva joint operations had received a claim from the Ministry of Petroleum and Natural Gas, Government of India (GOI) for the period from Year 2000-2005 for US$129 million for an alleged underpayment of profit petroleum (by recovering higher Base Development Costs ("BDC") against the cap imposed in the PSC) to the Government of India (GOI), out of which, Vedanta Limited's (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) share will be US$29 million plus interest. Joint venture partners initiated the arbitration proceedings and Arbitration Tribunal published the Award allowing claimants (including Vedanta Limited) to recover the development costs spent to the tune of US$278 million and disallowed over run of US$22 million spent in respect of BDC along with 50% legal costs. The High Court of Kuala Lumpur as well as the Court of Appeal dismissed GOI's application of setting aside the part of the Award. GOI challenge to the same before the Federal Court of Malaysia was also dismissed on 17 May 2016. Vedanta Limited has filed an application for enforcement of award before Delhi High Court.

In connection with the above two matters, Vedanta Limited has received an order dated 22 October 2018 from the GOI directing oil marketing companies (OMCs) who are the off takers for Ravva to divert the sale proceeds to GOI's account. GOI alleges that the Ravva Joint Operations has short paid profit petroleum of US$314 million (Vedanta Limited's share approximately - US$93 million) on account of the two disputed issues of ONGC Carry and BDC matters, out of which US$64 million pertains to ONGC Carry and US$29 million pertains to BDC Matter. Against an interim application, filed by Vedanta Limited and other joint venture partner, seeking stay of such action from GOI, before the Delhi High Court, where enforcement petitions for both matters are pending, the Court directed the OMCs to deposit above sums to the Court for both BDC and ONGC Carry matters. However, Vedanta Limited (and other joint venture partner) has been given the liberty to seek withdrawal of the proportionate amounts (fallen due as of the date of Court order) from the Court upon furnishing a bank guarantee of commensurate value. As on date, the company has submitted bank guarantee of US$84 million and received the corresponding proceeds.

Separately, GOI has also filed an interim application seeking deposit by the said OMCs of an amount of US$87 million (Vedanta's share of US$56 million) towards interest on the alleged short payment of profit petroleum. The Hon'ble Delhi High Court vide its order dated 19 February 2020 allowed the petition for enforcement of the arbitration award in relation to BDC including declaratory relief and rejected the objections of GOI. The GOI has filed an SLP against this order before the Supreme Court which was listed on 17 June 2020 where in the Court directed the parties to file their written submissions by 15 July 2020. The case is listed for further hearing in due course. The SC has also directed the parties to maintain status quo till any further orders in the matter.

The Hon'ble Delhi High Court vide its order dated 28 May 2020 has directed that all future sale proceeds of Ravva Crude w.e.f. 5 June 2020 be paid directly to Vedanta Limited by the OMCs. The interim application filed by GOI and the ONGC Carry matter has been listed for hearing on 17 August 2020. While the Group does not believe the GOI will be successful in its challenge, if the Arbitral Awards in above matters are reversed and such reversals are binding, the Group would be liable for approximately US$93 million plus interest (31 March 2019: US$93 million) plus interest.

Proceedings related to the imposition of entry tax

Vedanta Limited and other Group companies i.e. Bharat Aluminium Company Limited (BALCO) and Hindustan Zinc Limited (HZL) challenged the constitutional validity of the local statutes and related notifications in the states of Chhattisgarh, Odisha and Rajasthan pertaining to the levy of entry tax on the entry of goods brought into the respective states from outside.

Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. Post a detailed hearing, although the bench rejected the compensatory nature of tax as a ground of challenge, it maintained status quo with respect to all other issues which have been left open for adjudication by regular benches hearing the matters.

Following the order of the nine judge bench, the regular bench of the Supreme Court proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods bought from other States to the respective High Courts for final determination but retained the issue of jurisdiction for levy on imported goods, for determination by the regular bench of the Supreme Court. Following the order of the Supreme Court, the Group filed writ petitions in respective High Courts.

On 9 October 2017, the Supreme Court has held that states have the jurisdiction to levy entry tax on imported goods. With this Supreme Court judgement, imported goods will rank pari-passu with domestic goods for the purpose of levy of Entry tax. Vedanta Limited and its subsidiaries have amended their appeals (writ petitions) in Odisha and Chhattisgarh to include imported goods as well. With respect to Rajasthan, the State Government has filed a counter petition in the Rajasthan High Court, whereby it has admitted that it does not intend to levy the entry tax on imported goods.

The issue pertaining to the levy of entry tax on the movement of goods into a Special Economic Zone (SEZ) remains pending before the Odisha High Court. The Group has challenged the levy of entry tax on any movement of goods into SEZ based on the definition of 'local area' under the Odisha Entry Tax Act which is very clear and does not include a SEZ. In addition, the Government of Odisha further through its SEZ Policy 2015 and the operational guidelines for administration of this policy dated 22 August 2016, exempted the entry tax levy on SEZ operations.

The total claims against Vedanta Limited and its subsidiaries are US$183 million (31 March 2019: US$190 million) net of provisions made.

BALCO: Challenge against imposition of Energy Development Cess

BALCO challenged the imposition of Energy Development Cess levied on generators and distributors of electrical energy @ 10 paise per unit on the electrical energy sold or supplied before the High Court on the grounds that the Cess is effectively on production and not on consumption or sale since the figures of consumption are not taken into account and the Cess is discriminatory since captive power plants are required to pay @ 10 paise while the State Electricity Board is required to pay @ 5 paise. The High Court of Chhattisgarh by order dated 15 December 2006 declared the provisions imposing ED Cess on CPPs as discriminatory and therefore ultra vires the Constitution. BALCO has sought refund of ED Cess paid till March 2006 amounting to US$5 million.

The State of Chhattisgarh moved an SLP in the Supreme Court and whilst issuing notice has stayed the refund of the Cess already deposited and the Supreme Court has also directed the State of Chhattisgarh to raise the bills but no coercive action be taken for recovery for the same. Final argument in this matter started before the Supreme Court. In case the Supreme Court overturns the decision of the High Court, the Group would be liable to pay an additional amount of US$112 million (31 March 2019: US$108 million). Accordingly the total exposure on the Group would be US$117 million (31 March 2019: US$113 million).

Class actions against KCM on behalf of Zambian nationals

Vedanta and KCM had challenged the jurisdiction of the English courts to hear and adjudicate the claims by Zambian residents in relation to KCM's operations in Zambia. The allegations relate to claims of personal injury, significant pollution, environmental damage and claims for aggravated and exemplary damages and for injunctive relief. These allegations are currently defended by KCM. On 27 May 2016, the English High Court of Justice, Queen's Bench Division, Technology and Construction Court ruled that the English courts have jurisdiction to hear and adjudicate the claims. Vedanta and KCM appealed this ruling.

The English Court of Appeal released a judgement on 13 October 2017, dismissing this appeal and ruling that the English courts have jurisdiction to hear and adjudicate the claims. This judgement was solely related to the jurisdiction of the English courts to hear these claims.

Vedanta and KCM had sought permission from the Supreme Court of London to appeal the Court's decision, which was granted by the Supreme Court on 23 March 2018.

The UK Supreme Court hearing on jurisdiction of the UK courts to adjudicate the substantive claims took place on 15 and 16 January 2019. Both parties presented their arguments and submissions on the days. On 10 April 2019, the UK Supreme Court delivered its decision on jurisdiction matter and held that the English Court has jurisdiction to try such claims. The Supreme Court, however, agreed with arguments put forward by Vedanta and KCM that England is not the proper place for the trial of these claims and consequently overturned the lower courts on this point. The Court further added that the High Court was entitled to conclude on the evidence before it that there is a real risk that "substantial justice" will not be obtainable in Zambia and because of this, the claims may nonetheless be heard in the English Court.

Owing to the ZCCM action of initiating liquidation proceedings against KCM and the Provisional Liquidator taking over control, the English class action proceedings did not move further for sometime. Post which the date for the trial in the English trail court was tentatively set for 11 October 2021. Vedanta and KCM were directed to submit a defence by 7 May 2020 which was later extended to 4 June 2020. Before the expiry of this period, Vedanta filed an application seeking 2 months' extension to file its defence statement. The hearing date for the application is yet to be fixed. KCM has also filed an application seeking a stay on the matter, the date for which has also not been fixed. Any stay if granted will be applicable on all the parties including VRL. The amount of the claims has not been specified. Given the stage of proceedings the amount is presently not quantifiable.

Miscellaneous disputes - Income tax

The Group is involved in various tax disputes amounting to US$255 million (31 March 2019: US$200 million) relating to income tax. It also includes similar matters where initial assessment is pending for subsequent periods and where the Group has made claims and assessments are in progress. These mainly relate to the disallowance of tax holiday for 100% Export Oriented Undertaking under Section 10B of the Income Tax Act, 1961, disallowance of tax holiday benefit on production of gas under Section 80IB of the Income Tax Act, 1961,

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on account of depreciation disallowances of the Income Tax Act and interest thereon which are pending at various appellate levels. Interest and penalty, if any would be additional. Refer note 11 for other income tax disputes.

The Group believes that these disallowances are not tenable and accordingly no provision is considered necessary.

Miscellaneous disputes - Others

The Group is subject to various claims and exposures which arise in the ordinary course of conducting and financing its business from the excise, indirect tax authorities and others. These claims and exposures mostly relate to the assessable values of sales and purchases or to incomplete documentation supporting the companies' returns or other claims.

The approximate value of claims (excluding the items as set out separately above) against the Group companies total US$534 million (31 March 2019: US$581 million).

The Group considers that it can take steps such that the risks can be mitigated and that there are no significant unprovided liabilities arising.

Except as described above, there are no pending litigations which the Group believes could reasonably be expected to have a material adverse effect on the results of operations, cash flows or the financial position of the Group.

Based on reassessments and developments during the period, the following matters that were reported as contingent liability as at 31 March 2019 are no more considered as contingent liability:

1. Richter and Westglobe, Income Tax matter of US$123 million basis the favourable order received from High Court.

2. South Africa Carry Cost of US$62 million basis the acceptance of closure application by Petroleum Agency South Africa (PASA) to exit from South Africa block.

E. Operating Lease commitments: As lessee

(i) Refer to note 2(b) for details of the Group's transition to IFRS 16 "Leases". Commitments disclosed as non-cancellable operating leases under IAS 17 Leases have been recorded as lease liabilities from 1 April 2019, with the exception of short-term and low-value leases. Refer to note 25 for the maturity profile of the Company's lease liabilities.

The aggregate amounts of minimum lease payments under non-cancellable operating leases at 31 March 2019, prepared and reported under IAS 17 "Leases", were as follows:

(US$ million)

Particulars	As at 31 March 2019
Within one year of the balance sheet date	2
Within two to five years from the balance sheet date	3
After five years from the balance sheet date	0
Total	**5**

Lease payments recognised as expenses during the year ended 31 March 2019, on non-cancellable leases, is US$2 million.

(ii) TSPL has ascertained that the Power Purchase Agreement (PPA) entered with Punjab State Power Corporation Limited (PSPCL) qualifies to be an operating lease under IAS 17 'Leases'. Based on the assessment that the lease payments by PSPCL are subject to variations on account of various factors like availability of coal, water, etc., the management has determined the entire consideration receivable under the PPA relating to recovery of capacity charges towards capital cost to be contingent rent under IAS 17. The contingent rent recognised as revenue in the consolidated income statement during the year ended 31 March 2020 and 31 March 2019 is US$236 million and US$242 million respectively.

34. OTHER MATTERS

i) Share transactions Call options

a) HZL

Pursuant to the Government of India's policy of divestment, the Group in April 2002 acquired 26% equity interest in HZL from the Government of India. Under the terms of the Shareholder's Agreement ('SHA'), the Group had two call options to purchase all of the Government of India's shares in HZL at fair market value. The Group also acquired an additional 20% of the equity capital in HZL through an open offer. The Group exercised the first call option on 29 August 2003 and acquired an additional 18.9% of HZL's issued share capital, increasing its shareholding to 64.9%. The second call option provides the Group the right to acquire the Government of India's remaining 29.5% share in HZL. This call option is subject to the right of the Government of India to sell 3.5% of HZL shares to HZL employees. The Group exercised the second call option on 21 July 2009. The Government of India disputed the validity of the call option and has refused to act upon the second call option. Consequently, the Group invoked arbitration which is in the early stages. The next date of hearing is to be notified. The Government of India without prejudice to the position on the Put/Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route. Meanwhile, the Supreme Court has, in January 2016, directed status quo pertaining to disinvestment of Government of India's residual shareholding while hearing the public interest petition filed. Vedanta Limited has filed an early hearing application in Supreme Court. The hearings in the matter have started and will now be listed for further arguments in due course.

b) BALCO

Pursuant to the Government of India's policy of divestment, the Group in March 2001 acquired 51% equity interest in BALCO from the Government of India. Under the terms of the SHA, the Group has a call option to purchase the Government of India's remaining ownership interest in BALCO at any point from 2 March 2004. The Group exercised this option on 19 March 2004. However, the Government of India has contested the valuation and validity of the option and contended that the clauses of the SHA violate the (Indian) Companies Act, 1956 by restricting the rights of the Government of India to transfer its shares and that as a result such provisions of the SHA were null and void. In the arbitration filed by the Group, the arbitral tribunal by a majority award rejected the claims of the Group on the grounds that the clauses relating to the call option, the right of first refusal, the "tag-along" rights and the restriction on the transfer of shares violate the (Indian) Companies Act, 1956 and are not enforceable. The Group has challenged the validity of the majority award in the High Court of Delhi and sought for setting aside the arbitration award to the extent that it holds these clauses ineffective and inoperative. The Government of India also filed an application before the High Court of Delhi to partially set aside the arbitral award in respect of certain matters involving valuation. The matter will be listed for hearing in due course. Meanwhile, the Government of India without prejudice to its position on the Put/Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route.

On 9 January 2012, the Group offered to acquire the Government of India's interests in HZL and BALCO for US$2,071 and US$238 respectively. This offer was separate from the contested exercise of the call options, and Group proposed to withdraw the ongoing litigations in relation to the contested exercise of the options should the offer be accepted. To date, the offer has not been accepted by the Government of India and therefore, there is no certainty that the acquisition will proceed.

In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Group considers the strike price of the options to be at fair value, and hence the call options have not been recognised in the financial statements.

ii) Pursuant to Management Committee recommendation and minutes of Empowered Committee of Secretaries (ECS) filed by GoI, Vedanta Limited had considered cost recovery of US$251 million in FY 2017-18, being the cost incurred over the initially approved FDP of Pipeline Project. Vedanta Limited's claim for the resultant profit petroleum of US$43 million (31 March 2019: US$43 million), which had been previously paid, has been objected by the GoI. The Group believes that it has a good case on merits to recover the amount and has therefore treated it as a non-current recoverable amount.

iii) The Department of Mines and Geology (DMG) of the State of Rajasthan initiated the royalty assessment process from January 2008 to 2019 and issued a show cause notice vide an office order dated 31 January 2020 amounting to US$257 million. The Group has challenged (the show cause notice or/and) computation mechanism of the royalty on the ground that the State has not complied with the previous orders of Rajasthan High Court where a similar computation mechanism was challenged and Court had directed DMG to reassess basis the judicial precedents and mining concession rules. Pending compliance of previous orders, High Court has granted a stay on the notice and directed DMG not to take any coercive action. Based on the opinion of external council, the Group believes that it has strong grounds of a successful appeal, and the chances of an outcome which is not if favour of the Group is remote.

iv) In terms of various notifications issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), ash produced from thermal power plant is required to be disposed of by the Group in the manner specified in those notifications. However compliance with manner of disposal as specified in those notifications is not fully achieved due to lack of demand from user agencies. Consequently, the Group is storing some of the ash produced in ash dyke in accordance with conditions of the Environmental Clearance & Consent to Operate granted by the MOEF&CC & Odisha State Pollution Control Board (OSPCB) respectively while giving preference to supplying the same to user agencies. Management believes storage of ash in ash dykes/ash pond in accordance with environmental clearances received by the Group are sufficient compliance with the applicable notifications issued by MoEF&CC which is supported by a legal opinion obtained.

The National Green Tribunal (NGT) has also taken cognisance of the matter and vide its order dated 12 February 2020 has ordered for levy of environmental compensation on generating companies on account of their failure to comply the aforesaid notifications. The Group has already filed an appeal against the said order with the Hon'ble Supreme Court of India (Apex Court) on the grounds that it is not in accordance with directions given by the Apex Court and methodology for determination of compensation is not reasonable. Management believes that the outcome of the appeal will not have any significant adverse financial impact on the Group which is supported by a legal opinion obtained.

v) The Scheme of Amalgamation and Arrangement amongst Sterlite Energy Limited ('SEL'), Sterlite Industries (India) Limited ('Sterlite'), Vedanta Aluminium Limited ('VAL'), Ekaterina Limited ('Ekaterina'), Madras Aluminium Company Limited ('Malco') and Vedanta Limited (the "Scheme") had been sanctioned by the Honourable High Court of Madras and the Honourable High Court of Judicature of Bombay at Goa and was given effect to in the year ended 31 March 2014. Subsequently the above orders of the Honourable High Court of Bombay and Madras have been challenged by Commissioner of Income Tax, Goa and Ministry of Corporate Affairs through a Special Leave Petition before the Honourable Supreme Court and also by a creditor and a shareholder of Vedanta Limited. The said petitions are currently pending for hearing.

35. RELATED PARTY TRANSACTIONS

Related party transactions

The information below sets out transactions and balances between the Group and various related parties in the normal course of business for the year ended 31 March 2020.

HOLDING COMPANIES

Volcan Investments Limited
Volcan Investments Cyprus Limited

FELLOW SUBSIDIARY

Sterlite Technologies Limited ('STL')
Sterlite Power Transmission limited ('SPTL')
Sterlite Iron and Steel Company Limited ('SISCOL')
Sterlite Power Grid Ventures Limited

ASSOCIATES/JOINT VENTURES

RoshSkor Township (Pty) Ltd.
Gaurav Overseas Private Limited
Madanpur SouthCoal Company Limited

OTHERS

India Grid Trust*
Cairn Foundation**
Fujairah Gold Ghana
Vedanta Foundation
Sesa Goa Community Foundation Limited
Vedanta Medical Research Foundation
Sesa Goa Employees Provident Fund Trust
Sesa Group Employees Gratuity Fund and Sesa Group
Sesa Group Executives Superannuation scheme
Sesa Resources Limited Employees Provident Fund Trust
Sesa Resources Limited Employees Gratuity Fund
Sesa Mining Corporation Limited Employees Provident Fund Trust
Sesa Mining Corporation Limited Employees Gratuity
Sesa Resources Limited and Sesa Mining Corporation
Hindustan Zinc Limited Employees Contributory Provident Fund Trust
Hindustan Zinc Limited Employee group Gratuity Trust
Hindustan Zinc Limited Superannuation Trust
Balco Employees Provident Fund Trust
Runaya Refinery LLP

*Ceased to be related party w.e.f. 7 May 2019.

**Cairn Foundation though not a related party as per the definition under IAS 24, related party disclosure has been included by way of a voluntary disclosure, following the best corporate governance practices.

Details of transactions for the year ended 31 March 2019 are as follows:

(US$ million)

Particulars	Holding Company/Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
Income:				
(i) Revenue from operations	121	-	0	121
(ii) Dividend Income	0	-	1	1
(iii) Net Interest Received	2	-	0	2
Expenditure:				
(i) Purchases of goods/services	-	-	1	1
(ii) Stock option (recovery)	-	-	(0)	(0)
(iii) Management fees paid	2	-	1	3
(iv) Reimbursement for other expenses (net of recovery)	0	-	(0)	0
(v) Donation	-	-	15	15
(vi) Interest paid	1	-	-	1
(vii) Dividend Paid	536	-	-	536
(viii) Contribution to Post retirement employees benefit trust/fund	-	-	16	16
Other transactions during the year:				
(i) Investments redeemed during the year*	639	-	-	639
(ii) Loans given/(repayment thereof)	0	(0)	-	(0)
(iii) Guarantees given during the period (net of relinquishment)	-	-	(4)	(4)

*** Structured Investment**

During the previous year ended 31 March 2019, as part of its cash management activities, Cairn India Holdings Limited (CIHL), a step-down subsidiary of the Company, entered into a tripartite agreement with Volcan and one of its subsidiaries. Under the agreement, CIHL purchased an economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, from Volcan for a total consideration of US$541 million (of which US$254 million and US$64 million was paid up to 31 March 2019 and during the year ended 31 March 2020 respectively) determined based on an independent third-party valuation. The ownership of the underlying shares, and the associated voting interests, remained with Volcan and the investment were to mature in two tranches in April 2020 and October 2020. In addition, CIHL also received a put option from Volcan. In July, 2019, the transaction was unwound and the investments were redeemed for a total consideration of US$639 million, representing the actual price Volcan realised from selling the shares of AA Plc to an unrelated third-party net of applicable costs, out of which US$12 million is outstanding.

Details of balances as at 31 March 2020 are as follows:

(US$ million)

Particulars	Holding Company/Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
(i) Net amounts receivable at year end	14	-	-	14
(ii) Net amounts payable at year end	1	-	10	11
(iii) Investment in equity Share	5	0	-	5
(iv) Value of bonds held by Volcan	13	-	-	13
(v) Interest payable	0	-	-	0
(vi) Dividend Payable	1	-	-	1
(vii) Net Advance received at year end	0	-	-	0
(viii) Net advance given at year end	1	-	0	1
(ix) Financial guarantee given*	15	-	3	18
(x) Loans given	1**	1	-	2

*Bank guarantee has been provided by the Group on behalf of Volcan in favour of Income tax department, India as collateral in respect of certain tax disputes of Volcan. The guarantee amount is US$15 million (31 March 2019: US$17 million).

** During the previous year ended 31 March 2019, the Group had renewed loan provided to Sterlite Iron and Steel Company Limited to finance project in earlier years. The loan balance as at 31 March 2020 was US$1 million (31 March 2019: US$0 million). The loan is unsecured in nature and carries an interest rate of 8.50% per annum. The loan was due in March 2020. The loan has been renewed for a further period of 12 months in March 2020 and is due in March 2021.

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Details of transactions for the year ended 31 March 2019 are as follows:

(US$ million)

	Particulars	Holding Company/Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
	Income:				
(i)	Revenue from operations	131	-	-	131
(ii)	Dividend Income	0	-	2	2
(iii)	Net Interest Received	1	-	-	1
(iv)	Management fees income	0	-	-	0
	Expenditure:				
(i)	Purchase of goods/Services	0	-	0	0
(ii)	Management fees paid	2	-	-	2
(iii)	Recovery	0	-	-	0
(iv)	Donation	-	-	19	19
(v)	Interest paid	1	-	-	1
(vi)	Dividend Paid	73	-	-	73
(vii)	Contribution to Post retirement employees benefit trust/fund	-	-	18	18
(viii)	Reimbursement	0	-	-	0
(ix)	Other expenses	0	-	-	0
	Other transactions during the year:				
(i)	Investments redeemed during the year	8	-	-	8
(ii)	Loans given/(repayment thereof)	0	0	-	0
(iii)	Guarantees given during the period (net of relinquishment)	-	-	2	2
(iv)	Purchase of structured investment	541	-	-	541

Details of balances as at 31 March 2019 are as follows:

(US$ million)

	Particulars	Holding Company/Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
(i)	Net amounts receivable at year end	3	-	-	3
(ii)	Net amounts payable at year end	3	-	14	17
(iii)	Investment in equity Share	17	-	15	32
(iv)	Value of bonds held by Volcan	13	-	-	13
(v)	Interest payable	-	-	-	-
(vi)	Dividend Payable	-	-	-	-
(vii)	Net Advance received at year end	-	-	-	-
(viii)	Net advance given at year end	-	-	0	0
(ix)	Financial guarantees given	-	-	7	7
(x)	Loan given	0	1	-	1
(xi)	Deferred Consideration payable	299	-	-	299
(xii)	Fair Value of structured Investment*	690	-	-	690

*Refer note on structured investment above.

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

Remuneration of Key Management Personnel

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Short-term employee benefits	22	24
Post-employment benefits	2	1
Share-based payments	2	4
	26	**29**
Compensation for Non-Executive Directors	1	1
Commission/Sitting Fees to KMP	0	0

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including any director (whether executive or otherwise).

Other related party#

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Remuneration to relatives	2	2
Commission/sitting fees to relatives of KMP	0	0

# close relatives of the executive chairman

Given that there is no specific requirement in IAS 24 to disclose transactions with each related party, the presentation has been revised during the year to aggregate the transactions based on categories of related parties. The disclosure of previous year has also been restated accordingly.

36. SUBSEQUENT EVENTS

On 12 May 2020, the Company announced its intention to acquire outstanding shares of Vedanta Limited from the market and take Vedanta Limited private by delisting it from all stock exchanges in India and SEC.

The Company also informed Vedanta Limited Board vide letter dated 12 May 2020 and in turn Vedanta Limited had informed the stock exchanges that it has received a letter from its Parent Company, Vedanta Resources Ltd. ("VRL"), wherein VRL has expressed its intention to, either individually or along with one or more subsidiaries, acquire all fully paid-up equity shares of Vedanta Limited ("Equity Shares") that are held by the public shareholders (as defined under the Delisting Regulations, to be referred to as "Public Shareholders") and consequently voluntarily delist the Equity Shares from BSE Limited and National Stock Exchange of India Limited, the recognised stock exchanges where the Equity Shares are presently listed ("Stock Exchanges"), in accordance with the Delisting Regulations ("Delisting Proposal") and if such delisting is successful, then to also delist the company's American Depositary Shares from the New York Stock Exchange ("NYSE") and deregister the company from the Securities and Exchange Commission ("SEC"), subject to the requirements of the NYSE and the SEC.

Further, the board of directors of Vedanta Limited in their meeting held on 18 May 2020 have considered and granted their approval for the said Delisting Proposal and to seek shareholders' approval for the said proposal via postal ballot. The Shareholder notices for postal ballot was posted on 24 May 2020 and shareholder approved the delisting of Vedanta Limited on 25 June 2020.

The Company is in discussion with banks to arrange financing in order to complete this transaction. The Company has received necessary bond amendment approvals from the bond holders and necessary waivers from the banks.

The Company will make further announcement on the progress and will take appropriate action as per regulatory requirement of listing regulation in India.

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for the year ended 31 March 2020

37. AUDITOR'S REMUNERATION

The table below shows the fees payable globally to the Company's auditor, Ernst & Young LLP and their associate firms, for statutory external audit and audit related services, as well as fees paid to other accountancy firms for statutory external audit and audit related services in each of the two years ended 31 March:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Fees payable to the Company's auditor for the audit of Vedanta Resources Limited (formerly Vedanta Resources Plc) annual accounts	2	1
The audit of the Company's subsidiaries pursuant to legislation	2	2
Total audit fees	**4**	**3**
Fees payable to the Company's auditor and their associates for other services to the Group		
Other services pursuant to legislation[1]	2	2
Tax services[2]	0	0
Corporate finance services[3]	0	1
Other services[4]	1	0
Total non-audit fees	**3**	**3**
Total fees paid to the Company's auditor	**7**	**6**
Audit fees payable to other auditors of the Group's subsidiaries	0	0
Non-audit fees payable to other auditors of the Group's subsidiaries	-	-
Total fees paid to other auditors	**0**	**0**

(1) Other services pursuant to legislation principally comprise assurance services, being quarterly reviews of the Group's subsidiaries results and the half year review of the Group's results.

(2) Tax services principally comprise certification and assurance services as required by Indian and overseas tax regulations.

(3) Corporate finance services principally comprise services in connection with debt raising transactions, group simplification and other acquisition related certifications. These assurance-related services are ordinarily provided by the auditor.

(4) Includes certification related services.

38. JOINT ARRANGEMENTS

Joint Operations

The Group's principal licence interests in oil and gas business are joint operations. The principal licence interests for the year ended 31 March 2020 and 31 March 2019 are as follows:

(US$ million)

Oil & Gas blocks/fields*	Area	Participating Interest
Operating blocks		
Ravva block-Exploration, Development and Production	Krishna Godavari	22.50%
CB-OS/2 – Exploration	Cambay Offshore	60.00%
CB-OS/2 - Development & production	Cambay Offshore	40.00%
RJ-ON-90/1 – Exploration	Rajasthan Onshore	100.00%
RJ-ON-90/1 – Development & production	Rajasthan Onshore	70.00%
Non-operating blocks		
KG-ONN-2003/1	Krishna Godavari Onshore	49.00%

* South Africa Block1-Exploration was relinquished on 10 September 2019.

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39. LIST OF SUBSIDIARIES

The Group owns directly or indirectly through subsidiaries, more than half of the voting power of all of its subsidiaries as mentioned in the list below, and has power over the subsidiaries, is exposed or has rights, to variable returns from its involvement with the subsidiaries and has the ability to affect those returns through its power over the subsidiaries.

(US$ million)

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Direct Subsidiaries of the Parent Company								
Vedanta Resources Holdings Limited ('VRHL')	Holding company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Resources Jersey Limited('VRJL")	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Resources Jersey II Limited('VRJL-II')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Finance (Jersey) Limited ('VFJL')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Jersey Investments Limited('VJIL")	Investment company	13 Castle Street, St. Helier, Jersey JE4 5UT, Channel Islands	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Indirect Subsidiaries of the Parent Company								
Valliant (Jersey) Limited	Investment company	47 Esplanade, St Helier JE1 0BD, Jersey	Jersey(CI)	100.00%	100.00%	VRJ2L	100.00%	100.00%
Vedanta Holdings Jersey Ltd[4]	Investment company	47 Esplanade, St Helier JE1 0BD, Jersey	Jersey(CI)	100.00%	100.00%	VRHL	100.00%	100.00%
Vedanta Resources Finance II Plc	Investment company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	VRHL	100.00%	100.00%
Vedanta Resources Finance Limited ('VRFL')	Investment company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	VRHL	100.00%	100.00%
Vedanta Resources Cyprus Limited ('VRCL')	Investment company	66, Ippocratous Street. 1015 Nicosia, Cyprus	Cyprus	100.00%	100.00%	VRFL	100.00%	100.00%
Richter Holding Limited('Richter')	Investment company	66, Ippocratous Street. 1015 Nicosia, Cyprus	Cyprus	100.00%	100.00%	VRCL	100.00%	100.00%
Westglobe Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324, Mauritius	Mauritius	100.00%	100.00%	Richter	100.00%	100.00%
Finsider International Company Limited	Investment company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	Richter, Westglobe	100.00%	100.00%
Welter Trading Limited ('Welter')	Investment company	28th Oktovriou Street, 205 Louloupis Court, 1st Floor P.C. 3035, Limassol, Cyprus	Cyprus	100.00%	100.00%	VRCL	100.00%	100.00%
Vedanta Finance UK Limited	Investment company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	Welter	100.00%	100.00%

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(US$ million)

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Twin Star Holdings Limited ('Twin Star')	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street, Port Louis, 11324, Mauritius	Mauritius	100.00%	100.00%	VRHL	100.00%	100.00%
Monte Cello Corporation NV (MCNV')	Investment company	Kaya Flamboyan 6, Curacao	Curacao	100.00%	100.00%	Twin Star Holdings Limited	100.00%	100.00%
Vedanta Limited	Copper smelting, Iron ore mining, Aluminium mining, refining and smelting, Power generation, Oil and Gas exploration, and production	Vedanta Limited 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai – 400 093, Maharashtra, India	India	50.33%	50.33%	Twin Star Holdings Limited, Welter, Westglobe and Finsider International company Limited	50.33%	50.33%
Cairn India Holdings Limited	Investment company	4th Floor, 22-24 New Street, St. Paul's Gate, St. Helier, Jersey, JE1 4TR	Jersey	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Cairn Energy India Pty Limited	Oil and gas exploration, development and production	Level 12, 680 George Street, Sydney NSW 2000, Australia	Australia	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%
Cairn Energy Hydrocarbons Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland***	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%
Cairn South Africa Pty Limited	Oil and gas exploration, development and production	22 Bree Street, Cape Town, 8001, South Africa	South Africa	50.33%	50.33%	Cairn Energy Hydrocarbons Limited	100.00%	100.00%
CIG Mauritius Holdings Private Limited	Investment Company	Ocorian Corporate Services (Mauritius) Limited, 6th Floor, Tower A, 1 CyberCity, Ebene, Mauritius	Mauritius	50.33%	50.33%	Cairn Energy Hydrocarbons Limited	100.00%	100.00%
CIG Mauritius Private Limited	Investment Company	Ocorian Corporate Services (Mauritius) Limited, 6th Floor, Tower A, 1 CyberCity, Ebene, Mauritius	Mauritius	50.33%	50.33%	CIG Mauritius Holdings Private Limited	100.00%	100.00%
Cairn Lanka Private Limited	Oil and gas exploration, development and production	Lanka Shipping Tower, No.99, St. Michael's Road, Colombo 03	Sri Lanka	50.33%	50.33%	CIG Mauritius Private Limited	100.00%	100.00%
Cairn Energy Discovery Limited[3]	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%
Cairn Energy Gujarat Block 1 Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%

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(US$ million)

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Cairn Exploration (No. 2) Limited[3]	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%
AvanStrate Inc. ('ASI')	Operating & holding Company	No.1-11-1 Nishi-Gotanda-1, Shinagawa-ku, Tokyo, Japan	Japan	25.99%	25.99%	Cairn India Holdings Limited	51.63%	51.63%
AvanStrate Korea Inc	Manufacturer of LCD glass substrate	84, Hyeongoksandan-ro, Cheongbuk -myeon, Pyeongtaek-city, Gyeonggi, South Korea	South Korea	25.99%	25.99%	Avanstrate (Japan) Inc.	100.00%	100.00%
AvanStrate Taiwan Inc	Manufacturer of LCD glass substrate	No 8, Industry III road Annan, Tainan	Taiwan	25.99%	25.99%	Avanstrate (Japan) Inc.	100.00%	100.00%
Sesa Resources Limited ("SRL")	Iron ore mining	Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa) – 403 001	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Sesa Mining Corporation Limited	Iron ore mining	Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa) – 403 001	India	50.33%	50.33%	Sesa Resources Limited	100.00%	100.00%
Bloom Fountain Limited	Operating (Iron ore) and Investment Company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324, Mauritius	Mauritius	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Sesa Sterlite Mauritius Holdings Limited **	Investment Company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324, Mauritius	Mauritius	-	50.33%	Bloom Fountain Limited	-	100.00%
Twin Star Energy Holdings Limited ("TEHL") **	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324, Mauritius	Mauritius	-	50.33%	Bloom Fountain Limited	-	100.00%
Western Cluster Limited	Iron ore mining	Amir Building, 18th Street, Sinkor, Tubman Boulevard, Sinkor, Monrovia, Liberia, West Africa	Liberia	50.33%	50.33%	Bloom Fountain Limited	100.00%	100.00%
Twin Star Mauritius Holdings Limited ("TMHL") **	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324, Mauritius	Mauritius	-	50.33%	Twin Star Energy Holdings Limited	-	100.00%
Paradip Multi Cargo Berth Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Electrosteel Steels Limited[2]	Manufacturing of Steel (Products: TMT, Wire Rod) & DI Pipe	801, Uma Shanti Apartments, Kanke Road, Ranchi – 834 008, Jharkhand	India	48.06%	45.30%	Vedanta Limited	95.49%	90.00%

(US$ million)

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Vedanta Star Limited[2]	Operating and holding Company	M 11, First Floor, VIP Road, Harmu Housing Colony, P.S. Argoda, Ranchi – 834 002	India	-	50.33%	Vedanta Limited	-	100.00%
Sterlite (USA) Inc.*	Investment company	Corporation Service Company, 2711 Centerville Road, Suite 400, City of Wilmington, Country of New Castle, Delaware, 19808	United States of America	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
THL Zinc Ventures Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324, Mauritius	Mauritius	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
THL Zinc Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324, Mauritius	Mauritius	50.33%	50.33%	THL Zinc Ventures Limited	100.00%	100.00%
Black Mountain Mining (Proprietary) Limited	Mining	Penge Road, Aggeneys	South Africa	37.24%	37.24%	THL Zinc Ltd	74.00%	74.00%
THL Zinc Namibia Holdings (Proprietary) Limited ("VNHL")	Mining and Exploration and Investment company	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.33%	THL Zinc Ltd	100.00%	100.00%
Skorpion Zinc (Proprietary) Limited ('SZPL')	Operating (Zinc) and Investment Company	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.33%	THL Zinc Namibia Holdings (Proprietary) Limited	100.00%	100.00%
Amica Guesthouse (Proprietary) Limited	Accommodation and catering services	4 mokke street, Windhoek, Namibia	Namibia	50.33%	50.33%	Skorpion Zinc (Proprietary) Limited	100.00%	100.00%
Skorpion Mining Company (Proprietary) Limited ('NZ')	Exploration, development, production and sale of zinc ore	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.33%	Skorpion Zinc (Proprietary) Limited	100.00%	100.00%
Namzinc (Proprietary) Limited	Mining	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.33%	Skorpion Zinc (Proprietary) Limited	100.00%	100.00%
THL Zinc Holding BV	Investment company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Lakomasko BV	Investment company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.33%	THL Zinc Holding BV	100.00%	100.00%

(US$ million)

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Vedanta Lisheen Holdings Limited	Investment company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	THL Zinc Holing BV	100.00%	100.00%
Killoran Lisheen Mining Limited	Zinc and lead mining	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Vedanta Lisheen Mining Limited	Zinc and lead mining	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Lisheen Mine Partnership	Mining Partnership Firm	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	50% each held by Killoran Lisheen Mining Limited & Vedanta Lisheen Mining Limited	100.00%	100.00%
Killoran Lisheen Finance Limited	Investment company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Lisheen Milling Limited	Manufacturing	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Vedanta Exploration Ireland Limited	Exploration company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Hindustan Zinc Limited ("HZL")	Zinc mining and smelting	Yashad Bhawan, Udaipur (Rajasthan) – 313 004	India	32.67%	32.67%	Vedanta Limited	64.92%	64.92%
Bharat Aluminium Company Limited ("BALCO")	Aluminium mining and smelting	Aluminium Sadan, 2nd Floor, Core-6-Scope Complex, 7 Lodhi Road, New Delhi – 110 003	India	25.67%	25.67%	Vedanta Limited	51.00%	51.00%
Monte Cello BV ("MCBV")	Holding company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Copper Mines of Tasmania Pty Limited ("CMT")	Copper mining	c/o MCullough Robertson lawyers 44 martin place, Sydney NSW 2000	Australia	50.33%	50.33%	Monte Cello BV	100.00%	100.00%
Thalanga Copper Mines Pty Limited ("TCM")	Copper mining	c/o MCullough Robertson lawyers 44 martin place, Sydney NSW 2000	Australia	50.33%	50.33%	Monte Cello BV	100.00%	100.00%

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for the year ended 31 March 2020

(US$ million)

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
MALCO Energy Limited ("MEL")	Power generation	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN –628 002 IN	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Fujairah Gold FZC	Of sub Manufacturing of Copper Rod and Refining of Precious Metals (Gold & Silver)	P.O. Box 3992, Fujairah, United Arab Emirates	United Arab Emirates	50.33%	50.33%	Malco Energy Limited	100.00%	100.00%
Talwandi Sabo Power Limited ("TSPL")	Power generation	Vill. Banawala, Mansa - Talwandi Sabo Road, Mansa, Punjab – 151 302	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Vizag General Cargo Berth Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi Tuticorin Thoothukudi TN – 628 002 IN	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Sterlite Ports Limited	Infrastructure	MALCO Power company limited, SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN –628 002 IN	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Goa Sea Port Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi Tuticorin Thoothukudi TN – 628 002 IN	India	50.33%	50.33%	Sterlite Ports Limited	100.00%	100.00%
Maritime Ventures Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN –628 002 IN	India	50.33%	50.33%	Sterlite Ports Limited	100.00%	100.00%
KCM SmelterCO Limited[5]	Sale of copper and slimes	Private Bag KCM (C) 2000, Stand M 1408, Fern Avenue, Chingola, Zambia	Zambia	-	79.42%	VRHL	-	100.00%
Konkola Copper Mines PLC ('KCM')[5]	Mining, production and marketing of copper and cobalt Alloys	Private Bag KCM (C) 2000, Stand M 1408, Fern Avenue, Chingola, Zambia	Zambia	-	79.42%	VRHL	-	79.42%

*Under liquidation **Liquidated during the year ***Principal place of business is in India

(1) The Group also has interest in certain trusts which are neither significant nor material to the Group.

(2) Vedanta star Limited has been merged with Electrosteels steel Limited w.e.f. 25 March 2020. (Refer note 3(c))

(3) Under the process of striking off, application already filed, Ministry order is awaited.

(4) Incorporated with effect from 15 March 2020.

(5) Refer note 3(e)

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40. ULTIMATE CONTROLLING PARTY

At 31 March 2020, all of the issued shares of the Company were held by Volcan Investments Limited and its wholly owned subsidiary. Accordingly, the ultimate controlling party of the Group was Volcan, which is beneficially owned by the Anil Agarwal Discretionary Trust. Volcan Investments Limited is incorporated in the Bahamas and does not produce Group accounts.

COMPANY BALANCE SHEET

As at 31 March 2020

(US$ million)

Particulars	Note	As at 31 March 2020	As at 31 March 2019
Fixed assets			
Tangible assets	2	16	7
Investments in subsidiaries	3	1,731	1,226
Financial asset investment	4	0	0
		1,747	**1,233**
Current assets			
Debtors due within one year	5	2,724	621
Debtors due after one year	5	1,169	4,487
Investments	6	23	29
Cash and cash equivalents		11	8
		3,927	**5,145**
Creditors: amounts falling due within one year			
Trade and other creditors	7	193	75
Lease liability	9	1	-
External borrowings	7	4,647	100
Loan from subsidiary	7	177	-
		5,018	**175**
Net current assets		**(1,091)**	**4,970**
Total assets less current liabilities		**656**	**6,203**
Creditors: amounts falling due after one year			
Loan from subsidiary	8	64	176
Lease liability	9	9	-
External borrowings	8	-	4,541
		73	**4,717**
Net assets		**583**	**1,486**
Capital and reserves			
Called up share capital		29	29
Share premium account		202	202
Capital reduction reserve		2	2
Other reserves		(2)	(2)
Retained earnings		352	1,255
Equity shareholders' funds		**583**	**1,486**

The separate Financial Statements of Vedanta Resources Limited, registration number 4740415 were approved by the Board of Directors on 10 August 2020 and signed on their behalf by

Ravi Rajagopal

Director

COMPANY STATEMENT OF CHANGES IN EQUITY

for the year ended 31 March 2020

(US$ million)

	Share capital*	Share premium	Capital redemption Reserve	Retained earnings	Other Reserves	Total
Equity shareholders' funds at 1 April 2019	**29**	**202**	**2**	**1,255**	**(2)**	**1486**
Loss for the year	-	-	-	(367)	-	(367)
Dividends paid (note 13 of Group financial statements)	-	-	-	(536)	-	(536)
Movement in fair value of Financial Investment	-	-	-	-	(0)	(0)
Equity shareholders' funds at 31 March 2020	**29**	**202**	**2**	**352**	**(2)**	**583**

(US$ million)

	Share capital*	Share premium	Share-based payment reserve	Capital redemption Reserve	Treasury Shares**	Retained earnings	Other Reserves	Total
Equity shareholders' funds at 1 April 2018	**30**	**202**	**13**	**-**	**(491)**	**1,567**	**(2)**	**1,319**
Profit for the year	-	-	-	-	-	274	-	274
Dividends paid (note 13 of Group financial statements)***	-	-	-	-	-	(114)	-	(114)
Exercise of stock options (note 29 of Group financial statements)	1	-	(19)	-	-	19	-	1
Recognition of share-based payments (note 29 of Group financial statements)	-	-	6	-	-	-	-	6
Cancellation of Treasury Shares	(2)	-	-	-	491	(489)	-	-
Transfer to capital reduction Reserve	-	-	-	2	-	(2)	-	-
Movement in fair value of Financial Investment	-	-	-	-	-	-	0	0
Equity shareholders' funds at 31 March 2019	**29**	**202**	**-**	**2**	**-**	**1,255**	**(2)**	**1,486**

* For details, refer note 30 of Group financial statements.

** The treasury shares have been cancelled during the previous year. At 31 March 2020, the total number of treasury shares held by the Company was NIL (31 March 2019: NIL).

*** Total dividends of US$114 million (2018: US$165 million) includes dividend of US$1 million (US$1 million) paid to a separate investment trust which is consolidated in the Group's financial statements with that element of dividends paid by the company being eliminated (Refer note 13 of Group financial statements).

CONSOLIDATED
NOTES TO THE FINANCIAL STATEMENTS
for the year ended 31 March 2020

1. COMPANY ACCOUNTING POLICIES

Basis of Accounting

The Company meets the definition of a qualifying entity in accordance with Financial Reporting Standard 100 'Application of Financial Reporting Requirements' (FRS 100) issued by the Financial Reporting Council and in accordance with 101 Reduced Disclosure Framework (FRS 101). Accordingly, these financial statements have been prepared on a going concern basis and in accordance with the provisions of the UK Companies Act, 2006 and applicable UK accounting standards.

These financial statements have been prepared under the historical cost convention. Historical cost is generally based on the fair value of the consideration given in exchange for the assets.

As permitted by Section 408 of the Companies Act, 2006, the profit and loss account of the Company is not presented as part of these financial statements. The loss after tax for the year of the Company amounted to US$367 million (2019: Profit US$274 million)

These financial statements are presented in US dollars being the functional currency of the Company and all values are rounded off to the nearest million except when indicated otherwise. Amounts less than US$0.5 million have been presented as "0".

In these financial statements, the Company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- The requirements of paragraphs 38, 134 and 136 of IAS 1 'Presentation of Financial Statements'
- The requirements of IAS 7 'Statement of Cash Flows';
- Paragraphs 45 (b) and 46 to 52 of IFRS 2, " Share-based payment" (details of the number and weighted average exercise prices of share options and how the fair value of goods and services received was determined)
- The requirements of IFRS 7 'Financial Instruments: Disclosures';
- The requirements of Paragraph 17 of IAS 24 "Related party disclosures"
- The requirements of IAS 24, "Related party disclosures" to disclose related-party transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by such a member.
- Paragraphs 91-99 of IFRS 13 "Fair value measurement" (disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities)
- The requirements of paragraphs 30 and 31 of IAS 8 "Accounting policies, changes in accounting estimates and errors" in relation to standards not yet effective.

Significant accounting policies

Investments in subsidiaries

Investments in subsidiaries represent equity holdings in subsidiaries except preference shares, valued at cost less any provision for impairment. Investments are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable.

Cash and cash equivalents

Cash and cash equivalents in the balance sheet comprise of cash at bank, short-term bank deposits and cash in hand.

Currency translation

Transactions in currencies other than the functional currency of the Company, being US dollars, are translated into US dollars at the spot exchange rates ruling at the date of transaction. Monetary assets and liabilities denominated in other currencies at the balance sheet date are translated into US dollars at year end exchange rates, or at a contractual rate if applicable.

Tangible fixed assets

Tangible fixed assets are stated at cost less accumulated depreciation and provision for impairment.

Deferred taxation

Deferred taxation is provided in full on all timing differences that result in an obligation at the balance sheet date to pay more tax, or a right to pay less tax, at a future date, subject to the recoverability of deferred tax assets. Deferred tax assets and liabilities are not discounted.

Share-based payments

The cost of equity-settled transactions with employees is measured at fair value at the date at which they are granted. The fair value of share awards are determined with the assistance of an external valuer and the fair value at the grant date is expensed on a straight-line basis over the vesting period based on the Company's estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date at which point the estimate is adjusted to reflect the current expectations. No adjustment is made to the fair value after the vesting date even if the awards are forfeited or not exercised. Amounts recharged by subsidiaries in respect of awards granted to employees of the Company are recognised as intercompany creditors until paid.

The resultant increase in equity is recorded in share-based payment reserve.

In case of cash-settled transactions, a liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognised in employee benefits expense. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The fair value is determined with the assistance of an external valuer.

Borrowings

Interest bearing loans are recorded at the net proceeds received i.e. net of direct transaction costs. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on accruals basis and charged to the profit and loss account using the effective interest method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Convertible Bonds

The Convertible bond issued by VRJL and VRJL-II are accounted for as a compound instrument. The gross proceeds (net of issue costs) were lent to the Company by VRJL and VRJL-II. The equity component has been recognised in a separate reserve of the Company and is not subsequently re measured. The recognition of the equity component by the Company acts to reduce the payable to VRJL and VRJL-II which arises once the gross proceeds are borrowed. The liability component is held at amortised cost. The interest expensed on the liability component is calculated by applying an effective interest rate. The difference between interest expensed and interest paid is added to the carrying amount of the liability component.

Cash flow statement

The Company financial statements are prepared under FRS 101, which does not require application of IAS 7. Accordingly, the Company does not present the individual company cash flow statement.

Financial guarantees

Guarantees issued by the Company on behalf of subsidiaries are designated as 'Insurance Contracts'. Accordingly these are shown as contingent liabilities. (Note 10)

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(a) Financial Assets – Recognition

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset on the trade date.

For purposes of subsequent measurement, financial assets are classified in the following categories:

Debt instruments at amortised cost

A 'debt instrument' is measured at amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the Effective Interest Rate (EIR) method.

Equity instruments

All equity investments in scope of IFRS 9 are measured at fair value. For all equity instruments not held for trading, the Company may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value.

(b) Financial Asset - Derecognition

The Company derecognises a financial asset when the contractual rights to cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

(c) Impairment of financial assets

In accordance with IFRS 9, the Company applies expected credit loss ("ECL") model for measurement and recognition of impairment loss on financial assets.

The Company follows 'simplified approach' for recognition of impairment loss allowance on trade receivables. The Company recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

At each reporting date, for recognition of impairment loss on other financial assets and risk exposure, the Company determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has increased significantly, lifetime ECL is used instead of 12-month ECL.

ECL is the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original EIR.

(d) Financial liabilities – Recognition & Subsequent measurement

The Company's financial liabilities include trade and other payables and loans and borrowings. All financial liabilities are recognised initially at fair value, and in the case of financial liabilities at amortised cost, net of directly attributable transaction costs.

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method.

(e) Financial liabilities – Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires.

2. COMPANY TANGIBLE FIXED ASSETS

	(US$ million)
Cost	
At 1 April 2018	**2**
Additions	7
Deletions/Disposals	(2)
At 31 March 2019	**7**
ROU Asset as at 1 April 2019	10
Additions	1
Deletions/Disposals	-
At 31 March 2020	**18**
Accumulated depreciation	
At 1 April 2018	**2**
Charge for the period	0
Deletions/Disposals	(2)
At 31 March 2019	**0**
Charge for the period	2
Deletions/Disposals	-
At 31 March 2020	**2**
Net book value	
At 1 April 2018	0
At 31 March 2019	7
At 31 March 2020	**16**

Details of Right of Use (ROU) Assets

	(US$ million)
For the FY 2019-20	**Building**
ROU asset as at 1 April 2019	**10**
Additions	-
Depreciation	(1)
Net book value/carrying amount as on 31 March 2020	**9**

3. INVESTMENTS IN SUBSIDIARIES

	(US$ million)
Cost	
At 1 April 2018	1,226
At 1 April 2019	**1,226**
additions during the year*	505
At 31 March 2020	**1,731**

*During the year, Vedanta Resources Holdings Limited (VRHL), a fully owned subsidiary of the company, capitalised an amount of US$505 million outstanding against various loans payable by it to the company by issuing 504,534,532 ordinary shares of US$1 each. Subsequently, VRHL reduced the face value of it's issued share capital from US$662,073,056 (662,073,056 shares of US$1 each) to US$6,620,731 (662,073,056 shares of US$0.01 each).

At 31 March 2020, the Company held 662,073,200 shares in Vedanta Resources Holdings Limited ('VRHL') (March 2019: 157,538,524 shares), being 100% of VRHL's issued equity share capital. The Company also held one deferred share in VRHL (March 2019: one). At 31 March 2020, the Company held two shares in Vedanta Finance Jersey Limited ('VFJL') (March 2019: two), two shares in Vedanta Resources Jersey Limited ('VRJL') (March 2019: two), two shares in Vedanta Resources Jersey II Limited ('VRJL-II') (March 2019: two), two shares in Vedanta Jersey Investment Limited ('VJIL') (March 2019: two), being 100% of its issued equity share capital.

VRHL is an intermediary holding company incorporated in the United Kingdom (note 39 of the financial statements of the Group) and registered in England and Wales. VFJL, VRJL, VJIL and VRJL-II are companies, registered and incorporated in Jersey, established to raise funds for the Vedanta Group.

4. FINANCIAL ASSET INVESTMENT

	(US$ million)
Fair value	
As at 1 April 2019	0
Fair value movement	0
As at 31 March 2020	**0**
As at 1 April 2018	0
Fair value movement	(0)
As at 31 March 2019	**0**

The investment relates to an equity investment in the shares of Victoria Gold Corporation. As at 31 March 2020, the investment in Victoria Gold Corporation was revalued and gain of US$0 million (2019: gain of US$0 million) was recognised in equity.

5. COMPANY DEBTORS

(US$ million)

Particulars	**As at 31 March 2020**	**As at 31 March 2019**
Amounts due from subsidiary undertakings	4,763	5,162
Amounts due from Konkola Copper Mines (note 3(e) of Group financial statements)	371	15
Advance to vendors and deposit	1	-
Prepayments and accrued income	1	1
Other taxes	1	1
Less: Provision for impairment*	(1,244)	(71)
Total	**3,893**	**5,108**
Debtors due within one year	2,724	621
Debtors due after one year	1,169	4,487
Total	**3,893**	**5,108**

Amounts due from subsidiary undertakings

At 31 March 2020, the Company had loans due from VRHL of US$1,799 million (2019: US$2,180 million) which represented the funds being loaned for funding the subsidiaries. Out of the total loan, US$1,055 million bears interest at 6.82%, US$547 million at 6.95%, US$197 million at US$ LIBOR plus 385 basis points.

At 31 March 2020, the Company had loan of US$1,085 million (2019: US$2,425 million) due from Vedanta Resources Jersey II Limited (VRJL-II). Out of the total loan US$302 million bears interest at 6.82%, US$60 million at 6.50%, US$628 million at 6.95% (Net of impairment provision US$1,101 million created during the year (Previous year - US$71 million)), US$95 million at 7.11%.

At 31 March 2020, the Company had loan of US$325 million (2019: US$ NIL million) due from Westglobe (WL) Out of the total loan US$250 million bears interest at US$ LIBOR plus 435 basis points and remaining US$75 million bears interest at 7.57%.

The Company was owed US$281 million (2019: US$472 million) of accrued interest from VRHL and VRJL-II and WL.

The Company had given a corporate guarantee for loan facilities/trade advances on behalf of Konkola Copper Mines Plc (KCM), a erstwhile subsidiary of Vedanta Resources Holding Limited (VRHL). During the year, due to loss of control over KCM and the resulting developments (for details refer note 3 (e) of group financial statements), the Company has recognised a liability of US$355 million (inclusive of interest), towards the guarantee liability and a corresponding receivable from KCM. Of the said liability, the Company has paid an amount of US$250 million to the lenders of KCM and the balance has been presented as creditors due within one year. Additionally, the Company was owed US$16 million (2019: US$15 million) from KCM in the form guarantee commission and other receivables.

In addition to the loans, the Company was also owed US$32 million (Net of impairment provision US$71 million created during the year) (2019: US$29 million) of other receivables from Group companies. The above amounts includes brand fee receivable from subsidiaries (refer note 11).

* The Company had given loans to its subsidiary, VRJL - II in previous years, which was further advanced as inter-company loans to its then fellow subsidiary, Konkola Copper Mines plc (KCM). With the loss of control over KCM w.e.f. 21 May 2019 and the ensuing recoverability assessment (Refer note 3 (e) of Group Financial Statements for details), VRJL - II has impaired its receivables from KCM. Consequently, the Company has also carried out an impairment assessment of its receivables from VRJL - II and have recognised an impairment of US$1,102 million during the year.

The Company has also carried out an impairment assessment of its investment in its subsidiary, Vedanta Resources Holding Limited (VRHL), which in turn has impaired its equity investment in KCM, and concluded that there is no impairment.

Furthermore, the Company has recognised an impairment provision of US$71 million on its receivables from VJIL pursuant to the Expected Credit Loss (ECL) assessment (31 March 2019 - US$71 million, VRJL – II).

6. COMPANY CURRENT ASSET INVESTMENTS

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Bank term deposits	23	29
Total	**23**	**29**

7. COMPANY CREDITORS: AMOUNTS FALLING DUE WITHIN ONE YEAR

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Accruals	86	71
Advance from related parties	1	4
Loan from subsidiary (Note 8)	177	-
Term Loans (Note 8)	1,489	100
Bonds	3,158	
Guarantee amount payable on behalf of KCM (Refer note 5)	105	-
Dividend payable	1	-
Total	**5,017**	**175**

8. COMPANY CREDITORS: AMOUNTS FALLING DUE AFTER ONE YEAR

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Loan from subsidiary	64	176
Term loans*	1,489	1,487
Bonds:		
6.125% bonds due August, 2024	994	993
8.25% bonds due June, 2021	669	668
6.375% bonds due July, 2022	996	995
7.125% bonds due May, 2023	499	498
Less: Current Maturities (Note 7)		
Term Loans	(1,489)	(100)
Bonds	(3,158)	-
Total	**64**	**4,717**

As at 31 March 2020 loan from subsidiary included a loan of US$177 million due to Vedanta Finance UK Limited. During the previous year, its maturity has been extended to January 2021 and the rate of interest has been amended to US$ LIBOR plus 410 basis points.

As at 31 March 2020 loan from subsidiary included a loan of US$64 million due to Vedanta Resources Jersey II Limited (VRJL-II). The loan bears a rate of interest of 7.31% and is repayable in September 2021.

Terms loans are made up of the following loans that the Company has entered into:

In March 2015, the Company entered into a facility agreement with State Bank of India for borrowing up to US$350 million. US$100 million is repayable in June 2020 and bears interest at a rate of US$LIBOR plus 370 basis points. US$250 million bears interest at a rate of US$LIBOR plus 403 basis points repayable in three instalments being US$100 million due in June 2020, US$100 million due in June 2021 and US$150 million in June 2022. During the year, US$100 million was prepaid. As at 31 March 2020, the outstanding amount under this facility is US$249 million.

In January 2016, the Company entered into a facility agreement with State Bank of India for borrowing up to US$300 million. US$120 million is repayable in February 2022 and bears interest at a rate of US$ LIBOR plus 450 basis points. US$180 million is repayable in February 2023 and bears interest at a rate of US$ LIBOR plus 453 basis points. As at 31 March 2020, the outstanding amount under this facility is US$298 million.

In November 2017, the Company entered into a facility agreement with Syndicate Bank for borrowing up to US$100 million and bears interest at a rate of 3 months US$ LIBOR plus 325 basis points. US$1 million is repayable in November 2021 and US$99 repayable in November 2022. As at 31 March 2020, the outstanding amount under this facility is US$99 million.

During the year 2017-18, the Company entered into facility agreements with Yes Bank in different tranches for borrowings up to US$150 million and bears interest at a rate of 3 months US$LIBOR plus 299 basis points (increased to 324 basis points from October 2019). During the year, US$100 million was repaid. US$15 million is repayable in July 2020, US$35 million is repayable in September 2020. As at 31 March 2020, the outstanding amount under this facility is US$50 million. Accordingly, entire amount outstanding of US$50 million has been reclassified from creditors due after one year to creditors due within one year.

During the year 2017-18, the Company entered into facility agreements with State Bank of India in different tranches for borrowings up to US$200 million and bears interest at a rate of US$ LIBOR plus 339 basis points. The loan is repayable in January 2025. As at 31 March 2020, the outstanding amount under this facility is US$198 million.

During the current year, the Company entered into facility agreements with Syndicate Bank in different tranches for borrowings up to US$200 million and bears interest at a rate of US$ LIBOR plus 375 basis points. The loan is repayable in various instalments till December 2024. As at 31 March 2020, the outstanding amount under this facility is US$198 million.

During the previous year, the Company entered into facility agreements with ICICI Bank in different tranches for borrowings up to US$200 million and bears interest at a rate of US$ LIBOR plus 339 basis points. The loan is repayable in various instalments till September 2023. As at 31 March 2020, the outstanding amount under this facility is US$198 million. Out of this US$20 million has been reclassified from creditors due after one year to creditors due within one year.

During the previous year, the Company entered into facility agreements with Bank of Baroda in different tranches for borrowings up to US$200 million and bears interest at a rate of US$ LIBOR plus 300 basis points. The loan is repayable in various instalments till June 2024. As at 31 March 2020, the outstanding amount under this facility is US$198 million. out of this US$15 million has been reclassified from creditors due after one year to creditors due within one year.

Further, as per the terms of the bond agreement, in case any acceleration notice is served by any of these lenders, the Company would not satisfy the requirement of IAS 1 of unconditional right to defer payment beyond one year from the balance sheet date in case of non-convertible bonds of US$3,158 million. Subsequent to the balance sheet date, the Company has obtained a waiver on the covenant requirements.

Accordingly, non-current portion of US$4,562 million of borrowings have been reclassified under the current maturities of long-term borrowings.

*As at 31 March 2020, the Company could not meet one of the covenant requirements of borrowings of US$1,489 million.

9. LEASE LIABILITY

Movement in Lease liabilities is as follows:

(US$ million)

Particulars	Amount
At 1 April 2019	10
Additions during the year	-
Interest on Lease Liabilities	0
Payments made	(0)
As at 31 March 2020	**10**

10. COMPANY CONTINGENT LIABILITIES

The Company has given corporate guarantees for loan facilities and other obligations on behalf KCM worth US$355 million including interest thereon (2019: US$428 million). During the current year, the same has been recognised as liability (refer note 3 (e) of group financial statements).

The Company has guaranteed US$170 million (out of which, US$108 million has been repaid during the previous year) for a loan facility entered by Valliant Jersey Limited with ICICI bank. (2019: US$136 million). Post the Balance Sheet date, entire outstanding amount of US$62 million under this facility has been repaid.

The Company has guaranteed US$120 million for revolving credit facility entered by Twin Star Holdings Limited with First Abu Dhabi Bank PJSC as facility agent. (2019: US$170 million)

The Company has guaranteed US$500 million for a syndicated facility entered by Twin Star Holdings Limited with Axis Bank as lead arranger and facility agent. During the year 2017-18 and 2018-2019, US$100 million and US$150 million respectively was repaid under this facility. During the year the entire outstanding amount of US$250 million has been prepaid.

The Company has provided a guarantee for the Cairn India Group's (now merged with Vedanta Limited) obligation under the Production Sharing Contract ('PSC'). The Company has also provided parent company financial and performance guarantee to Government of India for Vedanta Limited's obligation under the Revenue Sharing Contract ('RSC') in respect of 41 Blocks awarded under the Round 1 of Open Acreage Licensing Policy (OALP) by Government of India. The guarantee provides for making available financial resources equivalent to Vedanta Limited's share for its obligation under RSC, personnel and technical services in accordance with industry practices and any other resources in case Vedanta is unable to fulfil its obligations under RSC.

No consideration is charged for the above services and this is subject to ongoing review and study.

During the previous year, the Company has guaranteed US$180 million for a facility agreement entered by Vedanta Resources Jersey II Limited with Yes Bank as facility agent. (2019: US$180 million)

The Company has guaranteed US$100 million for a facility agreement entered by Welter Trading Limited with Axis Bank as facility agent. (2019: US$100 million)

The Company has guaranteed US$575 million for a facility agreement entered by Twin Star Holdings Limited with Citicorp International Limited as facility agent. (2019: US$575 million)

The Company has guaranteed US$100 million for a facility agreement entered by Twin Star Holdings Limited with First Abu Dhabi Bank PJSC as facility agent. US$80 million was drawn under this facility and US$8 million & US$12 million was repaid during the year 2017-18 and 2018-19 respectively.

During the previous year, the Company has guaranteed US$225 million for a facility agreement entered by Twin Star Holdings Limited with Standard Chartered Bank as facility agent. During the year this loan has been prepaid.

During the year, the Company has guaranteed US$600 million for a facility agreement entered by Twin Star Holdings Limited with Standard Chartered Bank as facility agent.

During the year, the Company has guaranteed US$70 million for a facility agreement entered by Twin Star Holdings Limited and Vedanta Resources Jersey II Limited with ICICI Bank as facility agent.

During the year, the Company through its wholly owned subsidiary, Vedanta Resources Finance II Plc issued US$1,000 million bonds which were guaranteed by the Company.

11. RELATED PARTY TRANSACTIONS

During the year the Company entered into transactions, in the ordinary course of business, with other related parties. The Company has taken advantage of the exemption under paragraph 8(k) of FRS101 not to disclose transactions with wholly owned subsidiaries. Transactions entered into and trading balances outstanding at 31 March with other related parties, are as follows:

(US$ million)

Name of Company	Relationship	Nature of transaction	Year ended 2020	Year ended 2019
Vedanta Limited	Subsidiary	PCO Income and Management & Brand Fees charged	44	48
Vedanta Limited	Subsidiary	Sale of Alumina	8	-
Konkola Copper Mines Plc*	Subsidiary	Management & Guarantee Fees charged	0	3
Sterlite Technologies Limited	Related Party	Management Fees charged	-	0
Volcan Investments Limited	Holding Company	Dividend paid/payable	352	73
Volcan Investments Limited	Holding Company	Interest paid on bonds	-	1
Volcan Investments Limited	Holding Company	Redemption of bonds	-	8
Volcan Investments Cyprus Limited	Holding Company	Dividend paid/payable	184	-
Vedanta Limited	Subsidiary	Receipt of Service	(0)	(0)
Vedanta Limited	Subsidiary	(Reimbursement)/Payment of Expenses	7	0
Vedanta Limited	Subsidiary	Recovery against share option expense	-	2
Cairn India Holdings Limited	Subsidiary	(Reimbursement)/Payment of Expenses	0	-
Konkola Copper Mines Plc*	Subsidiary	Recovery against share option expense	-	0
Copper Mines of Tasmania Pty Limited	Subsidiary	Recovery against share option expense	-	0
Electrosteel Steels Ltd (ESL)	Subsidiary	Brand Fee charged	9	-
Talwadi Sabo Power Ltd	Subsidiary	Brand Fee charged	1	-
Fujariah Gold FZC	Subsidiary	Recovery against share option expense	-	0
Namzinc Pty Limited	Subsidiary	Recovery against share option expense	-	0
Namzinc Pty Limited	Subsidiary	Brand Fee charged	3	-
Black Mountain Mining (Pty) Limited	Subsidiary	Brand Fee charged	4	-
Cairn Energy Hydrocarbon Limited	Subsidiary	Brand Fee charged	11	-
Black Mountain Mining (Pty) Limited	Subsidiary	Recovery against share option expense	-	0
Western Cluster Limited	Subsidiary	Recovery against share option expense	-	0
THL Zinc Limited	Subsidiary	Reimbursement of Expenses	0	0
THL Zinc Ventures Limited	Subsidiary	Reimbursement of Expenses	0	0
Bloom Fountain Limited	Subsidiary	Reimbursement of Expenses	0	0

CONSOLIDATED NOTES TO THE FINANCIAL STATEMENTS

for the year ended 31 March 2020

Outstanding balances

(US$ million)

Name of Company	Relationship	Nature of transaction	As at 31 March 2020	As at 31 March 2019
Vedanta Limited	Subsidiary	(Payable)/Receivable	10	7
Sterlite Technologies Limited	Related Party	Receivable	0	0
Fujariah Gold FZC	Subsidiary	Receivable	-	0
Vedanta Lisheen Holdings Limited	Subsidiary	(Payable)	-	(0)
Namzinc Pty Limited	Subsidiary	(Payable)/Receivable	1	(0)
Cairn India Holdings Limited	Subsidiary	Receivable	0	-
Electrosteel Steels Ltd (ESL)	Subsidiary	(Payable)	(1)	-
Talwadi Sabo Power Ltd	Subsidiary	(Payable)	(0)	-
Black Mountain Mining (Pty) Limited	Subsidiary	Receivable/(Payable)	1	0
Western Cluster Limited	Subsidiary	Receivable	0	0
THL Zinc Limited	Subsidiary	Receivable	0	0
THL Zinc Ventures Limited	Subsidiary	Receivable	0	0
Monte Cello BV	Subsidiary	(Payable)	(1)	(1)
Konkola Copper Mines Plc*	Subsidiary	Receivable	-	15
Cairn Energy Hydrocarbon Limited	Subsidiary	Receivable	11	-
Bloom Fountain Limited	Subsidiary	Reimbursement of Expenses	0	0
Volcan Investments limited	Holding Company	Dividend payable	1	-
Volcan Investments limited	Holding Company	Investments in Bonds	-	13
Volcan Investments Cyprus limited	Holding Company	Dividend payable	0	-

* Ceased to be a related party w.e.f. 21 May 2019. Vedanta Resources Holdings Limited (VRHL) holds 79.42% in Konkola Copper Mines Plc (KCM). A provisional liquidator was appointed to manage KCM's affairs on 21 May 2019, after ZCCM Investments Holdings Plc (ZCCM-IH), an entity owned by the Government of Zambia and a 20.6% shareholder in KCM, filed a winding up petition against KCM. Since all the significant decision-making powers, including carrying on the business of KCM and control over all the assets of KCM, rests with the provisional liquidator, VRHL believes that the event has caused loss of its control over KCM. Consequently, KCM is not a related party of the Company from that date as per IAS 24.

For details relating to Ultimate controlling party, refer note 40 of Group financial statements.

12. During the year, the Company received dividends amounting to US$811,897,120 from its subsidiary Vedanta resources holdings limited (VRHL). In lieu of this dividend, VRHL assigned it's US$325,000,000 receivable from Westglobe Limited, gave up its claim over principal and interest accrued receivable from the Company amounting to US$293,885,406 and paid the remaining US$193,011,714 in form of cash.

13. SUBSEQUENT EVENTS

There have been no material events after reporting date, other than those already reported, which would require disclosure or adjustment to the financial statements for the year ended 31 March 2020.

FIVE YEAR SUMMARY

SUMMARY CONSOLIDATED INCOME STATEMENT

(US$ million except as stated)

Name of Company	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Revenue	**11,790**	**13,006**	**15,294**	**11,520**	**10,738**
EBITDA	**3,003**	**3,457**	**3,963**	**3,191**	**2,336**
Depreciation and amortisation	(1,412)	(1,380)	(1,271)	(1,031)	(1,455)
Special items	(2,065)	38	586	(17)	(5,210)
Operating profit	**(474)**	**2,115**	**3,278**	**2,143**	**(4,329)**
Net finance (costs)/investment revenues (including other gains and Losses)	(872)	(747)	(790)	(763)	(655)
Profit before taxation from continuing operations (a)	**(1,346)**	**1,368**	**2,488**	**1,380**	**(4,984)**
Net tax credit/(expense) (b)	370	(611)	(1,013)	(500)	1,482
Profit for the period/year from continuing operations (a+b)	**(976)**	**757**	**1,475**	**880**	**(3,502)**
Profit/(loss) after tax for the period/year from discontinued operations and gain on deconsolidation	(771)	(333)	-	-	-
Profit after taxation	**(1,747)**	**425**	**1,475**	**880**	**(3,502)**
Non-controlling interests	(1568)	661	1,236	(902)	1,665
Profit attributable to equity shareholders in parent	**(179)**	**(237)**	**239**	**(23)**	**(1,837)**
Dividends	(352)	(185)	(182)	(138)	(111)
Retained (loss)/profit	**(531)**	**(422)**	**57**	**(160)**	**(1,948)**
Dividend per share (US cents per share)	123	65	65	55	30

SUMMARY CONSOLIDATED FINANCIAL POSITION

(US$ million except as stated)

Name of Company	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Goodwill	12	12	12	17	17
Intangible assets	100	108	123	96	92
Property, plant and equipment	13,245	17,726	17,727	16,751	16,648
Financial asset investments	12	707	25	11	7
Total fixed assets	**13,369**	**18,553**	**17,887**	**16,874**	**16,763**
Stocks	1,515	2,060	2,038	1,670	1,366
Debtors	1,102	1,504	1,527	1,085	1,344
Cash & Liquid Investments	5,090	5,297	5,606	9,725	8,937
Total current assets	**7,707**	**8,861**	**9,171**	**12,480**	**11,647**
Short-term borrowings	(6,065)	(5,456)	(5,460)	(7,659)	(4,314)
Other current liabilities	(5,805)	(7,060)	(6,194)	(6,413)	(6,098)
Total current liabilities	**(11,870)**	**(12,516)**	**(11,654)**	**(14,072)**	**(10,412)**
Net current assets	**(4,069)**	**(3,643)**	**(2,457)**	**(1,588)**	**1,289**
Total assets less current Liabilities	**12,316**	**17,265**	**17,584**	**17,432**	**19,908**
Long-term borrowings	(9,030)	(10,524)	(9,734)	(10,570)	(11,950)
Other long-term liabilities	(238)	(258)	(136)	(77)	(225)
Provisions and deferred tax assets	(775)	(1,218)	(1,162)	(758)	(869)
Total long-term liabilities	**(10,043)**	**(12,000)**	**(11,032)**	**(11,405)**	**(13,043)**
Equity Non-controlling interests	(5,536)	(6,181)	(6,870)	(6,423)	(7,565)
Non-equity Non-controlling interest	(0)	(12)	(12)	(12)	(12)
Net assets attributable to the equity holders of the parent	**(3,263)**	**(928)**	**(330)**	**(409)**	**(713)**

FIVE YEAR SUMMARY

TURNOVER

(US$ million)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Zinc:	3,004	3,347	3,889	2,857	2,503
India	2,563	2,955	3,354	2,525	2,111
International	441	392	535	332	392
Oil and Gas	1,787	1,892	1,480	1,223	1,322
Iron ore	489	417	485	615	350
Copper:	1,278	1,537	5,111	4,008	4,170
India/Australia	1,278	1,537	3,828	3,134	3,197
Zambia	-	-	1,283	874	973
Aluminium	3,751	4,183	3,545	2,040	1,694
Power	827	933	877	836	708
Steel	604	600			
Other	51	97	(93)	(59)	(8)
Group	**11,790**	**13,006**	**15,294**	**11,520**	**10,738**

EBITDA

(US$ million)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Zinc:	1,283	1,616	2,122	1,562	1,063
India	1,230	1,516	1,902	1,423	995
International	54	100	220	138	68
Oil and Gas	1,032	1,101	849	597	570
Iron ore	117	90	48	194	73
Copper:	(40)	(36)	235	258	319
India/Australia	(40)	(36)	162	252	337
Zambia	(0)	-	73	6	(18)
Aluminium	281	316	414	344	107
Power	233	219	258	245	196
Steel	83	113	-	-	-
Other	14	38	37	(9)	8
Group	**3,003**	**3,457**	**3,963**	**3,191**	**2,336**

EBITDA MARGIN

(%)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Zinc	43	48	54	55	42
India	48	51	56	56	47
International	12	25	41	42	17
Oil and gas	58	58	57	49	43
Iron ore	24	22	10	32	21
Copper	(3)	(2)	5	6	8
India/Australia	(3)	(2)	4	8	11
Zambia	-	-	6	1	-2
Aluminium	8	8	12	17	6
Power	28	23	25	29	28
Steel	14	19	-	-	-
Group	**25**	**27**	**26**	**28**	**22**

FIVE YEAR SUMMARY

PRODUCTION

(000's MT)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Aluminium	1,904	1,959	1,675	1,213	923
BALCO	561	571	569	427	332
Jharsuguda Aluminium	1,343	1,388	1106	786	592
Copper	77	90	599	582	566
Sterlite Copper	77	90	403	402	384
KCM	-	-	195	180	182
Iron Ore (WMT)	4,562	4,511	7,903	12,300	5,630
Steel	1,231	1,199	-	-	-
Zinc total	937	960	876	757	841
HZL	870	894	791	672	759
Skorpion	67	66	84	85	82
Zinc and Lead MIC	174	82	72	70	144
BMM	66	65	72	70	63
Lisheen	-	-	-	-	81
Gamsberg	108	17	-	-	-
Oil and Gas – Gross Production	63	69	68	69	75
Oil and Gas – Working Interest	40	44	43	44	47

CASH COST OF PRODUCTION IN US CENTS

(US cents/lb)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Aluminium-Balco	77	92	87	68	75
Aluminium-Jharsuguda Aluminium	76	90	85	65	69
Copper – Sterlite Copper	-	-	5.7	5.0	5.7
Copper – KCM	-	276	239	209	198
Zinc including Royalty – HZL	62	63	62	52	47
Zinc without Royalty – HZL	47	46	44	38	37
Zinc COP – Skorpion	100	110	85	75	74
Zinc COP – BMM	67	66	59	51	63
Zinc COP – Lisheen	-	-	-	-	57
Zinc COP– Gamsberg	65	67			
Oil and Gas (Opex) (US$/boe)	6.0	7.7	6.6	6.2	6.5

CASH COST OF PRODUCTION IN INR

(INR/mt)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Aluminium-Balco	1,20,400	1,35,906	1,23,947	1,01,051	1,08,629
Aluminium-Jharsuguda Aluminium	1,19,500	1,35,466	1,20,349	96,622	99,408
Copper – Sterlite Copper	-	-	8,112	9,047	8,203
Zinc including Royalty	97,248	96,488	87,971	77,454	68,408
Zinc without Royalty	74,300	70,400	62,882	55,679	52,629

FIVE YEAR SUMMARY

CAPITAL EXPENDITURE

(US$ million)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Sustaining	558	399	385	145	185
Expansion	819	1,081	820	668	566
Total capital expenditure	**1,376**	**1,480**	**1,205**	**814**	**751**

NET CASH/(DEBT)

(US$ million)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Zinc:	2,912	2,528	3,507	3,881	5,415
India	2,892	2,454	3411	3,741	5,318
International	20	74	96	140	97
Oil and gas	694	1,388	754	4,185	3,240
Iron Ore	-51	(141)	-176	-404	-459
Copper:	-49	-317	-382	-496	-494
India/Australia	-49	(169)	-7	57	132
Zambia	0	(148)	-375	-553	-627
Aluminium	-4,987	(4,494)	-4,400	-5,098	-4,131
Power	-917	(1,347)	-1,693	-1,574	-1,802
Other	-7,605	(7,910)	-7,198	-8,997	-9,096
Group	**-10,005**	**-10,292**	**-9,588**	**-8,503**	**-7,329**

GEARING

(%)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Gearing	81%	66%	60%	59%	52%

GROUP FREE CASH FLOW

(US$ million)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Group Free Cash Flow after capital creditors	1,642	2,411	1745	2,212	2339
Group Free Cash Flow after post capex	823	1,330	925	1,544	1773

CAPITAL EMPLOYED

(US$ million)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
Avg Capital Employed	13,912	15,837	15,323	14,350	17,448

ROCE

(%)

	Year ended 31-Mar-20	Year ended 31-Mar-19	Year ended 31-Mar-18	Year ended 31-Mar-17	Year ended 31-Mar-16
ROCE	10.3%	9.6%	14.3%	12.8%	3.4%

PRODUCTION AND RESERVES SUMMARY

COPPER

Copper Production Summary

(US$ million)

Facility	Product	Year ended 31 March 2020 Mt	Year ended 31 March 2019 Mt
Tuticorin	Copper anode	–	4
	Sulphuric acid	–	–
	Phosphoric acid	–	182
	Copper cathode	–	2,873
	Copper rods	–	2,282
Silvassa	Copper cathode	77,490	86,644
	Copper rods	100,219	108,915

ALUMINIUM, ALUMINA AND BAUXITE

Aluminium Production Summary

(Mt)

Company	Year ended 31 March 2020	Year ended 31 March 2019
BALCO	561,338	571,231
Jharsuguda Aluminium	1,342,643	1,387,784

Alumina Production Summary

(Mt)

Company	Year ended 31 March 2020	Year ended 31 March 2019
Jharsuguda Aluminium	1,810,702	1,500,670

Bauxite Production Summary

(Mt)

Company	Year ended 31 March 2020	Year ended 31 March 2019
BALCO – Mainpat	55,700	0
BALCO – Bodai Daldali	469,800	461,956

Bauxite Mine Resource and Reserve Summary

	Resources			Reserves		
Mine	Measured and indicated million mt	Aluminium grade %	Inferred million mt	Aluminium grade %	Proved and probable reserves million mt	Aluminium grade %
BALCO						
Mainpat (Kesra, Kudiridih, Sapnadar)	6.2	40.4	1.3	42.1	4.6	43.6
Bodai-Daldali (Kawardha)	2.0	43.2	0.5	44.4	1.9	43.1
Total BALCO	**8.2**	**41.1**	**1.8**	**42.7**	**6.5**	**43.4**
MALCO						
Kolli Hills and Yercaud	0.8	44.0			0.2	43.0

Resources are additional to Reserves

PRODUCTION AND RESERVES SUMMARY

HINDUSTAN ZINC

Zinc and Lead Production Summary:

(Mt)

Company	Year ended 31 March 2020	Year ended 31 March 2019
HZL		
Zinc	688,286	696,283
Lead	181,370	197,838

Zinc and Lead Mining Summary:

a) Metal mined & metal concentrate

(Mt)

		Ore mined		Zinc concentrate		Lead concentrate	
Mine	Type of mine	31 March 2020	31 March 2019	31 March 2020	31 March 2019	31 March 2020	31 March 2019
Rampura Agucha	Underground	39,40,097	33,30,011	767,935	718,273	60,695	59,676
Rajpura Dariba	Underground	10,37,608	10,79,955	78,365	91,815	19,119	23,027
Zawar	Underground	32,70,668	28,64,587	139,241	104,497	92,014	70,458
Kayad	Underground	11,39,071	11,99,823	138,219	191,950	13,143	17,947
Sindesar Khurd	Underground	50,77,646	53,10,794	325,195	350,272	166,776	187,273
Total		**14,465,090**	**13,785,170**	**14,48,956**	**14,56,806**	**351,748**	**358,381**

b) Metal in Concentrate (MIC)

(Mt)

		Zinc concentrate		Lead concentrate	
Mine	Type of mine	31 March 2020	31 March 2019	31 March 2020	31 March 2019
Rampura Agucha	Underground	380,738	357,571	33,398	34,622
Rajpura Dariba	Underground	37,273	44,305	7,473	8,711
Zawar	Underground	71,672	54,661	53,765	44,698
Kayad	Underground	70,256	97,945	7,377	10,341
Sindesar Khurd	Underground	160,122	174,016	95,027	108,818
Total		**720,060**	**728,498**	**197,041**	**207,190**

Zinc and Lead Mine Resource and Reserve Summary

Zinc India

	Resources						Reserves		
Mine	Measured and indicated million mt	Zinc grade %	Lead grade %	Inferred million mt	Zinc grade %	Lead grade %	Proved and probable reserves million mt	Zinc grade %	Lead grade %
Rampura Agucha	10.3	14.7	2.2	35.5	9.6	2.6	39.1	12.6	1.6
Rajpura Dariba	16.3	7.2	2.0	22.2	6.2	2.1	20.4	5.1	1.7
Zawar	29.7	4.5	1.9	52.5	4.6	2.2	14.2	3.1	1.5
Kayad	0.8	12.1	2.0	1.1	8.2	1.4	3.6	5.1	1
Sindesar Khurd	51.9	4.1	2.2	27.1	3.6	2.2	37.3	3.6	2.3
Bamnia Kalan	20.7	3.3	1.1	20.1	3.5	1.4	-	-	-
Total	**129.7**	**5.3**	**1.9**	**158.6**	**5.7**	**2.2**	**114.7**	**6.9**	**1.8**

Resources are additional to Reserves

PRODUCTION AND RESERVES SUMMARY

Zinc International

	Resources						Reserves		
Mine	Measured and indicated million mt	Zinc grade %	Lead grade %	Inferred million mt	Zinc grade %	Lead grade %	Proved and probable reserves million mt	Zinc grade %	Lead grade %
Skorpion	1.4	14.1	-	1.4	11.4	-	1.3	11.1	-
BMM									
- Deeps	7.2	3.2	3.1	-	-	-	3.9	3.0	2.3
- Swartberg	63.7	0.9	2.6	19.1	1.1	2.8	25.4	0.5	1.7
- Gamsberg	42.0	5.9	0.5	66.4	7.8	0.5	109.8	6.1	0.5
- Big Syncline Project	6.1	3.0	1.1	161.8	2.5	1.0	-	-	-

Resources are additional to Reserves

Zinc Production Summary:

(Mt)

Company	Year ended 31 March 2020	Year ended 31 March 2019
Skorpion	66,967	65,948

Zinc and Lead Mining Summary:

a) Metal mined & metal concentrate

(Mt)

		Ore mined		Zinc concentrate		Lead concentrate	
Mine	Type of mine	31 March 2020	31 March 2019	31 March 2020	31 March 2019	31 March 2020	31 March 2019
Skorpion	Open Cast	1,038,936	1,009,243	-	-	-	-
BMM	Underground	1,486,754	1,611,301	56,857	58,874	54,694	55,548
Gamsberg	Underground	3,437,460	1,551,361	228,258	36,621	-	-
Total	**Underground**	**5,963,150**	**4,171,905**	**285,115**	**95,494**	**54,694**	**55,548**

b) Metal in Concentrate (MIC)

(Mt)

		Zinc concentrate		Lead concentrate	
Mine	Type of mine	31 March 2020	31 March 2019	31 March 2020	31 March 2019
BMM	Underground	27,943	27,558	37,628	37,354
Gamsberg	Underground	107,949	17,128	-	-
Total	**Underground**	**135,892**	**44,686**	**37,628**	**37,354**

IRON ORE

Iron Ore Production Summary

(Mt)

Company	Year ended 31 March 2020	Year ended 31 March 2019
Vedanta Limited		
Saleable Iron Ore	4.4	4.6
Goa	0.0	0.2
Karnataka	4.4	4.4
Dempo		

PRODUCTION AND RESERVES SUMMARY

Iron Ore Resource and Reserve Summary

	Resources				Reserves	
Mine	Measured and indicated million mt	Iron ore grade %	Inferred million mt	Iron ore grade %	Proved and probable reserves million mt	Iron ore grade %
Iron ore Karnataka	12.39	43.6	2.34	50.5	73.07	47.8

OIL AND GAS

The Oil and gas reserves data set out below are estimated on the basis set out in the section headed “Presentation of Information”.

CAIRN INDIA

The Company's gross reserve estimates are updated at least annually based on the forecast of production profiles, determined on an asset-by-asset basis, using appropriate petroleum engineering techniques. The estimates of reserves and resources have been derived in accordance with the Society for Petroleum Engineers “Petroleum Resources Management System (2018)". The changes to the reserves are generally on account of future development projects, application of technologies such as enhanced oil recovery techniques and true up of the estimates. The management’s internal estimates of hydrocarbon reserves and resources at the period end, based on the current terms of the PSCs, are as follows:

(mmboe)

	Gross proved and probable hydrocarbons initially in place		Gross proved and probable reserves and resources		Net working interest proved and probable reserves and resources	
Particulars	31 March 2020	31 March 2019	31 March 2020	31 March 2019	31 March 2020	31 March 2019
Rajasthan MBA Fields	2,288	2,288	317	362	222	253
Rajasthan MBA EOR	-	-	317	293	222	205
Rajasthan Block Other Fields	3,535	3,405	449	429	314	300
Ravva Fields	692	724	28	39	6	9
CBOS/2 Fields	292	254	40	33	16	13
Other fields	348	335	43	40	25	22
Total	**7,155**	**7,005**	**1,194**	**1,195**	**806**	**802**

The Company’s net working interest proved and probable reserves is as follows:

	Proved and Probable reserves		Proved and Probable reserves (developed)	
Particulars	Oil (mmstb)	Gas (bscf)	Oil (mmstb)	Gas (bscf)
Reserves as of 1 April 2018*	**98**	**51**	**71**	**27**
Additions/revision during the year	259	225	149	114
Production during the year	(42)	(12)	(42)	(12)
Reserves as of 31 March 2019**	**315**	**264**	**178**	**129**
Additions/revision during the year	25	61	22	37
Production during the year	(36)	(24)	(36)	(24)
Reserves as of 31 March 2020***	**303**	**301**	**164**	**143**

* Includes probable oil reserves of 26.77 mmstb (of which 5.00 mmstb is developed) and probable gas reserves of 25.12 bscf (of which 4.17 bscf is developed).

** Includes probable oil reserves of 116.21 mmstb (of which 16.03 mmstb is developed) and probable gas reserves of 89.00 bscf (of which 24.19 bscf is developed).

*** Includes probable oil reserves of 132.23 mmstb (of which 21.94 mmstb is developed) and probable gas reserves of 114.73 bscf (of which 42.64 bscf is developed).

PRODUCTION AND RESERVES SUMMARY

SOURCE OF INFORMATION:

In respect of all businesses, the information has been certified by geologist on behalf of Group management.

Basis of preparation

Ore reserves and mineral resources reported herein comply with the ‘Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves’. The code is prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists, and Minerals Council of Australia, and is commonly referred to as the ‘JORC Code’. As at the date of this document, the editions of the JORC Code in force are dated December 2012.

The JORC Code uses the term Ore Reserve for Reserves. For the purposes of ore and mineral resources reported herein, the term ore resources have been used throughout.

Oil and Gas reserves and resources have been prepared according to the Petroleum Resources Management Systems (PRMS) approved in June 2018 by the Board of Society of Petroleum Engineers (SPE). The process included approval by six sponsoring societies: the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the European Association of Geoscientists and Engineers, and the Society of Petrophysicists and Well Log Analysts.

Mineral resources are based on mineral occurrences quantified on the basis of geological data and an assumed cut-off grade, and are divided into Measured, Indicated and Inferred categories reflecting decreasing confidence in geological and/or grade continuity. The reporting of resource estimates carries the implication that there are reasonable prospects for eventual economic exploitation. An Ore or Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource. It includes the effect of dilution and losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, need to have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.

These assessments demonstrate at the time of reporting that extraction could be reasonably justified. Ore Reserves are sub-divided in order of decreasing confidence into Proved Ore Reserves and Probable Ore Reserves.

The Measured and Indicated mineral resources have been reported as being exclusive of those mineral resources modified to produce the ore reserves, in addition to the ore reserves. The resource and reserve estimates provided herein comply with the resource and reserve definitions of the JORC Code.

OTHER INFORMATION

Alternative performance measures

Introduction

Vedanta Group is committed to providing timely and clear information on financial and operational performance to investors, lenders and other external parties, in the form of annual reports, disclosures, RNS feeds and other communications. We regard high standards of disclosure as critical to business success.

Alternative Performance Measure (APM) is an evaluation metric of financial performance, financial position or cash flows that is not defined or specified under International Financial Reporting Standards (IFRS).

The APMs used by the group fall under two categories:

- **Financial APMs:** These financial metrics are usually derived from financial statements, prepared in accordance with IFRS. Certain financials metrics cannot be directly derived from the financial statements as they contain additional information such as profit estimates or projections, impact of macro-economic factors and changes in regulatory environment on financial performance.
- **Non-Financial APMs:** These metrics incorporate non-financial information that management believes is useful in assessing the performance of the group.

APMs are not uniformly defined by all the companies, including those in the Group's industry. APM's should be considered in addition to, and not a substitute for or as superior to, measures of financial performance, financial position or cash flows reported in accordance with IFRS.

Purpose

The Group uses APMs to improve comparability of information between reporting periods and business units, either by adjusting for uncontrollable or one-off factors which impacts upon IFRS measures or, by aggregating measures, to aid the user of the Annual Report in understanding the activity taking place across the Group's portfolio.

APMs are used to provide valuable insight to analysts and investors along with Generally Accepted Accounting Practices (GAAP). We believe these measures assist in providing a holistic view of the company's performance.

Alternative performance measures (APMs) are denoted by◊ where applicable.

◊APM terminology*	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements
EBITDA	Operating profit/(loss) before special items	Operating Profit/(Loss) before special items Add: Depreciation & Amortisation
EBITDA margin (%)	No direct equivalent	EBITDA divided by Revenue
Adjusted revenue	Revenue	Revenue Less: revenue of custom smelting operations at our Copper India & Zinc India business
Adjusted EBITDA	Operating profit/(loss) before special items	EBITDA Less: EBITDA of custom smelting operations at our Copper India & Zinc India business
Adjusted EBITDA margin	No direct equivalent	Adjusted EBITDA divided by Adjusted Revenue
Underlying profit/(loss)	Attributable Profit/(loss) before special items	Attributable profit/(loss) before special items Less: NCI share in other gains/(losses) (net of tax)
Project Capex	Expenditure on Property, Plant and Equipment (PPE)	Gross Addition to PPE Less: Gross disposals to PPE Add: Accumulated Depreciation on disposals Less: Decommissioning liability Less: Sustaining Capex
Free cash flow (FCF) post capex	Net cash flow from operating activities	Net Cash flow from operating activities Less: addition of property, plant and equipment and intangibles less proceeds on disposal of property, plant and equipment Add: Dividend paid and dividend distribution tax paid Add/less: Other non-cash adjustments

OTHER INFORMATION

◊APM terminology*	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements
Net debt*	Net debt is a Non-IFRS measure and represents total debt after fair value adjustments under IAS 32 and IFRS 9 as reduced by cash and cash equivalents, liquid investments and structured investment, net of the deferred consideration payable for such investments (referred as Financial asset investment net of related liabilities), if any.	No Adjustments
ROCE	No direct Equivalent	Not Applicable

*In December 2018, the Group has made a structured investment which is classified as Financial Assets investments. We believe liquidity of the investment makes its comparable to the other assets included previously in the debt calculation; therefore, inclusion gives more reliable and relevant information.

ROCE for FY2020 is calculated based on the working summarised below. The same method is used to calculate the ROCE for all previous years (stated at other places in the report).

(US$ million)

Particulars	Period ended 31 March 2020
Operating Profit Before Special Items	1,591
Less: Cash Tax Outflow	165
Operating Profit before special Items less Tax outflow (a)	1,426
Opening Capital Employed (b)	15,545
Closing Capital Employed (c)	12,278
Average Capital Employed (d)= (b+c)/2	13,912
ROCE (a)/(d)	**10.3%**

Adjusted Revenue, EBITDA & EBITDA Margin for FY2019 and FY2020 is calculated based on the working summarised below. The same method is used to calculate the adjusted revenue and EBITDA for all previous years (stated at other places in the report).

(US$ million)

Particulars	Period ended 31 March 2020
Revenue	11,790
Less: Revenue of Custom smelting operations	(1,277)
Adjusted Revenue(a)	**10,513**
EBITDA	3,003
Less: EBITDA of Custom smelting operations	(40)
Adjusted EBITDA(b)	3,043
Adjusted EBITDA Margin (b)/(a)	**29%**

GLOSSARY AND DEFINITIONS

Adapted Comparator Group

The new comparator group of companies used for the purpose of comparing TSR performance in relation to the LTIP, adopted by the Remuneration Committee on 1 February 2006 and replacing the previous comparator group comprising companies constituting the FTSE Worldwide Mining Index (excluding precious metals).

Adjusted EBITDA

Group EBITDA net of EBITDA from custom smelting operations at Copper India & Zinc India operations.

Adjusted EBITDA margin

EBITDA margin computed on the basis of Adjusted EBITDA and Adjusted Revenue as defined elsewhere

Adjusted Revenue

Group Revenue net of revenue from custom smelting operations at Copper India & Zinc India operations.

Aluminium Business

The aluminium business of the Group, comprising of its fully-integrated bauxite mining, alumina refining and aluminium smelting operations in India, and trading through the Bharat Aluminium Company Limited and Jharsuguda Aluminium (a division of Vedanta Limited), in India.

Articles of Association

The articles of association of Vedanta Resources Limited.

Attributable Profit

Profit for the financial year before dividends attributable to the equity shareholders of Vedanta Resources Limited.

BALCO

Bharat Aluminium Company Limited, a company incorporated in India.

BMM

Black Mountain Mining Pty

Board or Vedanta Board

The board of directors of the Company

Board Committees

The committees reporting to the Board: Audit, Remuneration, Nominations, and Sustainability, each with its own terms of reference.

Businesses

The Aluminium Business, the Copper Business, the Zinc, lead, silver, Iron ore, Power and Oil & Gas Business together.

Boepd

Barrels of oil equivalent per day

Bopd

Barrels of oil per day

Cairn India

Erstwhile Cairn India Limited and its subsidiaries

Capital Employed

Net assets before Net (Debt)/Cash

Capex

Capital expenditure

CEO

Chief executive officer

CFO

Chief Financial Officer

CII

Confederation of Indian Industries

CO_2

Carbon dioxide

COP

Cost of production

CMT

Copper Mines of Tasmania Pty Limited, a company incorporated in Australia

Company or Vedanta

Vedanta Resources Limited

Copper Business

The copper business of the Group, comprising:

- A copper smelter, two refineries and two copper rod plants in India, trading through Vedanta Limited, a company incorporated in India;
- One copper mine in Australia, trading through Copper Mines of Tasmania Pty Limited, a company incorporated in Australia; and
- An integrated operation in Zambia consisting of three mines, a leaching plant and a smelter, trading through Konkola Copper Mines Limited, a company incorporated in Zambia which is treated as discontinued operations and deconsolidated the same w.e.f. 1 June 2019, affiliation with Zambian government is in progress.

Copper India

Copper Division of Vedanta Limited comprising of a copper smelter, two refineries and two copper rod plants in India.

Cents/lb

US cents per pound

CRRI

Central Road Research Institute

CRISIL

CRISIL Limited (A S&P Subsidiary) is a rating agency incorporated in India

CSR

Corporate social responsibility

CTC

Cost to company, the basic remuneration of executives, which represents an aggregate figure encompassing basic pay, pension contributions and allowances.

CY

Calendar year

% Change

It is calculated and presented on absolute numbers. Hence, it would not match with % calculated on face value numbers.

DDT

Dividend distribution tax

Deferred Shares

Deferred shares of £1.00 each in the Company

DFS

Detailed feasibility study

DGMS

Director General of Mine Safety in the Government of India

Directors

The Directors of the Company

DMF

District Mineral Fund

DMT

Dry metric tonne

Dollar or $

United States Dollars, the currency of the United States of America

EAC

Expert advisory committee

EBITDA

EBITDA is a non-IFRS measure and represents earnings before special items, depreciation, amortisation, other gains and losses, interest and tax.

EBITDA Margin

EBITDA as a percentage of turnover

Economic Holdings or Economic Interest

The economic holdings/interest are derived by combining the Group’s direct and indirect shareholdings in the operating companies. The Group’s Economic Holdings/Interest is the basis on which the Attributable Profit and net assets are determined in the consolidated accounts.

E&OHSAS

Environment and occupational health and safety assessment standards

E&OHS

Environment and occupational health and safety management system

ESOP

Employee share option plan

ESP

Electrostatic precipitator

Executive Committee

The Executive Committee to whom the Board has delegated operational management. It comprises of the Chief Executive Officer and the senior management of the Group.

GLOSSARY AND DEFINITIONS

Executive Directors

The Executive Directors of the Company.

Expansion Capital Expenditure

Capital expenditure that increases the Group's operating capacity.

Financial Statements or Group financial statements

The consolidated financial statements for the Company and the Group for the year ended 31 March 2019 as defined in the Independent Auditor's Report to the members of Vedanta Resources Limited.

Free Cash Flow

Net Cash flow from operating activities Less: purchases of property, plant and equipment and intangibles Add proceeds on disposal of property, plant and equipment.

Add: Dividend paid and dividend distribution tax paid

Add/less: Other non-cash adjustments

FY

Financial year i.e. April to March.

GAAP, including UK GAAP

Generally Accepted Accounting Principles, the common set of accounting principles, standards and procedures that companies use to compile their financial statements in their respective local territories.

GDP

Gross domestic product

Gearing

Net Debt as a percentage of Capital Employed

GJ

Giga joule

Government or Indian Government

The Government of the Republic of India

Gratuity

A defined contribution pension arrangement providing pension benefits consistent with Indian market practices.

Group

The Company and its subsidiary undertakings and, where appropriate, its associate undertaking.

Gross finance costs

Finance costs before capitalisation of borrowing costs

HIIP

Hydrocarbons initially-in place

HSE

Health, safety and environment

HZL

Hindustan Zinc Limited, a company incorporated in India

IAS

International Accounting Standards

IFRIC

IFRS Interpretations Committee

IFRS

International Financial Reporting Standards

INR

Indian Rupees

Interest cover

EBITDA divided by gross finance costs (including capitalised interest) excluding accretive interest on convertible bonds, unwinding of discount on provisions, interest on defined benefit arrangements less investment revenue.

IPP

Independent power plant

Iron Ore Sesa

Iron ore Division of Vedanta Limited, comprising of Iron ore mines in Goa and Karnataka in India.

Jharsuguda Aluminium

Aluminium Division of Vedanta Limited, comprising of an aluminium refining and smelting facilities at Jharsuguda and Lanjigarh in Odisha in India.

KCM or Konkola Copper Mines

Konkola Copper Mines Limited, a company incorporated in Zambia.

Key Result Areas or KRAs

For the purpose of the remuneration report, specific personal targets set as an incentive to achieve short-term goals for the purpose of awarding bonuses, thereby linking individual performance to corporate performance.

GLOSSARY AND DEFINITIONS

KPIs

Key performance indicators

KTPA

Thousand tonnes per annum

Kwh

Kilo-watt hour

KBOEPD

Kilo barrel of oil equivalent per day

LIBOR

London inter bank offered rate

LIC

Life Insurance Corporation

LME

London Metals Exchange

London Stock Exchange

London Stock Exchange Limited

Lost time injury

An accident/injury forcing the employee/contractor to remain away from his/her work beyond the day of the accident.

LTIFR

Lost time injury frequency rate: the number of lost time injuries per million man hours worked

LTIP

The Vedanta Resources Long-Term Incentive Plan or Long-Term Incentive Plan

MALCO

The Madras Aluminium Company Limited, a company incorporated in India.

Management Assurance Services (MAS)

The function through which the Group's internal audit activities are managed.

MAT

Minimum alternative tax

MBA

Mangala, Bhagyam, Aishwarya oil fields in Rajasthan

MIC

Metal in concentrate

MOEF

The Ministry of Environment, Forests and Climate change of the Government of the Republic of India

MMSCFD

Million standard cubic feet per day

MT or Tonnes

Metric tonnes

MU

Million Units

MW

Megawatts of electrical power

NCCBM

National Council of Cement and Building Materials

Net (Debt)/Cash

Net debt is a Non-IFRS measure and represents total debt after fair value adjustments under IAS 32 and IFRS 9 as reduced by cash and cash equivalents, liquid investments and structured investment, net of the deferred consideration payable for such investments (referred as Financial asset investment net of related liabilities), if any.

NGO

Non-governmental organisation

Non-Executive Directors

The Non-Executive Directors of the Company

Oil & Gas business

Oil & Gas division of Vedanta Limited, is involved in the business of exploration, development and production of Oil & Gas.

OALP

Open Acreage licensing Policy

Ordinary Shares

Ordinary shares of 10 US cents each in the Company

ONGC

Oil and Natural Gas Corporation Limited, a company incorporated in India

GLOSSARY AND DEFINITIONS

OPEC

Organisation of the Petroleum Exporting Countries

PBT

Profit before tax

PPE

Property plant and equipment

Provident Fund

A defined contribution pension arrangement providing pension benefits consistent with Indian market practices.

PSC

A “production sharing contract” by which the Government of India grants a licence to a company or consortium of companies (the ”Contractor”) to explore for and produce any hydrocarbons found within a specified area and for a specified period, incorporating specified obligations in respect of such activities and a mechanism to ensure an appropriate sharing of the profits arising there from (if any) between the Government and the Contractor.

PSP

The Vedanta Resources Performance Share Plan

Recycled water

Water released during mining or processing and then used in operational activities.

Return on Capital Employed or ROCE

Operating profit before special items net of tax outflow, as a ratio of average capital employed.

Revenue Sharing Contract

Contract between Vedanta & Joint venture which define share of revenue for each joint venture partner.

RO

Reverse osmosis

Senior Management Group

For the purpose of the remuneration report, the key operational and functional heads within the Group.

SEWT

Sterlite Employee Welfare Trust, a long-term investment plan for Sterlite senior management.

SHGs

Self help groups

SBU

Strategic Business Unit

STL

Sterlite Technologies Limited, a company incorporated in India

Special items

Items which derive from events and transactions that need to be disclosed separately by virtue of their size or nature.

Sterling, GBP or £

The currency of the United Kingdom

Superannuation Fund

A defined contribution pension arrangement providing pension benefits consistent with Indian market practices.

Sustaining Capital Expenditure

Capital expenditure to maintain the Group’s operating capacity.

% Share in EBITDA

It is % share of respective segment’s EBITDA to Vedanta Resources Limited’s EBITDA.

TCM

Thalanga Copper Mines Pty Limited, a company incorporated in Australia

TC/RC

Treatment charge/refining charge being the terms used to set the smelting and refining costs.

TGT

Tail gas treatment

TLP

Tail Leaching Plant

TPA

Metric tonnes per annum

TPM

Tonne per month

GLOSSARY AND DEFINITIONS

TSPL

Talwandi Sabo Power Limited, a company incorporated in India

TSR

Total shareholder return, being the movement in the Company’s share price plus reinvested dividends.

Twin Star

Twin Star Holdings Limited, a company incorporated in Mauritius

Twin Star Holdings Group

Twin Star and its subsidiaries and associated undertaking

US cents

United States cents

Underlying profit/(loss)

Attributable profit/(loss) before special items Less: NCI share in other gains/(losses) (net of tax)

Vedanta Limited (formerly known as Sesa Sterlite Limited/Sesa Goa Limited)

Vedanta Limited, a company incorporated in India engaged in the business of Oil & Gas exploration and production, copper smelting, Iron Ore mining, Alumina & Aluminium production and Energy generation.

VFJL

Vedanta Finance (Jersey) Limited, a company incorporated in Jersey

VGCB

Vizag General Cargo Berth Private Limited, a company incorporated in India

Volcan

Volcan Investments Limited, a company incorporated in the Bahamas

VRCL

Vedanta Resources Cyprus Limited, a company incorporated in Cyprus

VRFL

Vedanta Resources Finance Limited, a company incorporated in the United Kingdom

VRHL

Vedanta Resources Holdings Limited, a company incorporated in the United Kingdom

Water Used for Primary Activities

Total new or make-up water entering the operation and used for the operation’s primary activities; primary activities are those in which the operation engages to produce its product.

WBCSD

World Business Council for Sustainable Development

ZCI

Zambia Copper Investment Limited, a company incorporated in Bermuda.

ZCCM

ZCCM Investments Holdings Limited, a company incorporated in Zambia and a minority shareholder of Konkola Copper Mines Limited.

ZRA

Zambia Revenue Authority

NOTES

NOTES

NOTES

ZINC-LEAD-SIVER / OIL & GAS / ALUMINIUM & POWER / COPPER / IRON ORE & STEEL

vedanta
transforming elements

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