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12th August 2020

# Vedanta Resources Limited
# Results for the year ended 31 March 2020

*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 CWIP and capital advances of US$ 94 million, and Impairment charge of glass substrate business's assets at Avanstrate Inc (ASI) US$ 72 million
- An ex-parte order received from the High Court of Zambia, appointing a provisional liquidator (PL) for KCM w.e.f 21 May 2019, as obtained by minority shareholder ZCCM, has led to a deconsolidation of KCM. The Group has a total exposure of US$ 1,952 million (including equity investment in KCM of US$ 266 million) in form of loans, receivables and equity investments, which has now been recorded at a fair value of US$ 660 million. [For more information, refer note 3(e) of consolidated financial statements].
- (Loss)/Profit) 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 w.e.f 21 May 2019 obtained by minority shareholder 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 Vedanta Resources limited.

- 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$5.7 Billion)
- Realised power debtors of c. US$ 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 through its subsidiary, FACOR Power Limited (FPL). The consideration payable for the acquisition of FACOR on a cash-free and debt-free basis is c. 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 c. US$ 36 million to the Financial Creditors payable equally over 4 years commencing March 2021.[For more information refer note 3(a) of 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 Vedanta Resources 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 28th July 2020, Moody's confirmed Vedanta Resources Limited'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 c. three years for the entire debt portfolio
- Contribution to the exchequer of c. US$ 4.6 billion in FY2020 (FY2019: c. US$ 6.2 billion)

***Business highlights***

***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 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 Q4FY2020

*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 600MW in FY2020
- Achieved Plant Load Factor (PLF) of 71% at the 300MW BALCO IPP in FY2020

*Iron Ore*

- 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
- 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) | (170) | 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 w.e.f. 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).*

The results will be available in the Investor Relations section of our website

www.vedantaresources.com

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### About Vedanta Resources

Vedanta Resources Limited ("Vedanta") is a diversified global natural resources Company. The group produces aluminium, copper, zinc, lead, silver, iron ore, oil & gas and commercial energy. Vedanta has operations in India, Zambia, Namibia, South Africa, Ireland and Australia. With an empowered talent pool globally, Vedanta places strong emphasis on partnering with all its stakeholders based on the core values of trust, sustainability, growth, entrepreneurship, integrity, respect and care. Governance and sustainable development are at the core of Vedanta's strategy, with a strong focus on health, safety, and environment and on enhancing the lives of local communities.
For more information on Vedanta Resources, please visit www.vedantaresources.com

### Disclaimer

This press release contains "forward-looking statements" – that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as "expects," "anticipates,"

"intends," "plans," "believes," "seeks," "should" or "will." Forward–looking statements by their nature address matters that are, to different degrees, uncertain. For us, uncertainties arise from the behaviour of financial and metals markets including the London Metal Exchange, fluctuations in interest and/or exchange rates and metal prices; from future integration of acquired businesses; and from numerous other matters of national, regional and global scale, including those of a political, economic, business, competitive or regulatory nature. These uncertainties may cause our actual future results to be materially different that those expressed in our forward-looking statements. We do not undertake to update our forward-looking statements.

## Chairman's statement

### Enabling a well-resourced future

It is a great honor 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 organization 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. We, at Vedanta, salute this human spirit and solidarity of citizens and 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 CY 2019, 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 CY 2020, in light of the progress in US-China trade talks and Brexit deal.

In what was expected to be a year of continued recovery, CY 2020 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, FY 2020 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.

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 USD 1.44 trillion during the period FY 2020-2025 deserves a special mention. It reinforces the government's commitment to build 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 Indian 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 90,000 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 around 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 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 1000th Nand Ghar. By FY 2020-21, 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 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.

Our environmental, social and governance (ESG) priorities are well-aligned to our enterprise goals and towards 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 programs 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 programs 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 organization to secure our social license 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 7 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 provide 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 with effect from 5th April 2020, for personal reasons and will be re-joining his family in South Africa. Over the last 2 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 & 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.

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**

## STRATEGIC OVERVIEW

Over the last few years, our strategic priorities have remained consistent with a focus on delivering growth and long-term value to our stakeholders while upholding operational excellence and sustainable development through our diversified portfolio. We continuously strive to improve our operations to achieve benchmark performance, optimise costs and improve realisations.

Summary of strategic priorities below:

**1) Continued focus on world-class ESG performance:** 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.

**2) Augment our Reserves & Resources (R&R) base:** 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.

**3) Delivering on growth opportunities:** 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.

**4) Optimise capital allocation and maintain strong balance sheet:** 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.

**5) Operational excellence:** 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.

# FINANCE REVIEW

We had a 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 Oil & Gas, Vedanta Resources limited.

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 $ 5.1 billion (FY2019: $ 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 c.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 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 & 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[1] | 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 & deconsolidated in books w.e.f. 21 May 2019.*

## Consolidated operating profit bridge before special items:

*(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 amortization | (32) |
| **Operating profit before special items for FY2020** | **1,591** |

*1.Excludes Copper Zambia as its operations have been discontinued & deconsolidated in books w.e.f. 21 May 2019.*

### 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%) |

### 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, 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$ 5 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 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 mn 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 15kt in FY2019 to 109kt 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', 018 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 w.e.f. 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 & Oil & Gas business and lower power sales at TSPL partially offset by higher volume at Aluminium business, additional volumes from Gamsberg operations, higher sales at Iron Ore of Karnataka & Steel business.

*(US$ million, unless stated)*

| **Consolidated revenue[1]** | **FY2020** | **FY2019** | **% change** |
|---|---|---|---|
| Zinc | 3,004 | 3,347 | (10)% |
| India | 2,563 | 2955 | (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 w.e.f. 21 May 2019*

*2. Includes port business and eliminations of inter-segment sales.*

## Consolidated EBITDA[1]

The consolidated EBITDA by segment is set out below:

*(US$ million, unless stated)*

| | **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 & 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 & 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 and others)**

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 off:
  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 c.US $12 million** pertaining to the period prior to H1 FY2020 based on positive Supreme Court order.
- **Renewal power obligation liability reversal of US$ 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]

**Special items - 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 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 notes 3(e) of the consolidated financial statement]

## Net Interest

The blended cost of borrowings was 7.43% for FY2020 compared to 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 FY 2019.

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 w.e.f. 21 May 2019.*

*3. It includes $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 Vedanta Resources Limited.

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); and

US$ 1.0 billion of working capital loans (March 2019: US$ 0.5 billion).

*The maturity profile of term debt of the Group (totalling US$ 12.9 billion) is summarised below:*

| Particulars | As at 31 March 2019 | As at 31 March 2020 | FY2021 | FY2022 | FY2023 | FY2024 | FY2025 & beyond |
|---|---|---|---|---|---|---|---|
| Debt at Vedanta Resources | 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 Vedanta Resources Limited. The total undrawn fund-based credit limit was c.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$^{st}$ Dec 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(c) of the consolidated financial statements on going concern]

## 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 15 of consolidated financial statements on financial instruments].

## Credit rating

Moody's downgraded corporate family rating of Vedanta Resources Limited 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 28th 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 fiscal year 2021 in wake of the 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.

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.

## 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 w.e.f. 21 May'19, 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) of consolidated financial statements].*

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 $ 234 million, dividend pay-out of US$ 537 million (US cents 188 per share) and FCTR 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.]

## Contribution to the exchequer

The Group contributed c.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 Vedanta Resources Limited.

## Project capex

*(US$ million)*

| Capex in progress | Status | Total capex approved3 | 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 | On - going | 2,493 | 651 | 492 | 1,350 |
| **Aluminium Sector** | | | | | |
| Jharsuguda 1.25mtpa smelter | Line 3: Fully capitalised<br>Line 4: Fully Capitalised<br>Line 5: Six Section 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 $3.2 bn*
*2. Capital approved US$ 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 March 31, 2020*
*6. Spent in FY20 does not include ROU capex c.US$ 143mn*

# 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.

### 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 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.

## 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 5$^{th}$ in the Dow Jones Sustainability Index (Metal and Mining) globally, and No. 1 in 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 5 companies in India.

## 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 (million ounce)[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.*

## 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 H1 FY2020.

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

| 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$/ounce | 16.5 | 15.4 | 7% |

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.

## Zinc Demand – Supply

| Zinc Global Balance in kt | CY 2018 | CY 2019 | CY 2020 E |
|---|---|---|---|
| Mine Production | 12,894 | 13,363 | 12,853 |
| Smelter Production | 13,237 | 13,601 | 13,686 |
| Consumption | 14,178 | 13,924 | 12,984 |

*Source: Wood Mackenzie*

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$1900-US$2000 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 TC 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.

**Unit costs**

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

Zinc's cost of production (excluding royalty) for FY2020 was US$ 1,047 per tonne, higher by 4% y-o-y. The 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.

**Financial performance**

*(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)% |

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.

**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 RA UG 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 Q1 FY2021. 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. RD 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.

**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 FY 2020 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

## 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, VZI reported a fatality at Black Mountain Mine, where Mrs. Venessa Plagg, a Mining Operator, was fatally injured on January 10, 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 & 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 FY19: 0.96 and FY20 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 VCT 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.

### Production performance

| Particulars | FY2020 | FY2019 | % change |
|---|---|---|---|
| Total production (kt) | 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 approximately 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 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 Q4FY2020 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.

### Unit costs

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

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 TCRCs, lower copper credits and annual inflation.

### Financial performance

*(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)% |

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.

**Projects**

**Skorpion Refinery Conversion -** Project activities were resumed due to the LOM 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 the second quarter of FY21.

**Swartberg Phase 2 –** Mine plan and design are complete. Ore reserves have increased from 2.6 million tonnes to 25.4 million tonnes in FY20.

**Gamsberg Phase 2-** The previously completed Phase 2 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 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 reserves and resources (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 reserves and resources support a mine life of more than 30 years.

**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 Mt Ore throughput. Likewise, BMM continues to deliver stable production performance and the focus is to debottleneck its Ore volumes from 1.6 Mt to 1.8 Mt. Skorpion is expected to remain in 'Care and Maintenance' for H1 FY21, 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 COP< US$1000 per tonne.

In addition to the above, the 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.

## 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 lost time injuries (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 follows:

- Mangala oil field received first prize – Overall performance and rolling trophy for Best Performing Fire Fighting Unit during Mines Safety Week
- Raageshwari oil and gas mines received 1st 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

### 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 FY2019-20 are as:

- 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 Mt in FY20
- 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 tons of $CO_2e$/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: ~23156 tons of $CO_2e$

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

**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 million standard cubic feet per day (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 79.1mmscfd.

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

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

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 approximately 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.

### Financial performance

(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% |

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

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.

### 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 Alkaline surfactant polymer (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 enhanced oil recovery 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 8 wells in Aishwarya are hooked up. Surface facility development for polymer implementation has commenced and polymer injection is ongoing.

#### Tight oil and gas projects

*Tight oil: Aishwariya Barmer Hill (ABH)*

Aishwariya Barmer Hill (ABH) is the first tight oil project to monetise the Barmer hill potential and drilling of the project started in Q1 FY2019. All 39 wells have been successfully drilled and 7 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 Raageshwari Deep Gas 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 ~90mmscfd of gas production in near term. This will ramp up the overall Rajasthan gas production to ~240mmscfd.

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.

**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%.

*Ravva development*

An integrated development campaign has commenced. Till March 2020, 4 wells have been drilled and 2 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, 7 wells have been drilled.

*Open Acreage Licensing Policy (OALP)*

Under the Open Acreage Licensing Policy (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, 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 optimizes 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 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 03 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 upto 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-finalization 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

## 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 Q4 FY2020 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 MBRD (Making Better Risk Decision) 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 self-help groups (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.

**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 m3/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 Mt Spent Pot lining and 6,507 Mt 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%).

### Production performance

| Particulars | FY2020 | FY2019 | % change |
|---|---|---|---|
| **Production (kt)** | | | |
| 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 vs. 63kt in FY2019*

### 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

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

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.

### Unit costs

*(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)% |

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 Q4 FY2020. 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.

### Financial performance

(US$ million, unless stated)

| Particulars | FY2020 | FY2019 | % Change |
|---|---|---|---|
| Revenue | 3751 | 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)% |

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: $ 316 million), mainly due to improved hot metal cost of production and true up of RPO liability being partially offset by lower sales realisations.

**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 & 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 & 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 & 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.

**POWER**

### The year in summary:

FY2020 was a significant year for the Talwandi Sabo power plant (TSPL), where we achieved plant availability of c. 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 minimizing 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% utilization 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.

### 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 Jan 2019 from CSERC for Conversion of 300MW IPP to CPP. During the Q4 FY2019, 184 units were sold externally from this plant.*

### 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 plant load factor (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.

### 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 are June 2020 for CPPs. IPPs of BALCO & 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 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**

| Particulars | FY2020 | FY2019 | % change |
|---|---|---|---|
| Sales realisation (US cents/kWh)[1] | 5.1 | 4.8 | 5% |
| Cost of production (US Cents/kWh)[1] | 3.5 | 4.1 | (15)% |
| TSPL sales realisation (US Cents/kWh)[2] | 5.3 | 5.9 | (9)% |
| TSPL cost of production (US Cents/kWh)[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*

Average power sale prices, excluding TSPL, increased by 5% to US cents 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 3.5 per kWh (FY2019: US cents 4.1 per kWh), driven mainly by a decrease in coal prices and improved linkage materialisation.

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

**Financial performance**

(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*

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 c.US$142 million from PSPCL on account of GCV matter resolution basis Hon'ble Supreme Court order.

**Strategic Priories & 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; and
- Improve power plant operating parameters to deliver higher PLFs/availability and reduce the non-coal cost.

## 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 state-wide 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 Lost Time Injury Frequency Rate (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.

We have an attractive rewards & 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 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 275805 m3/annum. Additionally, the Company has de-silted 10 nearby village ponds, increasing their rainwater harvesting potential by 75629 m3/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.

## 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)% |

## 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 approximately 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. These ore were then beneficiated and around 0.9 million tonnes were exported, which further helped us to cover our fixed cost. Some ore was used to cater to the requirement of our pig iron plant at Amona.

## Financial performance

(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 | -- |

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.

**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 E-auction/trade barrier in Karnataka.

## 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.

In 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$78 per tonne v/s US$ 115 per tonne) on account of decline in steel prices.

### 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.

### 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 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, 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 Blast furnace to minimise fuel requirement, LD gas and BF gas in several operations, such as reheating furnace of rolling mills, Blast furnace, 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.

## Production performance

| Particulars | FY2020 | FY2019 | % change |
|---|---|---|---|
| Production (kt) | 1231 | 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% |

## 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 (PCB). This was followed by the Ministry of Environment, Forests and Climate Change revoking the Environmental Clearance (EC) dated 21.02.2018. 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 nation-wide lockdown situation, all High Court hearings through a general order have been postponed and shall be taken up in due course.

## Prices

*(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)%** |

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.

### Unit costs

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

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.

### Financial performance

(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 | - | - | - |

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.

### Strategic Priorities & Outlook

Global steel markets at the time of writing remain uncertain, yet the focus is to operate within the highest of heath 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 FTA countries for coking coal
- Ensure zero harm and zero discharge, fostering a safety-centric culture
- To generate healthy EBITDA & cash profit

## 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 lost time injury frequency rate (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.

### Production performance

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

### 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).

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 18.02.2019 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 the 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.

**Prices**

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

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.

**Financial performance**

*(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)%- |

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%.

**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.

## 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.

## PRINCIPAL RISKS AND UNCERTAINTIES

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.

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 senior management, business teams and members of the Audit Committee. In addition, we make reference to past audit experience, financial analysis and 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 Vedanta's 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 below.

| Impact | Mitigation |
|---|---|
| **Sustainability risks** | |
| **Health, safety and environment (HSE)** | **Risk direction: ◄►** |
| 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.<br><br>**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 greenhouse gas (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.<br>■ 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.<br>■ BU Leadership continues to emphasize on three focus areas i.e. visible felt leadership, safety critical tasks and managing business partners.<br>■ The process to improve learning from incidents is currently being improved with the aim of reducing re-occurrence of similar incidents.<br>■ A Vedanta Critical Risk Management program will be launched to identify critical risk controls and to measure, monitor and report the control effectiveness.<br>■ 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.<br>■ All businesses have appropriate policies in place for occupational health-related matters, supported by structured processes, controls and technology.<br>■ To provide incentives for safe behaviour and effective risk management, safety KPIs have been built into performance management of all employees.<br>■ 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.<br>■ The Group Companies are actively working on reducing the GHG Emissions Intensity of our operations.<br>■ 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. |
| **Managing relationship with stakeholders** | **Risk direction: ◄►** |

| | |
|---|---|
| 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.<br>■ 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.<br>■ Business Excos factor in these inputs, and then decide upon focus areas of CSR and budgets while also aligning with strategic business priorities.<br>■ All BUs follow well-laid processes for recording and resolving all community grievances.<br>■ 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.<br>■ 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.<br>■ 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.<br>■ 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.<br>■ CSR communication and engagement with all stakeholders – within and outside communities. |
| **Tailings dam stability** | **Risk direction: ◄►** |
| 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.<br>■ Operation of tailings dams is executed by suitably experienced personnel within the businesses.<br>■ 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.<br>■ 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.<br>■ Those responsible for dam management received training from third party and will receive on-going support & coaching from international consultants.<br>■ Management standard implemented with business involvement.<br>■ BU's are expected to ensure ongoing management of all tailings facilities with ExCo oversight with independent third-party assessment on Golder recommendations implementation status YoY. |

| | |
|---|---|
| | ■ Tailing management standard is updated to include latest best practices in tailing management. UNEP/ICMM Global Tailings Standard to be incorporated into Vedanta Standard during FY21. |
| **Operational risks** | |
| **Challenges in Aluminium and Power business** | **Risk direction: ◄►** |
| 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 utilization / evacuation. | ■ One of the impacts of the COVID-19 slowdown has been falling Aluminium LME prices, partly offset by lower alumina & carbon prices.<br>■ 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 FY21.<br>■ Local sourcing of Bauxite & Alumina from Odisha.<br>■ Jharsuguda facilities have ramped up satisfactorily.<br>■ Project teams in place for Ash pond, Red mud, railway infrastructure and FGD.<br>■ Dedicated teams working towards addressing the issue of new emission norms for power plants.<br>■ TSPL is engaging with all stakeholders regarding FGD matter.<br>■ Global technical experts have been inducted to strengthen operational excellence.<br>■ Continuous focus on plant operating efficiency improvement programme to achieve design parameters, manpower rationalisation, logistics and cost reduction initiatives.<br>■ Continuous augmentation of power security and infrastructure.<br>■ Strong management team continues to work towards sustainable low-cost of production, operational excellence and securing key raw material linkages.<br>■ Force majeure notice dated 29th March 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.<br>■ Talwandi Saboo (TSPL) power plant matters are being addressed structurally by a competent team. |

| **Discovery risk** | **Risk direction: ◄►** |
|---|---|
| Increased production rates from our growth-oriented operations place demand on exploration and prospecting initiatives to replace reserves and resources 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.<br>■ Appropriate organisation and adequate financial allocation in place for exploration.<br>■ Strategic priority is to add to our reserves and resources by extending resources at a faster rate than we deplete them, through continuous focus on drilling and exploration programme.<br>■ Exploration Executive Committee (Exco) has been established to develop and implement strategy and review projects group wide.<br>■ Continue to make applications for new exploration tenements in countries in which we operate under their respective legislative regimes.<br>■ Exploration-related systems being strengthened, and standardised group wide and new technologies being utilised wherever appropriate.<br>■ International technical experts and agencies are working closely with our exploration teams to enhance our capabilities. |

| Breaches in IT / cybersecurity | Risk direction: ◄► |
|---|---|
| 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.<br>■ Implementation and adoption of various best-in-class tools and technologies for information security to create a robust security posture.<br>■ Special focus to strengthen the security landscape of plant technical systems (PTS) through various initiatives.<br>■ 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.<br>■ Work towards ensuring strict adherence to the IT related SOPs to improve operating effectiveness and continuous focus for employees to go through mandatory cybersecurity awareness training.<br>■ 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 | Risk direction: ◄► |
|---|---|
| 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.<br>■ An external agency reviews the risk portfolio and adequacy of this cover and assists us in our insurance portfolio.<br>■ Our underwriters are reputed institutions and have capacity to underwrite our risk.<br>■ 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.<br>■ Continuous monitoring and periodic review of security function.<br>■ Continue to focus on capability building within the Group. |

| Cairn related challenges | Risk direction: ▲ |
|---|---|
| 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.<br>■ The applicability of the Pre-NELP Extension Policy to the RJ Block is currently sub judice.<br>■ Cairn team is engaging with stakeholders for PSC extension.<br>■ 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 LNG prices globally. However, in the month of May, the crude prices have started improving.<br>■ Discussions within teams as well as with partners have been initiated with an objective to optimise cost across all spheres of operations.<br>■ Constant engagement with vendors/partners to ensure minimal project delay based on the current situation and plan to ramp-up.<br>■ 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. |
| **Compliance risks** | |
| **Regulatory and legal risk** | **Risk direction: ◄►** |
| 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.<br>■ Business-level teams identify and meet regulatory obligations and respond to emerging requirements.<br>■ Focus has been to communicate our responsible mining credentials through representations to government and industry associations.<br>■ Continue to demonstrate the Group's commitment to sustainability by proactive environmental, safety and CSR practices. Ongoing engagement with local community/media/NGOs.<br>■ SOX compliant subsidiaries.<br>■ Common compliance monitoring system being implemented in group companies. Legal requirements and a responsible person for compliance have been mapped in the system.<br>■ Legal counsels within the Group continues to work on strengthening the compliance and governance framework and the resolution of legal disputes.<br>■ 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.<br>■ Standard operating procedures (SOPs) have been implemented across our businesses for compliance monitoring.<br>■ Greater focus for timely closure of key non-compliances.<br>■ 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.<br>■ Framework for monitoring performance against anti-bribery and corruption guidelines is also in place. |
| **Tax related matters** | **Risk direction: ◄►** |
| 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.<br>■ Continue to engage with concerned authorities on tax matters.<br>■ Robust organisation in place at business and group-level to handle tax-related matters.<br>■ 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 |

**Financial risks**

| Fluctuation in commodity prices (including oil) and currency exchange rates | Risk direction: ◄► |
|---|---|
| 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.<br>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.<br>■ Pursue low-cost production, allowing profitable supply throughout the commodity price cycle.<br>■ 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 & due approval from ExCo.<br>■ Our Forex policy prohibits forex speculation.<br>■ Robust controls in forex management to hedge currency risk liabilities on a back-to-back basis.<br>■ Finance standing committee reviews all forex and commodity-related risks and suggests necessary courses of action as needed by business divisions.<br>■ 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.<br>■ Notes to the consolidated financial statements in the Annual Report give details on the accounting policy followed in calculating the impact of currency translation. |

| Major project delivery | Risk direction: ◄► |
|---|---|
| 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.<br>■ Strong focus on safety aspects in the project.<br>■ Geo-technical audits are being carried out by independent agencies.<br>■ 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 BP and Growth targets.<br>■ Standard specifications and SOPs for all operations to avoid variability. Reputable contractors are engaged to ensure completion of the project on indicated timelines.<br>■ 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.<br>■ Stage gate process to review risks and remedy at multiple stages on the way.<br>■ Robust quality control procedures have also been implemented to check safety and quality of services/design/actual physical work. |

| Access to capital | Risk direction: ▲ |
|---|---|
| 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.<br>■ 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, FIIs etc.<br>■ Track record of good relations with banks, and of raising borrowings in last few years.<br>■ Regular discussions with rating agencies to build confidence in operating performance.<br>■ Business teams ensure continued compliance with the Group's treasury policies that govern our financial risk management practices.<br>■ KCM matter is being addressed through structured engagement with various stakeholders.<br>■ Credit matrix trending weaker due to challenging refinancing environment and volatility in commodity prices (COVID-19) is being addressed through structured initiatives.<br>■ Please refer consolidated financial statements for more details. |

# CONSOLIDATED INCOME STATEMENT

*(US$ million)*

| | | Year ended 31 March 2020 | | | Year ended 31 March 2019 (Restated)* | | |
|---|---|---|---|---|---|---|---|
| | **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)** | 10 | **(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

*(US$ million)*

| | 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 | (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 recognized 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

*(US$ million)*

| | Note | As at 31 March 2020 | As at 31 March 2019 |
|---|---|---|---|
| **Assets** | | | |
| **Non-current assets** | | | |
| Goodwill | | 12 | 12 |
| Intangible assets | | 100 | 108 |
| Property, plant and equipment | | 13,005 | 17,322 |
| Exploration and evaluation assets | | 240 | 404 |
| Leasehold land | | - | 63 |
| Financial asset investments | 12 | 12 | 707 |
| Non-current tax assets | | 354 | 504 |
| Other non-current assets | | 1,548 | 1,010 |
| Financial Instruments (derivatives) | | 0 | - |
| Deferred tax assets | | 1,114 | 778 |
| | | **16,385** | **20,908** |
| **Current assets** | | | |
| Inventories | | 1,515 | 2,060 |
| Trade and other receivables | | 1,102 | 1,504 |
| Financial instruments (derivatives) | | 93 | 11 |
| Current tax assets | | 1 | 1 |
| Short-term investments | 13 | 4,385 | 4,164 |
| Cash and cash equivalents | 14 | 705 | 1,133 |
| | | **7,801** | **8,873** |
| **Total assets** | | **24,186** | **29,781** |
| **Liabilities** | | | |
| **Current liabilities** | | | |
| Borrowings | 15(a) | 10,186 | 5,456 |
| Trade and other payables | | 5,719 | 6,878 |
| Financial instruments (derivatives) | | 13 | 66 |
| Retirement benefits | | 15 | 17 |
| Provisions | | 32 | 38 |
| Current tax liabilities | | 26 | 61 |
| | | **15,991** | **12,516** |
| **Net current liabilities** | | **(8,190)** | **(3,643)** |
| **Non-current liabilities** | | | |
| Borrowings | 15(a) | 4,909 | 10,524 |
| Trade and other payables | | 232 | 244 |
| Financial instruments (derivatives) | | 6 | 14 |
| Deferred tax liabilities | | 397 | 776 |
| Retirement benefits | | 22 | 71 |
| Provisions | | 356 | 371 |
| Non equity non-controlling interests | | - | 12 |
| | | **5,922** | **12,012** |
| **Total liabilities** | | **21,913** | **24,528** |
| **Net assets** | | **2,273** | **5,253** |
| **Equity** | | | |
| Share capital | | 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 | | 5,536 | **6,181** |
| **Total equity** | | **2,273** | **5,253** |

# CONSOLIDATED CASH FLOW STATEMENT

*(US$ million)*

| | 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 | 15(b) | 15,178 | 12,588 |
| Purchases of short-term investments | 15(b) | (15,460) | (11,949) |
| Proceeds from sale of financial asset investments | 15(b) | 428 | - |
| Payments toward financial asset investments | 15(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) | 15(b) | (1,604) | (90) |
| Proceeds from other short-term borrowings | 15(b) | 317 | 1,324 |
| Repayment of other short-term borrowings | 15(b) | (551) | (2,296) |
| Proceeds from long-term borrowings | 15(b) | 4,294 | 2,856 |
| Repayment of long-term borrowings | 15(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** | **14 & 15(b)** | **705** | **1,133** |

**Restated, refer note 1(b)*

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

## For the year ended 31 March 2020

*(US$ million)*

| | Attributable to equity holders of the parent | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Share capital | 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 | - | - | - | - | (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 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Share capital | 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 | - | - | - | - | - | - | (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 20 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 03 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 01 October 2018.

At the General Meeting of Vedanta shareholders held on 01 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 09 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 09 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 01 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 04 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 mechanization 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.

# NOTES TO ANNOUNCEMENT

## *1(a). General information and accounting policies*

This results announcement is for the year ended 31 March 2020. While the financial information contained in this results announcement has been prepared in accordance with the recognition and measurement criteria of International Financial Reporting Standards ("IFRS"), this announcement does not itself contain sufficient information to comply with IFRS. For these purposes, IFRS comprise the Standards issued by the International Accounting Standards Board ("IASB") and Interpretations issued by the IFRS Interpretations Committee ("IFRIC") that have been endorsed by the European Union. The financial information contained in the announcement has been prepared on the same basis of accounting policies as set out in the previous financial statements unless otherwise stated. The standards/amendments applicable with effect from 01 April 2019 did not have any significant impact on the amounts reported in the financial statements. The Company expects to publish full financial statements that comply with IFRSs in due course.

## *1(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.

## *1(c) 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 $150m 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 $2.5bn 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.$6.6bn, of which c.$2.2bn 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 $1bn. This shortfall could be increased by in excess of $2bn 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 $1.6bn, 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 $1.0bn from an operating entity of the Group to the Company. The Company currently has an agreement in place amounting to $475m for an intercompany loan from the operating entity. The Directors believe that the existing agreement provides a precedent demonstrating that an additional $525m 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 $0.2bn term loan and a syndicated $1.4bn term loan at Vedanta Limited level. The Group has received sanction letters indicating approval for loans amounting to a total of $0.9bn, 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 organizing the syndication of the remaining $0.7bn 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.$1bn. 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.$1.3bn and commercial papers in issue amounting to c.$1.0bn. 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.$1.4bn of supplier's credit and c.$1.0bn 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.

## 2(a) Compliance with applicable law and IFRS

The financial information contained in this results announcement has been prepared on the going concern basis. This results announcement does not constitute the Group's statutory accounts as defined in section 434 of the Companies Act 2006(the "Act") but is derived from those accounts. The statutory accounts for the year ended 31 March 2020 have been approved by the Board and will be delivered to the Registrar of Companies following approval by the Company's shareholders. The auditors have reported on those accounts and their report was qualified for not able to perform their planned procedures surrounding the observation of physical counts of inventory due to restrictions imposed by the Government of India in response to COVID19. Material uncertainty around going concern was also reported. This has been explained in detail in note 1(c) above. Except for the reason arising solely from the limitation on the scope of Auditors' work relating to inventory, their report did not contain statements under section 498(2) of the Act (regarding adequacy of accounting records and returns) or under section 498(3) (regarding provision of necessary information and explanations). The information contained in this announcement for the year ended 31 March 2019 also does not constitute statutory accounts. A copy of the statutory accounts for that year has been delivered to the Registrar of Companies. The auditors' report on those accounts was unqualified, with no matters by way of emphasis, and did not contain statements under sections 498(2) or (3) of the Companies Act 2006.

## 2(b) Application of new and revised standards

The Group has adopted, with effect from 01 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 01 April 2019. This standard introduces a single lessee accounting model and requires a lessee to recognize 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 01 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 recognized as an expense on a straight-line basis over the lease term.

### 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 would have been higher by US$ 561 million as on April 01, 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 01 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.

## 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 judgments 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 centers 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 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 are disclosed in note 6.

*(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 are disclosed in note 6.

*(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 are disclosed in note 6.

*(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 utilized. 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 10) 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.

*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 08 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 License 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 authorization 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 02 January 2019 challenging the judgement of NGT dated 15 December 2018 and the previously passed judgement of NGT dated 08 August 2013. The Supreme Court vide its judgement dated 18 February 2019 set aside the judgements of NGT dated 15 December 2018 and 08 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 08 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 Mar 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 07 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 03 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 upto 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-finalization 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 01 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 desulfurization (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 December 31, 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 December 31, 2019 deadline. CPCB vide notice published on its website, has imposed environment compensation penalty of ₹ 18 Lacs 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 March 31, 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 March 31, 2020. The Group has carried out an impairment analysis over the remaining book value of the mining and refining assets as at March 31, 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 March 31, 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 March 31, 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 note 4 and 5.

*(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.

*(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 judgment 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.

*(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 04 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 01 October 2018.

The bid cost of US$ 551 million represents Vedanta Limited's total committed capital expenditure on the blocks for the committed work programs 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.

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 onland 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 program 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.

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.

### *i. The profit/ (loss) from discontinued operations i.e. KCM:*

*(US$ million)*

| | 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)*

| | 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.*

### *iii. The carrying amount of assets and liabilities:*

*(US$ million)*

| | 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

### *iv. The profit/(loss) from discontinued operations i.e. KCM including loss on its deconsolidation has been presented below:*

*(US$ million)*

| | **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 recognized 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.

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)*

| Financial asset | Fair value at | | Significant unobservable Inputs | Relationship of unobservable inputs to fair value |
|---|---|---|---|---|
| | 31 March 2020 | 21 May 2019 | | |
| 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.<br>A 10% decrease in the probability of success, with no change to any other inputs, would decrease the fair value by US$ 80 million.<br>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.<br>A 10% decrease in the recovery percentage, with no change to any other inputs, would decrease the fair value by US$ 132 million.<br>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<br>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.<br>A 10% reduction in the copper price, with no change to any other inputs, would decrease the fair value by US$ 302 million.<br>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)*

| | 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)*

| | 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** |

| | 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).*

## 4. Segment information (continued)

### *(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)*

| | 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 | |
|---|---|---|
| | As at 31 March 2020 | As at 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 | **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 (FY 2018-19: US$ 31 million) which is recorded over a period of time and the balance revenue is recognised at a point in time.*

## 5. Total Revenue

*(US$ million)*

| | 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 | 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 (FY 2018-19: 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

February 01, 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 October 24, 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 recognized 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 contracts 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)*

| | Year ended 31 March 2020 | | | Year ended 31 March 2019 | | |
|---|---|---|---|---|---|---|
| | Special items | Tax effect of Special items | Special items after tax | 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 recognized 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 upto 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 upto 04 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 recognized 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 upto 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 recognized 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 recognized 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 01 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 07 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 07 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.

## 7. Investment revenue

*(US$ million)*

| | 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 (March 31, 2019: mark to market gain of US$ 149 million) relating to structured investment*

## 8. Finance costs

*(US$ million)*

| | 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 | 14 | 13 |
| Net interest on defined benefit arrangements | 3 | 3 |
| Special items (note 6) | - | (9) |
| Capitalisation of finance costs/borrowing costs | (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)*

| | 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)** |

## 10. Tax

(a) Tax charge/ (credit) recognised in Consolidated Income Statement (including on special items)

*(US$ million)*

| | 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)*

| | 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 |
| Unrecognized 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 recognized 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 upto 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).

## 11. 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)*

| | 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** |

## 12. Financial asset investments

Financial asset investments represent investments classified and accounted for at fair value through profit or loss or through other comprehensive income

***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 | (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.

## 13. 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.

## 14. 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.

## 15(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.

## 15(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), 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.*

## 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 & Amortization |
| EBITDA margin (%) | No direct equivalent | EBITDA divided by Revenue |
| Adjusted revenue | Revenue | Revenue<br>Less: revenue of custom smelting operations at our Copper India & Zinc India business |
| Adjusted EBITDA | Operating profit/(loss) before special items | EBITDA<br>Less:<br>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<br>Less: NCI share in other gains/(losses) (net of tax) |
| Project Capex | Expenditure on Property, Plant and Equipment (PPE) | Gross Addition to PPE<br>Less: Gross disposals to PPE |

| | | |
|---|---|---|
| | | Add: Accumulated Depreciation on disposals<br>Less: Decommissioning liability<br>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<br>Add: Dividend paid and dividend distribution tax paid<br>Add/less: Other non-cash adjustments |
| 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 summarized below. The same method is used to calculate the ROCE for all previous years (stated at other places in the report).

| **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 FY 2019 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).

| **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 01 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

**CO2**
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 1st 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

**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

**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

**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 license 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

**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