



We Are...
**GROWING
RESPONSIBLY**

VEDANTA RESOURCES LIMITED
INTEGRATED REPORT
AND ANNUAL ACCOUNTS
2018-19

Growing Responsibly

Vedanta Resources Limited is a globally diversified natural resources company with interests in zinc-lead-silver, oil & gas, aluminium, power, iron ore, steel and copper. We strive to make a positive all-round impact on the communities in which we operate, both as an employer and a contributor, and to leave a legacy of pride.





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We Are...

Committed to give back to the stakeholders who play a vital role in powering our growth. Reducing the social and economic divide by generating economic value, distributing wealth, investing in employees and enhancing standard of living are all key elements of our sustainability framework.

Forward-looking statements

Certain statements in this document constitute 'forward-looking statements' which involve known and unknown risks and opportunities, other uncertainties and important factors that could turn out to be materially different following the publication of actual results.

These forward-looking statements speak only as of the date of this document. The Company undertakes no obligation to update publicly, or release any revisions, to these forward-looking statements, to reflect events or circumstances after the date of this document, or to reflect the occurrence of anticipated events.

Operating responsibly and ethically is an integral part of Vedanta’s core values. We deliver on our commitments to all internal and external stakeholders by demonstrating these values through our actions, processes, systems and interactions. We constantly learn as we develop, and never stop looking to improve our operations. Throughout our successful expansion over the last three decades into many locations around the world, we have operated with integrity and uncompromised business ethics.



Main picture: Off shore facility of Oil & Gas

Inset: Diversity and inclusion are our core values

WHAT WE DO

We supply natural resources that help the world grow, focusing on the core product portfolio above. Our strategic capabilities and alliances are singularly focused on creating and preserving value for our wide stakeholder groups and our customers.

The Company has a portfolio of world-class, low-cost, scalable assets that consistently generate strong profitability and robust cash flows. We also enjoy industry-leading market shares across our core divisions.

As India’s only diversified natural resources group, we are uniquely placed to make a ‘home-grown’ contribution to the nation’s growth and to assist in its process of modernisation.

CORE PURPOSE AND VALUES

Since we first introduced Vedanta Values, they have become a vital part of our culture and an essential underpinning of our growth and success. Every person at Vedanta understands what is important – how we work together as a team and how ‘growth and sustainable development’ are at the centre of what we do. These are universal values, which guide us as we expand into new markets and countries.

Our people are empowered to drive excellence and innovation and we demonstrate world-class standards of governance, safety, sustainability and social responsibility. Our business was built with a simple mission envisioned by the Group’s Chairman, Anil Agarwal, “To create a leading global natural resource company.”

We also play an increasingly significant role in the society as we continue to create jobs, supporting our host communities through our various social programmes in the areas of childcare, health, education and women empowerment, generating value along our entire supply chain and contributing to the nation’s exchequer.

REPORTING THEME

In keeping with these values, our theme for this 2019 integrated report is ‘Growing Responsibly’. It builds on the previous year’s theme of growth, but also emphasises our commitment to sustainability – to the ecosystems we rely on, to our business and to our stakeholders, including employees and contractors, customers, communities, suppliers and to our host countries. This focus is in keeping with the scale of our operations and the expectations our stakeholders have from the organisation. It seeks to highlight our commitment to global movement to minimising ecological footprints, upholding human rights, and aligning business decision-making to the long term societal needs.

Vedanta at a Glance

Building a world-class portfolio

Large and diversified asset base of long-life, low-cost assets



ZINC | LEAD | SILVER



Businesses

- Zinc India (HZL)
- Zinc International

Production volume

Zinc India (HZL)

894kt

Silver: 21.8 million ounces

Zinc International

148kt

79% share of India's zinc market

EBITDA (US\$ million)

Zinc India:

1,516

Zinc International

100

Asset highlights

- The world's largest integrated zinc-lead producer
- The world's second largest zinc mine at Rampura Agucha, India
- 9th largest silver producer in the world
- Developing the largest undeveloped zinc deposit in the world at Gamsberg
- Zinc India has R&R of 403 million tonnes with mine life of ~25 years
- Zinc International has R&R of more than 434 million tonnes, supporting mine life in excess of 30 years

Application areas

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



OIL & GAS



Business

- Cairn India

Production volume

Average Daily Gross Operated Production

189kboepd

EBITDA (US\$ million)

1,100

Asset highlights

- Largest private sector oil & gas producer in India
- Operator of 25% of India's crude oil production
- Executing one of the largest polymer EOR projects in the world
- Footprint over a total acreage of c. 50,000 square kilometres
- Gross proved and probable reserves and resources of 1,195 mmbob

Application areas

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



ALUMINIUM



Business

- Aluminium smelters at Jharsuguda and Korba (BALCO), and Alumina refinery at Lanjigarh

Production volume

Aluminium

1,959kt

Alumina

1,501kt

EBITDA (US\$ million)

316

Asset highlights

- Largest installed aluminium capacity in India: 2.3 million tonnes per annum (mtpa)
- Strategically located large-scale assets with integrated power and an alumina refinery
- 37% market share among domestic primary aluminium producers

Application areas

- Primary use in automotive, building & construction, transportation and electrical industries
- Product portfolio includes ingots, wire rods, billets, primary foundry alloys and rolled products



POWER



Business

- Power plants at Talwandi Sabo, Jharsuguda and Korba

Sales volume

c. 14bn kWh

EBITDA (US\$ million)

219

Asset highlights

- One of India's largest power generators with 9GW diversified power portfolio
- TSPL is the largest thermal power producer in the state of Punjab
- 3.3GW of commercial power generation capacity, with balance for captive usage
- Leading producers of wind power in India; 96% thermal power and 4% from renewable energy sources

Application areas

- 63% is for captive use while 37% is used for commercial purposes; of which c. 95% is backed by long term Power Purchase Agreements with Indian distribution companies



IRON ORE & STEEL



Businesses

- Iron Ore India
- Electrosteel Steels Ltd.

Production volume

Pig Iron

686kt

Steel

1.2mn tonnes

EBITDA (US\$ million)

Iron Ore

90

Electrosteel

113

Asset highlights

Iron Ore

- Karnataka iron ore mine with R&R of 81 million tonnes, and life of 18 years
- Value added business: 3 blast furnaces (0.8mtpa), 2 coke oven batteries (0.5mtpa) and 2 power plants (60MW)

Steel

- Acquired in June 2018 under IBC process for an integrated iron ore and steel business
- Design capacity of 2.5mtpa;
- Largely long steel product

Application areas

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



COPPER



Business

- Copper India
- Copper Zambia

Production volume

Copper India

90kt

Copper Zambia

90kt Integrated

Copper Zambia

87kt Custom

EBITDA (US\$ million)

Copper India

(36)

Copper Zambia

(63)

Asset highlights*

- One of the largest copper producers in India
- Konkola Copper Mines is among the top five highest grade mines with c. 2.99% (KDMP)

* NB: The copper plant at Tuticorin has not been operational since March 2018

Application areas

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

Highlights 2018-19

FINANCIAL HIGHLIGHTS

- Revenue at US\$14.0 billion, 8% lower y-o-y (FY2018: US\$ 15.3 billion) driven mainly by shutdown of Tuticorin smelter partially offset by Aluminium business ramp up and ESL acquisition
- EBITDA at US\$3.4 billion, 14% lower y-o-y (FY2018: US\$ 4.0 billion)
- Robust adjusted EBITDA^o margin of 29% (FY2018: 35%)
- ROCE^o at 9.6% in FY2019 (FY2018: 14.3%)
- Free cash flow (FCF)^o post-capex of US\$1.2 billion (FY2018: US\$0.9 billion)
- Gross debt at US\$16.0 billion (FY2018: US\$15.2 billion), due to ESL acquisition and temporary borrowing at Zinc India
- Net debt^o at US\$10.3 billion (FY2018: US\$9.6 billion), primarily due to ESL acquisition
- Strong financial position with cash equivalents, liquid investments and structured investments of US\$5.7 billion (FY2018: US\$5.6 billion)
- S&P affirmed the ratings at B+ while revising the outlook to Negative in March 2019
- Moody's affirmed the Corporate Family ratings at Ba3 while revising the outlook to Negative in February 2019
- Highest ever contribution to the exchequer of c. US\$6.2 billion in FY2019
- In December 2018, the Group purchased an economic interest through a structured investment in the equity shares of Anglo-American Plc, from Volcan Investments Limited for a total consideration of US\$541 million. As of March 31, 2019, the transaction was positively marked to market by US\$137 million.

BUSINESS HIGHLIGHTS

Zinc India

- Record underground mined metal production at 936kt, up 29% y-o-y. Total mined metal production marginally down 1% y-o-y, post closure of open-cast operations
- Record lead metal production at 198kt, up 18% y-o-y
- Record refined silver production at 21.8 million ounces, up 22% y-o-y

Zinc International

- Commercial production commenced at Gamsberg in March 2019

Oil & Gas

- Average gross production of 189kboepd for FY2019, up 2% y-o-y
- 11 development drilling rigs as at March 2019, 99 wells drilled and 33 wells hooked up during FY2019 in Rajasthan
- Production Sharing Contracts (PSC) of Rajasthan and Ravva block extended for 10 years, subject to conditions
- Revenue sharing contract signed for 41 OALP blocks

Aluminium

- Record aluminium production at 1,959kt, up 17% y-o-y
- Record alumina production from Lanjigarh refinery at 1,501kt, up 24% y-o-y
- Q4 FY2019 hot metal cost of production significantly lower at US\$1,776 per tonne, lower by 12% q-o-q

Power

- Record PFA of 88% at the 1,980MW TSPL plant in FY2019

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 4.1 million tonnes, up 89% y-o-y

Steel

- Record annual steel production at 1.2 million tonnes for FY2019, up 17% y-o-y
- Achieved hot metal production run-rate of c. 1.5mtpa in FY2019

Copper Zambia

- Integrated metal production at 90kt, up 7% y-o-y
- Custom production at 87kt, down 22% y-o-y

Copper India

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



Above: Employees at Gamsberg

Left: Employee at operational site, Hindustan Zinc Limited



Above: HZL Employees

Right: Employee at operational site, Cairn Oil & Gas



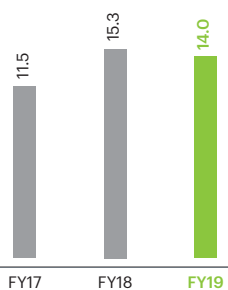
CONSOLIDATED GROUP RESULTS

(US\$ million, unless stated)

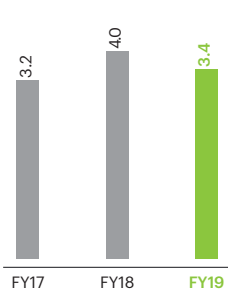
Particulars	FY2019	FY2018	% Change
Net Sales/Income from Operations	14,031	15,294	(8)
EBITDA	3,393	3,963	(14)
EBITDA Margin (%)	24%	26%	
Adjusted EBITDA margin ⁽¹⁾ (%) ^o	29%	35%	
Operating Profit before special items	1,911	2,692	(29)
Profit/(loss) attributable to equity holders of the parent	(237)	239	-
Underlying attributable profit/(loss) ^o	(226)	166	-
ROCE (%) ^o	9.6%	14.3%	

1. Excludes custom smelting at Copper India, Copper Zambia and Zinc India Operations.

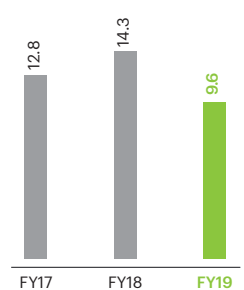
REVENUE (US\$ billion)



EBITDA (US\$ billion)



RETURN ON CAPITAL EMPLOYED (ROCE) (%)



Investment Case

Delivering returns and creating value

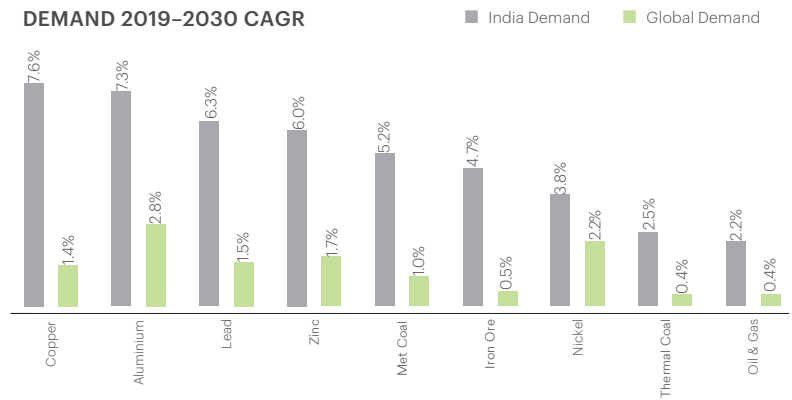
Our investment case is focused on delivering sustainable long term returns and creating value for our stakeholder. Natural resources constitute an important engine of growth for any economy and being India's only diversified natural resources company, we are very well placed to make a significant contribution to the nation's growth.

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

Vedanta's large-scale, diversified asset portfolio, with attractive cost positions in many of our core businesses, positions the Company well to deliver strong margins and free cash flows through the commodity cycle. Vedanta has an attractive commodity mix, due to its focus on base metals and oil – commodities with strong fundamentals and leading demand growth.

This fiscal year, markets have seen an upturn in the second half, driven by improved demand and continuing supply side constraints, which has benefited the commodities sector; in particular, Vedanta's core commodities including zinc, aluminium and oil & gas.

DEMAND 2019–2030 CAGR



Source: Wood Mackenzie

IDEALLY POSITIONED TO CAPITALISE ON INDIA'S GROWTH POTENTIAL

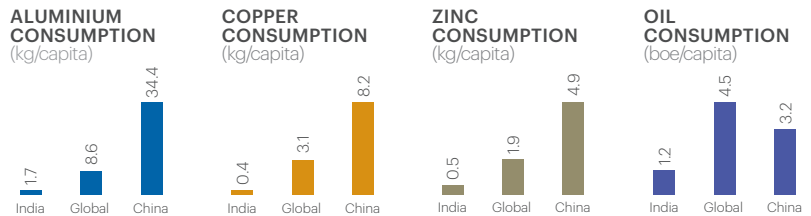
India is Vedanta's main market and one which has huge growth potential since current per capita metal consumption in India is significantly lower than the global average.

India's GDP is estimated to grow by 7.3% in 2019 and 7.5% in 2020. Urbanisation and industrialisation, supported by government initiatives on infrastructure and housing, continue to drive strong economic growth and generate demand for natural resources. India currently has a resources import bill of US\$465 billion, which offers huge opportunities for a diversified player such as Vedanta. The Indian government has recently announced various policy measures to support the metals, mining and oil sectors further making India an attractive operational ground.

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

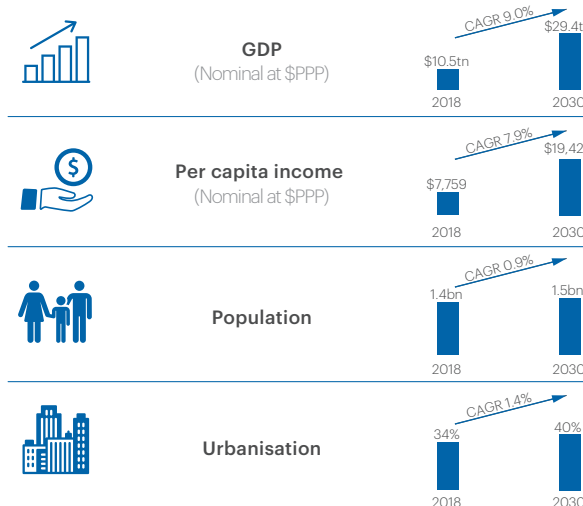
- A diversified portfolio of established operations in India;
- A strong market position being India's largest base metals producer and largest private sector oil producer; and
- An operating team with an extensive track record of executing growth in India

Commodity Demand Potential 2019



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

India's Growth Potential



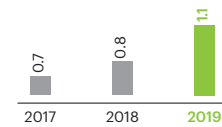
Source: IHS Markit, United Nations World Urbanization Prospects: The 2018 Revision

WELL-INVESTED ASSETS DRIVING CASH FLOW GROWTH

A significant proportion of our capital investment programme has been completed, and we are now ramping up production to take advantage of our expanded capacity. We have already started seeing the results of our investments, with Zinc India and Aluminium delivering record production in the past year, and we expect our Zinc International Gamsberg project to provide further impetus to our Zinc business going forward. In the Oil & Gas business, we have begun to implement

our growth projects with gross capex of over US\$ 3.2 billion, and this will enable us to increase volumes in the near term. These increases in production are leading to strong cash flow generation.

Growth Capex (US\$ bn)

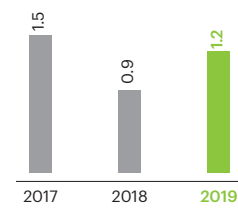


OPERATIONAL EXCELLENCE AND TECHNOLOGY DRIVING EFFICIENCY AND SUSTAINABILITY

We are consistently striving to improve our operations, integrate our businesses through the value chain and optimise our performance through operational efficiencies and innovative technological solutions.

We also employ these tools to ensure we operate sustainably and we are focused on delivering a positive impact for all our stakeholders and, more broadly, society as a whole.

FCF Post Capex (US\$ bn)



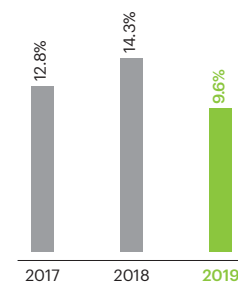
STRONG FINANCIAL PROFILE

Our operational performance, coupled with a strong focus on optimisation of capital allocation, has helped strengthen Vedanta's financial profile. In FY2019, our operational excellence, supported by the robust price environment, has helped us to deliver:

- Revenues of US\$14.0 billion and EBITDA of US\$3.4 billion
- Strong ROCE of 9.6%

- Refinancing and extension of our debt maturities through proactive liability management exercises
- Strong and robust FCF^o of US\$1.2 billion
- Cash equivalents, liquid investments and structured investments of US\$5.7 billion

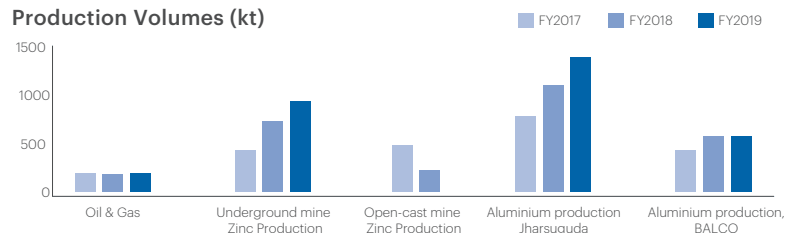
ROCE (%)



PROVEN TRACK RECORD

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

Production Volumes (kt)



CEO's Statement

We Are...

Registering a steady sustainable performance and setting a solid base for FY2020

I am pleased to table my first report to all our shareholders and other stakeholders for the year ending 31 March 2019. It was a year that saw the setting of new production records across some of our businesses, commissioning of a new zinc mine, efficiencies to mitigate cost pressures, growth projects being on track, an increase in our oil reserves and mineral resources and reserves and a healthy dividend to shareholders.



What I've found since joining, is a company with a strong purpose of giving back for the greater good, a track record of achievement, coupled with an equally strong sense of selflessness. Vedanta has always recognised that business and people are interdependent. We regard supporting our local communities, respecting our environments and sharing the collective fruits of our work as imperatives for our social licence to operate. This is an area where we recognise we need to improve and communicate better and these will receive added attention during the forthcoming year.

As we look forward to the year ahead, our three key businesses are well positioned. In the case of our Zinc, Lead and Silver business, we will see the benefit of increased volumes and therefore lower costs, augmented by our newly commissioned mine in South Africa. In Oil & Gas, we are India's largest private producer of crude, and rank with the world's lowest-cost producers with a production, development and exploration pipeline. In aluminium we offer India's largest production capacity, supported by our own captive power generation and we are increasingly integrating backwards for our own alumina.

We continue to consolidate our position as one of the largest diversified natural resource businesses in the world, positioned in commodities that have a growing demand in the largest, most stable and fastest growing democracies in the world. We operate long-life, high-growth, low-cost assets, and deliver consistent returns through the cycle. This set of strengths, together with our focused growth strategy, excellent talent, hunger for technology and modernisation, and an anchor shareholder who is committed to the long term, all combine to create a truly inspirational company.

SAFETY & SUSTAINABILITY

A life lost at work is a life too many and we are deeply saddened to report that we recorded fourteen fatal accidents in the Group.



Above: Our diverse workforce at Jharsuguda

Right: Facility at Lanjigarh

'Zero harm' is our non-negotiable safety tenet across all our operations at Vedanta, and we are determined to bring about a clear and measurable improvement in our safety record, and are ramping up a range of actions to achieve this. These include strengthening compliance and accountability; instilling a new culture of care in the field; and ensuring transparent reporting of incidents, near-misses and high impact potential incidents and consequence management.

For FY2020, we have also enhanced safety scorecards with the three focus areas of 'Visible Felt Leadership', managing safety critical tasks and better management of business partners. We have seen some improvement in the fourth quarter ended 31 March 2019, with no fatal accidents across the businesses, however, we also recognise that 'zero harm' is a journey and we continue to monitor this as a high priority.

Our initiatives on water, energy and carbon management progressed well during the year. We recycled 92% of the high-volume-low-effect-wastes such as fly ash, slag, red-mud and jarosite. We had set ourselves a target of reducing our greenhouse gas intensity by 16% by FY2020, against the baseline year of 2012. By the end of this year, we were on track to achieving our target and had reduced our GHG emission intensity by 14.5%.

We have strengthened our efforts on tailings dam management. We apply stringent steps to comply with all local environmental standards, ensuring that the water contained in this waste is treated and made safe before it can be discharged into local drainage systems. We have worked with independent industry experts to provide long term monitoring and advice

"Our key strategic priority is focusing on ethics, governance and our social licence to operate where we will continue our journey towards zero harm by ensuring greater levels of safety; an even gentler impact on our environments and resources; and even greater inroads into delivering healthcare, education, skills and quality of life where it is needed in our communities."

Srinivasan Venkatakrishnan
Chief Executive Officer

CEO's Statement

Continued

on the safe design, construction and operation of all our tailings facilities. I am happy to share that these efforts are resulting in further advances towards making our operations sustainable. For example, at Zinc India, instead of disposing of tailings in land-hungry surface pits, we have found a way to turn them into paste and use them for backfilling of empty underground voids. We have also rehabilitated one retired tailing dam into a haven of over 1.5 million trees, and another into a vibrant football academy for India's most promising young talent.

INDIA'S GROWTH: WE STAND READY

I believe there is no more exciting economy in the world than our own here in India. It is a nation teeming with opportunity and potential, as the country looks to modernise, expand and accommodate the rising aspirations of a growing population. Indeed, in just a decade from now, India is expected to be home to 1.5 billion people and have an economy worth US\$6 trillion.

This presents Vedanta, as India's only diversified natural resources group, with a unique opportunity to provide the vital commodities the country needs for infrastructure development, asset-creation, mobility, housing, consumer goods and general consumption.

The demand potential for our metals such as aluminium, zinc and steel, therefore, is immense.

Companies such as Vedanta will also be instrumental in addressing a major national mineral deficit: India currently imports around 80% of its oil and mineral needs. We stand ready to supply the 'home-grown' products that the nation requires.

POLICY AND REGULATION

Against this backdrop, we were naturally pleased to see a renewed focus by the government of India on the mining sector as an engine of economic growth.

Its National Mineral Policy (NMP), launched during the year, aims to increase mineral production in India by 200% and to reduce India's trade deficit in minerals by 50% in the next seven years. NMP introduces a more effective and meaningful policy, with more transparency and better regulation enforcement. A pro-growth ambition requires a pro-business environment, and the NMP will encourage private sector participation in exploration.

We have offered our suggestions to NITI Aayog in its deliberations on a new pathway for the regulatory framework for mining.

In a similar vein, we welcomed landmark policy reforms in the Oil & Gas sector,

aimed at raising domestic output and cutting imports, while also providing a smooth transition to cleaner fuels.

In South Africa, the revised Mining Charter III, announced by the Minister for Mineral Resources, addressed the needs of the country and provided very welcome certainty to the sector, and we support the efforts of the government in this regard. As evidenced during the formal inauguration of our Gamsberg mine by His Excellency, Cyril Ramaphosa, the President of the Republic, our project is in keeping with the spirit of the Charter.

BUSINESS PERFORMANCE & GROWTH OPPORTUNITIES

The year saw our three large businesses Zinc, Aluminium and Oil & Gas – which together represent 90% of the Group's EBITDA, achieve significant milestones which give us a strong base for the near-term targets we have set for these businesses.

Zinc: We are pleased with the transition Zinc India has made from open-cast to fully underground mining, with the latter increasing by 29% y-o-y. The increased silver production at our Sindesur Kurd mine has resulted in the business now being ranked 9th in the elite club of top 10 silver producers with a record production of 21.8 million ounces during the year, up 22% y-o-y.

We now look to build on that success in FY2020 to achieve the mined metal design capacity of 1.2 million tonnes and further ramp up the silver production. We are expecting these volume increases to also translate to unit cost reductions in the business.

The Company achieved a significant milestone in December 2018, when our flagship Gamsberg project in South Africa shipped out its first parcel of concentrate. It is now ramping up to its target MIC capacity of 250,000 tonnes. This new-age fully automated and digital mine will be a catalyst for the region's development and a significant contributor to Vedanta's earnings over the next 9-12 months.

Certainly, in FY2019 we took a step towards becoming the largest producer of the zinc in the world.

Oil & Gas: We continue to make progress on the various growth projects in the Oil & Gas business. We now have 11 development drilling rigs deployed, drilled 99 wells and hooked up 33 wells in Rajasthan during the year. We are aiming to grow this production base using better well reservoir management, enhanced recovery technologies that we have already

successfully piloted, bringing on line more new wells, augmenting our surface infrastructure to appropriate levels and adding further gas and off-shore production. We are keeping a careful lid on our lifting and discovery costs, which are some of the most competitive globally.

We won 41 blocks under the government's new OALP and are excited by the potential it offers to make Vedanta an even more significant contributor to India's domestic oil & gas production. The discovery of oil & gas in the two fields in the KG basin enhances our position.

During the year, we also received an extension of the Production Sharing Contract for the Rajasthan block till 2030 subject to certain conditions. We have now committed to a gross capex of US\$3.2 billion and we are partnering with international oil service providers to achieve our objective.

Aluminium: Despite cost pressures seen in the first half of FY2019, we are very encouraged by the many structural changes we have put in place in the Aluminium business to reduce the overall cost of production – increased Bauxite sourcing reducing our dependence on imported alumina, improved volumes from our alumina refinery, better coal availability, linkage and coal stock on hand and more efficient logistics. The business exited the year with coal linkage at 72% of its consumption and indigenous bauxite sourcing to address more than one-third of our yearly requirement. With this and the proposed ramp up of alumina refinery, I am certain that our target of Aluminium COP of US\$1,500 per tonne is achievable in the near term.

Steel: We are also pleased with the acquisition of ESL, which we completed in June 2018. The year has been transformational for them with production ramping up to 1.2 million tonnes for the year and with an exit run rate of c. 1.5 million tonnes and EBITDA margins of US\$115 per tonne.

Copper Zambia: The business continues to focus on process stabilisation. The turnaround actions required are understood and under way, and although there is much to be done, it remains a world-class asset with a 50-year mine life. It remains an integral part of our vision for the future. We are equally focused on enhancing the margins by optimising our cost through our cost programme "NATSUNGE - Let us Preserve"

At KCM, in line with our commitment to contribute towards the growth of the economy and sustainability, we undertake

We are pleased to report a healthy resources and reserves base across our businesses as follows:

Business	Reserves and Resources
Zinc India	403 million tonnes
Zinc International	434 million tonnes
Oil & Gas	1,195 mmmboe gross proved and probable reserves and resources
Copper Zambia	509 million tonnes

to constructively engage with all key stakeholders such as government, local communities, suppliers, employees and the shareholders in a respectful manner.

RESOURCES AND RESERVES

As a natural resource’s company, we are clear that the greatest value adding growth can come from our existing land positions. We are therefore sharply focused on the areas of exploration and conversion of resources to reserves, to more than offset depletion and create a long runway for our assets.

PEOPLE

Good results are, of course, the product of great people, and the energies and talents of our 88,500+ employees across locations truly came to the fore during the year.

During the year we were also pleased to announce a number of new appointments as we strengthened our leadership in the business units. Ajay Kapur was appointed as the CEO of our Aluminium and Power business, Christopher Sheppard as the CEO of KCM, Pankaj Malan as Deputy CEO of ESL and Pankaj Kumar, CEO of Sterlite Copper. Since the year-end, Ajay Dixit has been appointed as the CEO of our Oil & Gas business.

The new leadership team is excited to take Vedanta forward on its journey to deliver the best from its assets and create value added growth. Importantly, it is well supported by a deep bench-strength of talent that will see the new leaders emerge to fill the succession pipeline for later years.

I also express my sincere thanks to Mr. Kuldip Kaura for his valuable contribution to Vedanta as interim CEO and for a seamless handover.

OUTLOOK

Looking ahead to FY2020, we have in place the building blocks to enhance our performance in the three key businesses. We are excited by the prospects ahead

which include a ramp up in zinc, lead and silver production from Hindustan Zinc, the benefit of a full year’s production from our Gamsberg Zinc mine, increased production from our Oil & Gas business as the first phase of our projects come on stream and embedding the structural changes to our cost structure in our Aluminium business while improving volumes. For our Iron Ore business in Goa, we will continue to engage with and encourage the Central and State Governments to resume production given the benefits to all stakeholders. We regret the tragic loss of thirteen lives in the demonstrations in Tuticorin and we will continue to engage with the government, the relevant authorities, the courts and all stakeholders to enable the safe and supported restart of operations at the copper smelter at Tuticorin.

In our markets, we expect base metals prices to remain stable and to inch higher to catch up with demand supply inventory dynamics. The refined metal market for aluminium and zinc remains in short supply and hence we expect favourable conditions. Also, as the only diversified natural resources company in India, we expect to benefit from economic development in this region. The various policy moves in India are encouraging. The approval of the National Mineral Policy (NMP), 2019 is an important milestone in the liberalisation of the mines and minerals sector in India. The new licensing policy for awarding the oil blocks is also a positive move to develop this sector.

OUR STRATEGIC FOCUS AREAS FOR FY2020 WILL CONTINUE TO BE:

• **Ethics, governance and our social licence to operate**

Here we will continue our journey towards ‘zero harm’ by ensuring greater levels of safety; an ever-gentler impact on our environments and resources; and even greater inroads into delivering healthcare, education, skills and quality of life where it is needed in our communities.

• **Expanding our reserves and resource base**

Focused exploration to augment our long-life, low-cost assets by improving our land positions, growing our reserves and resource positions in our businesses by more than offsetting depletion and bringing on stream more discoveries.

• **Continued track record of delivering value adding growth**

Continuing to build on the track record of our three key businesses whereby the project pipeline is strong and projects are stress tested to deliver at least 20%+ returns off conservative price assumptions.

• **Strict capital allocation and balance sheet focus**

As managers of the business, we will follow strict capital allocation whilst keeping the balance sheet in sharp focus. Balance sheet is proactively managed with businesses having to earn their capital before spending.

• **Delivering the best out of our assets with the best teams and means**

Our business CEOs will remain focused on operational delivery and having the right management and teams in place to deliver. Asset planning, execution, operational excellence, cost control and reduction, productivity enhancements, improving realisations, risk mitigation, use of technology, innovation and digitalisation will all help us sweat our assets better to deliver enhanced performance.

Together with our Chairman, the Board, all our colleagues and business partners, I thank all our loyal shareholders for their continuing support and look forward to delivering another year of value adding growth.

Srinivasan Venkatakrisnan

Chief Executive Officer



Growing Responsibly Aluminium



Strengthening the
business through structural
cost reduction measures

Vedanta is the largest aluminium producer in India with a capacity of 2.3 million tonnes per annum (mtpa) and holds a 37% market share. It benefits from strategically located large-scale assets in the states of Chhattisgarh and Odisha, with integrated power from captive power plants.

Since the first hot metal tapping in March 2008, the aluminium smelting unit at Jharsuguda has come a long way to establish itself as the world's largest single-location smelter. With an installed capacity of 1.75mtpa, backed by two smelters – 0.5mtpa and 1.25mtpa (SEZ) – and two power plants with a combined capacity of 3,615MW, it boasts a run rate of over 1.3mtpa. BALCO operates through its plant at Korba in Chhattisgarh with a smelter capacity of 0.57mtpa and power generation capacity of 2,010MW. The state-of-the-art alumina refinery at Lanjigarh feeds the aluminium smelters at Jharsuguda and BALCO and forms a crucial link in the value chain. It is one of the world's largest, one-site integrated alumina refining complexes with a current capacity of ~2mtpa that can be ramped up to 6mtpa.

The production capability of the smelter and refinery has been significantly enhanced in the last few years. With the ramp up of both smelters, aluminium production has more than doubled from ~0.8 million tonnes in 2014 to ~1.96 million tonnes in 2019. Alumina production has increased from ~0.9 million tonnes in FY2016 to 1.5 million tonnes in FY2019 due to debottlenecking of the refinery operations.

With the boost in production capability, both raw material security and backward integration take on the utmost importance for stable operations at optimal cost. All the assets have been configured to be fully integrated operations – from bauxite ore reserves, secured coal and energy sources, and captive alumina refinery and power plants.

37% MARKET SHARE

2.3mtpa
capacity



FY2019 was a transformational year in this direction. On the alumina front, it was an exceptional year for Lanjigarh refinery with the unit achieving its highest-ever production of 1.5 million tonnes, 24% higher than FY2018. Production loss mapping across various stages of the refinery and relentless focus on plant maintenance helped to improve productivity significantly.

On the refinery feedstock, multiple bauxite sources were reduced to three to four sustainable sources, selected due to geological similarities, supplemented with the advent of a fresh supply of locally sourced bauxite meeting around 1/3rd of our requirement. With a strong national mineral policy focusing on increased production to feed the 'Make in India' initiative, we expect further growth in bauxite production and the auction of bauxite blocks as per the MMDR Act 2015. This will ensure sustainable refinery operations at the optimal cost structure.

The efforts on improvement in operational efficiency, coupled with robust bauxite sourcing, resulted in a substantial reduction in captive alumina cost from US\$358 per tonne in Q2 FY2019 to US\$290 per tonne in Q4 FY2019.

Power is another key input in the Aluminium production process. Significant strides have been made to improve the coal security for our captive power plants. With our Chotia mines operational and Tranche IV sourcing, our coal security increased to 72% from 49% in the last two quarters.

With strong bauxite supply and coal linkages to back the raw material needs, the focus will be on further improving our operational and supply chain efficiencies, driving profitability and growth in the business and achieving the goal of US\$1,500 per tonne for cost of production. These milestone strides take Vedanta closer to fulfil its vision of being the largest low-cost manufacturer of aluminium.

Main Picture: Aluminium smelter at BALCO
Inset: Employees at operational site, BALCO



Electrosteel Steels (ESL): A turnaround success story



Vedanta has long used its experience to identify the unfulfilled potential in other businesses. Hindustan Zinc, BALCO and Cairn Oil & Gas are all examples of enterprises that have achieved exceptional growth since their acquisition by Vedanta.

In June 2018, Vedanta acquired a 90% stake in ESL, a primary producer of steel and downstream value-added products.

The business was acquired under the Insolvency and Bankruptcy Code (IBC) 2016, in line with the Resolution Plan approved by Honourable National Company Law Tribunal (NCLT), Kolkata. The acquisition was made for a consideration of c. US\$0.8 billion, paid upfront for a 90% stake. Following the deal, the company was delisted from the Indian Stock Exchange and is now owned by Vedanta Limited through Vedanta Star Limited.

ESL's manufacturing facility is a greenfield integrated steel plant located near Bokaro, Jharkhand, India, which has a current capacity of 1.5mtpa and the potential to increase to 2.5mtpa. It consists primarily of two sinter plants, a coke oven, two basic oxygen furnaces, a steel melting shop, a wire rod mill, a bar mill, a power plant and a ductile iron pipe plant.

Prior to the acquisition, the production capacity for the business was about 1mtpa, with around 22% of its output comprised of primary products such as pig iron and billets. This was mainly due to a sub-optimal use of assets, weak liquidity and limited working capital that resulted in an inadequate availability of resources.

Since June 2018, in the 10 months of Vedanta's ownership in FY2019, the business has seen consequential improvements leading to a healthy financial position. There have been significant gains in operational efficiencies, such as a substantial reduction in the coke rate at blast furnaces 2 & 3 by about 3% and 7%, respectively y-o-y; optimisation of the coal mix and iron ore blending; and improved yields of the finishing mill to 96.7% (from 95.9% in FY2018).

Initiatives on commercial excellence by leveraging Vedanta's strong market presence, as well as best practices using the broader technical experience and expertise of the Group, have yielded exceptional results. This has been well supplemented by an internal cost optimisation drive and focus on value-added products. Consistent and reliable execution of the business strategy by encouraging partnership through leadership further accelerated the turnaround.

With operations completely revamped, FY2019 has seen record production levels. The business achieved a run rate of c. 1.5mtpa in Q4 FY2019. The production ramp up and other operational efficiencies have resulted in a record EBITDA margin for the business, improving from US\$53 per tonne in FY2018 to US\$122 per tonne in Q4 2019.

These achievements, underpinned by a strong emphasis on safety practices, position ESL well to become a significant player in the Indian steel sector.

POTENTIAL TO INCREASE TO

2.5mtpa

capacity



Main picture: ESL's operating facility
Inset: DI pipes produced by ESL



Growing Responsibly

Oil & Gas

Fuel for change: Growing to meet India's demand





An essential element in any nation’s prosperity is its ability to create its own energy.

And yet, 80% of oil consumed in India is currently imported. As one of the world’s fastest growing economies, this dependence on imports needs to be reduced in order to foster sustainable growth.

At Vedanta, we are passionate believers in India’s potential, and in our position to help the nation achieve it. Indeed, our vision is to contribute half of the total oil produced in India. Over the next few years, we aim to increase production from today’s 200kboepd to 300kboepd. This will lay the foundations to achieve 500kboepd in the long term, with reserves of three billion barrels of oil equivalent.

Main picture: Mangla Processing Terminal, Barmer
Inset: Employees at operational site, MPT, Barmer

Our targets are unashamedly ambitious, but we have a robust road map and are focusing our energies and resources on two fronts:

MAJOR CAPEX INVESTMENT

We intend to increase volumes from our prolific operating blocks through gross capex investment of over US\$3.2 billion, awarded on an integrated basis in partnership with global oil field service companies. This includes investment of US\$2.8 billion in development projects to add reserves of around 400 million barrels. These projects comprise a rich portfolio of enhanced oil recovery, tight oil, tight gas and facility upgrade activity. Execution has already started on the ground, meaning we can look forward to a quantum leap in volumes in the near term. In addition, we are allocating exploration capex of US\$400 million in the prolific Barmer Basin and KG offshore. The target is to add over one billion barrels of oil equivalent to our resource base.

SCALING UP BASIN EXPLORATION

We intend to increase significantly our exploration efforts across the basins in India through participation in the OALP and DSF (Discovered Small Fields) rounds, initiated by the Government of India. The acquisition of 41 blocks in the OALP bid has established Cairn as one of the largest private acreage holders in the country, with a ten-fold jump in acreage from ~ 5,000 to ~ 55,000 sq. km. These blocks have prospective resource bases of ~1.4 – 4.2 billion boe. Over the next 2-4 years, we have a work programme commitment of US\$550 million, comprising seismic acquisition and the drilling of over 150 exploratory wells.

LONG TERM VISION TO ACHIEVE

500

kboepd

production



Growing Responsibly

Copper

The Tuticorin smelter: State-of-the-art and ready-to-serve



The Tuticorin copper smelter, operated by Vedanta’s Sterlite Copper business, is located in Thoothukudi in the state of Tamil Nadu.

It ranks as one of the largest custom copper smelters in India and is among the most prolific producers of copper rods in the country. With a design capacity of 400,000 tonnes, the business held a 33% market share of the country’s refined copper demand of around 675,000 tonnes in FY2018. The facilities include a custom smelter, a refinery, a phosphoric acid plant, a sulphuric acid plant and a copper rod plant.

The plant is equipped with comprehensive air pollution control measures and robust solid waste management systems and facilities. It has also been able to claim ‘zero liquid discharge’ since inception; all the effluent is treated and recycled back into operations. The solid waste from effluent treatment plants is disposed in secure landfill, designed in accordance with Central Pollution Control Board guidelines. The smelter’s water consumption is the second lowest in the world at 6.0m³/mt of cathode. With a 20% reduction in specific water usage since FY2014, it has been recognised over recent years for its excellence in water efficiency by FICCI, UNESCO, CII and other organisations. Emissions of sulphur dioxide are well below the prescribed standards and are at par with several European and Japanese smelters. With the continuous endeavour to conserve energy, the plant ranks at No. 7 in energy intensity among global smelters.



The business has spent over US\$74.5 million on environmental mitigation. In particular, flue gas desulphurisation units with bag filters and modern technology-based reverse osmosis plants and evaporators are among several state-of-the-art environmental protection measures.

Since March 2018, the plant has been shut by order of the Tamil Nadu State Government. The Company challenged the closure order through an appeal before the National Green Tribunal (NGT). Following the appeal, a three-member independent committee, set up by the NGT, set aside an order for closure by the Tamil Nadu Pollution Control Board. The NGT ruled that the order for closure by the Tamil Nadu Government was ‘non-sustainable’ and ‘unjustified’. The matter is currently being heard before the Madras High Court as per the directions of the Supreme Court.

Reaffirming the commitment to the local people of Thoothukudi, the Company has announced an INR 100-crore investment in social infrastructure plans. The vision includes a clean and green community with the planting of one million trees, high-quality education delivered through a fine and well-equipped school, a world-class hospital, a desalination plant and youth development schemes.

The Company remains continuously engaged with the local community and would like to prosper with them.

Main picture: Copper rods

Inset: Thoothukudi copper smelter

DESIGN CAPACITY OF

400,000
tonnes



Growing Responsibly

Zinc

HZL: Partnering the state to manage its sewage



Hindustan Zinc, India's largest integrated zinc-lead-silver producer, is proud to be a corporate citizen of Udaipur, which has been shortlisted as one of India's 'Smart Cities'.

The Company has always maintained high environmental standards, pioneering the adoption of clean, green technology in running its operations. In particular, saving water has been a special focus area.

In 2014, the Company commissioned a 20 million litre per day (MLD) sewage treatment plant (STP) to ensure Udaipur's lake remained free of sewage inflow pollution. The plant, which was the first of its kind to be built by an innovative public-private partnership, also developed an alternative source of potable water.

In June 2017, the plant's success led to an agreement to build a second STP project – with double the capacity at 40 MLD. The development was greeted with widespread local approval and today, 25 MLD of this extra capacity will be commissioned by Q1 FY2020. Two further decentralised sewage treatment plants, with a combined capacity of 15 MLD, will complete the project.

The STP is a fully automatic plant and uses hydraulics to minimise power consumption. The entire system is environmentally friendly with no hazardous waste generated during treatment. In total, the plant will treat 60 million of Udaipur's 70 million litres of daily sewage, conserving water and taking crucial steps towards 'zero-discharge' into the locality's lakes.



STP TO TREAT

60 million

of Udaipur's 70 million litres of daily sewage

Main picture: Dariba Smelting Complex at night
Inset: CSR Initiative at HZL

Materiality Matrix

Identifying material concerns

Continuous engagement with our internal and external stakeholders enables us to identify the relevant issues for each group and to take the temperature on the expectations they have of the Company. The views of our stakeholders serve as important input to our management group, to help it identify the material issues for the Company.

The materiality matrix compiled from the results of this engagement is presented below:

Critical importance	High importance	Average importance	Low importance
Policies and actions to restrict unethical business practices	Leadership development and talent management	Public policy and advocacy	Local hiring and content
Rights of indigenous peoples and human rights	Disclosure on slavery and human trafficking	Diversity and equal opportunity	
Employee health, safety and well-being	Transparency in reporting on revenue and production figures	Broader economic benefit to host country	
Community engagement and development initiatives	Labour rights and industrial relations	Responsible supply chain management	
Ethics and integrity – compliance with Code of Conduct	Community health and safety		
Environmental management (water management, waste management, air emissions and quality control, biodiversity management, environmental incidents management)	Energy management and climate change		
	Mine and site closure plans		
	Employee retention		
	Tax transparency and reporting		



Above: Community health initiative at Vedanta

Right: Building talent through teamwork at BALCO

During the year, we continued our efforts to improve our systems and their performance in all the key issues identified in the matrix through our Sustainability Framework.



Our Six Capitals and Stakeholder Value Creation
Growing responsibly

The capitals we draw upon
to operate and create
sustainable value



Left: Building a culture of best practices at HZL

OUR SIX CAPITALS



FINANCIAL CAPITAL

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



NATURAL CAPITAL

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



HUMAN CAPITAL

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



INTELLECTUAL CAPITAL

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



SOCIAL AND RELATIONSHIP CAPITAL

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



MANUFACTURED CAPITAL

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

CREATING VALUE FOR ALL OUR STAKEHOLDERS



For shareholders
A return on investment



For employees
A safe and inclusive work environment



For communities
Investment in health, education and local businesses



For governments
Generating economic value



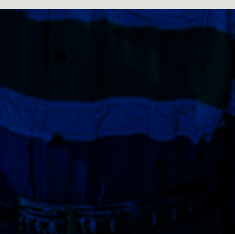
For suppliers, customers and service providers
Building long term partnerships



For civil society
Delivering sustainable growth



Further Information on our stakeholders
See pages 47-49



Our Business Model

Value creation model

Our business model provides an overview of how Vedanta employs the six capitals to create long-term, sustainable value for its key stakeholders. It is based on the International Integrated Reporting Council's Integrated Reporting framework

INPUTS



Financial Capital

Net worth
US\$5.3 billion

Gross debt
US\$16.0 billion

Capex^o
US\$1.1 billion

Cash and cash equivalents
US\$5.7 billion



Natural Capital

R&R - Zinc India
403 million tonnes, containing 34.6 million tonnes of zinc-lead metal and 965 million ounces of silver

R&R - Zinc International
434 million tonnes, containing 24.4 million tonnes of zinc-lead metal

R&R - O&G
1,195 mmmboe gross proved and probable reserves
Energy consumption:
554 million GJ

Water consumed
278.6 million m³
Coal used:
32 million tonnes



Human and Intellectual Capital

No. of employees, including contractors
88,979

HSE employees including contractors
1,322

Safety training (hrs)
1.46 million

No. of geologists, including contractors
224

Technology used

O&G

- World's largest Enhanced Oil Recovery polymer flood project in Mangala Field
- New-age technology of High Density Multi Stage Fracturing in horizontal transverse wells – first in India

Zinc International

- 'Smart Ore' a digital concept providing end to end solution of mine performance and mine condition

Zinc India

- Autonomous machines for 24x7 mining at SK mine & Remote controlled LHD for ore hauling

Aluminium

- Parameters defined for Category 'A' pots based on power consumption, Fe content



Social and Relationship Capital

Community investment
US\$45 million

Rated by two global rating agencies – Moodys and S&P

Strong network of
25 global and domestic relationship banks



Manufactured Capital

PP&E
US\$17.7 billion

- Expansion of smelting/ mining capacities in Zinc India and Zinc International

- Debottlenecking of smelters at Zinc and Alumina refinery

- Oil & gas projects in progress to increase production volumes



WHAT WE DO

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



Explore

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



Develop

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



Extract

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



Process

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



Market

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



Restore

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



Strategic framework
See pages 30-33

OUTPUTS



Financial Capital

Turnover
US\$14.0 billion

EBITDA
US\$3.4 billion

Adjusted EBITDA margin^o
29%

ROCE
9.6%

FCF post capex^o
US\$1.2 billion



Natural Capital

Water recycled
24%

Water savings
3 million m³

High-volume-low-effect
Waste recycled %
92%

GHG emitted
58.6 million tCO₂e

Fly ash utilisation rate
110%



Human and Intellectual Capital

Total remuneration wages & incentives paid
US\$576 million

Attrition rate
5.86%

Diversity ratio
10.36%

LTIFR
0.47
per million man hours worked



Social and Relationship Capital

Dividends royalty and taxes paid to governments
c. US\$6.2 billion

No. of people reached by our CSR programmes
3.1 million

Youth provided with vocational skills to find employment
3,600+

No. of Nand Ghars (women-child welfare centres) operational
502



Manufactured Capital

Record production at Aluminium, ESL business and Zinc India underground mines

Production target for three main businesses

Zinc India
Zinc
c. 1.0 mtpa

Silver
750-800 tonnes

Zinc International
Scorpion and BMM
>170kt

Gamsberg
180-200 kt

Oil & Gas
Gross volume
200-220 kboepd

Aluminium
Alumina
1.7-1.8 mtpa

Aluminium
1.9-1.95 mtpa

Strategic Framework and Focus Areas for Short and Long Term

Framing our strategy while addressing the material concerns of our stakeholders

Strategic priorities



Continued focus on world-class ESG performance

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

FY2019 update

- 14 fatalities occurred in the fiscal year
- Average score of 61% achieved in six safety performance standards
- LTIFR reported at 0.47
- Achieved water savings of 3 million cubic metres
- Achieved c. 14.5% reduction in GHG intensity over baseline of 2012
- Achieved energy saving of 1.6 million GJ
- Audits completed on our tailing management practices; recommendations under consideration
- Completed baseline and social impact assessments in all businesses
- ~110% of the generated fly ash is being utilised
- 358 Nand Ghars constructed this year, taking the total to 502
- 100% of new hires trained on Code of Conduct training
- On gender diversity, 12.5% of Vedanta board is female
- Focus on right management in place in each SBU with 41 SBUs in place, each is led by SBU president. SBU Management-in-place is regularly reviewed by Group Chairman and Group ExCo



Augment our Reserves & Resources (R&R) base

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

Zinc India

- During the year, gross additions of 5.4 million tonnes were made to Reserve & Resource (R&R), prior to depletion of 13.8 million tonnes
- Combined R&R were estimated to be 403 million tonnes, containing 34.6 million tonnes of zinc-lead metal and 965 million ounces of silver
- Overall mine life continues to be more than 25 years

Zinc International

- Combined mineral resources and ore reserves estimated at 434 million tonnes, containing 24.4 million tonnes of metal

Oil & Gas

- PSC extension (subject to conditions) received in Rajasthan taking our probable reserve base (2P reserves) to 567 mmboe
- Awarded integrated contracts for exploration in the prolific Barmer Basin, Ravva and KG offshore with a target to add over 1 billion barrels of oil equivalent to our resource base
- Announced gas and oil discovery in the first and second exploratory well in KG Basin in the east coast of India
- Acquired 41 blocks in OALP Round I bid spread over an acreage of c. 50,000 sq. km with a prospective resources base of ~1.4 – 4.2 bn boe, establishing Vedanta as one of the largest private acreage holders in the country

Copper Zambia

- Increased mineral resource by 4.6Mt at Luano deposit
- Established first digital model of the Nampundwe pyrite deposit



Delivering on growth opportunities

Description: We are focused on growing our operations organically by developing brownfield opportunities in our existing portfolio. Our large well diversified and long-life asset portfolio offers us attractive growth opportunities, which are evaluated based on our return criteria for long-term value enhancement of the Company.

Zinc India

- Ramp up of underground mines delivered mined metal production at 936kt, 29% higher y-o-y and offsetting the closure of open-cast operations last year
- The announced mining projects are nearing completion and expected to reach 1.2 million MT per annum of mined metal capacity in FY2020

Zinc International

- Achieved the milestone of Gamsberg zinc project commissioning; despatched first shipment in December 2018
- 41mt rock moved during the year, including pre-stripping and healthy stockpile of 1.0mt built for smooth feed to plant

Oil & Gas

- Integrated contracts have been awarded to global oilfield service providers such as Halliburton, Schlumberger, Petrofac and GE-Baker Hughes, to be executed in a span ranging from one to three years to achieve a near-term target of 300kboepd
- Gas production ramp up through early production facility commenced; peak rate of 90 mmscf/d expected in Q1 FY2020
- Revenue-sharing contracts for 41 exploration blocks awarded through OALP 1, and two discovered small satellite fields secured in DSF (Discovered Small Fields) round-II

ESL

- Completed the acquisition of ESL to further our plans on iron ore business

Copper Zambia

- Initiated projects for Cobalt/Copper separation, Heap Leach, Elevated Temperature Leach Phase-II, Permanent Cathode and New Refinery at Nchanga

Objectives for FY2020

- Achieve score >75% in ten safety performance standards
- Zero fatal accidents and an LTIFR of 0.30
- Achieve water saving of 3.5 million cubic metres
- Achieve fly ash utilisation of 80%
- Reduce our GHG emissions intensity by 16% from a 2012 baseline by 2020
- Achieve energy savings of 1.95 million GJ
- Third-party review of tailings/ash dyke management system and development of site specific improvement plan (India operations)
- Ensure alignment of all BU plans with issues identified during baseline surveys
- 1,200 Nand Ghars to be constructed in FY2020
- Roll out of employee engagement platform across the Group
- A standard online community grievance record/redressal software (NIVARAN) across the Group
- Continue to focus on Code of Conduct training for all professional employees, including new hires
- Achieve 33% female representation at Vedanta Board-level by 2020.
- Diversity % improvement in our campus hiring programme by 5%
- Ensuring right ExCo & succession for each business

KPIs

- LTIFR
- CSR footprint
- Gender diversity

Risks

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

- O&G: start exploration in 41 blocks awarded through first round auctions under OALP
- O&G: further appraisal at KG Basin to establish its size and commerciality
- On O&G: high ranked prospects are being taken up for drilling of wells across our assets
- Participate and fulfil the government’s vision of tripling the mineral sector output over seven years as announced under New Mineral Policy
- On metals: continue to build R&R base and generate new green field targets for our commodities/metals

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

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

Zinc India

- Ramp up underground mines to 1.2 million tonnes MIC per annum design capacity
- Planning for the next phase of expansion from 1.2 to 1.35mtpa mined metal capacity announced in April 2018 is underway

Zinc International

- Ramp up Phase-I production in H1 of FY2020
- Carry out a project study for Swartberg Phase-II and Gamsberg Phase-II to extend the life of the Black Mountain complex
- Complete the feasibility study for an integrated smelter-refinery with 250ktpa metal production

Oil & Gas

- Evaluate further opportunities to expand the exploration portfolio through OALP and other opportunities
- Execute growth projects within schedule and cost

Copper Zambia

- Focus would be on capital ranking of the projects and early execution for long term value creation

- Revenue
- ROCE
- FCF post-capex^o
- Growth capex^o

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

Strategic Framework

Continued

Strategic priorities



Optimise capital allocation and maintain strong balance sheet

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

FY2019 update

- FCF improvement from US\$0.9 billion to US\$1.2 billion, up 29% y-o-y
- Net debt^o (Refer note 22(b) of the financial statements) increased from US\$9.6 billion to US\$10.3 billion, primarily due to Electrosteel acquisition
- ND/EBITDA at 3.0x on a consolidated basis



Operational excellence

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

Zinc India

- Underground mined metal production at 936kt, up 29%; total mined metal production down 1%, despite closure of open-cast operations
- Record refined lead metal production at 198kt, up 18%
- Record silver production at 21.8 million ounces, up 22%
- Underground crusher and production shaft were commissioned for 3.75mtpa at Sindesar Khurd
- New mills commissioned at SK and Zawar taking milling capacity to 6.2mtpa and 4.7mtpa, respectively
- At RA mines, the second paste fill plant was commissioned ahead of schedule during Q4

Zinc International

- Pre-stripping of Pit 112 completed as per mine plan

Oil & Gas

- 11 development drilling rigs as on March 2019, 99 wells drilled and 33 wells hooked up in Rajasthan during the year
- Production from the offshore assets stood at a combined 32,881boepd, higher by 19% y-o-y, supported by gains from the Cambay infill campaign
- Gas production increased by 37% to 63.5 Mmscfd due to debottlenecking of existing facilities
- Signed an agreement with GSPL India Gasnet Limited for constructing eighteen-inches diameter pipeline connecting Raageshwari Gas Terminal to Pali and thereon connecting Mehsana to Bhatinda to Palanpur
- 4 wells were fracked in RDG field, including the hi-way frack technique enabling connection to more reservoirs, leading to improved production and recovery of the field
- Proactive geo-steering with the state-of-art LWD tools having advanced bed boundary detection capabilities was used. Successfully placed 370m lateral section in FM3 clean oil zone, which resulted in well going online with production ~ 10kboepd
- Volume enhancement through e-line campaign with innovative paraphernalia of advanced robotic tools in Ravva
- Completed well preparations works for the CB/OS-2 drilling campaign with rigless intervention methods for the side-track wells leading to significant saving of rig time and lower cost

Aluminium

- Record aluminium production at the smelters at 1,959kt, up 17% y-o-y
- Record alumina production from Lanjigarh refinery at 1,501kt, up 24% y-o-y due to debottlenecking of the refinery
- Locally sourced bauxite of ~1.3 MT during the year; alumina CoP flat y-o-y at US\$322/T despite higher caustic and imported bauxite cost
- 3.2mtpa of coal linkages added during FY2019 from Tranche IV auctions, taking our coal security to 72%
- Significant improvement in coal materialisation in Q4 FY2019, resulting in no power imports from the grid in last 4 months of FY2019
- FY2019 exit CoP for aluminium was less than \$1,800 per tonne

Steel

- Record steel production at 1.2mtpa, up 17% y-o-y, as a result of improved plant availability and optimum utilisation. Exited with a run rate of c. 1.5mtpa
- FY2019 EBITDA margin of 19% was among the sector leaders in India

Copper and Iron Ore

- Karnataka production at 4.1 million tonnes, up 89% y-o-y
- Continued engagement with the government and local communities to restart operations at Goa and Tuticorin
- Copper Zambia: Focussed approach on industrial architecture, process stabilisation and growth projects to drive all of KCM's strategic business priorities with clear understanding of turnaround actions. Cost programme 'NATSUNGE - Let us Preserve' underway to enhance the margins by optimising the cost

Objectives for FY2020

- Generate healthy free cash flow from our operations
- Disciplined capex across projects to generate healthy ROCE
- Improve credit ratings
- Reduce working capital

KPIs

- FCF post-capex^o
- ND^o/EBITDA (Consol)
- EPS (before exceptional items)
- Interest cover ratio
- Dividend

Risks

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

Zinc India

- Achieve significantly higher production for both mined and finished metal at c. 1.0 million tonnes
- Ramp up silver production to 750-800 tonnes
- Achieve cost of production for zinc as < 1,000/mt
- Debottleneck and expand smelting capacity to maintain mines/smelter synergies at higher levels of production

Zinc International

- Production of Scorpion @ 110kt & BMM at 60kt
- Gamsberg production to ramp up to 180-200kt

Oil & Gas

- For FY2020, with the surge in drilling activities and well hook up, production volumes to be 200-220 kboepd
- Control opex at c. \$7.5/boe

Aluminium

- Production at Lanjigarh refinery of 1.7-1.8 million tonnes, with aluminium production at smelters remaining stable at 1.9-1.95mtpa
- Reduce the aluminium COP, with a target of \$1725-1775/T
- Improve coal linkage security further and ensure better materialisation and continued production at our Chotia mines
- Enhance our raw material security of bauxite & alumina

Copper & Iron ore

- Engage with government and relevant authorities to enable restart of operations
- Successful implementation of vendor partnering model, increase production of underground mine at Konkola with an additional, deeper horizontal development, refocus and strengthen industrial architecture & infrastructure to delivery stability in short term and growth in long term

Steel

- Achieve full-year production to rated capacity of c. 1.5mtpa

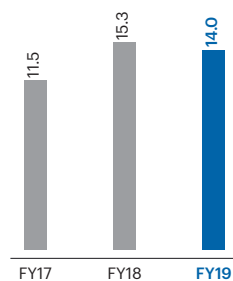
- EBITDA
- Adj. EBITDA margin
- FCF post-capex^o
- ROCE^o

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

Key Performance Indicators

GROWTH

REVENUE
(US\$ BILLION)



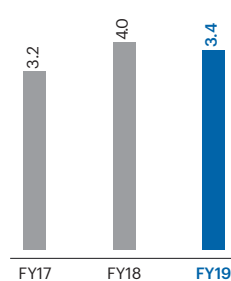
Description

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

Commentary

FY2019, consolidated revenue was at US\$14.0 billion compared with US\$15.3 billion in FY2018. This decrease was mainly on account of shutdown of Tuticorin smelter, lower zinc volumes, lower custom volumes at Copper Zambia and lower metal prices. This was partially offset by ramp up of volumes at Aluminium, volume addition from ESL acquisition and improved oil prices.

EBITDA
(US\$ BILLION)



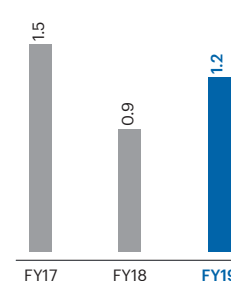
Description

Earnings before interest, tax, depreciation and amortisation (EBITDA) is a factor of volume, prices and cost of production. This measure is calculated by adjusting operating profit for special items and adding depreciation and amortisation.

Commentary

EBITDA for FY2019 was at US\$3.4 billion, 14% lower y-o-y. This was mainly on account of shutdown of Tuticorin smelter, input commodity inflation, lower metal prices, and higher cost of production which was partially offset by ramp up of volumes at Aluminium, volume addition from ESL acquisition, improved oil prices and currency depreciation.

FCF POST CAPEX^o
(US\$ BILLION)



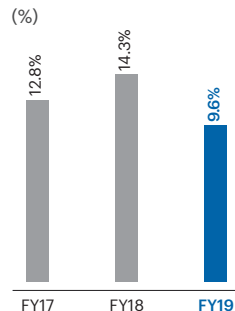
Description

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

Commentary

We generated FCF^o of US\$1.2 billion in FY2019, driven by active working capital management and disciplined capital allocation.

RETURN ON CAPITAL EMPLOYED (ROCE)^o



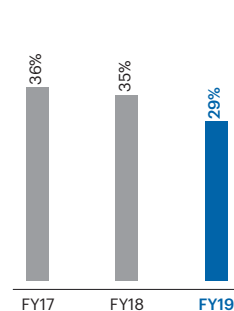
Description

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

Commentary

ROCE down by c. 4.7%, primarily owing to closure of Tuticorin smelter, inflation in input commodity prices leading to increase in cost of production and higher depreciation charge partially offset by volume growth in Aluminium, volume addition due to ESL acquisition and currency depreciation.

ADJUSTED EBITDA MARGIN^o



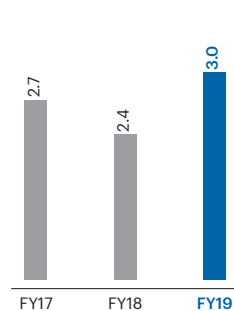
Description

Adjusted EBITDA margin is calculated by excluding EBITDA and turnover from custom smelting of Copper India, Copper Zambia and Zinc India operations.

Commentary

Adjusted EBITDA margin for FY2019 was 29% (FY2018: 35%).

NET DEBT^o/EBITDA



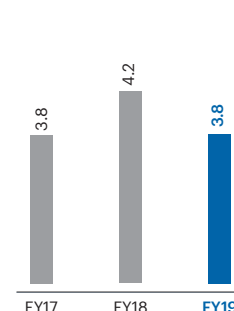
Description

This ratio represents the level of leverage of the Company. It represents the strength of the balance sheet of Vedanta Resources Limited. Net debt is calculated in the manner as defined in Note 22(b) of the financial statements.

Commentary

Net debt^o/EBITDA ratio as at 31 March 2019 was at 3.0x, compared to 2.4x as at 31 March 2018. The net debt is higher primarily due to ESL acquisition.

INTEREST COVER



Description

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

Commentary

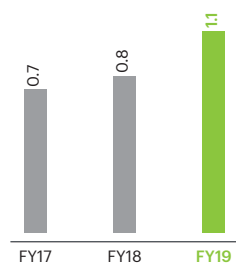
The interest cover for the Company continues to be stable at c. 4 times

Key Performance Indicators

Continued

LONG TERM VALUE

GROWTH CAPEX[®] (US\$ BILLION)



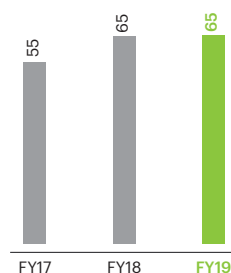
Description

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

Commentary

Our stated strategy is of disciplined capital allocation on high-return, low-risk projects. Expansion capital expenditure during the year stood at US\$1.1 billion, with the majority invested in projects at Zinc India, the Gamsberg project at our Zinc International business, growth projects at Oil & Gas and ramping up our Aluminium capacities.

DIVIDEND (US CENTS)



Description

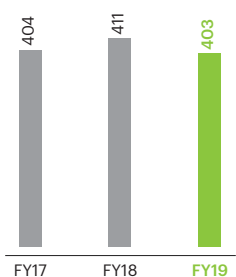
Dividend per share is the total of the final dividend recommended by the Board in relation to the year, and the interim dividend paid out during the year.

Commentary

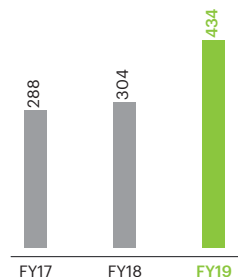
The Board has recommended a total dividend of 65 US cents per share this year compared with 65 US cents per share in the previous year.

RESERVES AND RESOURCES (R&R)

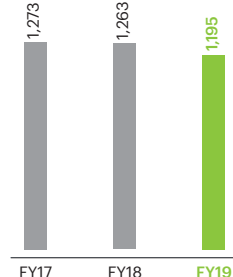
Zinc India (million tonnes)



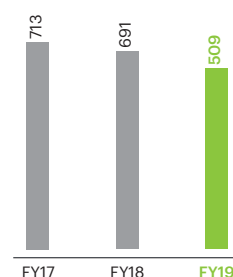
Zinc International (million tonnes)



Oil & Gas (mmboe)



KCM (million mt)



Description

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

Commentary

Zinc India

During the year, gross additions of 5.4 million tonnes were made to reserves and resources, prior to depletion of 13.8 million tonnes. Overall mine life continues to be more than 25 years.

Zinc International

During the year, gross additions of 130.39 million tonnes were made to reserves and resources, prior to depletion. Zinc International is further pleased to announce the declaration of a maiden resource at its Big Syncline project, located on its Black Mountain mining licence in South Africa. Resource estimation was carried out by SRK Consulting (UK) and resulted in an inferred resource of 151.7 million tonnes grading 3.6% (zinc and lead). The majority of the resource is accessible through open-cast operations at low stripping ratios. Overall mine life is more than 30 years.

Oil & Gas

During FY2019, the gross proven and probable reserves and resources were depleted by 68 mmboe primarily due to production during the year.

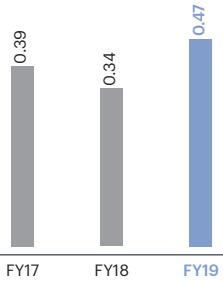
Copper Zambia

During the year, the total reserved and resourced of KCM decreased from 691 million tonnes to 509 million tonnes.

SUSTAINABLE DEVELOPMENT

LTIFR

(MILLION MAN HOURS)



Description

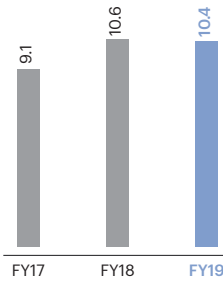
The Lost Time Injury Frequency Rate (LTIFR) is the number of lost-time injuries per million man-hours worked. This includes our employees and contractors working in our operations and projects.

Commentary

This year the LTIFR was 0.47. Safety remains the key focus across businesses.

GENDER DIVERSITY

(%)



Description

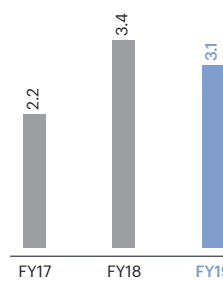
The percentage of women in the total permanent employee workforce.

Commentary

We provide equal opportunities to men and women. During the year, the ratio of female employees was at 10.4% of total employees.

CSR FOOTPRINT

(MILLION BENEFICIARIES)



Description

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

Commentary

We benefited around 3.1 million people this year through our community development projects comprising community health, nutrition, education, water and sanitation, sustainable livelihood, women empowerment and bio-investment.

Opportunities and Risks

Opportunities

We proactively work to minimise our risks by accepting and eliminating them while identifying and taking advantage of opportunities. Our strategic priorities and strong opportunity management culture give us a competitive edge in identifying opportunities and making the best of them.



Above: An employee at the Mangala Processing Terminal, Barmer

POSITIVE MARKET FUNDAMENTALS

The commodities market is fundamentally on an uptick, underpinned by a supply-demand deficit in most of the commodities. Most base metals prices face upside risks from the possibility of tighter than expected environmental policies and a slower than expected easing of commodity-specific supply bottlenecks. Additionally, a stable global growth is expected that will lead to higher demand for metals and oil.

Vedanta's diversified portfolio and attractive basket of commodities position us well to take advantage of this projected uplift in demand and a resulting improvement in price outlook.

INDIA-LED GROWTH

India is the primary market for Vedanta. The Indian economy remains one of the fastest growing in the world supported by strong macroeconomic fundamentals and policy changes, attributable to the sustained rise in consumption and a gradual revival in investments, especially with a greater focus on infrastructure development. Together with the economic reforms and supportive policies of the government, the growth path for the economy is healthy. This is also supported by urbanisation plans of the country and positive demographic factors such as an increasing workforce.

As India's only diversified natural resources group, we are uniquely placed to take advantage of this domestic growth.

A PORTFOLIO OF DIVERSIFIED LOW-COST ASSETS WITH LONG ASSET LIFE

Vedanta has a portfolio of world-class, low-cost, scalable assets that consistently generate strong profits and robust cash flows enjoying industry-leading market shares across our core divisions. The long asset life of this scalable diversified portfolio provides a strong base of opportunities for Vedanta. The many brownfield opportunities being explored in each of the businesses are indicative of this position.

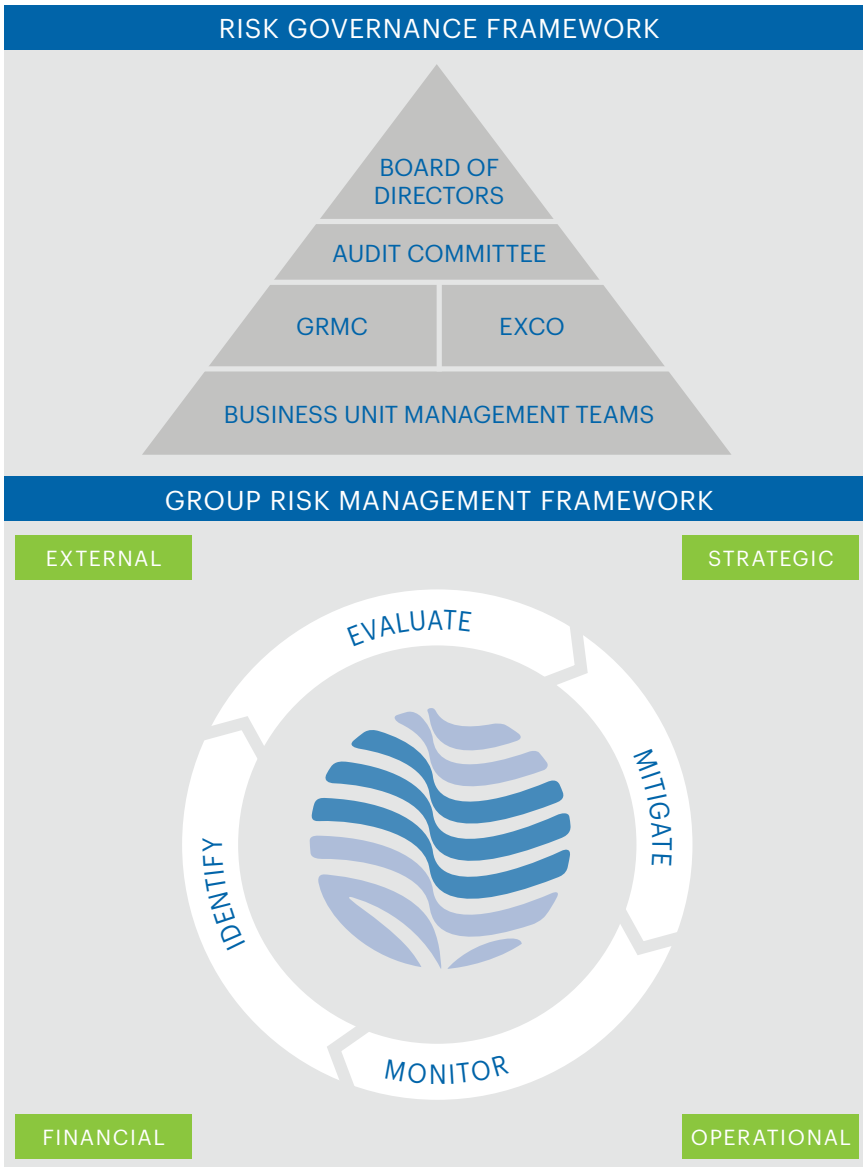
UNDER-UTILISED RESOURCES IN INDIA WITH SIGNIFICANTLY LOW PER CAPITA CONSUMPTION

India has a huge underutilised potential of rich and diverse resources which can be tapped with Vedanta's extensive exploration plans. This has been very strongly supported by the recent policy reforms of the government. Additionally, the per capita consumption of metals in India is significantly lower than global averages, providing ample opportunities for growth.

TECHNOLOGICAL ADVANCEMENT AND DIGITALISATION

New technological and digital advances have helped in improving productivity and reducing costs, and so improving profitability for the Company.

Risks



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, principal 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) having oversight on treasury related risks. The FSC comprises of CEO, Non-Executive Director, Group CFO.
- Board-level Sustainability Committee, which reviews sustainability related risks.
- Group Project/Capex Council which evaluates the risks while reviewing any capital investment decisions as well as institutes 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, CSR Committee, etc. who work towards identifying various risks in the Group and work towards mitigating them.

The Group has a consistently applied methodology for identifying risks at the individual business level for existing operations and for ongoing projects. The Group’s risk appetite is set by the Board. It has been defined taking into consideration the Group’s risk tolerance level and is clearly

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 & consistent, and provide clarity on managing and reporting risks to the 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 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 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.

Opportunities and Risks

Continued

linked to its strategic priorities. The risk appetite forms the basis of the Board’s assessment and prioritisation of each risk based on its likely impact on the business operations. A risk scale aligned to the Board’s overall risk appetite and consisting of qualitative and quantitative factors has been defined to facilitate a consistent assessment of the risk exposure across the Group.

The governance framework continues to operate in the same manner post delisting of the Company. 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 team in the businesses is accountable for governance of the risk management framework and they provide regular updates to the GRMC.

Each of the businesses has developed its own 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 Management Assurance Services (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.

Each of the principal subsidiaries has procedures in place to ensure that sufficient internal controls are maintained. These procedures include a monthly meeting of the relevant management committee and quarterly meeting of the audit committee of that subsidiary. Any adverse findings are reported to the Audit Committee. The Chairman of the Audit Committee may request MAS and/or the external auditor to look at certain areas identified by risk management and the internal control framework. The findings by MAS are presented monthly to the Executive Committee and to the Audit Committee periodically. Due to the limitations inherent in any system of internal control, this system is designed to meet the Group’s particular needs, and the risks to which it is exposed, rather than to eliminate risk altogether. Therefore, it can only provide reasonable and not absolute assurance against material misstatement or loss.

Vedanta’s principal risks and uncertainties as set out below may impact the following areas of the Group’s business:

Area	Impact
Business model (BM)	Ability to conduct our operations across the value chain in order to generate revenue and make profit from operations
Future performance (FP)	Ability to deliver on our financial plans in short/medium term
Solvency (S)	Ability to meet all our financial obligations
Liquidity (L)	Ability to meet our short-term obligations/liabilities as they fall due
Health, safety, environment and communities (HSEC)	Ability to send our employees and contractors home safe and healthy every day and work with our communities and partners to achieve the Group’s sustainable development goals
Reputation (R)	Ability to maintain investor confidence and our social licence to operate

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


Financial risks

Impact	Mitigation	Risk direction
<p>Fluctuation in commodity prices (including oil) and currency exchange rates</p> <p>Prices and demand for the Group's products may remain volatile/uncertain and could be influenced by global economic conditions. Volatility in commodity prices and demand may adversely affect our earnings, cash flow and reserves.</p> <p>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.</p> <p>Impact criteria: BM, FP, S, L</p>	<ul style="list-style-type: none"> • The Group has a well-diversified portfolio which acts as a hedge against fluctuations in commodities and delivers cash flows through the cycle • Pursue low-cost production, allowing profitable supply throughout the commodity price cycle • Vedanta considers exposure to commodity price fluctuations to be an integral part of the Group's business and its usual policy is to sell its products at prevailing market prices and not to enter into price hedging arrangements other than for businesses of custom smelting and purchased alumina, where back-to-back hedging is used to mitigate pricing risks. Strategic hedge, if any, is taken after appropriate deliberations & due approval from ExCo • Our forex policy prohibits forex speculation • Robust controls in forex management to hedge currency risk liabilities on a back-to-back basis • Finance standing committee reviews all forex and commodity-related risks and suggests necessary courses of action as needed by business divisions • Seek to mitigate the impact of short-term movements in currency on the businesses by hedging short-term exposures progressively, based on their maturity. However, large or prolonged movements in exchange rates may have a material adverse effect on the Group's businesses, operating results, financial condition and/or prospects • Notes to the financial statements in the Annual Report give details of the accounting policy followed in calculating the impact of currency translation 	
<p>Access to capital</p> <p>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.</p> <p><i>Risk has been increased compared to last year, due to increased credit spreads with tighter liquidity and other external factors.</i></p> <p>Impact criteria: FP, S, L, R</p>	<ul style="list-style-type: none"> • A focused team continues to work on proactive refinancing initiatives with an objective to contain cost and extend tenor • The team is actively building the pipeline for long term funds for near-to medium-term requirements both for refinancing and growth capex • Track record of good relations with banks, and of raising borrowings in last few years • The Group's structured investments, including the Volcan transaction, are exposed to underlying equity price variance of Anglo shares. For further details on the Volcan transaction refer note 35 of the financial statement • Regular discussions with rating agencies to build confidence in operating performance • Business teams ensure continued compliance with the Group's treasury policies that govern our financial risk management practices 	
<p>Major project delivery</p> <p>Shortfall in achievement of expansion projects stated objectives leading to challenges in achieving stated business milestones – existing & new growth projects.</p> <p>Impact criteria: BM, FP, L, R</p>	<ul style="list-style-type: none"> • Enlisting internationally renowned engineering and technology partners on all projects • Empowered organisation structure has been put in place to drive growth projects • Strong focus on safety aspects in the project • Geo-technical audits are being carried out by independent agencies • Reputable contractors are engaged to ensure completion of the project on indicated time lines • Mines being developed using best-in-class technology and equipment and ensuring the highest level of productivity and safety • Stage gate process to review risks and remedy at multiple stages on the way • Robust quality control procedures have also been implemented to check safety and quality of services/design/actual physical work 	


Opportunities and Risks

Continued

Sustainability risks		
Impact	Mitigation	Risk direction
<p>Health, safety and environment (HSE) The resources sector is subject to extensive health, safety and environmental laws, regulations and standards. Evolving requirements and stakeholder expectations could result in increased cost or litigation or threaten the viability of operations in extreme cases.</p> <p>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.</p> <p>Impact criteria: BM, HSEC, R</p>	<ul style="list-style-type: none"> • HSE is a high priority area for Vedanta. Compliance with international and local regulations and standards, protecting our people, communities and the environment from harm and our operations from business interruptions are key focus areas • Policies and standards are in place to mitigate and minimise any HSE-related occurrences. Safety standards issued/continue to be issued to reduce risk level in high-risk areas. Structured monitoring and a review mechanism and system of positive compliance reporting are in place • The Company has implemented a set of standards to align its sustainability framework with international practice. A structured sustainability assurance programme continues to operate in the business divisions covering environment, health, safety, community relations and human rights aspects, and is designed to embed our commitment at operational level • All businesses have appropriate policies in place for occupational health-related matters, supported by structured processes, controls and technology • Strong focus on safety during project planning/execution, and contract workmen safety • Building safety targets into performance management to incentivise safe behaviour and effective risk management • A 'Leadership in Action' programme has been launched for identification of critical risks to identify critical risk controls and to measure, monitor and report the control effectiveness • Leadership remains focused on a zero-harm culture across the organisation • Carbon forum with business representation monitors developments and sets out defensive policies, strategy and actions • Defined targets and action plans in place to reduce the carbon intensity of our operations. This includes reducing emission intensity, increasing renewable mix and green cover at locations. New Emission norms for thermal power plants will require capex – working towards the same • Institutionalise systems to manage carbon risks and opportunities across the business over the life cycle of its products • Engage with stakeholders in creating awareness and developing climate change solutions 	
<p>Tailings dam stability A release of waste material leading to loss of life, injuries, environmental damage, reputational damage, financial costs and production impacts. A tailings dam failure is considered to be a catastrophic risk – i.e. a very high severity but very low frequency event that must be given the highest priority.</p> <p>Impact criteria: BM, FP, HSEC, R</p>	<ul style="list-style-type: none"> • The Risk Management Committee included tailings dams on the Group Risk Register with a requirement for annual internal review and three-yearly external review • Operation of tailings dams is executed by suitably experienced personnel within the businesses • Vedanta is currently reviewing approach to tailings dam management, particularly upstream raised dams, in the wake Brumadinho in Brazil • Golder Associates 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 • Those responsible for dam management received training from Golder Associates and will receive on-going support & coaching from international consultants • Management standard implemented with business involvement • System of monitoring of tailings dams instituted 	

Impact	Mitigation	Risk direction
<p>Managing relationship with stakeholders</p> <p>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.</p> <p><i>Risk has been increased compared to last year, due to community-related incidents at some of our facilities.</i></p> <p>Impact criteria: BM, FP, HSEC, R, S, L</p>	<ul style="list-style-type: none"> • 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; UN Millennium Development Goals (UNMDG); CSR National Voluntary Guidelines of the Ministry of Corporate Affairs, Government of India; and the UN's sustainable development goals • Our BU teams are proactively engaging with communities and stakeholders through a proper and structured engagement plan, with the objective of working with them as partners • Business ExCos factor in these inputs, and then decide upon focus areas of CSR and budgets while also aligning with strategic business priorities • At KCM, in line with our commitment to contribute towards the growth of the economy and from sustainability perspective, we undertake to constructively engage with all key stakeholders such as the Zambian Government, local communities, suppliers, employees and the shareholders in an optimal & productive manner • All BUs follow well-laid processes for recording and resolving all community grievances • Every business has a dedicated Community Development Manager, who is a part of the BU Exco. They are supported with dedicated teams of community professionals, totalling nearly 110 people • 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 • Periodic meetings with existing and potential SRI Investors, lenders and analysts, as well as hosting a Sustainable Development Day in London, helps in two-way engagement and understanding the material issues for stakeholders • CSR communication and engagement with all stakeholders – within & outside communities 	

Operational risks



Impact	Mitigation	Risk direction
<p>Challenges in Aluminium and Power business</p> <p>Our projects have been completed and may be subject to a number of challenges during operationalisation phase. These may also include challenges around sourcing raw materials and infrastructure-related aspects and concerns around ash utilisation/evacuation.</p> <p>Impact criteria: BM, FP, S, L, R</p>	<ul style="list-style-type: none"> • Global uncertainties reflected as fall in Aluminium LME prices. • Continue to pursue new coal linkages to ensure coal security. Operations at Chotia coal mines also started. • Local sourcing of Bauxite from Odisha. • Jharsuguda facilities have ramped up satisfactorily. • New Ash Dyke being built in Jharsuguda. • Dedicated teams working towards addressing the issue of new emission norms for power plants. • Global technical experts have been inducted to strengthen operational excellence. • Continuous focus on plant operating efficiency improvement programme to achieve design parameters, manpower rationalisation, logistics and cost reduction initiatives. • Continuous augmentation of power security and infrastructure. • Strong management team continues to work towards sustainable low-cost of production, operational excellence and securing key raw material linkages. • Talwandi Saboo (TSPL) power plant matters are being addressed structurally by a competent team. 	
<p>Operational turnaround at KCM</p> <p>Lower production and higher cost at KCM may impact our profitability.</p> <p><i>Risk has been increased compared to last year, due to challenging external & operating environment.</i></p> <p>Impact criteria: BM, FP, S, L, R</p>	<ul style="list-style-type: none"> • Management team reviewing operations and engaging with all stakeholders in light of operating challenges. • Focus at Konkola is to stabilise infrastructure framework, improve operational efficiency, equipment availability, dewatering and developments aiming to enhance volumes. Committed to improving KCM operating performance. • To improve performance, KCM team is working on stabilisation of business partnering model with outsourced contractors. • Several cost-saving initiatives and restructuring reviews under way at KCM to preserve cash. • Process improvement actions put in place through focused operating teams to improve production performance. • Working on the optimised engineering design for accelerated dewatering and development to increase production from Konkola mine. • All environmental projects are being monitored closely for timely closure. • Concentrate sourcing tie-ups with high grade mines being pursued. • VAT refunds are being pursued. 	

Opportunities and Risks

Continued

Impact	Mitigation	Risk direction
<p>Discovery risk 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 & 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.</p>	<ul style="list-style-type: none"> • Dedicated exploration cell with continuous focus on enhancing exploration capabilities • Appropriate organisation and adequate financial allocation in place for exploration • Strategic priority is to add to our reserves and resources by extending resources at a faster rate than we deplete them, through continuous focus on drilling and exploration programme • Exploration Executive Committee (ExCo) has been established to develop and implement strategy and review projects group wide • Exploration-related systems being strengthened and standardised group wide and new technologies being utilised wherever appropriate • International technical experts and agencies are working closely with our exploration teams to enhance our capabilities 	
<p>Impact criteria: BM, FP</p>		
<p>Breaches in IT/cybersecurity Like many global organisations, our reliance on computers and network technology is increasing. These systems could be subject to security breaches resulting in theft, disclosure or corruption of key/strategic information. Security breaches could also result in misappropriation of funds or disruptions to our business operations. A cybersecurity breach could have an impact on business operations.</p>	<ul style="list-style-type: none"> • Group-level focus on formulating necessary frameworks, policies and procedures in line with best practices and international standards • Implementation and adoption of various best-in-class tools and technologies for information security to create a robust security posture • Special focus to strengthen the security landscape of plant technical systems (PTS) through various initiatives • Adoption of various international standards relating to Information Security, Disaster Recovery & Business Continuity Management, IT Risk Management and setting up internal IT processes and practices in line with these standards • 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 	
<p>Impact criteria: FP, R</p>		
<p>Loss of assets or profit due to natural calamities Our operations may be subject to a number of circumstances not wholly within the Group's control. These include damage to or breakdown of equipment or infrastructure, unexpected geological variations or technical issues, extreme weather conditions and natural disasters – any of which could adversely affect production and/or costs.</p>	<ul style="list-style-type: none"> • Vedanta has taken appropriate group insurance cover to mitigate this risk • An external agency reviews the risk portfolio and adequacy of this cover and assists us in our insurance portfolio • Our underwriters are reputed institutions and have capacity to underwrite our risk • Established mechanism of periodic insurance review in place at all entities. However, any occurrence not fully covered by insurance could have an adverse effect on the Group's business • Continuous monitoring and periodic review of security function • Continue to focus on capability building within the Group 	
<p>Impact criteria: FP, R</p>		
<p>Cairn-related challenges Cairn India has 70% participating interest in Rajasthan Block. The production sharing contract (PSC) of Rajasthan Block runs till 2020. The Government of India has granted its approval for ten-year extension at less favourable terms, pursuant to its policy for extension of Pre-NELP Exploration Blocks, subject to certain conditions. Ramp up of production vs envisaged may have impact on profitability.</p>	<ul style="list-style-type: none"> • Ongoing dialogue with the government and relevant stakeholders to address the conditions prescribed • The applicability of the Pre-NELP Extension Policy to the RJ Block is currently sub judice • The growth projects are being implemented through an Integrated Contracting approach. Contracts have built in mechanism for risk and reward • Project management committee & project operating committee is being put in place 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 • Third party is engaged to conduct a study on growth projects with key objectives of providing assurance on project delivery, highlight risks, identify areas needing management intervention and suggest opportunities to deliver the outcome 	
<p>Impact criteria: BM, FP, L, S</p>		

Compliance risks

Impact	Mitigation	Risk direction
<p>Regulatory and legal risk We have operations in many countries around the globe. These may be impacted because of legal and regulatory changes in the countries in which we operate resulting in higher operating costs, and restrictions such as the imposition or increase in royalties or taxation rates, export duty, impacts on mining rights/bans, and change in legislation.</p> <p>Impact criteria: BM, R</p>	<ul style="list-style-type: none"> • The Group and its business divisions monitor regulatory developments on an ongoing basis • Business-level teams identify and meet regulatory obligations and respond to emerging requirements • Focus has been to communicate our responsible mining credentials through representations to government and industry associations • Continue to demonstrate the Group's commitment to sustainability by proactive environmental, safety and CSR practices. Ongoing engagement with local community/media/NGOs • SOX compliant subsidiaries • Common compliance monitoring system being implemented in group companies. Legal requirements and a responsible person for compliance have been mapped in the system • Legal counsels within the Group continues to work on strengthening the compliance and governance framework and the resolution of legal disputes • Competent in-house legal organisation is in place at all the businesses and the legal teams have been strengthened with induction of senior legal professionals across all group companies • Standard operating procedures (SOPs) have been implemented across our businesses for compliance monitoring • Contract management framework has been strengthened with the issue of boiler plate clauses across the group which will form part of all contracts. All key contract types have also been standardised • Framework for monitoring performance against anti-bribery and corruption guidelines is also in place 	
<p>Tax-related matters Our businesses are in a tax regime and changes in any tax structure or any tax-related litigation may impact our profitability.</p> <p>Impact criteria: FP, L, R</p>	<ul style="list-style-type: none"> • Tax Council reviews all key tax litigations and provides advice to the Group • Continue to engage with concerned authorities on tax matters • Robust organisation in place at business and group-level to handle tax-related matters • Continue to consult and obtain opinion from reputable tax consulting firms on major tax matters to mitigate the tax risks on the group and its subsidiaries 	

Stakeholder Engagement

WE AIM TO FORGE STRONG RELATIONSHIPS WITH OUR KEY STAKEHOLDERS AND UPHOLD HUMAN RIGHTS WHEREVER WE OPERATE, AS WE MAINTAIN OUR SOCIAL LICENCE TO OPERATE.

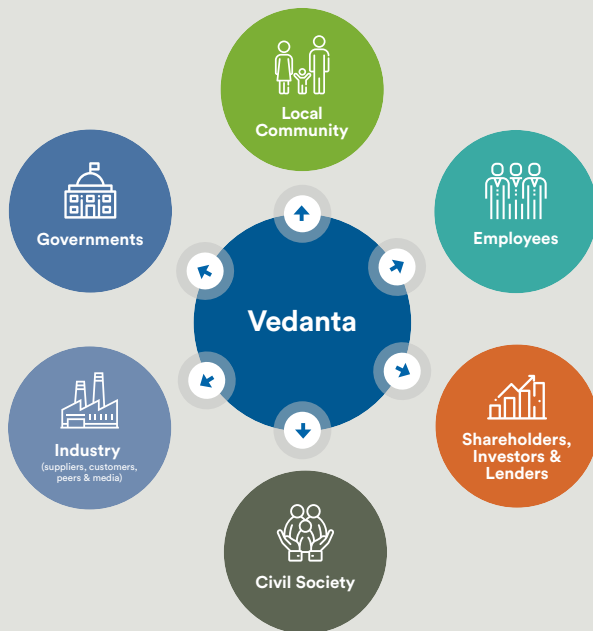
Our approach

At Vedanta we are committed to constructive dialogue with our key stakeholders. We believe that open, ongoing and systemic communication is key to building successful relationships with our stakeholders. This also helps us to identify their material issues, and foresee emerging risks, opportunities and challenges.

Our social responsibility performance standards help ensure effective engagement with relevant stakeholders across multiple industries and geographies; provide adequate grievance mechanisms to help resolve situations of potential conflict; and develop specialised standards for potentially vulnerable communities such as indigenous peoples. The standards follow five principles of engagement:

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

Our key stakeholders



Left: HZL Samadhan Project

Right top: Investing in the future of children through CSR initiatives


Right bottom: Access to affordable and quality healthcare

Stakeholder Engagement

Continued

The table below sets out how we engaged with our stakeholders during the year to address their concerns and meet their expectations.

Stakeholder	Types of Engagement	Key Expectations	Initiatives in FY2019
<p>Local Community</p> 	<p>Community group meetings, village council meetings, community needs/social impact assessments, public hearings, grievance mechanisms, cultural events, engaging philanthropically with communities via the Vedanta Foundation.</p>	<ul style="list-style-type: none"> Needs- based community development projects Increasing reach of community development programmes Improved grievance mechanism for community 	<ul style="list-style-type: none"> Completed baseline, need, impact and SWOT assessments in all BUs US\$45 million invested in Social Investment 3.1 million beneficiaries of community development programmes Community grievance process followed at all operations
<p>Employees</p> 	<p>Chairman's workshops, Chairman's/CEO's town hall meetings, feedback sessions, performance management systems, various meetings at plant level, V-Connect mentor programme, event management committee and welfare committee, women's club.</p>	<ul style="list-style-type: none"> Improved training on safety Increased opportunities for career growth Increasing the gender diversity of the workforce 	<ul style="list-style-type: none"> 1.46 million man-hours of training on safety 23% of all new hires are women Identification of top talents and future leaders through workshops
<p>Shareholders, Investors & Lenders</p> 	<p>Regular updates, investor meetings, Sustainability Day for investor interaction, site visits, AGM and conference, quarterly results calls, dedicated contact channel – ir@vedanta.co.in and sustainability@vedanta.co.in</p>	<ul style="list-style-type: none"> Consistent disclosure on economic, social, and environmental performance 	<ul style="list-style-type: none"> US\$14.0 billion in revenue Sustainability assurance audits conducted through Vedanta Sustainability Assurance Programme (VSAP) Bi-weekly Investor Briefings and Pro-active engagement with the investment community on ESG topics





Stakeholder	Types of Engagement	Key Expectations	Initiatives in FY2019
<p>Civil Society</p> 	<p>Partnerships with and membership of international organisations, working relationships with organisations on specific projects, engagement with international, national, and local NGOs, conferences and workshops, dedicated contact channel – sustainability@vedanta.co.in.</p>	<ul style="list-style-type: none"> • Expectation of being aligned with the global sustainability agenda • Compliance with Human Rights 	<ul style="list-style-type: none"> • Membership of international organisations including the United Nations Global Compact, TERI, CII, The World Business Council for Sustainable Development (WBCSD), and Indian Biodiversity Business Initiative (IBBI) • Focus towards implementing Sustainable Development Goals • Compliance to the Modern Slavery Act
<p>Industry (Suppliers, Customers, Peers, Media)</p> 	<p>Customer satisfaction surveys, scorecards, in-person visits to customers, supplier, and vendor meetings.</p>	<ul style="list-style-type: none"> • Consistent implementation of the code of business conduct & ethics • Ensuring contractual integrity 	<ul style="list-style-type: none"> • Hotline service and email ID to receive whistleblower complaints
<p>Governments</p> 	<p>Participation in government consultation programmes, engagement with national, state, and regional government bodies at business and operational level.</p>	<ul style="list-style-type: none"> • Compliance with laws • Contributing towards the economic development of the nation 	<ul style="list-style-type: none"> • US\$45 million invested in community development • US\$6.2 billion in payments to the exchequer



For more information on our activities during the year, please see our Sustainability section on pages 60-74

Awards and Accolades

SNo.	Name of Awards	Category/Recognition	Recipient (Business Unit)
Operational Excellence 			
1	IMC RBNQA National Quality Award	Manufacturing Excellence	BALCO
2	Quality Circle Conventions	Improvement Projects	BALCO
3	Safety award by Oil Industry Safety Directorate (OISD)	Individual category	Cairn Oil & Gas
4	FTSE4Good Emerging Index Series	Sectorial leadership in Environmental, Social and Governance (ESG) performance	HZL
Sustainable Development & CSR 			
5	ET 2 Good 4 Good Rating	CSR Activities	BALCO
6	Dainik Jagran Award	Poverty Eradication	BALCO
7	FICCI CSR Award	Private Sector Companies with turnover of INR 3001 Crores per annum and above	Nand Ghar
8	Sustainability Award 4.0	Sustainable Business practices	BALCO
9	CII-ITC Sustainability Award 2018	Significant Achievement for impactful CSR programmes and initiatives across all assets	Cairn Oil & Gas
10	FICCI Corporate Social Responsibility Award 2017 – 2018	Health, Water and Sanitation category	Cairn Oil & Gas
11	CII - ITC Sustainability Awards 2018	For Corporate Excellence • Outstanding Accomplishment Award • Commendation for Significant Achievement in CSR • Excellence in Environment Management	HZL
12	Dow Jones Sustainability Index	Ranked 1st in the Environmental Category for Metals & Mining Industry	HZL
13	Greentech Safety Award	Gold/Safety Management	Vedanta Limited, Lanjigarh
14	India Green Manufacturing Award	Resource Conservation and Green Manufacturing Processes	Vedanta Limited, Lanjigarh
15	India CSR Leadership Award 2019	'Aajeevika Skill Development' initiatives including Dhokra Art and Tribal Painting	Vedanta Limited, Lanjigarh unit
16	ET Now CSR Leadership Awards	Sports Development	Vedanta Football & Nand Ghar
17	Golden Bird award	Environment Excellence	TSPL
18	Shrishti Good Green Governance Award	Environment	TSPL
19	Apex India CSR Excellence Award 2018	Gold Award	TSPL
20	AON Hewitt Best Employer Award	'Commitment to Engagement' (2017-2018)	Vedanta Limited, Jharsuguda
21	'National Best Employer Brands 2018'	HR practices and exemplary use of marketing communication for Human Resource Development	Vedanta Limited, Jharsuguda
Human Resources 			
22	CII HR Excellence Award	HR Initiatives	BALCO
23	ET HR Talent Management Leadership Award	Leadership Development Program	BALCO
24	Great Place to Work Certification	Employer-of-Choice and Workplace quality recognition	Cairn Oil & Gas
25	ET Now Dream Companies to Work For	Employer-of-Choice and Workplace quality recognition	Cairn Oil & Gas
26	'Significant Achievement in HR Excellence' during 9th CII-HR Excellence Award 2018-19	HR practices	HZL
27	CII National HR Excellence Award	Strong Commitment to HR Excellence	Vedanta Limited, Lanjigarh unit
28	The Employer Branding Awards	National Best Employer Brand	Sterlite Copper

S No.	Name of Awards	Category/Recognition	Recipient (Business Unit)
Innovation & Technology 			
29	7th International Bauxite –Alumina & Aluminium Conference & Exhibition	Improvement Projects	BALCO
30	INCAL	Improvement Projects	BALCO
31	Indian Institute of Metals – Non-Ferrous Best Performance Award 2018	For best quality, registering highest product development and environmental performance during 2017 - 18	HZL
32	QualTech Award 2018	Improvement Category	Sesa Goa Iron ore Value Addition Business unit
33	SECONA Shield Awards 2018	Innovative Practices & Technology	Vedanta Sesa Goa Iron Ore – Security Team
34	Smart logistics Summit & Awards 2019	‘Smart Exporter Metals’	Vedanta Limited, Jharsuguda
Energy Conservation 			
35	CII National Energy Conservation Award	Energy	BALCO
36	Clean Energy Management Insight Award	Spreading awareness about ISO 50001 Energy Management System	BALCO
37	Gold in SEEM National Energy Management Awards 2017	‘Industries Captive Power Plant’	Chanderiya Smelting Complex (HZL)
38	19th National Award for Excellence in Energy Management 2018	Energy Efficient Unit	Sesa Goa Iron ore - Value Addition Business unit
39	Golden Bird award	Energy Efficiency	
Industry Achiever/National Contributor 			
40	1st Edition of CNBC Awaaz Rajasthan Ratna Award	‘The Best Company in Mining Sector’ in the state of Rajasthan	HZL
41	Dun & Bradstreet Infra Awards 2018	Power - Thermal & Hydro Best Project category	TSPL
42	South African Institution of Civil Engineering, Awards for the Most Outstanding Civil Engineering Achievements of the Year	Most Outstanding Project in the Geotechnical Engineering Project Division	Gamsberg Business Partner, VZI
Business Awards 			
43	Best Environment Practices by SKOCH Leadership Award for Energy	Natural gas recovery zero flaring during frack well milling operation project under the category – ‘most innovative environmental project’	Cairn Oil & Gas
44	7th FICCI Safety Systems Excellence Award	Platinum Prize	Bhagyam field, Cairn Oil & Gas
45	5th CII Environmental Best Practices Award 2018	Natural gas recovery zero flaring during frack well milling operation project under the category – ‘most innovative environmental project’	Cairn Oil & Gas
46	‘Dun & Bradstreet Corporate Award 2018’	Under ‘Non-Ferrous & Precious Metals’ category for their role as ‘Champions of Change’ in transformation of the Country	HZL
47	Recognised for the ‘Best Investor Relations Program’ (nominated by the sell-side) and for hosting the “Second Best Analyst Day” (overall) by Institutional Investor Magazine’s 2018 all-Asia (ex-Japan) Executive Team rankings.	Basic Materials industry	Vedanta Limited

Market Review

GLOBAL ECONOMY AND COMMODITY MARKETS

After strong growth in 2017 and early 2018, global economic activity slowed notably in the second half of last year, reflecting a confluence of factors affecting major economies. China's growth declined following a combination of required regulatory tightening to rein in shadow banking and due to increase in trade tensions with the United States. The euro area economy lost more momentum than expected as the consumer and business confidence weakened. Trade tensions increasingly took a toll on business confidence with financial conditions tightening for both emerging and advanced economies, weighing on global demand.

As a result, global growth is now projected to slow from 3.6% in 2018 to 3.3% in 2019 as per IMF. The current forecast envisages that global growth will level off in the first half of 2019 and then firm up after that. The projected pickup in the second half is predicted due to an ongoing build-up of policy stimulus in China, recent improvements in global financial market sentiment and a gradual stabilisation of conditions in the stressed emerging markets.

Commodity prices rebounded in the first quarter of 2019 from a decline in the fourth quarter of 2018, which had followed an even steeper decline in the preceding quarters. The price increase reflected supply concerns, progress in trade negotiations between US and China and fiscal stimulus in China. Metal prices are expected to continue rebounding from 2018 troughs. Most base metal prices face upside risks from the possibility of tighter than expected environmental policies and slower than expected easing of commodity-specific supply bottlenecks. Oil prices have risen significantly since the start of the year amid a production cut by OPEC and other producers and supply disruptions elsewhere.

OPPORTUNITIES FOR VEDANTA

Improved momentum for emerging and developed economies is projected to continue into 2020, primarily reflecting developments in economies currently experiencing macroeconomic distress. Growth prospects for advanced economies are likely to plateau somewhat over the medium term, sustained by an increase in the relative size of economies such as China and India, which are projected to enjoy robust growth. This stable global growth is expected to lead to higher demand for metals and oil.

At the same time supply-side dynamics on zinc are expected to keep its price stable to higher. The zinc market is going through a cyclical shortage with refined metal expected to stay in short supply over the next two to three years as smelters are at full capacity and Chinese smelting capacities are restrained. With no new projects coming online, the market could possibly see concentrate supply issues in the medium term. All this provides Vedanta, as a large zinc producer, with a favourable market as we ramp up production.

Recent developments for the alumina refinery companies, bringing the price of alumina down, provide Vedanta with a cost advantage in its aluminium business. As we ramp up our refinery, in the interim period where we remain dependent on imported alumina supply, lower alumina costs will help us keep our aluminium costs under control.

Thus, Vedanta's diversified portfolio and attractive basket of commodities position us well to take advantage of this projected uplift in demand, and the resulting improvement in price outlook.

The backdrop of positive Indian economic growth, combined with supportive government policies, will strengthen commodity demand in India going forward and support domestic production.

Below: We focus on implementing new technologies at our site locations



THE INDIAN ECONOMY

India is Vedanta's main market and one that we believe has huge growth potential.

According to the latest IMF Report, India's growth is projected to rise to 7.3% in 2019 and 7.5% in 2020, supported by the continued recovery of investment, and robust consumption amid a more expansionary stance of monetary policy and some expected impetus from fiscal policy. Over the medium term, the IMF expects growth to stabilise at just under 7.75%, based on continued implementation of structural reforms and easing of the infrastructure bottleneck.

The government has been proactive in introducing major policy reforms for the technology and manufacturing sectors, and in our specific areas of operation we have seen the National Mineral Policy 2019, HELP (Hydrocarbon Exploration and Licencing Policy) and OALP. The government's focus on rural development and job creation, well supported by initiatives such as Make in India and Digital India, have also provided impetus to the economic growth of the country. External confidence in the Indian economy has also been boosted by structural reforms to improve the ease of doing business, strengthen the banking system and improve the capital markets.

OPPORTUNITIES FOR VEDANTA

India-focused growth agenda

The Indian economy remains one of the fastest growing in the world, supported by strong macroeconomic fundamentals and policy changes. This growth could be attributed to the sustained rise in consumption and a gradual revival in investments, especially with a greater focus on infrastructure development. Together with economic reforms, these augur well for a healthy growth path for the economy.

Positive demographic factors such as an increasing workforce and urbanisation are driving a greater need for infrastructure development. Looking ahead, we expect to see continued focus in the infrastructure, transportation and power sectors. This will lead to a rising demand for domestically produced metals. Additionally, there is huge scope of growth in India's significantly low per-capita consumption of all metals including zinc, aluminium, steel and copper when compared to the global average. Indeed, oil consumption in India is less than one-third that of the global per capita figure, providing immense opportunities for growth to the domestic producers.

POLICY SUPPORT

The Indian Government has recently announced various policy measures to support the metals, mining and oil sectors. The Union Cabinet approved the National Mineral Policy (NMP) 2019, which aims to bring more effective regulation while addressing the issues of those affected by mining. The policy is progressive and seeks to liberalise the sector by opening up opportunities to the private sector that were previously reserved for state-owned enterprises. The policy measures envisage that mineral production in India will grow by 200% and the trade deficit in minerals will reduce by 50% in the next seven years. Furthermore, efforts will be made to benchmark royalties and taxes (which are high in India) with mining jurisdictions elsewhere in the world in order to attract more investment and guarantees that statutory clearances are granted in a timely manner.

In the oil sector, the Hydrocarbon Exploration and Licencing Policy (HELP), aimed at enhancing domestic oil & gas production, has brought substantial investment into the sector and generated sizeable employment opportunities since its implementation. The OALP, a critical part of the HELP, enables contractors to explore conventional as well as unconventional oil & gas resources on a revenue-sharing basis with marketing and pricing freedom for the crude oil and natural gas produced. Vedanta Limited won 41 out of 55 oil & gas exploration blocks offered in OALP-1 bidding in 2018.

Foreign Direct Investment (FDI) in the mining sector, the exploration of metal and non-metal ores and the approval of the MMDR Bill (2011) will provide a more supportive legislative environment for investment and technology going forward. In addition, in the Union Budget 2018-19, the government added a surcharge of 10% on aggregate duties of customs on imported goods to strengthen the domestic mining industry.

This backdrop of positive Indian economic growth, combined with supportive government policies, will strengthen commodity demand in India going forward and support domestic production. Vedanta, as one of the country's largest natural resources companies, is uniquely positioned to leverage India's growth potential by catering to that demand across its diversified portfolio of commodities. With such a large domestic market, everything we produce in India, we would like to sell in India.



Market Review

Continued



ZINC

Investments in infrastructure drive zinc demand

In a year of volatility, zinc prices fell by approximately 17% to end the year at US\$2,922 per tonne, after peaking at US\$3,540 per tonne in February 2018. Macro-economic factors including fears of a trade war and a slowdown in global economic growth contributed to this fall. However, in Q4 the apparent easing of trade tensions, and production disruptions as a result of floods in Australia accompanied by steep drawdowns in inventories helped prop up zinc prices. Price increases since then have largely reflected robust demand from China, which accounts for half of global consumption. Against the backdrop of rapidly growing zinc ore production, smelter capacity constraints have driven refining fees (zinc concentrate treatment charges) to near record highs.

Products & customers

Vedanta is the largest zinc producer in India, with a 79% market share in FY2019. Between 70-74% of the refined zinc produced is sold in the Indian market, primarily to steel companies, with the rest being exported to mainly Asian countries and the Middle East to increase the customer portfolio in special high-grade and value-added products. Over 70% of Indian zinc consumption is used for galvanising steel, predominantly in the construction and infrastructure sectors. We also produce zinc for use in die-casting alloys, brass oxides and chemicals. This year we have successfully launched and supplied EPG (electro-plating galvanising) and HZDA (Hindustan Zinc die-casting alloy). Our focus is on increasing the supply of value-added products to 25% of total zinc sales in FY2020, from 16% in FY2019.

Vedanta Zinc's international operations produce refined zinc, which is sold within Africa and exported to Europe and China; and concentrate, which is exported to traders and refiners internationally.

Market drivers & opportunities

Zinc market fundamentals remain robust with global zinc consumption expected to grow by 1.5% to 14.5 million tonnes in 2019, while smelter supply will increase to 14 million tonnes and mine supply will likely be 13.9 million tonnes. The growth in consumption in 2019 will mainly come from China and India, as the consumption rate is expected to be low in the US, Europe and Japan due to weak demand, trade tensions and a slowdown in the automotive sector. International trade talks will also have a significant bearing on investor sentiment and consequently on zinc prices going forward. Despite a fundamentally tight zinc metal market, prices may struggle if trade tensions continue.

Primary zinc consumption in India has been steady for the last two years and we may see a rise in consumption of 3-4% going forward. Steel demand in India is forecast to increase at 6.5% CAGR until 2030. Indian zinc demand is expected to mirror this growth trajectory on the back of growth in its major end-use sectors, i.e. automotive, construction, infrastructure and railways. The Government's plan to spend US\$1.5 trillion on infrastructure over the next decade, in the form of new and upgraded railway stations, new airports, road projects, smart cities, electrification projects, renewable energy installations and investment in transmission corridors, will provide a long term boost to Indian zinc demand.

As most of our zinc is produced and sold in the Indian market, ongoing investment by the Indian government will be the main opportunity for Vedanta going forward. The International Zinc Association is working with government departments to increase zinc consumption in automobiles and railways, thereby bringing more safety and sustainability to the sectors.

LEAD

Demand continues to grow but the outlook is less certain

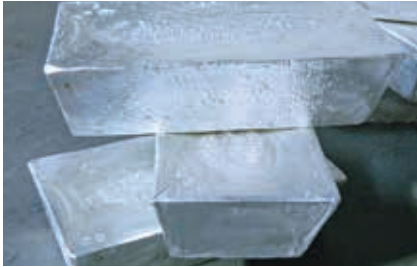
In line with zinc and other base metals, the lead price was volatile during the year in response to developments in the trade dispute between the US and its trading partners. The price dropped from around US\$2,544 per tonne in early January 2018 and ended the calendar year at US\$2,009 per tonne. Fundamentally, the lead market was favourable with stocks dropping to record lows and limited supply. Lead prices are projected to gradually increase over the remainder of 2019. More stringent environmental regulations in China restricting the recycling of lead scrap materials, which accounts for more than two-fifths of total refined production, presents an upside risk to the forecast. Over the medium term, a shift towards electric vehicles is likely to depress demand for lead, which is heavily used in batteries for internal combustion engine vehicles but not in electric vehicles.

Products & customers

In India, Vedanta owns and operates a fully integrated zinc-lead production facility and is one of the world's largest integrated zinc-lead producers by volume of those producing only primary metals. The main use for our lead is in lead acid batteries, mainly serving the automotive and telecoms sectors. India consumes around 1.1 million tonnes of lead annually, which includes both primary and secondary lead. HZL has a 57% market share of domestic primary lead consumption. HZL's domestic lead supplies increased by 12% in FY2019 against market growth of an estimated 3%.

Market drivers & opportunities

Demand for lead is expected to increase by 2% this year primarily due to growth in Asia, and especially China. HZL is poised to expand its supply base to more end-users, tapping the growth that will be driven by growing production in the automotive sector.



SILVER

Demand hit as China reduces subsidies

In a challenging environment, the silver price averaged US\$15.7 per ounce in CY 2018. Preliminary estimates point towards a slight increase in total supply in 2018 whereas demand contracted by 3%, primarily due to lower demand from investors. A slowing Chinese economy, coupled with rising US interest rates, an equity market bull run, and global trade tensions affected the price of many commodities, including gold and silver.

Products & customers

Hindustan Zinc is India's only primary silver producer and ranks 9th globally in terms of the top silver producing companies. We cater to markets including the industrial sector (electrical contacts, solder and alloys, and pharmaceuticals), and the jewellery and silverware manufacturing segment. Our focus is to improve penetration in the domestic market by increasing value-added products such as silver nitrate and silver powder.

Market drivers & opportunities

Silver prices are projected to remain broadly unchanged in 2019 according to the World Bank's commodity outlook. Jewellery demand and silverware fabrication are rising moderately whereas industrial demand for silver, which accounts for more than half of total demand, remains weak. Tariffs on solar imports to the United States led to a reduced use of silver in solar panels in 2018, and this trend is expected to persist. The use of silver in photovoltaics is expected to decline as it is one of the most expensive components.

OIL & GAS

Indian demand is projected to show robust growth

We saw a year marked by supply-demand fluctuations in 2018, leading to higher than usual volatility and uncertainty in the oil & gas markets. The year saw unprecedented production from the US, production cuts announced by the Organisation of the Petroleum Exporting Countries (OPEC) and US sanctions imposed on Iran and Venezuela. After peaking at US\$85 per bbl, Brent averaged US\$70.7 per bbl in CY2018.

Products & customers

Vedanta is the largest private sector producer of crude oil in India. Our crude is sold to hydrocarbon refineries and our natural gas is used by the fertiliser industry and the power generation sector in India.

Market drivers & opportunities

The shale gas revolution will continue to disrupt the oil & gas sector. The US closed out 2018 as the world's largest producer of crude oil and is projected to become a net exporter by 2020. Robust shale growth will take US production to an average of 12.4 million bpd in 2019 and 13.2 million bpd in 2020, which will exert downward pressure on oil prices.

India currently meets 83% of its oil consumption and 46% of its gas consumption through imports. The Indian government projects a 10% reduction in India's imports of oil & gas by 2022. India remains underexplored, with only 7 of the 26 sedimentary basins currently producing oil & gas. Further, re-assessment of India's resource base has increased the country's total hydrocarbon resources (in place) by close to 50%, of which approximately 71% remain undiscovered, providing significant growth opportunities.

In 2018, we saw an increase in the pace of implementation of the Open Acreage Licensing Policy (OALP) in the Indian oil & gas sector, with the launch of the second and third rounds offering 14 and 23 blocks, respectively. In addition, to boost domestic production and provide greater energy security, the Government has introduced a range of new policies aimed at facilitating business and attracting investment.

While global demand is expected to stagnate due to the global economic slowdown and mounting trade tensions, Indian demand is projected to show robust growth, thereby presenting opportunities in the oil & gas value chain.

As a result of the 2018 award of 41 OALP blocks, Vedanta has expanded its footprint to all the major sedimentary basins of India. With a strengthened growth pipeline in exploration and development, the Company is well positioned to meet this increased Indian demand by producing half of the country's crude oil in the coming years.

Market Review

Continued



ALUMINIUM

Expanding capacities in smelters and refinery

We saw an eventful year in 2018 in the global aluminium industry, with the imposition of US tariffs on imported aluminium, sanctions on Rusal, production disruptions at Alunorte's Brazil operations and weaker domestic demand growth in China. As a result, aluminium prices were extremely volatile. Prices on the London Metal Exchange fell 23% in the second half to US\$1,800 per tonne from US\$2,290 per tonne in May 2018.

Sanctions imposed on the Russian aluminium producer Rusal in April 2018 were lifted in January 2019. A production embargo on the world's largest alumina refinery, Alunorte in Brazil (which accounts for 10 percent of global alumina supply excluding China), due to alleged environmental breaches was lifted although the resumption of full production is still awaiting federal court approval. Aluminium production and smelter capacity is expanding cautiously in China where environmental curbs are a little less stringent than expected. Aluminium prices may remain range bound in 2019, depending on the utilisation of capacities in China.

Products and consumers

Vedanta has the largest integrated smelter in India with 2.3mtpa proposed capacity and is the market leader in primary aluminium with a 37% market share. Our product range includes ingots, primary foundry alloys, wire rods, billets and rolled products.

In FY2019, 30% of our sales were to the Indian market, specifically for use in the construction, electrical and transportation industries. This was lower than in previous years as India saw a surge in imported aluminium in 2018.

Vedanta boosted its sales to Japan and South-East Asia in 2018. International sales to our established customer base in other key Asian, European and North and South American markets also grew, increasing by 30% to 1.3 million tonnes this year.

Market drivers and opportunities

The domestic demand for aluminium in India is expected to benefit from the infrastructure projects prioritised by the government. The automotive and food packaging industries are also expected to rapid urbanisation should augment consumer demand; yet another positive for the sector. Moreover, the per capita aluminium consumption is far below the global average. This offers huge potential, given our demographic and economic outlook.

With a production capacity of 2.3 million tonnes, Vedanta is in pole position to take advantage of these opportunities

POWER

Growth in Indian demand driving capacity increases

Vedanta operates a 9GW diversified power portfolio in India consisting of 96% thermal power and 4% from renewable energy sources.

India is the third largest electricity producer in the world. The electricity generation target for conventional sources for the year 2018-2019 has been fixed at 1,265 billion units (BU), which represents growth of 4.87% over the previous year (2017-2018). Between 2010 and 2018 electricity production in India grew at a CAGR of 5.69%, driven by government initiatives and schemes to increase electrification across rural India. Since last April all villages in India have had an electricity connection.

Products and consumers

Of Vedanta's power portfolio, 37% is used for commercial power while 63% is for captive use. Nearly 95% of the power generated for commercial purposes is backed by long term Power Purchase Agreements with local Indian distribution companies.

Market drivers and opportunities

Demand for power in India is expected to grow rapidly from 691TWh in 2007 to 1,894.7TWh by 2022, at a CAGR of 7%, driven predominantly by the expansion in industrial activities, a growing population, rising per capita incomes, policy support and increasing electricity penetration. The government has also been supportive of



IRON ORE

growth in the power sector, delicensing the electrical machinery industry and allowing 100% Foreign Direct Investment (FDI). From April 2000 to June 2018, total FDI in the sector was US\$14.18 billion of which US\$6.84 billion was invested in non-conventional sources. In the wake of surging domestic coal production, the country's power sector is becoming increasingly stable. In addition, in February 2018 the government permitted commercial mining for thermal coal, which will improve India's self-sufficiency and reduce coal and logistics costs.

As of December 2018, India had total installed capacity of 349GW, of which thermal constituted 223GW, nuclear 7GW, hydro 45GW and renewables 74GW. Total captive power installed capacity stood at 84GW. India currently has a demand/supply gap of around 7.5% and is targeting an additional 58GW of conventional power by 2022. The target for renewable energy has also been increased to 175GW by 2022, of which 100GW will be produced through solar power. Vedanta's power portfolio is well positioned to capitalise on India's growing demand for power.

Iron ore prices lift in the last quarter of 2018

The Platts 62% Fe CFR North China Index – the price at which most iron ore across the globe is sold – rallied by 9% y-o-y in Q4 to average US\$71.4 a tonne. The price, which was sluggish over 2018 compared to rising steel and high-grade iron ore prices, has increased owing to various factors including a delay in implementing China's winter production cuts, temporary weather-related disruptions in Australia and safety outages in Brazil. The price was also supported by falling steel margins, which reduced the incentive to use high-grade ores in steel production.

Products and consumers

Iron ore is a key ingredient in steel, which is ultimately used in the construction, infrastructure and automotive sectors.

Our iron ore mining operations ceased in Goa from March 2018, pursuant to the Supreme Court order. Meanwhile, the permitted mining capacity at Karnataka has recently been increased to 4.5 million tonnes from the previous 2.29 million tonnes.

Market drivers and opportunities

Unexpected events impacted the sector during the year. The major tropical cyclone 'Veronica' hit Australia, knocking six to eight million tonnes off BHP Group's production, while Rio Tinto is expected to lose about 14 million tonnes of output. The loss of these exports came at a time when the market was having to reassess the longer-term impact of Vale's safety issues. The tailings dam breach is expected to have a major impact on the use of tailings dams in Brazil, with tighter restrictions on wet beneficiation and prolonged licensing processes as a result. Weather-related disruptions may cause a short price spike, but Vale's safety issues appear to be almost structural. This means the supply gap will have to be met by other producers. India's exports almost doubled in March, but only to 1.3 million tonnes. This provides a huge opportunity to players who can step in and ramp up quickly.

In addition, world steel production is forecast to continue increasing by 1.8% annually from 1,689 million tonnes in 2017 to 1,780 million tonnes in 2020, led by growth in India and other emerging markets. Production in China – which represents half of world production – is expected to taper in 2020, driven by an expected slowdown in economic growth, which will offset higher infrastructure investment. This growth in steel production in India represents an opportunity for Vedanta to grow its domestic iron ore sales.

Market Review

Continued



STEEL

Construction sector boosting steel demand

Global crude steel production reached 1,808.6 million tonnes for the year 2018, up by 4.6% compared to 2017. India's crude steel production was 106.5 million tonnes, up by 4.9% on 2017, meaning that India has replaced Japan as the world's second largest steel producing country. While the steel demand recovery seen in 2017 continued in 2018, risks have increased. Rising trade tensions and volatile currency movements are increasing uncertainty. As a result, steel prices are expected to experience volatility in 2019. But India's steel demand is expected to move back to a higher growth track, supported by improving investment and infrastructure programmes.

India's steel use per capita for finished steel products stood at 66.2kg, way below the world average of 212.3kg, suggesting a huge unrealised potential for steel demand growth. Recently, India has been trying to unleash this through an extensive reform agenda and an ongoing push for infrastructure development. These factors, along with favourable demographics, are improving the macroeconomic fundamentals.

India was a net exporter of steel in the last two financial years. However, the country witnessed a change in the current financial year with imports exceeding exports during the period April to December 2018.

Products and consumers

Vedanta Limited completed the acquisition of Electrosteel Steels Limited (ESL), an integrated steel plant, on 4 June 2018. ESL saw production increase by approximately 17% in FY2019 compared to FY2018. Wire rod, TMT and DI pipe products were sold in India, mainly to the construction, infrastructure and automotive sectors.

Market drivers and opportunities

The construction sector has been identified as a pan-India steel demand driver, on the back of strong infrastructure development and housing demand; in particular, for affordable housing. Projects such as industrial corridors (connecting existing industrial cities and developing manufacturing sectors) and Sagarmala (connecting states through waterways) will increase India's connectivity, reducing the costs of transportation across Indian states. The Smart Cities initiatives will further boost urban infrastructure investment. There are currently 99 smart cities planned across India.

In addition, the outlook for India's manufacturing sector, which has been lagging behind the service sector as a growth driver, should improve. Firstly, the Make in India initiative, which aims to transform India into a global design and manufacturing hub, will support the further development of steel. Secondly, many states are expected to develop automotive and ancillary industries, to be a global auto hub for small cars with a focus on exports. Finally, some states are also expected to strengthen their mechanical machinery sectors.

All these factors point to a high potential for steel demand growth in India. The speed with which this potential can be realised will depend on whether India can successfully implement both its reform agenda and infrastructure plans.



COPPER

Consumption in India and China fuelling demand

Refined copper consumption grew by 2.9% in 2018 while demand in China, the largest consumer of copper increased by 4.9%. However, the tariff dispute between China and the US, and the falling GDP in China, led to increased market uncertainty and falling copper prices during the year.

On the supply side, India faced a crunch in the availability of refined copper due to Vedanta's Tuticorin smelter closure. Chinese smelter output increased by 4.2% in 2018, despite the closure of some smelters for maintenance during Q4. In Chile, new environmental regulations led to smelters closing for maintenance, resulting in a further supply crunch.

Products and consumers

Refined copper is predominantly used in manufacturing cables, transformers and motors as well as castings and alloy-based products.

The Tuticorin smelter closure affected our production in India. In FY2019, we produced approximately 90kt of cathode.

Market drivers and opportunities

In the coming year, copper consumption in India and China is expected to increase by 11.8% and 1.6%, respectively. This rise is driven by population growth, urbanisation, the rise of the middle class and the evolution of electric vehicles (EVs) and is supported by government measures and initiatives. Another major driver of Chinese demand is the ban on Category 7 scrap imports.

On the supply side, there could be further disruptions in copper production due to the smelter upgrades in Chile following the introduction of new environmental regulations.

Our ability to take advantage of these opportunities is largely dependent on the re-opening of our smelter at Tuticorin.

Vedanta, as one of the country's largest natural resources companies, is uniquely positioned to leverage India's growth potential.



Sustainability & CSR

Growing responsibly



We Are...

Growing together
with everyone



We believe that with our thrust and focus on sustainability, we can advance both our business outcomes and those of the people, host communities and the environments surrounding us.

Over the years, Vedanta has grown to become one of the largest diversified natural resources company in the world. Our Group has interests in zinc-lead-silver, oil & gas, aluminium, power iron ore, steel and copper. All are mature, high-performing businesses in their own right with well-developed governance, HSE and community relations management systems.

Throughout our growth journey, we have remained focused on safety and sustainability, alongside our commercial goals of increasing volumes, becoming the lowest-cost producer, and improving margins. As a Group, we have sought to embed a standardised, high-performance sustainability culture across all our businesses while giving each the autonomy to make day-to-day decisions. Against this backdrop, we introduced the Vedanta Sustainability Framework (VSF) in 2011. Its goal has always been to ensure that each business integrates our sustainability principles into their operational and decision-making structures.

Main picture: Green cover at Cairn operations

Inset: Project Samadhan at HZL – Promoting integrated farming systems and livestock development



KEY STATISTICS*

3.1 million
Community beneficiaries of Vedanta’s social activities
(2018: 3.36 million)

58.6 million TCO₂e
Carbon footprint
(2018: 52.3 million TCO₂e)

24%
Water recycling rate
(2018: 27%)

14
Fatalities
(2018: 9)

3 million m³
of water saved
(target: 4 million m³)

0.47
LTIFR
(2018: 0.34)

1.6 million GJ
of energy conserved
(target: 2 million GJ)

US\$45 million
Community investment
(2017: US\$39 million)

*Due to its recent acquisition, numbers from Electrosteel Steels Limited (ESL) have not been included in the HSE & Sustainability numbers for FY2018-19. They will be included from next year’s reporting cycle.

Sustainability & CSR

Growing responsibly

To enhance our governance on sustainability, the Company has a Board-level committee for sustainability. The Charter for the committee requires it to ensure that the Group performance is in alignment with the policies, standards, and guidelines drafted in the Vedanta Sustainability Framework. It is also expected to advise the Board on emerging sustainability trends so that the Company can strategically address the issues in its long term planning.

Our central oversight bodies, including the Board and Group executive committees, set performance expectations that include sustainability metrics, and ensure that we comply with global environmental social governance (ESG) considerations. Based on this guidance, the individual businesses set their own strategy, technology deliverables, production outcomes, sustainability measures and other goals.

We are driven to achieve world-class ESG performance and this ensures that sustainability issues are central to Group-level decision-making.

During the year, we have continued to make progress against our priorities and achieve positive results in some areas, while reviewing how we operate in others and taking steps to improve outcomes for our stakeholders.

RESPONDING TO MATERIAL CONCERNS

Our continuous engagement with internal and external stakeholders enables us to keep a finger on the pulse of the expectations they have. Their views (see Page 47) serve as valuable input to our management group and help it to define the material issues for the Company.

While we continue our efforts to improve our systems and their performance in all the key issues identified, based on the external and internal stakeholder feedback, the following areas have emerged as being the most material in the last year demanding either management or stakeholder attention:

- The safety of our workforce (Page 64)
- Environmental management (Page 65)
- Retaining our social licence to operate

(including community engagement & development initiatives, and human rights) (Page 68); and

- People management for talent retention, diversity of our workforce and providing equal opportunities to all (Page 73)

Our sustainability roadmap sets out our targets and tracks performance on the key material issues.

We will be updating our materiality matrix at the beginning of FY2020.

Below: Our employee from Cairn Oil & Gas interacting with the local community



OUR SUSTAINABILITY ROADMAP

Objectives and targets FY2019	Status	Performance	Target FY2020
The safety of our workforce			
Achieve a score >75% in six safety performance standards	⬇️	Average score achieved was 61%	Achieve score >75% in ten safety performance standards
Zero fatal accidents and an LTIFR of 0.30	⬇️	14 fatalities; 0.47 LTIFR	Zero fatal accidents and an LTIFR of 0.30
Environment management			
Achieve water saving of 4 million m ³	➡️	3 million m ³	Achieve water savings of 3.5 million m ³
Achieve fly ash utilisation of 75%	⬆️	110%*	Achieve fly-ash utilisation of 80%
Continue our reduction in GHG intensity and formalise our target	⬆️	14.5% reduction; on-track to achieve target	Reduce our GHG emissions intensity by 16% from a 2012 baseline by 2020
Achieve 2 million GJ in energy savings	➡️	1.6 million GJ	Achieve energy savings of 1.95 million GJ
Develop our capability and strengthen tailing management practices across the Group	⬆️	Audits completed; recommendations under consideration	Third-party review of tailings/ash dyke management system and development of site specific improvement plan (India operations)
Retaining our social licence to operate			
Complete the baseline and social impact assessments in all businesses	⬆️	Completed	Ensure alignment of all BU plans with issues identified during baseline surveys
250 Nand Ghars to be constructed in FY2019, and planning for additional 1,000 to be completed	⬆️	358 Nand Ghars constructed. Planning for additional 1,287 completed	1,200 Nand Ghars to be constructed in FY2020.
Develop a standard policy on employee engagement for the Group	➡️	Under progress	Roll out of employee engagement platform across the Group A standard on-line community grievance record/redressal software (NIVARAN) across the Group
People and diversity			
Continue to focus on Code of Conduct training for all professional employees, including new hires	⬆️	100% of new employees trained; existing employees are given online training annually	Continue to focus on Code of Conduct training for all professional employees including new hires
Achieve 33% female representation at Vedanta Board-level by 2020.	➡️	Work in progress. 12.5% of the Vedanta Board is female	Achieve 33% female representation at Vedanta Board-level by 2020.
Focus on anchoring and engagement of high-potential employees through our flagship programme V-Connect	➡️	Initiative is directly anchored by the business leadership team through their respective HR teams. It is ensured that our professional population is anchored by senior leaders across the BUs	Diversity % improvement in our campus hiring programme by 5%
Focus on Right Management in Place in each SBU	➡️	There are 41 SBUs in place, each is led by SBU president. SBU Management-in-place is regularly reviewed by Group Chairman and Group ExCo	Ensuring Right ExCo & succession for each business

*The number exceeds 100% as we were able to utilise our legacy fly-ash waste for internal infrastructural development projects.

⬆️ Achieved ➡️ In progress/Partially achieved ⬇️ Not achieved

Sustainability & CSR

Continued

A STRUCTURED APPROACH TO SUSTAINABILITY

The Vedanta Sustainability Framework is central to our sustainability agenda, and is focused on our four strategic pillars:

1. Responsible stewardship

We are committed to safeguarding our resources by monitoring, managing and improving the Group's health, safety and environmental performance. Our vision for 'Zero Harm, Zero Waste, Zero Discharge' is the desired outcome of this approach.

Focus areas: Code of Conduct, ethics, health, safety & environment

2. Building strong relationships

We maintain an open and continuous dialogue with our stakeholders. Our goal is to ensure that we align our business planning, community relations and CSR programmes with stakeholders' needs, maintaining and strengthening our social licence to operate.

Focus areas: stakeholder engagement and management, human rights, neighbourhood dialogue

3. Adding and sharing value

We drive economic empowerment and generate shared value through significant and relevant investment in local communities and national economies.

Focus areas: employees, communities, business investments

4. Strategic communications

We are committed to transparent and timely disclosure that builds trust. We believe that clear and regular communication and dialogue with all our stakeholders helps to create a positive environment for successful operations.

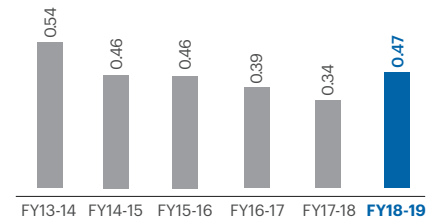
RESPONSIBLE STEWARDSHIP

It is critically important to us that we take care of the health and safety of our workforce. We also seek to tread as lightly as we can to minimise our environmental impacts on those who live around us, and to protect natural resources.

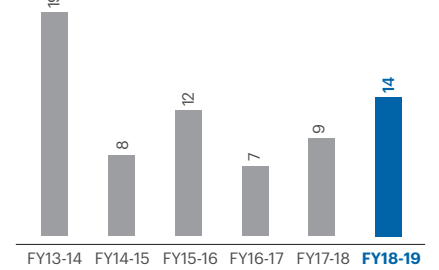
The safety of our workforce

Despite our continued efforts to improve the safety systems across the Group, this year saw the tragic loss of 14 of our colleagues in work-related accidents. Alongside identifying root causes, plugging existing gaps, training the workforce and management in identifying safety hazards and making better risk decisions, our leadership team has put its own roles and responsibility under a microscope. A key area of focus has been the practice of Visible Felt Leadership on safety, which requires all leaders to spend more time on the shop floor, identifying and correcting unsafe acts. In addition, the team will shift its attention to monitoring leading indicators, such as time-spent-on-field, safety interactions, checking and managing critical safety risks, and proactively engaging with long term business partners on their safety performance.

LTIFR



FATALITIES



Below: Safety is paramount at each step

We are driven to achieve world-class ESG performance and this ensures that sustainability issues are central to Group-level decision-making.



Chetna – a programme to raise safety consciousness

We are determined that if any safety incident occurs, we learn from it and use its lessons to prevent any repetition.

An analysis of past incidents revealed that many could have been avoided if workers had been more aware of their surroundings and practised safe behaviours. BALCO launched 'Project Chetna' (Project Awareness) to coach, assist and train the workforce in recognising warning signals, remaining focused on their task, and applying known, safe behaviours that can help prevent accidents.

The programme has trained over 1,600 employees and 1,100 contract workers, and made safe actions and safe behaviours clearer. As a result of this focus, the LTI frequency rates have nearly halved from the previous year.

Daily 'visual management' making issues visible

At the Lanjigarh refinery, the team has adopted a concept from the automotive industry. They now have a visual management system, with the idea of making key business processes literally visible.

This approach helps management teams to identify any bottlenecks that need to be resolved and eliminated in order to run a successful refinery. A key part of this approach is to resolve problems and barriers in a structured manner.

All sections in the plant area are assigned boards that detail:

- the safety measures required
- focus areas for safety interactions
- places where housekeeping inspections will occur
- the high-risk tasks for the day and their corresponding control measures

The boards also cover all the actions being undertaken during the day, with a specific focus of identifying any unplanned activities and/or risks in the operational area that may impact the refinery. They also flag up any maintenance activities that may need to be performed over the next 24 hours.

The final assessment involves identifying risks that the section may generate due to its activities at the 'one-week-out' stage, enabling advance planning to mitigate them.

This approach has allowed the plant managers to systematically identify and address risks to the plant and eliminate

safety hazards. As a result, the plant has seen record month-on-month production, coupled with zero-LTIs in over 28 million working-hours.

This approach underlines the overall philosophy of the Group when it comes to running safe operations. While our safety performance standards outline the expectations and help set out guidelines to prepare standard operating procedures, it is practices such as these above that are helping businesses implement safe working conditions.

Additional practices such as Visible Felt Leadership, improving the management of safety critical tasks, and increasing awareness, training, and accountability of our business partners will help the Group to deliver on its commitment of 'zero harm'.

Statistics for health and safety

- 1.57 million man-hours of HSE training delivered
- There were 110 LTIs and 14 fatalities in FY2019

Managing our environmental performance

Vedanta is committed to minimising the Group's environmental footprint. To do this we have embedded efficiency goals across the organisation focused on lowering our airborne emissions, reducing our waste and effluent volumes, and optimising the use of energy and water. We have also taken measures to protect the biodiversity of our operational regions.

The Vedanta Sustainability Framework (VSF) comprises comprehensive policies and standards on water, energy and carbon, waste and biodiversity. The framework, combined with objectives and targets on energy, GHG, and waste and water management, ensures that each of our businesses follows the same high standards of environmental management.

Tailings dam management

Tailings dams and ash ponds are inherent in mining operations. However, as the recent Vale disaster in Brazil has demonstrated, if breached they can pose a significant threat to neighbouring communities as well as damage the environment.

At Vedanta, our principal concern is the safety of the people who live downstream from our dams. Over the last 18 months the Company has taken active measures to improve the management of our dams and ponds. These started with an independent assessment, and over the last year we have brought onboard the global experts Golder

Associates to review the integrity of our dam structures and their associated management practices. The review has been completed at all our dam locations and we are now reviewing the recommendations for implementation.

The Company has also introduced a Tailings Dam Management Standard to ensure that all our Group companies follow consistent international best practices.

Learnings from the review were also supplemented by measures to prepare the dams for the monsoon season, which could experience overflow conditions in the event of heavy rainfall.

Other steps we have taken to improve oversight include daily/weekly checks (as required); revising the risk matrix; introducing online surveillance systems; conducting liquefaction analysis; enhanced training for all key personnel; improved documentation; quarterly dam-state reviews by senior management; and developing a closure plan for all facilities.

Although there is still much to do, we believe we have initiated a structured management approach that will minimise the risk of a future dam breach.

Water management

Managing water effectively is critical, both for our operations and for the communities who live near us. By understanding how we source and use this resource, our businesses can de-risk their operations from unplanned stoppages caused by supplies drying up.

Last year, we performed a water-risk assessment at 25 of our most significant business locations. This determined the risk based on water-stress information available in global and public databases and from site-specific measurements. The approach evaluated physical, social/regulatory, economic and business risks related to water. In addition to understanding each location's risk, our goal is to standardise this risk assessment across our Group companies.

Our findings confirmed how our operations in the high water-stress regions of India (Rajasthan, Punjab, Tamil Nadu) had a greater risk of shortages over a period of time than our businesses in other locations. This is because of competitive pressures for water usage in those regions. Each of our businesses has started to put in place appropriate mitigation measures to counter these risks.

Sustainability & CSR

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The road to improved water management at KCM

The Konkola mines of KCM have a 70-year legacy of discharging high-TDS water into the local river. The practice, which existed before KCM became part of the Vedanta group has been a sore point with local communities and has been a cause for environmental concern.

In 2017, KCM implemented a water management programme to permanently bring the operations to zero water and zero tailings discharge. This programme is supported by specialist consultants and has regulatory approval from the Zambia Environmental Management Agency (ZEMA). The programme is being implemented under the guidance of ZEMA and local communities and a governance committee has been formed, including the ZEMA Director General and the CEO of KCM.

The programme to address environmental concerns and bring KCM to a zero discharge site includes:

- A Tailings Dam Water Recycling Project to recycle water back to the plant
- De-silting works at the Pollution Control Dam (PCD)
- De-silting works of other streams
- Installation of a catchment pond immediately downstream of the Tailings Leach Plant
- Installation of online monitoring equipment for discharge control
- Following remediation, a review and Environmental Impact Assessment of off-site areas to consider further remediation options
- Installation of solar powered community water boreholes including a water reticulation piping network for local communities to ensure a continuous supply of drinking water.

As of FY2018-19, progress has been made on several of these sub-projects and we are confident that we will have a zero discharge plant in the near future.

	FY2019	FY2018	FY2017
Total water consumption (million m ³)	278.6	280.01	277.60
Water recycled/reused (million m ³)	67.58	74.40	66.81
Water recycled (%)	24.25	26.60	24

Energy and carbon management

Our energy and carbon management adopts a two-pronged approach: improving energy and process efficiency, and diversifying our energy portfolio to include renewable energy. We are committed to invest in new technologies and processes to enhance our energy efficiency.

Energy consumption (million GJ)	FY2019	FY2018	FY2017
Direct energy consumption	485.38	425.5	413.39
Indirect energy consumption	68.40	21.12	14.61
Total energy consumption	553.78	446.62	428

Climate-related business risk

Climate change continues to pose an ever-greater risk to the planet. India, which has set ambitious targets to reduce its carbon intensity by 33-35% by 2030, and to source 40% of its electricity from non-fossil sources, continues to push ahead to meet those targets. Vedanta's continuing commitment to decrease our climate change impact is delivering measurable results. Last year, we said we expected to reduce our GHG intensity by about 16%, from a 2012 baseline, by 2020. We are on-track to meeting this target. By FY2018-19 we had achieved a reduction of 14.5%.

GHG emissions (million tCO ₂ e)	FY2019	FY2018	FY2017
Scope 1 (direct)	54.40	51	51.7
Scope 2 (indirect)	4.22	1.2	1.4
Total	58.62	52.2	53.1

Improving efficiencies in the aluminium potline at Jharsuguda

The smelting process to produce aluminium is executed in pots. In Smelter 1 there are 600 pots in the pot room. Smelting is a continuous process and cannot be stopped and started frequently. The rectifier, which provides DC power to the potline for the electrolysis process, is therefore key to the smelting process.

The rectifier converts AC current to DC. During the project initiation phase, the rectifier conversion ratio was measured at 98.32% efficiency. The target set by the team was to drive efficiency up to 98.50% as this could result in substantial cost and energy savings.

Through observation, data and experience, the team identified that some initial quick-wins could be achieved by modifying specific processes, such as cleaning of the heat exchanger in the rectifier units, optimisation of the de-mineralised water-flow, and the cooler slot.

Outcome

These operational and process improvements, such as scheduled calibrations, changing nuts and bolts during overhaul, and dismantling electrolysis plates, led to enhanced efficiency of 98.5%, and savings of:

Energy saving	6.9 million units per annum
Coal consumption reduction	4,800 tonnes
Carbon dioxide reduction	7,040 tonnes

Air quality

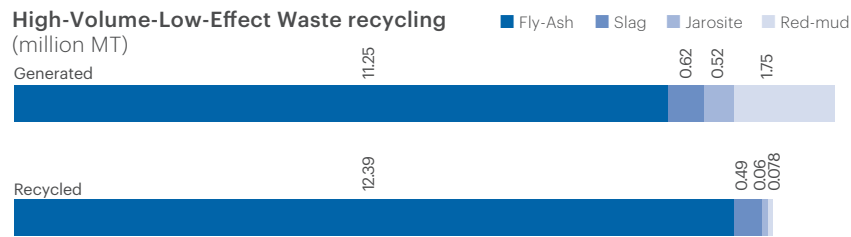
We are committed to identifying and managing our airborne emissions. We monitor particulate matter (PM) and SOx as part of our ambient air quality process. We also monitor as applicable lead and fluoride emissions from our operations.

Stack emissions (in MT)	2018-19	2017-18	2016-17
Particulate matter	10,106	8,837	11,056
Sox	243,472	191,751	178,324

Waste

To comply with our 'Resource Use and Waste Management' technical standard, we first reduce our waste, in quantity as well as quality (reducing the toxicity), and then recover and recycle where possible (either in-house or through authorised recyclers). The final stage is disposal in landfill or by incineration, using authorised, licenced and secured landfills.

Non-hazardous, High-Volume and Low-Effect wastes such fly ash, red mud and phosphogypsum are the predominant wastes generated from our operations. Hazardous waste includes used/spent oil, waste refractories, aluminium dross, spent pot lining and residual sludge from smelters.



HINDUSTAN ZINC: COMMITTED TO ACHIEVE ZERO WASTE

Responsible waste management is a fundamental priority across all Vedanta businesses. At Hindustan Zinc this requires particular management focus since the refined metal is only around 8% of the lead-zinc mineral ore.

The business applies the '4R' waste strategy – reduce, re-use, recycle, & reclaim – and disposes any residual waste through most eco-friendly avenues available.

Reduce – Fumer: preventing waste at source

In recent years, Hindustan Zinc has been converting Jarosite, a major waste from zinc smelters, into a non-hazardous material by using state-of-the-art 'Jarofix' technology. We are now about to go a step further by adopting 'Fumer' technology, stopping the generation of jarosite at the source itself, and recovering metals from waste while generating slag to be used by cement industry.

The first zinc Fumer project, scheduled for FY2020 at Chanderiya, will have a waste treatment capacity of 160,000 mt per annum. The project will advance our goal of zero solid waste and will reduce our land requirement for Jarofix storage by one hectare annually. Fumer plants are also planned at other smelters in Chanderiya and Dariba.

Re-use – Turning tailings into fillings

Tailings are the materials left over from separating the valuable fractions of ore from uneconomic waste. They are usually managed through surface disposal in lined pits, but these require huge land areas.

However, instead of disposing of tailings, we have started a unique trend in mining in India with the successful commissioning of 'paste-fill' plants at our Sindesar Khurd and Rampura Agucha mines. Mining operations require filling of stopes/voids to ensure stability and to control subsidence. Traditionally this has been executed by using hydraulic filling with cement, but a new concept is to use paste-fill technology in which the tailings are modified into a semi-solid paste which is then used to fill the empty underground voids. The paste filling process is fast and uses almost all the tailings, minimising the need for surface disposal.

With the successful commissioning of paste fill-plants at Sindesar Khurd and Rampura Agucha, along with the existing facility at Rajpura Dariba Mine, we will reuse more than 60% of our tailings and avoid surface disposal. This will increase the life of the tailing dams and saving hectares of additional land required for expansion of these dams.

Innovating to use smelter waste in cement and highway construction

For several years, we have also partnered with reputable R&D organisations and corporates to use slag in cement and highway construction. This has received approval by Bureau of Indian Standards and the Indian Road Congress. In FY2019, over 300,000 mt of slag was used in cement manufacturing and road construction. This freed up several hectares of land for alternative uses, replaced virgin red ochre and limestone and reduced CO₂ emissions. Similarly, based on studies conducted by various government organisations, Jarosite and Jarofix have been determined to be commercially viable for usage in cement industry and road construction. In FY2019, over 13,000mt of Jarosite was used in the cement industry while over 70,000mt of Jarosite and Jarofix was used in road construction projects.

Recycle – Waste to wealth

Our ancillary product plant at the Dariba Smelting Complex is an important 'waste to wealth' initiative that generates value from certain recycling activities. The plant treats smelting residues to produce key consumables such as copper sulphate, zinc sulphate and potassium antimony tartarate, which will be recycled back into beneficiation and smelting processes.

Following its success, a new ancillary unit, expected in H1 FY2020, is under construction at the Chanderiya lead zinc smelter to treat all smelting process residue, including work-in-progress material such as copper dross, purification cake, antimony dust and cadmium sponge.

Below: Geotextile laid on dump slopes for dump stabilisation at Codli mine



Sustainability & CSR

Continued

Reclaim – Wastelands hosting solar farms

Wherever we need to occupy land for mining and smelting waste, we are ensuring it is put to maximum use. We have used the Jarosite pond at the Debari smelter, the old tailing dam at the Dariba mine and the waste dump at Rampura Agucha to double up as solar farms. We have installed 38MW of solar generation there that would otherwise require an additional footprint of 190 acres.

In addition:

- We have rehabilitated an old tailing dam after stabilising the tailings and then planted more than 150,000 trees over a 38-hectare area. This first of its kind project was undertaken jointly by HZL, Dept. of Bio Technology (GoI), NEERI and the Nagpur & Swedish International Development Agency.
- We also have initiated 'Zinc Football' - a unique programme in India. At the heart of this initiative is the Zinc Football Academy at Zawar, a residential world-class football coaching facility. This facility was converted from old tailing dams, and today gives hand-picked kids, chosen from 4,000 aspiring footballers from all over Rajasthan, opportunities and guidance to be developed into professional footballers alongside their academic education.

STATISTICS FOR ENVIRONMENT Successes

- We recycled 92% of High-volume and low-effect waste in sustainable applications
- Our GHG intensity reduction target, from a 2012 baseline is 14.5% against an expectation of 16%, by 2020

Below: Captive Power Plant at Chanderiya Smelting Complex



Work in progress

- We saved 3 million m³ of water against targeted savings of 4 million m³
- We conserved 1.6 million GJ of energy against targeted savings of 2 million GJ

BUILDING STRONG RELATIONSHIPS

Human Rights

We regard upholding human rights as a fundamental responsibility, and this is brought into particularly sharp focus given that most of our operations are performed in developing countries. It is a material consideration across all our business decisions.

Our Human Rights Policy is aligned with the UN's Guiding Principles on Business and Human Rights, and includes strict prohibition of child or forced labour – either directly, or through contract labour.

These are non-negotiable offences at Vedanta and we have mandatory systems in place to enforce this policy at all our operations. Further, we carry out periodic inspections of our remote mine locations and require proof of age for all contract workers.

Additionally, our Code of Business Conduct and Ethics underpins our approach to protect the fundamental rights of all our direct and indirect employees, communities and immediate supply chain.

We uphold our workers' right to freedom of association. The collective bargaining agreements are based on transparent and fair discussions between the management and union representatives. Vedanta's Suppliers' Code of Conduct is

implemented as part of the terms and conditions of supplier contracts across the Group and all new suppliers are required to sign, endorse and practise this Code.

We also operate a Supplier & Contractor Sustainability Management Policy. Both the Code and the Policy clearly communicate our expectations of suppliers: to comply with all relevant legislation and follow our policies while executing work for Vedanta, or on our behalf.

Adding and sharing value

Our operations are mainly located in the emerging economies of India, South Africa, Namibia and Zambia. We believe that we have an important role to play in developing societies and communities where we operate, enabling them to share in the value we collectively create.

Our approach

We are committed to giving back to the stakeholders who play a vital role in powering our growth. Reducing the social and economic divide through generating economic value, distributing wealth, investing in employees and enhancing standards of living are all key elements of the Vedanta Sustainability Framework. We not only drive economic growth through taxes, royalties, wages and supplier contracts, but our operations also help to provide the products these communities need to further their development; for example, through infrastructure and housing.

Communities

Vedanta works towards a larger goal of creating enduring value for the communities from where it operates. Proactive engagement with communities helps to resolve concerns they may have about our operations. It also allows us to understand their expectations of the Company, and so help us develop a comprehensive engagement strategy. This strategy includes creating opportunities for employment, using the services of local vendors, and implementing focused CSR and community development activities. Collectively, these actions allow us to create a positive social impact. In some instances, like at Tuticorin, local stakeholders have sought to withdraw their social licence to operate, resulting in a stoppage of our operations. When we encounter such situations, our teams have taken a step back and sought to understand the root cause of the discontent. Steps have been taken to modify our response and engagement with the communities – with increased stakeholder interactions, review of our

policies and procedures, and where required, steps to respond to stakeholder concerns.

The majority of our initiatives are identified, developed and carried out in collaboration with local government bodies and community organisations. They are also in alignment with the needs of the communities, and the Company has committed to align its CSR activities to the priorities of its neighbourhood communities & also national/international priorities, including the Sustainable Development Goals. Almost all our programmes, follow a bottom-up community engagement approach. This collaborative approach ensures community ownership, suitable project design, effective delivery and post-project sustainability. Apart from communities, we also strongly believe in partnering with government agencies, corporates, civil society organisations & community-based organisations to carry out durable and meaningful interventions. This '4Ps' model (public-private-people-partnership) has inspired us to participate in ambitious long term projects such as the Nand Ghar initiative.

All our CSR programmes are governed by the Vedanta CSR Policy, and Corporate Technical Standards that are part of the Vedanta Sustainability Framework. Further, in order to benefit from diverse perspectives, and in keeping with a culture of collective leadership, Vedanta has formed a CSR council. The council is led by a senior business leader comprises of CSR Heads & CSR executives from the different Business Units. The council is responsible for governance, synergy and cross-learning across the Group CSR efforts. It meets every month and reviews the performance, spends and outcome of CSR programmes for all Business Units. The council is instrumental in implementing improvement projects to create a seamless enabling eco-system for Business Units to carry out best-in-class community development programmes.

Vedanta has a strong Board CSR Committee, which includes senior Independent Directors. The Committee provides strategic direction for CSR activities, and approves its plans and budgets. It also reviews progress and guides the CSR teams towards running well-governed and impactful community programmes.

In FY2019, Vedanta spent US\$45 million on social investments and CSR activities. This is 15% more than the previous year's US\$39 million. This money is spent across



Above: Nand Ghar – Supporting early childhood education

1,201 villages, benefiting nearly 3.1 million people.

Project updates

1. Nand Ghar and Children's Well-being Projects

The importance of education for social growth and upliftment is undisputable and for Vedanta this is a very important pillar of its work with communities. Our various education and childcare initiatives have reached over 155 thousand children.

500 Nand Ghars: Preparing India's future

Vedanta's Nand Ghar 'anganwadis' have been designed to support the Indian Government's Integrated Child Development Services (ICDS), a flagship programme for child and maternal health.

These rural child-health centres provide a community social hub and access to services that every young child needs. They provide early years education, nutritious food, safe play areas and television for interactive learning, and are equipped with rooftop solar panels for 24x7 electricity, water purifiers and clean lavatories.

Healthcare services are also delivered by a visiting mobile health van, and importantly the centres also give local women access to a range of opportunities to learn new skills.

During FY2019, Vedanta opened its 500th centre, at Chaksu Block in Jaipur, and as of this writing we have built 502 operational Nand Ghars across Rajasthan, Uttar Pradesh and Madhya Pradesh, transforming the anganwadi landscape of India. The initiative is delivering impact at scale, with more than 17,000 children receiving pre-school learning with advanced teaching methods, and over 11,000 enjoying nutritious meals every day.

While this 500th is a major milestone, we have greater ambitions: Vedanta is working to open 4,000 Nand Ghars across India. The project ultimately aims to impact 85 million children and 20 million women across 1.37 million anganwadis in the country.

Our Founder and Chairman Anil Agarwal said, "We strongly believe that a nation can only progress by investing in the future of women and children. This initiative addresses issues relating to pre-primary education, healthcare, nutrition for children, and economic empowerment for women in rural India."

As part of the Khushi initiative, HZL, in partnership with Government of Rajasthan strengthens the functioning of 3,089 ICDS centres (called Anganwadis) in the five Districts of Hindustan Zinc's presence, reaching over 60,000 children and caters to the health, nutrition and pre-school needs of children in the formative 0-6-year age group. The project also conducts periodic assessments to track developmental metrics of the children. This year an average increase of 11% in children's learning capability was identified through these standardised assessments. Attendance also saw an increase with the average attendance increasing from 44% two years ago to 60% now.

Vedanta Limited Jharsuguda initiated a project called 'Vedanta Vidyarthi Vikas Yojana (VVVY)' in the year 2009 to strengthen the education standards of secondary school students through remedial coaching classes. Since the beginning of the project, quality education has been provided to the students of standards 8 to 10. Significant work has been undertaken to improve the quality of education provided and this has improved the pass percentage of children in their school exams. To

Sustainability & CSR

Continued

date, 3,975 students have been enrolled under VVVY project. 1,346 students appeared in matriculation examination and 1,130 students have successfully passed with good marks.

At KCM, the childcare programme is implemented in partnership with NGOs and community as implementing partners in order to build their capacity and promote community ownership of the project. The early learning and nutrition programme has benefited a total of 657 children to date. Additionally, the company also provides scholarships to bright students in its areas of operation in order to develop young people to take up careers in mining in future. The company provides scholarships to pupils at secondary and tertiary levels, which has benefited over 1,000 students. The students study for degree programmes in the fields of; metallurgy, mining, engineering and medicine.

Konkola Copper Mines: Empowering children through education

Konkola Copper Mines (KCM), the largest copper producer in Zambia is committed to bringing about social and economic empowerment in the region. One of the company's initiatives is providing support to local schools through infrastructure development to enhance the learning environment.

For the last four years, KCM has been working on a school improvement programme at Shimulala, situated on the outskirts of Chingola town in the copper belt region of Zambia. The programme included constructing a classroom block and toilet facilities, transforming it from being a wood, mud, and grass thatched structure. The school now provides high-school education and has qualified as an examination centre for Grades seven (7) and nine (9). This development has put an end to the 10 kilometres distance, many students had to travel to



Above: Developing communities through women empowerment

sit for examinations at another school, an ordeal which negatively affected girls, who consequently dropped out of school.

Another major contribution from KCM has been the installation of a solar-powered borehole, which provides piped water to students and surrounding communities. Jennifer Kapitiya is a 16-years-old grade nine student at Shimulala primary school who has decided to return to her former school because of improved water and sanitation conditions. "My elder brother and I left the school because of poor quality of water, we used to experience diarrhoea regularly. Last year, I came back because we have clean water and I will write my exams here," she said

As a result of all these initiatives, enrolment, retention and the pass rate for the school has improved, with the school recording a 100% pass rate for two consecutive years. In particular, girls' enrolment and retention, has improved spectacularly.

emerged as a model community-based organisation. The cooperative has successfully completed 10 years of empowering women since its inception and is currently touching the lives of 3,793 members in 71 villages. The cooperative, aided by this programme, has been able to generate funds of ₹2.52 crore and there has been a significant increase in the income of its members.

HZL is running a similar programme called Sakhi which started three years ago and now has 1,922 SHGs connecting the company with 23,954 women. The total savings accumulated through this project are now at ₹6.22 crore and the total loans disbursed amount to ₹17.13 crore. This money is used by members for household consumption, agriculture and health & sanitation. 492 women have used the loans to create new enterprises or expand existing enterprises.

3. Healthcare

There is a great disparity in the quality and coverage of medical treatment in India. The majority of the rural population lack basic primary healthcare and given that most of our operations are also in rural areas enabling rural communities to have access to affordable and quality healthcare is an important focus for us. The Vedanta Hospital at Lanjigarh continues to provide much needed healthcare to thousands in the District of Kalahandi, Odisha. This year, the hospital has seen a total footfall of 67,425 patients, of which nearly a third were new patients – a testament to the effectiveness of the services provided. A further 12,988 patients were treated through the Lanjigarh team's Mobile Health Van programme.

2. Women's empowerment

Women's empowerment is all about equipping and enabling women to make life-determining decisions. Vedanta recognises this need for empowering women and is running several projects to help communities take a step towards a more equitable future. The programmes are associated with around 40,000 women (up from 28,000 last year) and amongst them 3,600 women have started/revamped their own micro enterprises. One of our interventions in this area is the Subhalaxmi Cooperative Society in Jharsuguda, which has



Above: Grooming young minds for tomorrow – KCM supported Ndeleni ECCED centre, Chingola

VMRF

BALCO has established the Vedanta Medical Research Foundation (VMRF), a voluntary, non-profit organisation to prevent, control and eradicate cancer and illnesses related to it. BALCO Medical Centre, a state-of-the-art oncology facility in Naya Raipur, is its first flagship initiative. As the first super-specialty hospital with the capability to treat cancer, BALCO Medical Centre’s genuinely colossal impact is validated by the reception it received from the people and the milestones achieved – over 4,000 patients were served, more than 230 patients underwent radiation, 250+ surgeries were performed and over 1,000 chemotherapies were carried out.

KCM implements the Clean Water Project for over 8,000 people in neighboring local communities as one of its key CSR initiatives. The programme is implemented in partnership with local organisation called Davis & Shirliff and local Community Development Committees who are trained in handling the facilities and manage it as part of entrepreneurship.

4. Agriculture and animal husbandry

In much of rural India, the communities continue to rely heavily on agriculture and animal husbandry. We therefore follow a livelihood development approach of integrating agriculture, dairy, water management, technology, farmer’s organisations and market outreach. To increase the income of farming community in Barmer through productivity enhancement of agriculture and livestock, project Unnati, a Cairn CSR initiative, was set up. More than 10,000 farmers have benefited through various interventions like horticulture demonstrations, construction & renovation of traditional water harvesting structures like KHADIN. Project SAMADHAN by HZL aims to improve the returns from Agriculture & Livestock for about 30,000 families. By the end of this year, the project had successfully worked with 8,660 farmers on agriculture-related activities and 8,944 farmers on livestock-related activities.

In Jharsuguda, to secure economic prosperity among identified households of Siripali village, project Jeevika Samriddhi was launched. The project aims to augment irrigation infrastructure, promotion of advanced agriculture, application of bio-fertiliser and pesticides and making farming a remunerative profession. 111 farmers are benefiting from this project and because of this project, the irrigation potential of the village has increased by 21.34%.

5. Skilling the youth

To maximise the output from the immense demographic dividend India has, it is imperative that the youth are trained in skills suited for the current economic scenario. With the aim of channelling this untapped potential the company is running a lot of skill development initiatives providing training to more than 3,000 youths. BALCO in partnership with IL&FS is providing training to youth in five different potentially high employment trades – Hospitality, Welding Assistant, Industrial stitching, Fitter Fabrication and Electrician. The institute has provided assured employment opportunities to 7,800 students since the inception of its operations. In Thoothukudi, Sterlite Copper through its Tamira Muthukkal project has provided vocational training to 2,000 youth and currently covers 500 more beneficiaries helping them gain skills, thus increasing their employability.

A few other programmes run by HZL, also aim to improve the skills of the youth of Rajasthan and increase their employability. HZLs Skilling and Entrepreneurship centres provide training to youth to become Domestic Electricians, Security Guards, General duty assistants, Sales entry and Data entry operators and in Micro Finance work. Currently, 160 students are being trained and the plans are to train 700 youths each year. Through other initiatives like the Mining academy, ITI training at Maruti, Business Process Outsourcing (BPO) training, the company has been able to train 559 youths this year.

KCM implements a livestock-based Sustainable Livelihood Programme that aims to build capacity of small-scale farmers through training and provision of livestock for rearing and income generation. The project has benefited

over 1,539 households with 4,196 livestock placed in three districts. KCM partners with NGOs, government departments and community in implementing the programme.

Another programme – the Leather Cluster Project has been developed for purpose of empowering youth and women through training, provision of equipment and setting up workshops for entrepreneurship and income generation. To ensure project success, KCM has partnered with the community, a region body called Africa Leather & Leather Products Initiative and government Ministry of Commerce and Trade.

KCM also implements an adult literacy programme, which has benefited over 300 adult learners who have successfully obtained a grade 12 certificate. KCM implements its education programme in collaboration with the Ministry of Education. Under this programme, the company provides the financial support and teaching aids while government covers infrastructure and human resources.

6. Environment protection & restoration

In our operations we make it a priority to operate in harmony with the natural environment. The company is committed to safeguarding the environment and makes extensive efforts to protect and restore nature. Pasumai Thoothukudi, an initiative by Sterlite, launched on the World Forest Day with a vision of developing a green belt in Thoothukudi is an illustration of the significance of this commitment for the company. The Company aims to plant 1 million trees by the culmination of the programme.



Above: Working for the sustainable livelihood of the community, Chililabombwe

Sustainability & CSR

Continued

Tree planting activities at Nchanga

KCM believes that tree plantation is the key to mitigate climate change and boost biodiversity. With this conviction, the business has been actively planting trees in its working areas and surrounding communities since 2007, with the count now exceeding one lakh . Nchanga Business Unit in Chingola has been one of the leading locations for the drive with many projects underway. Prominent among these is the Green Energy (Pongamia) project which commenced in 2016 with 2500 trees of 16 different varieties of Pongamia , planted in TD2 area, which contains residue tailings with no nutrients to support vegetation growth. These trees species will be used for remediation of overburden sites as well as generation of the Green Energy in Zambia once commercialised on a 50ha land.

As on date, more than 35,000 trees have been planted at Muntimpa tailings dam (TD5), overburden dumps and other areas in the plant. In FY2019, KCM has planted more than 1,000 species of Eucalyptus, Acacia Pine and a few other varieties at the site. which has gone a long way in preventing gully formation, reducing dam water levels, serving as wind breakers and providing dam wall stability.

Tree planting has also been embedded in its community relations activities and various types of trees including fruit trees are planted partnering with the communities on a yearly basis.

7. Sports & culture

Sports, at an individual level, helps build character, benefits health and for talented individuals becomes a source of livelihood. However, it is at a societal stage where sports can have a value-altering effect which can lead to a more tolerant and inclusive society. Vedanta identifies this dual impact that can be achieved through sports and thus its sports initiatives are focused on two main objectives; Sports for all and Sports for excellence. Vedanta through its football initiatives in Rajasthan's by Hindustan (Zinc Football Initiative (ZF)), and in Goa by the Iron Ore Business (Sesa Football Academy (SFA)), established on a reclaimed mine has taken great strides in getting closer to reaching these objectives. Zinc Football trains around 2,000 young people, both girls and boys in its 64 Zinc Football schools. Sesa Goa also has four similar centres training 500 children on a weekly basis. These centres enable the game to reach the masses and help create a culture of sports in the country. Both academies have their centres of

excellence with state-of-the-art infrastructure that have not just developed players for their respective state teams but also contributed to the national setup with seven alumni of SFA playing for the Indian national team and eight playing in the elite Indian Super League. The second edition of 'Vedanta Women's Football League' saw the involvement of 160 female football professionals and provided a platform for them to showcase their talents.

KCM Sponsors 2 local football clubs namely; Nchanga Rangers and Konkola Blades Football Club in Chingola and Chililabombwe. KCM football clubs works in collaboration with the Football Association of Zambia (FAZ) who administers football in the country. The clubs are run through employee volunteerism and participation from the community.

Additionally, the Company also promotes the preservation of cultural heritage through cultural dance events and support to traditional ceremonies in collaboration with the Cultural Heritage committees and the National Arts Council. KCM uses the platforms to sensitise the community regarding social, environment, safety, health and security issues that are affecting the Company and the community.

8. Community infrastructure

Infrastructure development provides impetus for economic growth and it is no different for the villages in our operational areas. It not only helps elevate the quality of life in the villages, but also forms the

foundation for socio-economical upliftment. The company recognises this need and therefore is aiding the operational villages in developing basic infrastructure, such as school toilets, drinking water projects, sports infra, local drains and community centres, as per local needs.

Clean drinking water for communities

KCM has strongly committed to Water Sanitation and Health (WASH) pledge and contributes significantly to promoting universal and equitable access to safe and affordable drinking water.

Water quality has been a lingering issue in the Chingola region. A study on Sustainable Livelihood Baseline Report Chingola & Nampundwe (December 2012), conducted by Village Water, Zambia found that most of the people in rural parts of Chingola get their drinking water from unprotected wells which are not safe; causing health issues like diarrhoea, especially among the children.



Above: Chingola peri-urban solar powered borehole: Harvesting the sunlight



Above: Zinc Football Academy – Building character and fueling excellence

KCM has implemented a project aimed at bringing clean water to more than 8,000 inhabitants in five peri-urban areas of Chingola to support national efforts of maintaining high health standards in communities. The water facilities comprise of boreholes, purification plants and 21 water distribution points aiming at alleviating problems of water in the areas and improving sanitation and hygiene. The water from the facilities meets World Health Organisation (WHO) standards and has been certified fit for drinking by the Zambia Bureau of Standards (ZABS). The Project is modelled on shared use of water facilities and the Company has partnered with the government in this for promoting community development. During the implementation period, KCM worked with a local water solutions provider Davis & Shirliff and Community leaders organisations).

The facility at Shimulala and Kalilo communities has enabled running water in two health posts, which has significantly improved the delivery of health services in the areas. The nurse in charge of Kalilo Health Centre on the outskirts of Chingola Lesser Silungwe says that there is a sudden inundation of people seeking health services, especially pregnant women. In her words, "Women were not coming to give birth here because of the requirement to bring with them some water. But suddenly we have seen numbers increase from seven women to an average of 27 in a month. All this is attributed to the availability of the clean water provided by KCM. The water borehole has had an overwhelmingly positive impact on our operations at the clinic."

The water facility has also been extended to a local school in Shimulala area. This has helped the students to access water within the school premises and has improved pupil retention especially girl students.

This conscious effort of KCM focuses to uplift people's standards of living anchored on four pillars of the Company's corporate social responsibility (CSR), which are education, health, sustainable livelihoods and sport. Not only has the project been of tremendous benefit to the communities, it has also helped build trust between the company and the local community, significantly improving our social licence to operate.



Above: Nurturing young talent for future leaders

Statistics for community projects

- In FY2019, we invested US\$45 million in social investment programmes
- 1,201 villages benefiting from our CSR programmes
- There are 3.1 million beneficiaries of our community development programmes

PEOPLE AND CULTURE

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

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

The Vedanta values that drive the organisational culture are:

- **Trust**
We actively foster a culture of transparency in our interactions and encourage an open dialogue which ensures mutual trust and respect.
- **Care**
We are committed to our triple bottom line of 'People, Planet and Prosperity' to create a sustainable future in a 'zero harm, zero waste & zero discharge' environment for our communities.
- **Integrity**
We engage ethically and transparently with all our stakeholders, taking accountability for our actions. We maintain the highest standards of professionalism and stringently comply with all international policies and procedures.

• **Innovation**

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

• **Entrepreneurship**

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

• **Respect**

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

• **Excellence**

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

DIVERSITY

Diversity remains a strong focus. We are committed to providing equal opportunities to our employees regardless of their race, nationality, religion, gender, orientation or age. We are pleased with our progress to date on gender diversity, and women now represent 10.36% of our total workforce. We have set ourselves a target to reach over 33% women at senior levels by 2020 and aim to achieve 20% female representation among our employees.

We are also focused on increasing the mix of geographies and nationalities in our workforce. Since most of our operations are in remote areas, we place a strong emphasis on recruiting employees from among the local population.

Sustainability & CSR

Continued

We are an equal opportunity employer, and a meritocracy – all our decisions regarding employees are based on their contribution, attitude and potential.

RECRUITMENT

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

Right management in place (RMIP)

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

Vedanta Leadership Development Programme (VLDP)

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

TALENT MANAGEMENT AND DEVELOPMENT

Internal growth workshops

We have always aimed to design an organisation which is spearheaded by our 'leaders from within'. Recognising internal talent and promoting them to leadership roles has been the driving factor in our journey of rapid growth. Aligned with this philosophy, the Group conducts 'Chairman's Internal Growth Workshops' which enable our young leaders to fulfil their potential through development



Above: Continuing our journey of developing 'Leaders from within'

opportunities and provide us with a talent pipeline enabled to fill critical roles across the Group. These workshops have resulted in the development of 600+ high-potential new leaders across the Group's businesses who are given significantly elevated roles and responsibilities.

Leadership and talent analytics

We have partnered with experts to evaluate our existing talent management practices and implement best-in-class new initiatives for talent development. We are focusing on employing digital channels to run accelerated growth drives, workshops, in-house learning modules and other development opportunities.

360° feedback

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

PERFORMANCE MANAGEMENT & TOTAL REWARDS

V-Perform: One performance system for one Vedanta

Our focus is to constantly improve the level of automation in all our operations. V-Perform is a pan-Vedanta initiative to standardise the Performance Management System (PMS) and process across all Vedanta Group companies by leveraging

technology. This enables functions, teams and individuals to track performance on a regular basis, evaluate efficiency through advanced analytics and implement proactive decisions towards achieving Vedanta's objectives. We foster a culture of safety and sustainability to achieve our ultimate vision of 'zero harm, zero waste & zero discharge'. To enhance our safety performance in the workplace and strengthen our existing Safety Management System, a safety competency assessment process was completed mid-year by all employees.

Employee Stock Option Scheme (ESOS) 2018

Employee stock options are a significant component of our long term incentives. They enable our employees to share in the success of the Company, encouraging high-growth performance and reinforcing employee pride with a focus on ownership. The scheme was launched after obtaining statutory approvals, including shareholders' approval in 2016. In 2018, 35% of the workforce participated in this scheme with a focus on our young and senior leaders, employees driving strategic projects and high-impact task force members.

GROUP NON-FINANCIAL INFORMATION STATEMENT

We aim to comply with the new Non-Financial Reporting requirements contained in sections 414CA and 414CB of the Companies Act 2006. During the year ended 31 March 2019, the Company was a traded company. The Company delisted from the Official List of the London Stock Exchange on 1 October 2018 and was subsequently re-registered as a private limited company.

The below table, and information it refers to, is intended to help stakeholders understand our position on key non-financial matters.

Reporting requirement	Policies and standards which govern our approach	Risk management and additional information	
Environmental matters	<ul style="list-style-type: none"> HSE Policy Biodiversity Policy Energy & Carbon Policy Water Management Policy 	Responsible Stewardship, page 64 Energy and carbon management, page 66	Sustainability report
Employees	<ul style="list-style-type: none"> HSE Policy HIV/AIDS Policy Code of Business Conduct and Ethics Policy on Prevention and Prohibition of Sexual Harassment Insider Trading Prohibition Policy 	People and culture, page 73	
Human Rights	<ul style="list-style-type: none"> Human Rights Policy Supplier and Contractor Sustainability Management Policy 	Human rights, page 68 Code of conduct and ethics and whistle-blower arrangements, page 140	
Social matters	<ul style="list-style-type: none"> Social Policy Supplier and Contractor Sustainability Management Policy Supplier Code of Conduct Corporate Social Responsibility Policy 	Adding and sharing Value page 64	
Anti-corruption and anti-bribery	<ul style="list-style-type: none"> Code of Business Conduct and Ethics Supplier code of conduct Insider Trading Prohibition Policy 	Operational risks, pages 43 Board fraud and UK Bribery Act, page 140 Code of conduct and ethics and whistle-blower arrangements, page 140	
Policy embedding, due diligence and outcomes		Risk overview, pages 41	Risk management and internal control framework, page 39
Description of principle risks and impact of business activity		Investment cases for creating value, pages 08 Market review, page 52 Principle risks and uncertainties, page 39	Risk management and internal control framework, page 39 Creating value for all our stakeholders, page 46
Description of the business model		Opportunities for Vedanta, pages 38	Our business model, pages 28
Non-financial key performance indicators		Key performance indicators, pages 34 Operational review, various throughout pages 84	Alternative performance measures, page 272

Finance Review

Growth projects on track, strong base for future



"We recorded a strong operational and financial performance in FY2019"

Arun Kumar GR
Whole-Time Director &
Chief Financial Officer

Executive summary: We had a strong operational and financial performance in FY2019. During the year, we completed the acquisition of ESL, which will complement our iron ore business through vertical integration. Our ramp-up plans for growth projects are all on track and with that we have a firm base for an even stronger performance next year.

In FY2019 we recorded an EBITDA of US\$3,393 million, 14% lower y-o-y but with a robust margin of 29%. (FY2018: US\$3,963 million, margin 35%).

Production volumes contributed to an increase in EBITDA of US\$148 million, which was primarily on account of ramp up of volumes at aluminium and volume addition from ESL acquisition. However, this was partially offset by lower volumes at Zinc India and at Zinc International.

Market factors resulted in a net fall in EBITDA of US\$244 million compared to FY2018. This was mainly driven by input raw material inflation and lower commodity prices. This decrease was partially offset by depreciation of operating currencies.

During FY2019, gross debt increased to US\$16.0 billion (FY2018: US\$15.2 billion), primarily due to the acquisition debt for Electrosteel Steels and temporary borrowings at Zinc India.

Net debt^o increased to US\$10.3 billion as at 31 March 2019 from US\$9.6 billion as at 31 March 2018, primarily due to the acquisition debt for ESL in FY2019.

In April 2019, to proactively refinance our near-term maturities, we raised US\$1 billion through bonds in two tranches at a blended average cost of 8.75% and average maturity of 5.8 years. This will extend the average maturity of the outstanding debt at VRL to c. 4 years.

The balance sheet of Vedanta Limited, the Indian listed subsidiary of Vedanta Resources continues to remain strong with cash equivalents, liquid investments and structured investment, net of the deferred consideration payable for such investment of c. US\$5.6 billion and Net Debt^o to EBITDA ratio at 1.1x, which is the lowest among Indian peers.

CONSOLIDATED OPERATING PROFITS BEFORE SPECIAL ITEMS

Operating profit before special items decreased by US\$781 million in FY2019 to US\$1,911 million. This was mainly on account of shutdown of the Tuticorin smelter, input commodity inflation, lower metal prices, higher cost of production and a higher depreciation charge. This was partially offset by ramp up of volumes at aluminium, volume addition from ESL acquisition, improved oil prices and currency depreciation.

CONSOLIDATED OPERATING PROFIT SUMMARY BEFORE SPECIAL ITEMS

(US\$ million, unless stated)

Consolidated operating profit before special items	FY2019	FY2018	% change
Zinc	1,287	1,861	(31)
-India	1,248	1,669	(25)
-International	39	192	(80)
Oil & Gas	489	388	26
Aluminium	76	157	(52)
Power	133	183	(28)
Iron Ore	55	(21)	-
Steel	85	-	-
Copper	(222)	98	-
India/Australia	(57)	137	-
Copper Zambia	(165)	(39)	-
Others	8	26	(68)
Total Group operating profit before special items	1,911	2,692	(29)

CONSOLIDATED OPERATING PROFIT BRIDGE BEFORE SPECIAL ITEMS

(US\$ million)

Operating profit before special item for FY2018	2,692
Market and regulatory: US\$ (244) million	
a) Prices, premium/discount	(91)
b) Direct raw material inflation	(344)
c) Foreign exchange movement	164
d) Profit petroleum to GOI at Oil & Gas	13
e) Regulatory changes	14
Operational: US\$ (76) million	
f) Volume	148
g) Cost and marketing	(224)
h) Others	(250)
Depreciation and amortisation	(211)
Operating profit before special items for FY2019	1,911

a) PRICES, PREMIUM/DISCOUNT

Commodity price fluctuations have a significant impact on the Group's business. During FY2019, we saw a net negative impact on EBITDA of US\$91 million due to commodity price fluctuations.

Zinc, lead and silver

Average zinc LME prices during FY2019 dropped to US\$2,743 per tonne, down 10% y-o-y; lead LME prices decreased to US\$2,121 per tonne, down 11% y-o-y; and silver prices decreased to US\$15.4 per ounce, down 9% y-o-y. The collective impact of these price fluctuations lowered EBITDA by US\$289 million.

Aluminium

Average aluminium LME prices decreased to US\$2,035 per tonne in FY2019, down 1% y o y, this had a negative impact of US\$ 33 million on EBITDA.

Oil & Gas

The average Brent price for the year was US\$70.4 per barrel, higher by 22% compared with US\$57.5 per barrel during FY2018, this was further supported by a lower discount to Brent during the year (FY2019: 6.1%; FY2018: 12.3%). These positively impacted EBITDA by US\$ 241 million

b) DIRECT RAW MATERIAL INFLATION

Prices of key raw materials such as imported alumina, thermal coal, carbon and caustics have increased significantly in FY2019 and this had an adverse impact on EBITDA of US\$344 million.

c) FOREIGN EXCHANGE FLUCTUATION

Our main operating currencies (the Indian rupee and South African rand) both depreciated against the US dollar during FY2019. Depreciation of these currencies is favourable to the Group's operating profit, given the local cost base and predominantly US dollar-linked revenues. However, the depreciation of the Zambian kwacha is unfavourable to the group; considering the Value Added Tax (VAT) receivables at Copper Zambia in local currency.

These currency movements at an aggregate increased EBITDA by US\$164 million compared to FY2018.

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\$13 million. The reduction was primarily due to the higher recovery of capital expenditure over the previous year.

Information regarding key exchange rates against the US dollar:

	Average year ended 31 March 2019	Average year ended 31 March 2018	% change	As at 31 March 2019	As at 31 March 2018
Indian rupee	69.89	64.45	8	69.17	65.04
South African rand	13.76	13.00	6	14.48	11.83
Zambian Kwacha	11.04	9.54	16	12.19	9.50

e) REGULATORY

During FY2019, regulatory changes had a cumulative positive impact on the Group EBITDA of US\$14 million.

f) VOLUMES

Higher volumes contributed to an increase in EBITDA of US\$148 million, generated through these key Group businesses:

Aluminium (positive US\$70 million)

In FY2019, the Aluminium business achieved record production of 1.96 million tonnes , up 17% y-o-y due to the ramp up of the Jharsuguda smelters. This volume increase had a positive impact on EBITDA of US\$70 million.

Electrosteel (positive US\$113 million)

Vedanta Limited completed the acquisition of 90% of the share capital of ESL on 4 June 2018. This acquisition had a positive impact on EBITDA of US\$113 million.

Power (positive US\$22 million)

The power business generated contributed positively to EBITDA by US\$29 million . This was mainly due to TSPL, which was impacted by a fire incident in the coal conveyor in Q1 FY2018.

Zinc India (negative US\$73 million)

The integrated zinc metal production stood at 696kt, lower by 12% , although this was offset by record lead and silver production of 198kt and 21.8 million ounces, respectively. This had a cumulative negative impact on EBITDA of US\$73 million.

g) COST AND MARKETING

Higher costs resulted in a fall in EBITDA by US\$224 million over FY2018, primarily due to volume led absorption at Zinc India and Zinc International and purchase of power from external sources in aluminium due to coal supply disruption during FY2019.

h) OTHERS

This primarily includes the reduction in EBITDA due to the shutdown of the Tuticorin smelter.

Depreciation and amortisation:

Depreciation and amortisation increased by US\$211 million against the previous year. This was mainly due to reversal of previously recorded impairment at Oil & Gas business in Q4 FY2018, higher charge due to higher ore production at Zinc businesses and capitalisation of costs at Gamsberg, and acquisition of ESL partially offset by depreciation of the India rupee.



Above right: Lab Activities at Gamsberg
Above left: Integrated facility at Jharsuguda

Finance Review

Continued

INCOME STATEMENT

(US\$ million, unless stated)

Particulars	FY2019	FY2018	% Change
Revenue	14,031	15,294	(8)
EBITDA [∅]	3,393	3,963	(14)
EBITDA margin (%)	24%	26%	-
EBITDA margin without custom smelting (%) [∅]	29%	35%	-
Special items	38	683	(94)
Depreciation and amortisation	(1,482)	(1,271)	17
Operating profit	1,949	3,375	(42)
Operating profit without special items	1,911	2,692	(29)
Net interest expense	(787)	(774)	2
Interest cost-related special items	9	(108)	-
Other gains/(losses) special items	-	11	-
Other gains/(losses)	(75)	(16)	-
Profit before taxation	1,096	2,488	(56)
Profit before taxation without special items	1,049	1,902	(45)
Income tax expense	(656)	(675)	(3)
Income tax (expense) (special items)	(16)	(338)	(95)
Effective tax rate without special items (%)	62	35	-
Profit for the year	424	1,475	(71)
Profit for the year without special items	393	1,227	(68)
Non-controlling interest	661	1,236	(46)
Non-controlling interest without special items	646	1,064	(39)
Attributable (loss)/profit	(237)	239	-
Attributable (loss)/profit without special items	(253)	163	-
Underlying attributable (loss)/profit	(226)	166	-

CONSOLIDATED REVENUE

Revenue for FY2019 decreased by 8% to US\$14,031 million (FY2018: US\$15,294 million). This was mainly on account of shutdown of Tuticorin smelter, lower zinc volumes, lower custom volumes at Copper Zambia and lower metal prices. This was partially offset by ramp up of volumes at aluminium, volume addition from ESL acquisition and improved oil prices.

(US\$ million, unless stated)

Particulars	FY2019	FY2018	Net revenue % change
Zinc	3,347	3,889	(14)
India	2,955	3,354	(12)
International	392	535	(27)
Oil & Gas	1,892	1,480	28
Aluminium	4,183	3,545	18
Power	934	877	6
Iron Ore	416	485	(14)
Steel	600	-	-
Copper	2,622	5,111	(49)
India/Australia	1,537	3,828	(60)
Zambia	1,085	1,283	(15)
Others ¹	37	(93)	-
Total	14,031	15,294	(8)

1) Includes port business, ASI and eliminations of inter-segment sales.

CONSOLIDATED EBITDA

The consolidated EBITDA by segment is set out below:

(US\$ million, unless stated)

Particulars	FY2019	FY2018	% change	Key drivers	EBITDA margin % FY2019	EBITDA margin % FY2018
Zinc	1,616	2,122	(24)		48	55
-India	1,516	1,902	(20)	Lower volumes and lower LME	51	57
-International	100	220	(55)	Lower sales, lower LME and higher COP	25	41
Oil & Gas	1,100	849	(30)	Improved Oil Prices	58	57
Aluminium	316	414	(24)	Record volume offset by higher COP	8	12
Power	219	258	(15)	One time gains in FY2018	23	25 ²
Iron Ore	90	48	87	Higher Iron Ore Karnataka volumes	22	10
Steel	113	-	-		19	-
Copper	(99)	235	-		(4)	5
-India/Australia	(36)	162	-	Shutdown of Tuticorin smelter	(2)	4
-Zambia	(63)	73	-	Lower Custom volumes, kwacha depreciation	(6)	6
Others ¹	38	37	3		-	-
Total	3,393	3,963	(14)	EBITDA margin[◇]	24	26
				Adjusted EBITDA margin[◇]	29	35

1. Includes port business, ASI and elimination of inter-segment transactions.
2. Excluding one-offs

EBITDA AND EBITDA MARGIN

EBITDA for the year was US\$3,393 million, 14% lower y-o-y. This was mainly on account of shutdown of Tuticorin smelter, input commodity inflation, lower metal prices and higher cost of production partially offset by ramp up of volumes at aluminium, volume addition from ESL acquisition, improved oil prices and currency depreciation.

We maintained a robust Adjusted EBITDA margin of 29% for the year (FY2018: 35%)

SPECIAL ITEMS (INCLUDING INTEREST COST RELATED, AND OTHERS)

In FY2019 special items included:

- A reversal of previously recorded non-cash impairment charge of US\$38 million relating to the KG ONN block, in the Oil & Gas business.
- Special items related to interest cost is a credit of US\$9 million in FY2019, this pertains to a reversal of charge relating to arbitration of a historical vendor claim pursuant to Supreme Court Order in Aluminium business.

Further analysis of special items is set out in notes 6 and 8 of the financial statements.

NET INTEREST

The blended cost of borrowings was 7.45% for FY2019 compared to with 7.15% in FY2018.

Finance cost excluding special items for FY2019 was at US\$1,267 million, 2% higher y-o-y compared to US\$1,239 million in FY2018 mainly because of higher gross debt due to ESL acquisition, temporary borrowings at Zinc India and higher average borrowing cost in line with market trends partially offset by higher capitalisation during the year and rupee depreciation.

Investment income for FY2019 stood at US\$480 million, 3% higher y-o-y compared to US\$465 million in FY2018. This was mainly due to mark to market gains on a treasury investment made by Vedanta Limited's overseas subsidiary through a purchase of an economic interest in a structured investment in Anglo American Plc from its parent, Volcan Investments Limited. This was partially offset by a lower investment corpus and rupee depreciation.

The higher finance cost was partially offset by higher investment revenue and this led to a net increase of US\$13 million in net interest expense (excluding special items) during the period.

OTHER GAINS/(LOSSES) EXCLUDING SPECIAL ITEMS

Other gains/(losses) excluding special items for FY2019 amounted to US\$(75) million, compared to US\$(16) million in FY2018. This was mainly on account of significant depreciation of the Indian rupee against the US dollar.

TAXATION

Effective tax rate (before special items) for FY2019 was 62%, compared to 35% in FY2018.

The effective tax rate (ETR) was higher in FY2019 due to a change in the profit mix across the businesses, together with depreciation of the rupee impacting tax WDV of Oil & Gas assets, whose functional currency is USD. Further the tax charge for FY2019 includes US\$121.0 million (FY2018: US\$ nil million) representing reversal of deferred tax assets on carry forward losses not expected to be utilised during the statutory permitted period and US\$158 million (FY2018: US\$63 million) of dividend distribution tax on dividends paid by subsidiaries.

Finance Review

Continued

ATTRIBUTABLE PROFIT/(LOSS)

Attributable loss before special items was US\$(253) million in FY2019 compared to an attributable profit of US\$163 million in FY2018. This was mainly on account of lower EBITDA, higher depreciation and a higher effective tax rate.

FREE CASH FLOW POST-CAPEX[◇]

The Group generated free cash flow (FCF)[◇] post-capex of US\$1,190 million (FY2018: US\$925 million). This was driven mainly by working capital initiatives and disciplined capital expenditure.

FUND FLOW MOVEMENT IN NET DEBT[◇]

Fund flow and movement in net debt[◇] in FY2019 are set out below.

(US\$ million, unless stated)

Details	FY2019	FY2018
EBITDA	3,393	3,963
Operating exceptional items	–	33
Working capital movements	279	(627)
Changes in non-cash items	33	28
Sustaining capital expenditure	(435)	(385)
Movements in Capital Creditors	107	42
Sale of property, plant and equipment	18	10
Net interest (including interest cost-related special items)	(738)	(821)
Tax paid	(386)	(498)
Expansion capital expenditure	(1,081)	(820)
Free cash flow (FCF) post capex[◇]	1,190	925
Dividend paid to equity shareholders	(113)	(164)
Dividend paid to non-controlling interests	(1,028)	(1,414)
Tax on dividend from Group companies	(161)	(69)
Acquisition of subsidiary	(707) ¹	(240) ²
Other movements ³	115	(122)
Movement in net debt	(704)	(1,084)

1. Includes cost of acquisition of ESL US\$788 million net of cash related to the acquired company US\$81 million.

2. Includes net debt on acquisition of ASI US\$72 million and acquisition expenses of US\$7million

3. Includes foreign exchange movements.

DEBT, MATURITY PROFILE AND REFINANCING

The Gross debt increased from US\$15.2 billion in FY2018 to US\$16.0 billion mainly on account of acquisition of Electrosteel Steels Limited (ESL) and temporary borrowing at Zinc India.

During FY2019, Net debt[◇] increased from US\$9.6 billion to US\$10.3 billion y-o-y. This was primarily on account of the acquisition of ESL during FY2019.

Our total gross debt of US\$16.0 billion comprises:

- US\$12.6 billion as term debt (March 2018: US\$11.3 billion);
- US\$2.9 billion of short-term borrowings (March 2018: US\$2.7 billion)and;
- US\$0.5 billion of working capital loans (March 2018: US\$0.7 billion).

Gross debt as at 31 March 2018 also included preference shares issued pursuant to the Cairn merger of US\$0.5 billion which were redeemed during FY2019.

The maturity profile of term debt of the Group (totalling US\$12.6 billion) is summarised below:

Particulars	As at 31 March 2018	As at 31 March 2019	FY2020	FY2021	FY2022	FY2023	FY2024 & beyond
Debt at Vedanta Resources	5.9	6.3	0.8	0.2	1.5	2.0	1.8
Debt at subsidiaries	5.4	6.3	1.2	1.3	1.7	0.4	1.7
Total term debt¹	11.3	12.6	2.0	1.5	3.2	2.4	3.5

1. Term debt excluding preference shares.

Term debt at our subsidiaries was US\$6.3 billion, with the balance at Vedanta Resources Limited. The total undrawn fund-based credit limit was c. US\$1.0 billion as at 31 March 2019.

In April 2019, to proactively refinance our near-term maturities, we raised US\$1 billion through bonds in two tranches at a blended average cost of 8.75% and average maturity of 5.8 years. This will extend the average maturity of the outstanding debt at VRL to c. 4 years. The Company intends to use the net proceeds primarily to repay near term debt maturities of the Company.

Cash equivalent, liquid investments and structured investments stood at US\$5.7 billion at 31 March 2019 (31 March 2018: US\$5.6 billion). The portfolio continues to be conservatively invested in debt mutual funds, and in cash and fixed deposits with banks.

GOING CONCERN

The Directors have considered the Group's cash flow forecasts for the next 12-month period, from the date of signing the financial statements for the year ending 31 March 2019. The Board is satisfied that the forecasts and projections show that the Group will be able to operate within the level of its current facilities for the foreseeable future. This takes into account the effect of reasonably possible changes in trading performance on cash flows and forecast covenant compliance; the transferability of cash within the Group; the flexibility that the Group has over the timings of its capital expenditure; and other uncertainties. For these reasons, the Group continues to adopt the 'going concern' basis in preparing its financial statements.

COVENANTS

The Group is in compliance with its covenants relating to all facilities for the testing period ending 31 March 2019.

CREDIT RATING

Moody's revised the outlook on ratings for Vedanta Resources Limited to Negative from Stable while affirming the corporate family rating at Ba3 in February 2019. This was on account of expectation of weaker earnings on account of downside risk to commodity prices and increased risk of movement of funds outside Vedanta to support Volcan interests following recent structured investment.

S&P affirmed the ratings at B+ while revising the Outlook to Negative in March 2019 on account of weaker operating performance due to commodity slowdown, which along with higher debt due to ESL acquisition and debt for privatisation of Vedanta Resources Limited could keep its metrics weaker than required for current rating levels.

BALANCE SHEET

(US\$ million, unless stated)

	31 March 2019	31 March 2018
Goodwill	12	12
Intangible assets	108	123
Property, plant and equipment	17,322	15,401
Exploration and Evaluation Assets	404	2,326
Other non-current assets	2,671	2,179
Cash, liquid investments and Financial asset investment net of related liabilities	5,688	5,606
Other current assets	3,576	3,591
Total assets	29,781	29,238
Gross debt	(15,980)	(15,194)
Other current and non-current liabilities	(8,548)	(7,504)
Net assets	5,253	6,540
Shareholders' (deficit)	(928)	(330)
Non-controlling interests	6,181	6,870
Total equity	5,253	6,540

Shareholders' (deficit) was US\$(928) million at 31 March 2019 compared with US\$(330) million at 31 March 2018. This mainly reflects the attributable loss for FY2019 and dividend pay-out of US\$113 million (US cents 41 per share).

Non-controlling interests decreased to US\$6,181 million at 31 March 2019 (from US\$6,870 million at 31 March 2018) mainly driven by the profit attributable to Non-controlling interests for the year offset by dividend payments during the year.

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

As at March 31, 2019, PPE was at US\$17,726 million (FY2018: US\$17,727 million). Investment of \$1,081 million on expansion projects and US\$435 million on sustaining capital expenditure and the acquisition of Electrosteel Steels Limited was offset by depreciation expense during the period and the restatement of rupee-denominated assets caused by rupee depreciation.

CONTRIBUTION TO THE EXCHEQUER

The Group contributed c. US\$6.2 billion to the exchequer in FY2019 compared to US\$5.4 billion in FY2018 through direct and indirect taxes, levies, royalties and dividend. This was the highest ever contribution made by Vedanta Resources Limited.

Finance Review

Continued

PROJECT CAPEX^o

(US\$ million)

Capex in progress	Status	Total capex ³	Cumulative spend up to March 2018 ⁴	Spent in FY2019 ⁴	Unspent as at 31 March 2019 ⁵
Cairn India¹					
Mangala infill, Liquid handling, Bhagyam & Aishwariya EOR, Tight oil & gas etc.		2,481	183	469	1,829
Aluminium Sector					
Jharsuguda 1.25mtpa smelter	Line 3: fully capitalised Line 4: fully capitalised Line 5: Six sections capitalised	2,920	2,846	69	5
Zinc India					
1.2mtpa mine expansion	Phase-wise by FY2020	2,076	1,265	304	507
Others		218	64	60	94
Zinc International					
Gamsberg mining Project ²	Completed Capitalisation	400	241	123	36
Copper India					
Tuticorin smelter 400ktpa	Project is under force majeure	717	189	9	519
Avanstrate					
Furnace Expansion and Cold repair	Completed	48	3	38	7
Capex flexibility					
Metals and Mining					
Lanjigarh Refinery (Phase II) – 5mtpa	Under evaluation	1,570	836	21	713
Zinc India (1.2mtpa to 1.35mtpa mine expansion)	Subject to board approval	698	-	1	697
Skorpion refinery conversion	Currently deferred till pit 112 extension	156	14	-	142

1. Capex approved for Cairn represents Net capex, however Gross capex is US\$3.2 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, 2019.

We continue to consolidate our position as one of the largest diversified natural resource businesses in the world.





Divisional Review
Zinc India





THE YEAR IN SUMMARY

The year witnessed continued ramp up of our underground mines, which delivered mined metal production at 936kt. This was 29% higher y-o-y; virtually overcoming the closure of open-cast operations in the previous year. Lead and silver metal production reached new records of 198kt and 21.8 million ounces respectively. Hindustan Zinc was ranked 9th in the elite club of top 10 silver producers globally published by Washington-based Silver Institute for calendar year 2018.

The ramp up to 1.2 million tonnes per annum (mtpa) mined metal capacity by FY2020 is on track as capital projects approach completion.

SAFETY

However, we were deeply saddened to report seven fatalities at our Rajapura Dariba, Zawar mines, Chanderiya Smelter and Debari smelting complex during the year. The root causes of these tragic incidents have been thoroughly investigated and the resulting learnings, which include, among other making better risk decisions and providing better supervision during all activities have been

shared and implemented across Zinc India to prevent such tragedies in the future.

Our business had seen improving safety performance in the last five year, where our LTIFR had decreased by 24%. However, this year has ran counter to that trend and during FY2019, the lost time injury frequency rate increased to 0.63 (FY2018: 0.27).

Specific initiatives have been introduced to instill a culture of safety. These include forming a Safety Innovation Cell and a Fatality and Serious Injury Prevention Programme subcommittee, as well as themed drives on reducing man-machine interactions; mine fire safety; a mining-mate competency assessment; a safety maturity assessment; and a second party safety audit.

We also collaborated with global safety and protection experts Du Pont on our 'Aarohan' journey to excel in our process safety management. Together we have developed a structured programme aimed at mitigating the risks of serious injuries and fatalities in our processes.



- 1 Debari smelter
- 2 Chanderiya smelters
- 3 Rampura Agucha mine
- 4 Rajapura Dariba mine and smelters and Sindesar Khurd mine
- 5 Zawar mine
- 6 Pantnagar silver refinery



"The year witnessed a continued ramp up of underground mines, virtually overcoming the closure of open cast operations. HZL was ranked 9th in the elite club of top 10 silver producers."

Sunil Duggal
CEO, Hindustan Zinc Limited





Divisional Review

Zinc India

ENVIRONMENT

Over the reporting year, the business improved its hazardous waste recycling, which rose to 52% from 42% in FY2018. Our water recycling rate remained consistent at 35% (FY2018: 35%).

With the success of implementing the 20 million litres per day (MLD) sewage treatment plant (STP), Phase-II of 40MLD STP is under commissioning, of which 25MLD will be commissioned in Q1 FY2020. On completion, it will reduce our fresh water intake at our operational sites.

Solar power projects of 22MW were commissioned during the year, and we intend to further enhance our solar energy footprint in the coming year.

We are also committed to the Science Based Target initiative, to reduce by 2026 our absolute Scope 1 and 2 GHG emissions by 14%, and absolute Scope 3 GHG emissions by 20%, measured against the 2016 base-year.

Our sustainability activities received several endorsements during the year, including the CII-ITC Sustainability Award ('Outstanding Accomplishment'), as well as awards for Sustainable Business of the Year and the Sustainability Disclosure Leadership Award from the World CSR Day. Zinc India's sustainability performance was ranked No.5 in the Dow Jones Sustainability Index (Metal and Mining) globally and No. 1 globally in the Environment category. We were also selected as an Index Constituent of the Emerging Index 'FTSE4Good' series 2018.

PRODUCTION PERFORMANCE

Production (kt)	FY2019	FY2018	% change
Total mined metal	936	947	(1)
Underground mines	936	724	29
Open cast mines	-	223	-
Refinery metal production	894	960	(7)
Refined zinc – integrated	696	791	(12)
Refined lead – integrated ¹	198	168	18
Production – silver (million ounces) ²	21.8	17.9	22

1. Excluding captive consumption of 6,534 tonnes in FY2019 vs. 6,946 tonnes in FY2018.

2. Excluding captive consumption of 1,099 thousand ounces in FY2019 vs. 1,171 thousand ounces in FY2018.

PRICES

	FY2019	FY2018	% change
Average zinc LME cash settlement prices US\$/tonne	2,743	3,057	(10)
Average lead LME cash settlement prices US\$/tonne	2,121	2,379	(11)
Average silver prices US\$/ounce	15.4	16.9	(9)

UNIT COSTS

	FY2019	FY2018	% change
Unit costs (US\$ per tonne)			
Zinc (including royalty)	1,381	1,365	1
Zinc (excluding royalty)	1,008	976	3

FINANCIAL PERFORMANCE

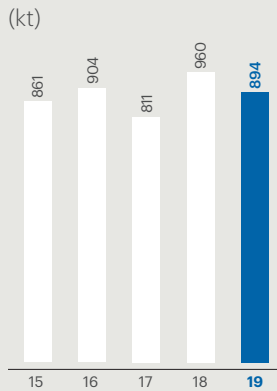
(US\$ million, unless stated)

	FY2019	FY2018	% change
Revenue	2,955	3,354	(12)
EBITDA	1,516	1,902	(20)
EBITDA margin (%)	51	57	-
Depreciation and amortisation	268	233	15
Operating profit before special items	1,248	1,669	(25)
Share in Group EBITDA (%)	45	48	
Capital expenditure	520	465	12
Sustaining	155	106	46
Growth	365	359	2

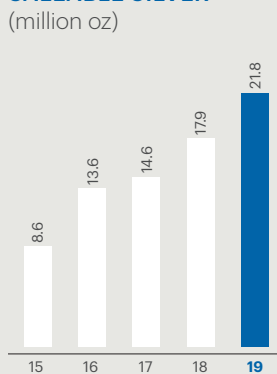


Above: Employees working in HZL Underground Mine

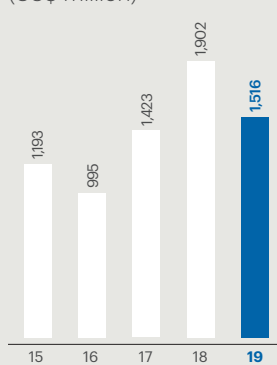
PRODUCTION REFINED ZINC/LEAD



PRODUCTION SALEABLE SILVER



EBITDA



OPERATIONS

Mined metal production for FY2019 was 936,000 tonnes compared to 947,000 tonnes in the prior year. The FY2019 production was entirely from underground mines, which ramped up strongly by 29%, driven by a 27% increase in ore production and better grades. Therefore, despite the closure of open-cast operations, total mined metal production declined only marginally from the year before.

Integrated metal production was 894,000 tonnes in line with mined metal production, 7% lower than the previous year's record production of 960,000 tonnes. Integrated zinc production was lower by 12%, in line with the availability of zinc mined metal and the higher lead ratio in ore. Integrated lead and silver production stood at a record 198,000 tonnes and 21.8 million ounces, higher by 18% and 22%, respectively. This was driven by higher lead mined metal production and retrofitting of a pyro-metallurgical smelter to produce more lead and better silver grades. This smelter was retrofitted during the year to produce more lead metal, in the light of the higher availability of lead mined metal, leading to higher lead production.

Hindustan Zinc was ranked 9th in the elite club of top 10 silver producers globally published by Washington based Silver Institute for calendar year 2018. Further during the year we received environment clearance to increase silver production from 600 tonnes per annum (tpa) to 800 tpa at the Pantnagar plant.

PRICES

FY2019 was a turbulent year for base metals, caused by uncertainty from international trade disputes, a slowdown in manufacturing activity and the negative impact of a stronger dollar. The average zinc price during the year was US\$2,743 per tonne, 10% lower than the previous year's average of US\$3,057.

Zinc market fundamentals remain robust with global zinc consumption expected to grow by 1.5% to 14.5 million tonnes in the calendar year 2019, with smelter supply increasing to 14 million tonnes and mine supply likely to be 13.9 million tonnes (source: Wood Mackenzie). According to demand-supply fundamentals, the zinc price should improve since metal stocks are at an all-time low and may continue to remain so.

In a similar story to zinc and other base metals, the lead price was volatile during the year, rising and falling in response to developments in international trade disputes between the US and its trading partners. Lead averaged US\$2,121 per tonne in FY2019, down 11% y-o-y.

In a challenging environment, silver prices declined by 9% against the prior year, slipping to US\$15.4 per ounce in FY2019. A slowing Chinese economy, coupled with rising US interest rates, an equity market bull run and global trade tensions all took their toll on the price performance.

Unit costs

Zinc's cost of production (excluding royalty) for FY2019 was US\$1,008 per tonne, higher by 3% y-o-y. Production cost was impacted by higher mine development, input commodity inflation and Long term Wage Settlement (LTS) related expense but was partly offset by higher acid credits and rupee depreciation. Including royalties, the total cost of zinc production increased to US\$1,381 per tonne, 1% higher y-o-y.

Of this figure, government levies amounted to US\$389 per tonne (FY2018: US\$423 per tonne). This comprised mainly of royalty payments, the clean energy cess, electricity duty and other taxes.

FINANCIAL PERFORMANCE

Revenue for the year was US\$2,955 million, down 12% y-o-y, primarily on account of lower zinc metal production and lower LME prices, partially offset by record lead and silver volumes. EBITDA in FY2019 decreased to US\$1,516 million, down 20% y-o-y. The decrease was primarily driven by lower volumes and higher cost of production.

Projects

The mining projects we announced are progressing in line with the expectation of reaching 1.2 million tonnes per annum of mined metal capacity in FY2020. Capital mine development increased by 12% to 43km in FY2019.

At the Rampura Agucha underground mine, the ventilation system was commissioned earlier in the year, liberating the mine from ventilation issues for its lifetime. The commissioning of the mid-shaft loading system in October 2018 allowed waste hoisting to be carried out through the shaft ahead of schedule, leading to improved ore production. The second paste fill plant was completed ahead of schedule in Q4 FY2019. The full shaft commissioning is expected to complete by Q2 FY2020, synchronising with the completion of the crusher and conveyor system.

During the year, Sindesar Khurd received environment clearance to produce 6.0 million tonnes of ore and 6.5 million tonnes of ore beneficiation. The new 1.5mtpa mill was commissioned smoothly and began production in Q3 FY2019, taking the total milling capacity to 6.2mtpa. The



Divisional Review

Zinc India

underground crusher and production shaft were commissioned during Q4 FY2019 and ore hoisting from the shaft is expected to start in Q1 FY2020. The second paste fill plant is under mechanical completion and expected to commission in Q1 FY2020.

With a substantial improvement in infrastructure, Zawar has reached a run-rate of c. 3.5mtpa. The new 2.0 mtpa mill was commissioned in Q4 FY2019, taking the total milling capacity at Zawar to 4.7mtpa. Meanwhile, the dry tailing plant is under execution and expected to commission in Q2 FY2020.

The Rajpura Dariba mine has received environmental clearance to increase ore production from 0.9 to 1.08 mtpa and is seeking regulatory approval for further expansion to 2.0mtpa. The ore production run-rate is already at 1.2 mtpa following the major infrastructure enhancement. During the year, orders were placed for a new 1.5 mtpa mill and paste fill plant; these are expected to complete in FY2020.

OTHER PROJECTS

The Fumer project at Chanderiya is expected to commission in Q1 FY2020.

The 22MW solar plant was completed during Q3 FY2019 at Rampura Agucha taking the total solar capacity there to 38MW.

The 25MLD Sewage Treatment Project at Udaipur will be commissioned in Q1 FY2020, taking the total capacity to 45MLD. This will play a key role in improving water availability at Dariba and treat over half of Udaipur's sewage.

EXPLORATION

Successful exploration in FY2019 added to reserves and resources (R&R), providing opportunities for extended mine life and production growth. Across all the sites, surface drilling increased to 181km and underground drilling of 26km was achieved during the year.

In comparison with the previous year's mineral resource and ore reserve statements:

There is an overall net depletion of 13.1 million tonnes of ore reserves to 92.6 million tonnes, and a net 4.7 million tonnes increase of exclusive mineral resources to 310.3 million tonnes.

Total contained metal in ore reserves is 7.2 million tonnes of zinc, 2.1 million tonnes of lead and 280 million ounces of silver.

The exclusive mineral resource contains 18.5 million tonnes of zinc, 6.8 million tonnes of lead and 685 million ounces of silver.

At current mining rates, the R&R underpins a mining life of more than 25 years.

OUTLOOK

Mined metal production, and finished metal production is expected to around 1 million tonnes. The cost of production excluding royalty is expected to be < US\$1,000 per tonne. The project capex for the year will be in the range of US\$350 to US\$400 million.

Further in line with the structural growth in mined metal production and with improved silver grades, we can expect to deliver significant growth in silver volumes. The silver volumes for FY2020 is in the range of 750 tonnes to 800 tonnes.

STRATEGIC PRIORITIES

Our focus and priorities will be to:

- Ramp up underground mines to 1.2 mtpa design capacity
- Debottleneck and expand smelting capacity to maintain mines/smelter synergies at higher levels of production
- Use advanced technology, automation and digitalisation to structurally reduce cost of production by improving equipment productivity, metal recoveries and operational efficiency
- Increase R&R through higher exploration activity and new mining tenements.

Below: Zinc processing plant at Dariba, HZL





Divisional Review
Zinc International





THE YEAR IN SUMMARY

FY2019 was a milestone year for Zinc International. We ramped up production from Pit 112 at Skorpion and completed our flagship Phase-I Gamsberg project.

As per the mine plan, we have substantially completed pre-stripping of Pit 112 and will be able to access the ore body and fully ramp up production in FY2020.

Gamsberg operation was commissioned during the middle of FY2019 with trial production starting in November 2018, followed by the first shipment of concentrate in December 2018. Gamsberg was formally inaugurated by the President of South Africa, Mr. Cyril Ramaphosa, and Vedanta Chairman, Mr. Anil Agarwal, on 28 February 2019. Ramp up to full capacity of 4mtpa of ore is expected in 3-6 months.

With further ramp-up of Gamsberg Phase-I and the Skorpion Zinc Pit 112 expansion, Zinc International is expected to produce more than 350,000 tonnes next year.

SAFETY

With deep sorrow, we reported a fatality at Gamsberg project during the year, which occurred in the construction phase at the concentrator plant. The lessons learned, following a thorough investigation, have

been shared across the business and our control of critical risks related to equipment selection and business partner onboarding have been strengthened. Lost time injuries have shown an increase from 16 to 23 for the year, with the frequency rate also showing an increase to 1.89 (FY2018: 1.36). This is largely due to an increase in activity at Gamsberg. Injury severity rates continue to decrease year on year.

The business has taken steps in driving safety as the Number One Value across the business. The value will strengthen partnerships with our employees and business partners in achieving zero harm. Dust control remains a main focus area in order to reduce lead and silica dust exposures of employees, which will also further sustain the number of employees withdrawn over the last few years (from 25 in FY2016 to 7, 8 and 8 over the last three years). Participation in the VCT drive for HIV/ Aids programmes for both employees and business partners was well attended, with 2,767 tests conducted during FY19.



- 1 Gamsberg, South Africa (under development)
- 2 Skorpion mine, Namibia
- 3 Black Mountain mine, South Africa



"Gamsberg is now ramping up to its target ore throughput capacity of 4mtpa to produce 250ktpa metal. With Gamsberg Phase-II mega pit production, we are expected to produce combined 450ktpa metal."

Deshnee Naidoo

CEO, Zinc International and CMT



Divisional Review

Zinc International

ENVIRONMENT

During the period, Skorpion Zinc reported one category 3 environmental incident involving tailings overflow from one pond due to a failed pump. The incident had a limited environmental impact and is being consistently and closely monitored. Remedial actions include drilling of 4 – 6 boreholes for the recovery of contaminants and monitoring purposes. The pond is also being rehabilitated.

Gamsberg complied with the Biodiversity Offset Agreement requirement on total hectares of sensitive plant communities impacted by securing four properties measuring 21,900ha. The proclamation of Gamsberg Nature reserve was also gazetted on 26 November 2018.

PRODUCTION PERFORMANCE

Production (kt)	FY2019	FY2018	% change
Total production (kt)	148	157	(5)
Production– mined metal (kt)			
BMM	65	72	(10)
Gamsberg*	17	-	-
Refined metal Skorpion	66	84	(22)

* Includes trial run production of 10 KT

UNIT COSTS

	FY2019	FY2018	% change
Zinc (US\$ per tonne) unit cost	1,912	1,603	19

FINANCIAL PERFORMANCE

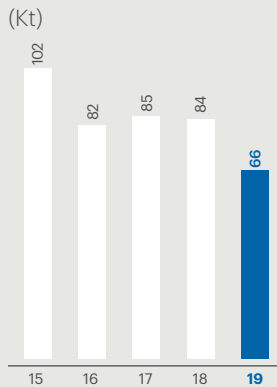
(US\$ million, unless stated)

	FY2019	FY2018	% change
Revenue	392	535	(27)
EBITDA	100	220	(55)
EBITDA margin (%)	25	41	-
Depreciation and amortisation	61	28	-
Operating profit before special items	39	192	(80)
Share in Group EBITDA (%)	3	6	-
Capital expenditure	196	238	(18)
Sustaining	73	65	12
Growth	123	173	(29)

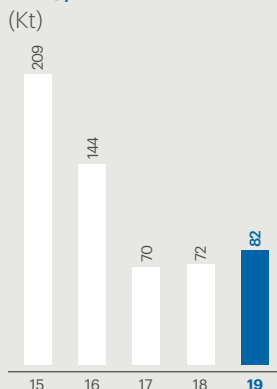
Below: Lab activities at BMM Plant



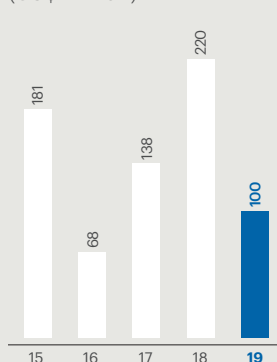
PRODUCTION REFINED ZINC



PRODUCTION ZINC/LEAD MINED METAL



EBITDA
(US\$ million)



OPERATIONS

During FY2019, total production stood at 148,000 tonnes, 5% lower y-o-y. This was due to lower production at Skorpion because of a two-week strike in March 2019, as well as lower zinc grades at Skorpion (7.6% vs 8.2%) and lower production at BMM due to lower than planned grades and hence lower recoveries. This was partially offset by the commencement of production from Gamsberg.

Skorpion's production was 66,000 tonnes, down 22% y-o-y, due to the planned shutdown of the acid plant during Q1 FY2019, and lower than planned zinc grades. Furthermore, the mining business partner's employees embarked on an illegal strike from 22 February to 6 March 2019. The employees cited unresolved labour matters with their employer. The strike action lasted 14 days and had a severe negative impact on mining activities and the lead time to re-establish mining operations. This resulted in the depletion of run of mine ore inventory, with the consequent effect of a temporary closure of the refinery while re-establishing mining buffers. Skorpion took this opportunity to bring forward the annual shutdown previously scheduled in Q2 FY2020. The operations restarted in the second half of April 2019.

At BMM, production was 10% lower than the previous year. This decrease was primarily due to lower than planned grades and hence lower recoveries.

UNIT COSTS

The unit cost of production increased by 19% to US\$1,912 per tonne, up from US\$1,603 in the previous year. This was mainly driven by lower production at both Skorpion Zinc and BMM, higher amortisation of stripping costs of Pit 112 at Skorpion Zinc, higher TCRCs and annual inflation partially offset by local currency depreciation, sulphur efficiencies, lower oxide consumption at Skorpion Zinc and higher copper credit at BMM.

FINANCIAL PERFORMANCE

During the year, revenue decreased by 27% to US\$392 million, driven by lower sales volumes compared to FY2018 and lower price realisations. The same factors, along with higher cost of production resulted in a decrease in EBITDA to US\$100 million, down 55% from US\$220 million in FY2018.

PROJECTS

Gamsberg mining is continuing as per plan. During the year, 41mt waste and ore has been moved including pre-stripping and a healthy stockpile of 1.0mt has been built up for smooth feed to plant. Post-trial production, the concentrator plant has been progressively ramping up.

The focus for Gamsberg has been to fully commission the plant, including all automation and achieve an 80% plant runtime, which has been successfully achieved in March 2019. This was despite the stoppage of work and retraining of all employees and business partners following the fatality at Gamsberg in May 2018 as well as commissioning issues which have since been resolved.

In the case of Pit 112 at Skorpion Zinc over 75% of waste pre-stripping has been completed and mining will come to end by Q3 FY2020 with a stockpile built up to feed plant for next 12 months.

We are at an advanced stage in concluding feasibility for Gamsberg Phase-II to increase Gamsberg production capacity from existing 250 thousand tonnes per annum (ktpa) to 450ktpa. Indicative investments in this project is expected to be around US\$300 million.

EXPLORATION

During the year, we made gross additions of 130.39 million tonnes of ore and 4 million tonnes of metal to reserves and resources (R&R), after depletion.

As at 31 March 2019, Zinc International's combined mineral resources and ore reserves were estimated at 434 million tonnes, containing 24.4 million tonnes of metal. The reserves and resources support a mine life of more than 30 years.

Zinc International is further pleased to announce the declaration of a maiden resource at its Big Syncline project, located on its Black Mountain mining licence in South Africa. Resource estimation was carried out by SRK Consulting (UK) and resulted in an inferred resource of 151.7 million tonnes grading 3.6% (zinc and lead). The majority of the resource is accessible through open-cast operations at low stripping ratios.



Divisional Review

Zinc International

OUTLOOK

In FY2020, we expect production volumes to be in the range of 180-200kt from Gamsberg, while the volumes from Skorpion and BMM will be greater than 170kt. The cost of production excluding Gamsberg is expected to be around US\$1,400 per tonne due to Skorpion's Zinc production ramp up due to access to high grade ore from Pit 112, while the cost of production Gamsberg is forecasted to be around US\$1000 per tonne.

STRATEGIC PRIORITIES

Our focus and priorities will be to:

- Ramp up of Gamsberg Phase-I production in H1 of FY2020
- Complete the approval of Gamsberg Phase-II
- Complete the feasibility study for an integrated smelter-refinery with 250ktpa metal production



Above: We believe in participative learning



Divisional Review

Oil & Gas





THE YEAR IN SUMMARY

During FY2019, we delivered a strong operational and financial performance in addition to execution of key contracts across our portfolio of development opportunities which are expected to add significant volumes going forward.

In pursuit of our vision to contribute 50% of India's domestic crude oil production, we continue to invest in growth projects in order to monetise the resource base. The Oil & Gas business has a rich project portfolio comprising enhanced oil recovery, tight oil, tight gas, satellite field development, facility upgradation and exploration and appraisal prospects. Most of the projects are being executed under an Integrated Development strategy involving leading global oilfield service companies and are on track to deliver expected volume additions. 11 development drilling rigs are currently deployed; 99 wells drilled & 33 wells hooked up during FY2019 in Rajasthan. We are ramping up well drilling and hook up to add volumes.

Further, in order to add additional resource base, we entered into Revenue Sharing Contract for 41 exploration blocks through OALP-1 and also secured two discovered small fields in DSF Round-II. The new blocks are expected to add significant resource potential to our portfolio.

SAFETY

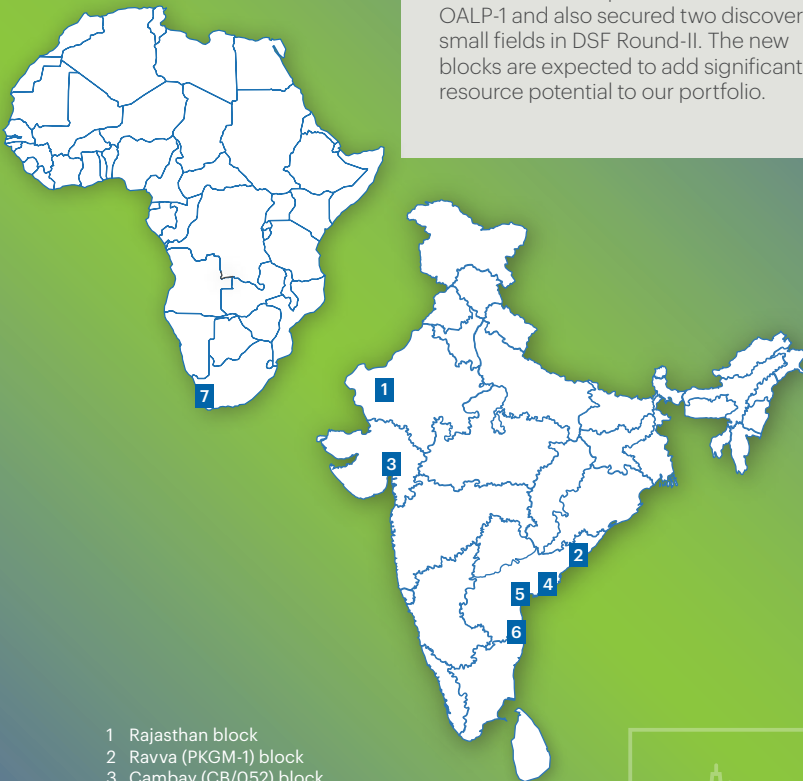
There were eleven lost time injuries (LTIs) in FY2019. The frequency rate stood at 0.31 (FY2018: 0.19), amid a significant increase in activity due to development projects.

At the same time, we were proud that our safety philosophy and management systems were recognised with awards conferred by a number of external bodies:

- Cairn Oil & Gas was recognised in the CII-ITC Sustainability Awards 2018
- Raageshwari Gas Terminal has been awarded 'Sword of Honour' from British Safety Council for excellence in HSE management
- Bhagyam field received the Platinum prize in the seventh FICCI Safety Systems Excellence Awards 2018 (large-scale mining sector category)
- Cairn Oil & Gas won three awards in the International Fire and Security Exhibition and Conference (IFSEC) India
- Raageshwari Gas Terminal and CB/OS-2 asset were certified for '5S' by the Quality Circle Forum of India (QCFI)
- Ravva asset achieved a Five Star Rating in the CII-Southern Region Award for HSE Excellence

"Revenue sharing contract signed for 41 exploration blocks through OALP-1 and these new blocks are expected to add significant resource potential to our portfolio."

Ajay Kumar Dixit
CEO, Oil & Gas



- 1 Rajasthan block
- 2 Ravva (PKGM-1) block
- 3 Cambay (CB/052) block
- 4 KG-ONN-2003/1 block
- 5 KG-OSN-2009/3 block
- 6 PR-OSN-2004/1 block
- 7 South Africa Block 1





Divisional Review

Oil & Gas

ENVIRONMENT

Our Oil & Gas business is committed to protecting the environment, minimising resource consumption and driving towards our goal of 'zero discharge'. Our progress was recognised in the fifth CII Environmental Best Practices Award 2018 for Natural Gas Recovery, for zero flaring during frac well milling in gas operations.

At the Rajasthan asset, our operations at the Mangala, Bhagyam and Aishwarya fields were recognised as 'Noteworthy Water Efficient Units', in the 'within fence category' of the National Award for Excellence in Water Management 2018 by CII.

PRODUCTION PERFORMANCE

	Unit	FY2019	FY2018	% change
Gross Operated production	Boepd	188,784	185,587	2
Rajasthan	Boepd	155,903	157,983	(1)
Ravva	Boepd	14,890	17,195	(13)
Cambay	Boepd	17,991	10,408	73
Oil	Bopd	178,207	177,678	0
Gas	Mmscfd	63.5	47.4	34
Net production – working interest*	Boepd	119,798	118,620	1
Oil	Bopd	114,214	114,774	0
Gas	Mmscfd	33.5	23.1	45
Gross production	Mmboe	68.9	67.7	2
Working interest production	Mmboe	43.7	43.3	1

*Includes net production of 119boepd from the KG-ONN block, which is operated by ONGC. Cairn holds a 49% stake.

PRICES

	FY2019	FY2018	% change
Average Brent prices – US\$ per barrel	70.4	57.5	22

FINANCIAL PERFORMANCE

(US\$ million, unless stated)

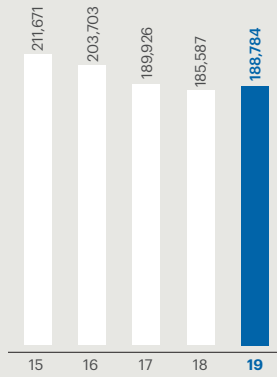
	FY2019	FY2018	% change
Revenue	1,892	1,480	28
EBITDA	1,100	849	30
EBITDA margin (%)	58	57	-
Depreciation and amortisation	611	461	33
Operating profit before special items	489	388	26
Share in Group EBITDA (%)	32	21	-
Capital expenditure	480	137	-
Sustaining	11	10	6
Growth	469	127	-

Below: Employees at the Mangala Processing Terminal, Barmer



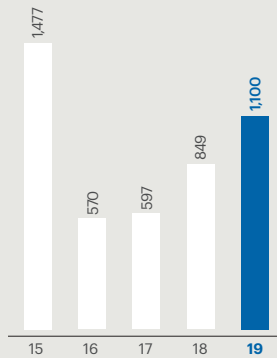
PRODUCTION – AVERAGE DAILY GROSS

Operated production(boepd)



EBITDA

(US\$ million)



OPERATIONS

Average gross production across our assets was 2% higher y-o-y at 188,784boepd. Production from the Rajasthan block was 155,903boepd, 1% lower y-o-y. The natural reservoir decline has been managed with gains accruing from the new wells brought online. Production from the offshore assets stood at a combined 32,881boepd, higher by 19% y-o-y, due to the gains from the Cambay infill campaign.

Production details by block are summarised below.

RAJASTHAN BLOCK

Gross production from the Rajasthan block averaged 155,903boepd in FY2019, 1% lower y-o-y. This decrease was primarily due to natural decline from the fields but was partially offset by the gain realised from new wells brought online as part of Mangala infill, Bhagyam & Aishwariya EOR campaign, production optimisation activities and augmentation of liquid handling capacity at the Mangala Processing Terminal (MPT).

At Rajasthan, 99 wells have been drilled as part of the growth projects, of these 33 wells have been brought online during FY2019.

Gas production from Raageshwari Deep Gas (RDG) averaged 51.3 million standard cubic feet per day (mmscfd) in FY2019, with gas sales, post captive consumption, at 35.6mmscfd.

The Government of India, acting through the Directorate General of Hydrocarbons, Ministry of Petroleum and Natural Gas, has 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 14,890boepd, lower by 13% y-o-y. This was primarily due to natural field decline, although this was partially offset by production optimisation measures. The Government of India, acting through the Directorate General of Hydrocarbons, Ministry of Petroleum and Natural Gas, has granted its approval for a ten-year extension of the PSC for the Ravva block, subject to certain conditions.

CAMBAY BLOCK

The Cambay block produced at an average rate of 17,991boepd in FY2019, up by 73% y-o-y, supported by the gains realised from the infill wells campaign completed in Q1 FY2019.

PRICES

Brent crude oil averaged US\$70.4/bbl, compared to US\$57.5/bbl in the previous financial year. The oil price rallied in the first half, owing to the high compliance on the production cut by OPEC and other producers, as well as sanctions on Iran imposed by the US and a steep decline in production from Venezuela. This rally saw crude oil hitting a four-year high in early October to touch US\$86.29/bbl.

In the latter half of the year, oil prices declined due to the US Government's waivers to eight major importers of Iranian crude, leading to an oversupply in the market. However, the oil price started to rebound in last quarter owing to the production cut by OPEC and other producer countries.

FINANCIAL PERFORMANCE

Revenue for FY2019 was 28% higher y-o-y at US\$1,892 million (after profit and royalty sharing with the Government of India), supported by a recovery in oil price realisation. EBITDA of FY2019 was higher at US\$1,100 million, up 30% y-o-y in line with the higher revenue.

The Rajasthan water flood operating cost was US\$5.1 per barrel in FY2019 compared to US\$4.6 per barrel in the previous year, primarily driven by increased interventions and production enhancement initiatives. Overall, the blended Rajasthan operating costs increased to US\$7.6 per barrel compared to US\$6.6 per barrel in the previous year, due to the ramp-up in polymer injection volumes and the increase in commodity prices.

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. Major contracts have been awarded and execution has started.





Divisional review

Oil & Gas

I) 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 field.

The valuable learnings, gained from the successful implementation of the Mangala polymer EOR project, are being leveraged to enhance production from the Bhagyam and Aishwariya fields. Till March 2019, 73 wells have been drilled under enhanced oil recovery projects across Mangala, Bhagyam and Aishwariya, of these 33 wells are online.

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. The contract for drilling has already been awarded, while the contract for the surface facility will be awarded by Q1 FY2020.

II) TIGHT OIL & GAS PROJECTS

a) Tight oil: Aishwariya Barmer Hill (ABH)

Aishwariya Barmer Hill (ABH) is the first tight oil project to monetise the Barmer Hill potential, and drilling started in Q1 FY2019. Currently three rigs are operational, and 20 wells had been drilled by March 2019. Initial deliverability from the two wells is in line with expectations. We have successfully drilled the longest lateral well of 1,355m using advanced geo-steering technology.

b) Tight gas: Raageshwari deep gas (RDG) development

The RDG project is being executed through an integrated development approach to ramp up overall Rajasthan gas production to ~150mmscfd, and condensate production of 5kboepd. The project entails developing surface facilities and the drilling and completion of 42 wells. The early production facility is under commissioning and the construction of the terminal is progressing to plan. Up to March 2019, six wells had been drilled.

III) OTHER PROJECTS

a) Satellite field development

An integrated contract for the development of satellite fields is under award.

b) Surface facility upgradation

The Mangala Processing Terminal (MPT) facility upgradation is progressing as per plan to handle incremental liquids. Phase-I of the intra-field pipeline augmentation project was commissioned in Q4 FY2019 and the balance scope of Phase-I to be commissioned by Q1 FY2020.

IV) RAVVA DEVELOPMENT

An integrated contract for drilling development wells is under award.

B. EXPLORATION AND APPRAISAL

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

The Group is reactivating its oil & gas exploration efforts in the prolific Barmer Basin, which provides access to multiple play types with oil in high permeability reservoirs, tight oil and tight gas. We have engaged global partners to reveal the full potential of the basin and establish >1 billion boe of prospective resources.

We have awarded an integrated contract for a drilling campaign of 7-18 exploration and appraisal wells to build on the resource portfolio, with well-spud expected by Q1 FY2020.

TIGHT OIL APPRAISAL

The contract for the appraisal of four fields (Vijaya & Vandana, Mangala Barmer Hill, DP and Shakti) has been awarded, and will include the drilling of 10 new wells. This will also involve multi-stage hydraulic fracturing and extended testing. Rigs are under mobilisation and drilling is expected to begin in Q1 FY2020.

KRISHNA-GODAVARI BASIN OFFSHORE

Oil discovery was notified in the second exploratory well (H2), and a further appraisal will now be required to establish its size and commerciality of the oil discovery.

The first exploration well drilled in the block (A3-2) was a gas discovery. Evaluations are ongoing.

RAVVA

In order to increase the reserve and resource base, an integrated contract for drilling exploratory wells is under award.

OPEN ACREAGE LICENSING POLICY (OALP)

Under the Open Acreage Licensing Policy (OALP), revenue-sharing contracts have been signed for 41 blocks. These comprise 33 onshore and 8 offshore blocks with a potential of ~1.4 - 4.2 billion boe of resource, and are located primarily in established basins, including some optimally close to existing infrastructure. We have issued a global tender, inviting bids for an end-to-end integrated contract.

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 as Hazarigaon and Kaza gas fields, located in Assam and Krishna Godavari basins, respectively, have been awarded under DSF2.

OUTLOOK

Vedanta's Oil & Gas business now has a robust portfolio comprising a number of exploration blocks with promising prospects, a large pool of development projects and prolific producing fields. Our energies are focused across these opportunities, and as we execute our development projects we expect to deliver a progressive increase in production volumes.

The closure of growth projects contracts with global vendors took longer than envisaged impacting near-term volumes. We have however locked in contracts at attractive prices and returns. For FY2020, with the increase in drilling activities and wells hook up, we expect the production volumes to be in the range of 200-220 kboepd. Opex during the year is expected to be c. US\$7.5/boe.

STRATEGIC PRIORITIES

Our focus and priorities will be to:

- Continue to progress towards 'zero harm, zero waste and zero discharge'
- Continue to operate at a low cost-base and generate free cash flow post-capex
- Execute growth projects within schedule and cost
- Continue progress on execution of projects to achieve targeted production of 270-300kboepd
- Evaluate further opportunities to expand the exploration portfolio through OALP and other opportunities



Above: Cairn offshore rig Suvali



Divisional Review Aluminium





THE YEAR IN SUMMARY

In FY2019, the aluminium smelters achieved an all-time-high production of 1.96 million tonnes (including trial run). Despite some headwinds facing cost of production – mainly input commodity inflation, global disruptions in alumina supply and temporary coal disruptions in the domestic market – we were supported by higher alumina production volumes at Lanjigarh and rupee depreciation. We are focusing on optimising our controllable costs and improving our price realisation to improve profitability in a sustainable way.

The cost of production for Q4 FY2019 was US\$1,776 per tonne, on account of structural improvements in the cost due to increased local bauxite supply, ramped up alumina volume and improved coal materialisations.

We also achieved record production of 1.5 million tonnes at the alumina refinery through debottlenecking. We continue to explore the feasibility of expanding the refinery's capacity, growing through a phased programme and subject to bauxite availability.

SAFETY

We experienced 15 lost time injuries during the year (FY2018: 22), and the frequency rate decreased to 0.23 from 0.39. We have delivered specialist skill and competency training in areas such as crane and lifting operations, vehicles and driving. Root cause analysis training was also given to the heads of department and maintenance heads, in order to investigate the injuries and high-potential incidents in order to avoid these lapses in the future.

Focusing on building a culture of care, a programme of 'Visible Felt Leadership' has been launched, with management at plants spending more time on the shop-floor to pre-empt and address safety issues.

At BALCO, in order to increase safety awareness and to interact with business partners, workers and their families, programmes such as care-drives (seven in number) and 'Suraksha ki goth' have been organised within the plant. Additionally, the Company has kick-started a training programme on practising life-saving behaviours. About 8,000 employees and business partners have received this training.

In a significant achievement, the Lanjigarh refinery achieved zero-LTIs for the third consecutive year, and we seek to replicate its success across the business.



- 1 Lanjigarh Alumina refinery
- 2 Jharsuguda smelter
- 3 Korba smelter



"In FY2019, we achieved record production of Alumina and an all-time-high production of Aluminium"

Ajay Kapur
CEO – Aluminium & Power





Divisional Review

Aluminium

ENVIRONMENT

The review of our tailings dam and ash pond structures was completed by Golder Associates and we are studying recommendations to increase the structures' stability.

Separately, we recycled 14% of the water we used in the year (FY2018: 11%) and our BALCO operations saw a marginal improvement in their specific water consumption of 0.72 m³/MT (FY2018: 0.74 m³/MT). In Lanjigarh, as part of waste management, 101%¹ of fly ash and 97% of lime grit was recycled.

1. The number exceeds 100% as we were able to utilise our legacy fly-ash waste for internal infrastructural development projects

PRODUCTION PERFORMANCE

Production (kt)	FY2019	FY2018	% change
Production (kt)			
Alumina – Lanjigarh	1,501	1,209	24
Total aluminium production	1,959	1,675	17
Jharsuguda I	545	440	24
Jharsuguda II ¹	843	666	27
BALCO I	260	259	-
BALCO II ²	311	310	-

1. Including trial run production of 60.5kt in FY2019 vs. 61.8kt in FY2018
2. Including trial run production of nil in FY2019 vs. 16.1kt in FY2018

PRICES

	FY2019	FY2018	% change
Average LME cash settlement prices (US\$ per tonne)	2,035	2,046	(1)

UNIT COSTS

(US\$ per tonne)

	FY2019	FY2018	% change
Alumina cost (ex-Lanjigarh)	322	326	(2)
Aluminium hot metal production cost	1,940	1,887	3
Jharsuguda CoP	1,938	1,867	4
BALCO CoP	1,945	1,923	1

FINANCIAL PERFORMANCE

(US\$ million, unless stated)

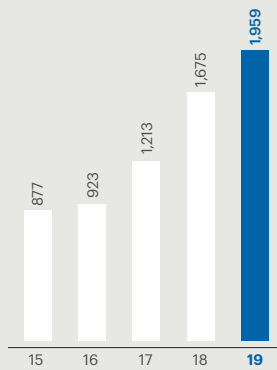
	FY2019	FY2018	% change
Revenue	4,183	3,545	18
EBITDA	316	414	(24)
EBITDA margin (%)	8	12	-
Depreciation and amortisation	240	257	(7)
Operating profit before special items	76	157	(52)
Share in Group EBITDA (%)	9	10	
Capital expenditure	182	218	(17)
Sustaining	100	105	(5)
Growth	82	113	(28)

Below: Smelter at Jharsuguda



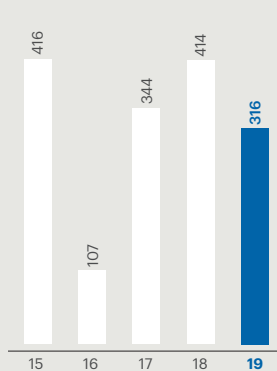
TOTAL ALUMINIUM PRODUCTION

(kt)



EBITDA

(US\$ million)



OPERATIONS

ALUMINA REFINERY: LANJIGARH

At Lanjigarh, production was 24% higher y-o-y at 1,501,000 tonnes, primarily through plant debottlenecking. We continue to evaluate the possible expansion of the refinery, subject to bauxite availability.

Aluminium smelters

We ended the year with record production of 1.96 million tonnes (including trial run).

Production from the Jharsuguda I smelter was 24% higher y-o-y. This was primarily due to lower volumes in 2018 due to pot outage incident in Q1 that affected 228 pots of the Jharsuguda I smelter. These pots were fully restored by Q3 FY2018.

Production from the Jharsuguda II smelter was 27% higher y-o-y. This was mainly driven by production stabilisation from the ramp-ups in the previous year. We continue to evaluate Line 4 of Jharsuguda II smelter.

The BALCO I & II smelters continued to show consistent performance.

Coal linkages

We continue to focus on ensuring the long term security of our coal supply, and at competitive prices. We added 3.2mtpa of coal linkages during FY2019 from Tranche IV auctions. The materialisation of Tranche IV began in March 2019. We have also operationalised the captive coal block, Chotia, at our BALCO operations. This takes our coal security to 72% of our requirements

PRICES

Average LME prices for aluminium in FY2019 stood at US\$2,035 per tonne, which was almost flat y-o-y. Prices were volatile throughout the year driven by global uncertainties, fuelled by sanctions against Rusal and US-China trade war concerns.

UNIT COSTS

During FY2019, the cost of production (CoP) of alumina was flat y-o-y at US\$322 per tonne. Benefits from increase in locally-sourced bauxite from Odisha Mining Corporation (OMC), improved plant operating parameters and rupee depreciation were offset by input commodity inflation (mainly caustic soda and imported bauxite).

In FY2019, the total bauxite requirement of about 4.4 million tonnes was met by captive mines (10%), OMC (31%), domestic sources (20%) and imports (39%). In the previous year, the bauxite supply mix was captive mines (29%), domestic sources (41%) and imports (30%).

In FY2019, the CoP of hot metal at Jharsuguda was US\$1,938 per tonne, up by 4% from US\$1,867 in FY2018. The equivalent CoP figure at BALCO increased to US\$1,945 per tonne, up by 1% from US\$1,923 in FY2018.

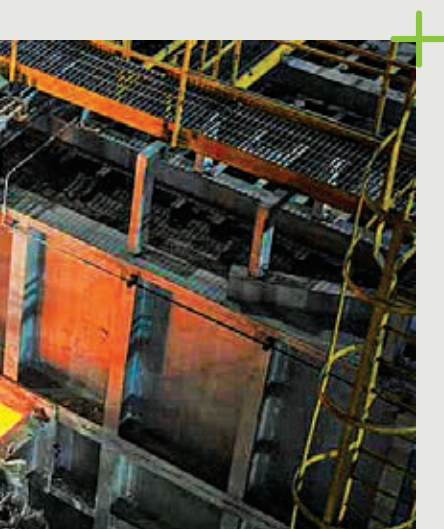
This was primarily driven by volatility in global alumina prices due to supply disruptions and input commodity inflation (mainly carbon). The global alumina price indices generally traded higher than prices in the past years. The power cost was higher due to disruptions in domestic coal supply from Coal India, resulting in procurement of coal from alternative sources at higher prices and power import from the grid. CoP was partially offset by higher Lanjigarh alumina production and currency depreciation.

The cost of production for Q4 FY2019 was US\$1,776 per tonne, significantly lower compared to previous quarters on account of structural improvements in the cost due to increased local bauxite supply from OMC meeting over 50% of our Q4 FY2019 requirements, increase captive alumina production from the Lanjigarh refinery. The peak run rate at Lanjigarh refinery during the year was 1.8 mtpa.

Coal materialisation improved significantly in Q4 FY2019, resulting in no power imports from the grid in last four months of FY2019. We have further secured 3.2 million tonnes of coal in the Tranche IV auction and materialisation started in March 2019. This will further improve coal availability and therefore help drive costs down.

FINANCIAL PERFORMANCE

During the year, revenue increased by 18% to US\$4,183 million, driven by volume ramp up at Jharsuguda. EBITDA was lower at US\$316 million (FY2018: US\$414 million), mainly due to increase in cost of production partially offset by a write back of liability pursuant to a settlement agreement with a contractor at BALCO.





Divisional Review

Aluminium

OUTLOOK

VOLUME AND COST

In FY2020, we expect production at our Lanjigarh refinery of around 1.7-1.8 million tonnes, with aluminium production at smelters remaining stable.

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

The global alumina price indices remained volatile during FY2019 and peaked in the middle of the year but have since lowered in recent months. We expect the global alumina supply to improve as new refinery volumes enter production and expect prices to remain stable for the forthcoming year.

At our power plants, we are also working towards reducing GCV losses as well as improving plant operating parameters which should deliver higher plant load factors (PLFs) and a reduction in non-coal costs.

The hot metal cost of production for FY2020 is expected to be in the range of US\$1,725 – 1,775 per tonne.

We aim to increase our value-added production to 60% of our total sales for FY2020.

STRATEGIC PRIORITIES

Our focus and priorities will be to:

- Deliver Lanjigarh refinery production at 1.7-1.8 million tonnes and stable aluminium production
- Enhance our raw material security of bauxite & alumina
- Improve coal linkage security, better materialisation and continued production at our Chotia mines
- Improve our plant operating parameters across locations
- Improve realisations by improving our value-added product portfolio



Above: Employees at integrated facility, Jharsuguda



Divisional Review
Power



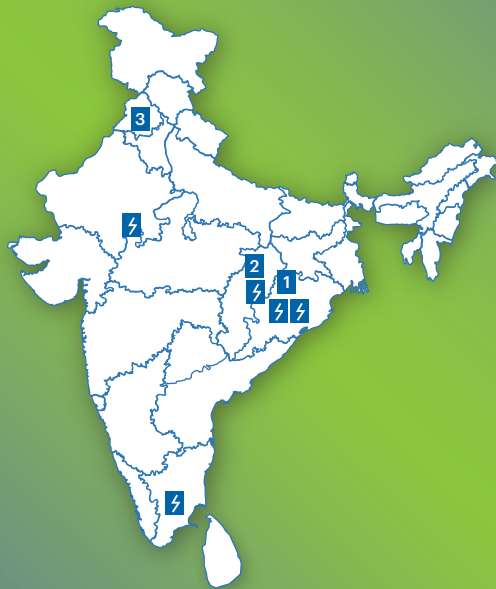



THE YEAR IN SUMMARY

FY2019 was a significant year for the Talwandi Saboo (TSPL) power plant, where we achieved plant availability of c. 88%. However, the plant load factors for the Jharsuguda and BALCO IPP were impacted by domestic coal shortages.

SAFETY

We report with deep regret a fatality during the year, as the result of a vehicle accident at our BALCO IPP. After a thorough investigation, the lessons learned were shared for implementation across all our businesses. To enhance safety, a segregated pedestrian pathway has been completed throughout the coal truck movement area, designed to reduce the risk of accidents to passing pedestrians.



- 1 Jharsuguda power plant
- 2 Korba power plant
- 3 Talwandi Sabo Power plant
-  Captive thermal power plant



"Record plant availability of 88% at TSPL in FY2019."

Ajay Kapur
CEO – Aluminium & Power



Divisional Review

Power

ENVIRONMENT

One of the main environmental challenges for power plants is the management and recycling of fly ash. At our BALCO IPP, 100% of the fly ash was utilised at both the power plants, up from 62% and 58%, respectively in the previous year. The plant also saw a significant reduction in auxiliary power consumption at 7.82% (FY2018: 8.14%). A similar downward trend was achieved in BALCO IPP's specific water consumption at 2.20 m³/MWh (FY2018: 2.8 m³/MWh).

PRODUCTION PERFORMANCE

	FY2019	FY2018	% change
Total power sales (MU)	13,515	11,041	22
Jharsuguda 600MW	1,039	1,172	(11)
BALCO 600MW*	2,168	1,536	41
MALCO#	-	4	-
HZL wind power	449	414	9
TSPL	9,858	7,915	25
TSPL – availability	88%	74%	

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

* we have received an order dated 1 January 2019 from CSERC for Conversion of 300MW IPP to CPP. During the Q4 FY2019, 184 units were sold externally from this plant.

UNIT SALES AND COSTS

	FY2019	FY2018	% change
Sales realisation (US cents/kWh) ¹	4.8	4.5	8
Cost of production (US Cents/kWh) ¹	4.1	3.6	15
TSPL sales realisation (US Cents/kWh) ²	5.9	5.5	7
TSPL cost of production (US Cents/kWh) ²	4.4	3.9	12

1. Power generation excluding TSPL.

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

FINANCIAL PERFORMANCE

(US\$ million, unless stated)

	FY2019	FY2018	% change
Revenue	934	877	6
EBITDA	219	258	(15)
EBITDA margin (%)	24	25 ¹	-
Depreciation and amortisation	86	75	15
Operating profit before special items	133	183	(28)
Share in Group EBITDA (%)	6	7	
Capital expenditure	4	2	
Sustaining	4	2	
Growth	-	-	

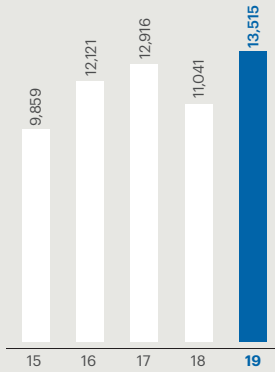
1. Excluding one-offs

Below: Power Plant at Jharsuguda



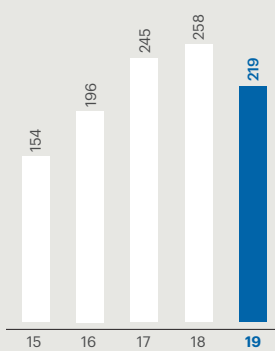
SALES

(Million kWh)



EBITDA

(US\$ million)



OPERATIONS

During FY2019, power sales were 13,515 million units, 22% higher y-o-y. Power sales at TSPL were 9,858 million units with 88% availability. At TSPL, the Power Purchase Agreement with the Punjab State Electricity Board compensates us based on the availability of the plant.

The 600MW Jharsuguda power plant operated at a lower Plant Load Factor (PLF) of 15% in FY2019.

The 600MW BALCO IPP operated at a PLF of 53% in FY2019. We have received an order dated 1 January 2019 from CSERC for the conversion of 300MW capacity from an Independent Power Plant (IPP) to a Captive Power Plant (CPP).

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

UNIT SALES AND COSTS

Average power sale prices, excluding TSPL, increased by 8% to US cents 4.8 per kWh. This was mainly due better prices in the open access market.

During the year, the average generation cost was higher at US cents 4.1 per kWh (FY2018: US cents 3.6 per kWh), driven mainly by an increase in coal prices owing to supply disruptions.

TSPL's average sales price was higher at US cents 5.9 per kWh (FY2018: US cents 5.5 per kWh), and power generation cost was higher at US cents 4.4 per kWh (FY2018: US cents 3.9 per kWh) driven mainly increased coal prices.

FINANCIAL PERFORMANCE

EBITDA for the year was 15% lower y-o-y at US\$219 million mainly due to an increase in the cost of production due to higher coal prices owing to supply disruption in the domestic market. Further, the EBITDA for FY2018 included a one-off revenue recognition of US\$35 million and US\$22 million at BALCO and at Jharsuguda IPP's, respectively.

OUTLOOK

During FY2020, we will remain focused on maintaining the plant availability of TSPL above 80% and achieving higher plant load factors at the BALCO and Jharsuguda IPP's.

STRATEGIC PRIORITIES

Our focus and priorities will be to:

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





Divisional Review Iron Ore





THE YEAR IN SUMMARY

Operations in Goa continued to be suspended in FY2019, and remain so, due to a state-wide directive from the Supreme Court. We continue to engage with the government to secure a resumption of mining operations.

Production of saleable ore at Karnataka was 4.1 million tonnes, in line with the increase in the mining cap for the state of Karnataka.

SAFETY

In continuing our journey to 'zero harm', the lost time injury frequency rate (LTIFR) was 0.30 (FY2018: 0.12). During the year, we initiated new safety practices in our organisations including 'one man, one lock'; deployment of trained rescue teams for work at height and confined space; training in making better risk decisions (MBRD); crane lifting and rigger training; and continuing a grid ownership concept for improving EHS culture on the ground.

We also launched a dedicated safety app for real-time reporting of safety issues as well as tracking business leaders' time on-field, which has proved highly successful. Across all the sites, scores have improved against the Vedanta Sustainability Audit Programme (VSAP) and Vedanta Safety Standards (VSS).



- 1 Iron Ore operations, Goa
- 2 Iron Ore operations, Karnataka



"Record production of 4.1 million tonnes at Karnataka. We continue to engage with the government for resumption of mining operations in Goa."

Naveen Singhal

CEO, Sesa Goa – Iron Ore Business



Divisional Review

Iron Ore

ENVIRONMENT

We recycle and reuse all of the wastewater we generate in the Iron Ore business, with the exception of blow down from the power plant which is treated and discharged according to consent conditions. We have also installed five fog cannon systems for dust suppression and have installed a bag filter at the charging car of the coke oven.

Our Iron Ore Karnataka business has started biodiversity studies, which are currently in the Phase-II stage. We have planted around 32,000 plants and also desilted around 1.17 lakh m³ in 29 check dams and village ponds round our business area.

PRODUCTION PERFORMANCE

	FY2019	FY2018	% change
Production (dmt)			
Saleable ore	4.4	7.1	(38)
Goa	0.2	4.9	(95)
Karnataka	4.1	2.2	89
Pig iron (kt)	686	646	6
Sales (dmt)			
Iron ore	3.8	7.6	(49)
Goa	1.3	5.4	(77)
Karnataka	2.6	2.2	19
Pig iron (kt)	684	645	6

FINANCIAL PERFORMANCE

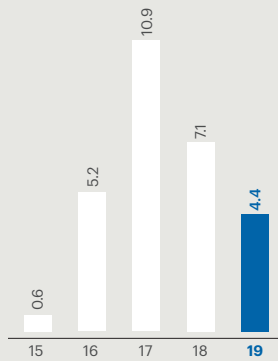
(US\$ million, unless stated)

	FY2019	FY2018	% change
Revenue	416	485	(14)
EBITDA	90	48	87
EBITDA margin (%)	22	10	
Depreciation and amortisation	35	69	(49)
Operating profit before special items	55	(21)	
Share in Group EBITDA (%)	3	1	
Capital expenditure	1	11	(92)
Sustaining	1	11	(92)
Growth	-	-	-

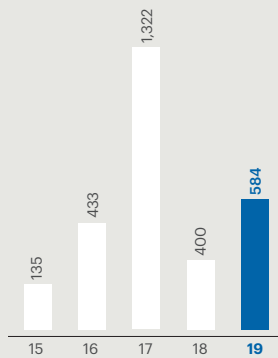
Below: Employees at operational site, Sesa Iron Ore



PRODUCTION
(Mt)



EBITDA
(US\$ million)



OPERATIONS

At Goa, production and sales volumes were lower than the prior year due to the mine closure. This was 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.

At Karnataka, production was 4.1 million tonnes, 89% higher y-o-y due to an increase in the annual mining allocation. Sales in FY2019 were 2.6 million tonnes, 19% higher y-o-y due to an increase in production, but partially offset by muted e-auction sales.

Production of pig iron increased by 6% to 686,000 tonnes in FY2019, mainly lower metallurgical coke availability due to weather-related supply disruptions in Australia in Q1 FY2018, and a local contractors' strike in Q2 FY2018.

FINANCIAL PERFORMANCE

In FY2019, revenue decreased to US\$416 million, 14% lower y-o-y mainly due to lower sales at Iron Ore Goa resulting from the mine closure partially offset by increase in sales volume at Karnataka and pig iron prices during the year. EBITDA increased to US\$90 million compared with US\$48 million in FY2018. This was mainly due to higher volumes at Karnataka.

OUTLOOK

The production from Iron Ore Karnataka is expected to be 4.5 WMT (wet million tonnes).

STRATEGIC PRIORITIES

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
- Increase our footprint in iron ore by continuing to participate in auctions across the country, including Jharkhand





Divisional Review Steel





THE YEAR IN SUMMARY

Vedanta Limited completed the acquisition of 90% of the share capital of ESL on 4 June 2018. ESL is an integrated steel plant (ISP) in Bokaro, Jharkhand, with a design capacity of 2.5mtpa. Its current operating capacity is 1.5mtpa with a diversified product mix of wire rod, rebar, DI pipe and pig iron.

FY2019 was a transformational year for Electrosteel Steels Limited (ESL). The business achieved record production, sales volume, EBITDA, EBITDA margin and free cash flow generation. Indeed, FY2019 EBITDA margin of 19% was among the sector leaders in India.

SAFETY

Since the acquisition by Vedanta, we have started to implement the best safety practices of the Vedanta Group to work towards achieving 'zero harm'. These include:

- Training and awareness programmes for making better risk decisions (MBRD)
- Implementation of eight Vedanta safety standards
- Launch of Vedanta Sustainability Audit Programme (VSAP)
- Focusing on Visual Felt Leadership (VFL)

We regard any safety incident as unacceptable and preventable and continue to work towards our zero harm goal.



1 Electrosteel Steels plant, Bokaro



"Record production of 1.2 million tonnes during FY2019."

PANKAJ MALHAN

Deputy Chief Executive Officer – Electrosteel Business





Divisional Review Steel

ENVIRONMENT

Alongside zero harm, a main priority for ESL is to achieve 'zero waste and zero discharge'. In line with this, we have started on a journey to achieve no discharges of water.

PRODUCTION PERFORMANCE

	FY2019	FY2018	% change
Production (kt)	1,199	1,025	17
Pig iron	142	179	(21)
Billet	39	50	(21)
TMT bar	441	300	47
Wire rod	427	365	17
Ductile iron pipes	150	130	15

PRICES

(US\$ per tonne)

	FY2019	FY2018	% change
Pig iron	404	359	13
Billet	486	447	9
TMT	564	515	10
Wire rod	638	558	14
DI pipe	593	598	(1)

UNIT COSTS

(US\$ per tonne)

	FY2019	FY2018	% change
Steel (US\$ per tonne)	457	456	1

FINANCIAL PERFORMANCE

(US\$ million, unless stated)

	FY2019*
Revenue	600
EBITDA	113
EBITDA margin (%)	19
Depreciation and amortisation	28
Operating profit before special items	85
Share in Group EBITDA (%)	3
Capital expenditure	15
Sustaining	15
Growth	-

* Financial numbers are for a period of 10 months post acquisition

Below: TMT Bars produced by Electrosteel Steels Limited



OPERATIONS

ESL's manufacturing facility is a greenfield integrated steel plant located near Bokaro, Jharkhand, India, which has a current capacity of 1.5mtpa and the potential to increase to 2.5mtpa. It primarily consists of one sinter plant, a vertical coke oven plant, two blast furnaces, an oxygen plant, a lime calcination plant, a steel melting shop, a wire rod mill, a bar mill, a captive power plant and a ductile iron pipe plant.

Since June 2018, post Vedanta's acquisition of ESL, the business has seen significant improvements leading to a healthy financial position. There have been significant gains in operational efficiencies, such as a substantial reduction in the coke rate at blast furnaces 2 & 3 by about 3% and 7%, respectively y-o-y; optimisation of the coal mix and iron ore blending; and improved yields of the finishing mill to 96.7% (from 95.9% in FY2018).

Prior to the acquisition, the saleable production for the business was about 1mtpa. This was mainly due to a sub-optimal use of assets, weak liquidity and limited working capital that resulted in an inadequate availability of resources. In FY2019, we achieved record saleable production of 1.2mtpa as a result of operational excellence and restarting of 350 m³ blast furnace 3 in August 2018. In line with our stated priorities to stabilise production and ramp up to 1.5mtpa, we achieved a hot metal production run-rate of c. 1.5mtpa in FY2019.

The priority remains to enhance production of Value-added Products (VAPs), i.e. TMT bar, wire rod and DI pipe, and to minimise the production of Non-value-added Products (NVAPs) i.e. Pig iron and billets. During the year, we shifted c. 21% production of NVAPs to higher margin VAPs. TMT bar and wire rod production increased by 47% and 17%, respectively y-o-y, driven mainly by improving yields at the steel melting shop, higher availability of hot metal and better efficiency at the mills.

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). Both the directions have since been stayed by the Hon'ble High Court of Jharkhand until the next hearing date, which is due on 25 July 2019.

PRICES

Average sales realisation increased 12% y-o-y from US\$510 to US\$572 per tonne in FY2019. Prices of iron and steel are influenced by several macro-economic factors. These include 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 China.

UNIT COSTS

Coal prices and iron ore prices were higher by 15% and 50%, respectively over FY2018 despite of which, the cost of production stood flat at US\$457 per tonne in FY2019. This was managed through improvement in key operational metrics which includes optimisation of lower grade iron ore fines, improvement in coke rate consumption, higher PCI consumption in blast furnaces, lower consumption of pellets, improvements in mill yields, commercial excellence and tight control over costs.

FINANCIAL PERFORMANCE

Since its acquisition by Vedanta with effect from June 2018, ESL has generated EBITDA of US\$113 million. Prudent cost management and improvisation of key matrices played a pivotal role for this turnaround story.

OUTLOOK

Hot metal production is expected to be c. 1.5mtpa in FY2020 and expected EBITDA margin is US\$130 – US\$140 per tonne.

STRATEGIC PRIORITIES

Our focus and priorities will be to:

- Obtain clean Consent to Operate and environmental clearance
- Debottleneck the blast furnace, steel melting shop & roll capacity, improving production volume
- Raw material securitisation through long term contracts
- Re-branding of value-added products and enter the retail market for TMT
- Embark on the expansion journey from 1.5 to 2.5mtpa
- Ensure zero harm and zero discharge, fostering a safety-centric culture
- Focus on waste-to-wealth through maximising revenue from secondary products





Divisional Review

Copper – India/Australia





THE YEAR IN SUMMARY

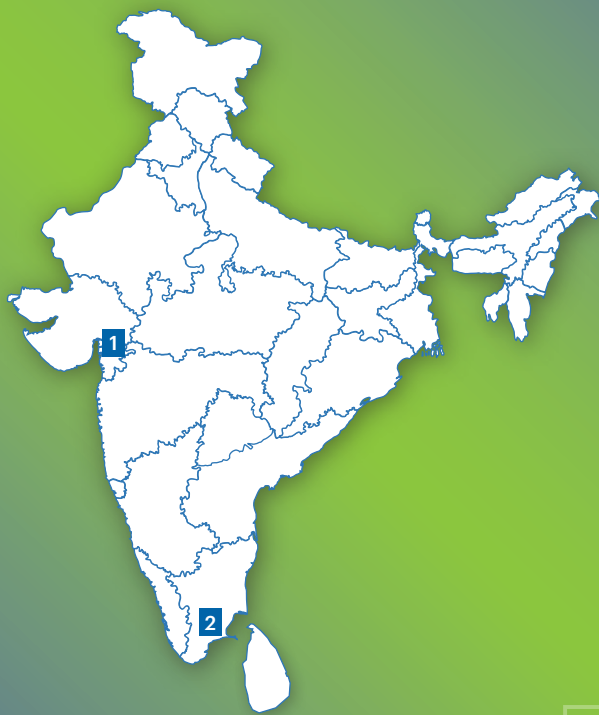
The copper smelter plant at Tuticorin was under shutdown for the whole of FY2019.

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.

SAFETY

The lost time injury frequency rate (LTIFR) was 0.15 (FY2018: 0.08). The primary reason for the increase was the significant decline in man-hours due to plant closure.



- 1 Silvassa refinery
- 2 Tuticorin smelter



"We continue to engage with government and relevant authorities to enable the restart of operations at Copper India."

PANKAJ KUMAR
Chief Executive Officer – Sterlite Copper





Divisional Review

Copper – India/Australia

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

	FY2019	FY2018	% change
Production (kt)			
India – cathode	90	403	(78)

PRICES

	FY2019	FY2018	% change
Average LME cash settlement prices (US\$ per tonne)	6,337	6,451	(2)

FINANCIAL PERFORMANCE

(US\$ million, unless stated)

	FY2019	FY2018	% change
Revenue	1,537	3,828	(60)
EBITDA	(36)	162	-
EBITDA margin (%)	(2)	4	-
Depreciation and amortisation	21	25	(17)
Operating profit before special items	(57)	137	-
Share in Group EBITDA (%)	(1)	4	-
Capital expenditure	37	84	(55)
Sustaining	28	34	(17)
Growth	9	50	(81)

Below: Employee at operational Site, Sterlite Copper



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.

However, in February 2019, the Hon'ble Supreme Court set aside NGT's order on the grounds of maintainability and left it open for Vedanta Limited to file a writ petition before the Madras High Court against all the above orders. Hon'ble Supreme Court has further left it open for Vedanta Limited to apply for interim reliefs considering that the plant has been shut down since 09 April 2018, and to apply before the Chief Justice of the High Court for an expeditious hearing.

Vedanta Limited duly filed writ petitions before the Madras High Court on 22 February 2019, which heard our miscellaneous petitions seeking interim relief on 1 March 2019. The court directed the TNPCB and the Government of Tamil Nadu to file their counters and scheduled them for further hearing on 23 April 2019. On 23 April 2019, the matter was posted for further hearing on 11 June 2019.

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

Data from the International Copper Study Group showed refined output and demand growth estimates for 2019 indicating a market deficit of 280kt. Wood Mackenzie reported that the world refined copper production for CY2019 will be 23.90 million tonnes against 23.54 million tonnes in CY2018, while refinery consumption is estimated to be around 24.18 million tonnes against 23.68 million tonnes in CY2018.

Average LME copper prices decreased by 2% compared with FY2018.

FINANCIAL PERFORMANCE

During the year, EBITDA was US\$(36) million and revenue was US\$1,537 million, a decrease of 60% on the previous year's revenue of US\$3,828 million. The reduction in revenue and EBITDA was mainly due to the shutdown of the Tuticorin smelter.

OUTLOOK

To be advised following the restart of Tuticorin.

STRATEGIC PRIORITIES

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
- Continuously upgrade technology to ensure high-quality products and services that sustain market leadership and surpass customer expectations





Divisional Review Copper Zambia





THE YEAR IN SUMMARY

Copper Zambia had another challenging year in terms of production, but we are now turning the corner with an approach focusing on industrial architecture, process stabilisation and growth projects to drive all of KCM's strategic business priorities. The turnaround actions required are understood and under way, and although there is much to be done, it remains a world-class asset with a 50-year mine life. It remains an integral part of our vision for the future. We are confident that the new approach and re-engineering of design parameters will secure our 50-year vision for mining at KCM.

At the Konkola underground mine, we are focusing on infrastructure reliability, stabilisation of partnering approach and accelerated dewatering and development rates for Konkola's growth vision. Sustained process controls are steadily delivering results at the Tailings Leach Plant (TLP).

Mr. Christopher Sheppard was appointed as the CEO of KCM in March 2019. He will provide leadership in delivering KCM's vision of over 50 years of sustainable mining operations in Zambia. With over 35 years of mining experience behind him, he will be steering all of KCM's strategic business priorities.

"We are committed to contribute towards the growth of the economy and sustainability in Zambia and we undertake to constructively engage with all key stakeholders such as government, local communities, suppliers, employees and the shareholders in a respectful manner."

CHRISTOPHER SHEPPARD
Chief Executive Officer
Copper Zambia



1 Konkola and Nchanga copper mines and Nchanga smelter, Zambia



Divisional Review

Copper Zambia

SAFETY

We deeply regret that there were four fatal accidents at the Konkola underground mine and one at the Nchanga underground mine during FY2019. Incidents were thoroughly investigated, and the lessons learned have been actioned for implementation with the rest of the organisation. Our LTIFR for the year was 0.56 (FY2018: 0.30)

KCM continued driving its renowned safety programme 'Chingilila', envisioned to train mine captains to become safety ambassadors who regularly visit every working area to improve the safety awareness in the field and in the workplace. In over 400 leaders were trained in Company safety procedures and practices.

During the year, the British Safety Council audited our OHS management system, which again showed an improvement in reporting near-misses and we expect to improve the Corrective Action Preventive Action (CAPA) closure rate.

ENVIRONMENT

Improving our water management practices remains a top priority for the business. During the year, we successfully reduced our specific water consumption from 171 to 160 m³/T for the business. Further improvement projects are under way which will not only improve the current performance but will start to set standards for the industry in water and air quality.

PRODUCTION PERFORMANCE

	FY2019	FY2018	% change
Production (kt)			
Total mined metal	91	91	-
Konkola	30	37	(20)
Nchanga	13	13	(1)
Tailings leach plant	49	41	19
Finished copper	177	195	(9)
Integrated	90	84	7
Custom	87	111	(22)

UNIT COSTS (INTEGRATED PRODUCTION)

	FY2019	FY2018	% change
Unit costs (US cents per lb) excluding royalty	276.2	239.1	16
Unit costs (US cents per lb) including royalty ¹	366.2	314.8	16

1. Including sustaining capex and interest cost

FINANCIAL PERFORMANCE

(US\$ million, unless stated)

	FY2019	FY2018	% change
Revenue	1,085	1,283	(15)
EBITDA	(63)	73	-
EBITDA margin (%)	(6)	6	
Depreciation and amortisation	102	112	(9)
Operating loss before special items	(165)	(39)	-
Share in group EBITDA (%)	(2)	2	
Capital expenditure	36	24	49
Sustaining	36	24	49
Growth	-	-	

Below: Employees on site at the Nchanga East Mill Concentrator, KCM



OPERATIONS

Mined metal production in FY2019 was 91,000 tonnes, flat y-o-y. Custom volumes decreased to 87,000 tonnes, 22% lower compared FY2018 mainly due to lower concentrate availability in the market and introduction of a 5% import duty on concentrates from 1st January 2019.

Konkola

At Konkola, production decreased to 30,000 tonnes, down 20% y-o-y, due to poor performance from one of the business partner at Shaft 3 area, shaft's structural maintenance for improving the hoisting capacities and reliability and lower equipment availability than planned resulting in lagging developments and consequently the lower production. A new business partner with better mining expertise has already been identified and productive engagement is on with the partners with a targeted resource mobilisation by Q1 FY2020.

Nchanga

At Nchanga, production was at 13,000 tonnes, down 1% y-o-y, primarily due to heavy monsoon impacting feeds from open-pits and temporary suspension of Nchanga underground operations from Q4 FY2019 due to low availability of acid as a result of rationalised operations at our Nchanga smelter following the introduction of an import duty on copper concentrates.

Tailings Leach Plant

TLP's production stood at 49,000 tonnes, up 19% y-o-y, mainly due to improved feed-grades and higher copper recoveries as a result of consistent pumps and plant availability and stabled process controls partially offset by temporary suspension of Nchanga underground operations from Q4 FY2019.

Smelter and refinery

Production of finished copper (excluding TLP) decreased to 41,000 tonnes in FY2019 compared to 43,000 tonnes in FY2018. Custom volumes decreased to 87,000 tonnes, 22% lower compared FY2018 mainly due to lower concentrate availability in the market and introduction of a 5% import duty on concentrates from 1st January 2019.

UNIT COSTS (INTEGRATED PRODUCTION)

In FY2019, the unit cost of production (excluding royalties) increased by 16% to US cents 276.2 per lb on y-o-y basis as a result of significant depreciation of Kwacha against the US dollar, higher waste stripping costs planned for enhanced ore exposure at open-pit, additional cost incurred on sourcing acid for TLP ramp-up, focused preventive maintenance programmes akin to improved plant availabilities, lower cobalt credits as a result of current mining sequence and a one-off credit related to Energy Regulation Board (ERB) tariff provision in FY2018.

FINANCIAL PERFORMANCE

Revenue in FY2019 was lower at US\$1,085 million compared with US\$1,283 million in the previous year. This was mainly due to lower metal prices and reduction in custom sales volumes. EBITDA for the year stood at US\$(63) million compared with US\$73 million in FY2018. This was mainly due to incremental process improvement cost, significant depreciation of the Kwacha against US dollar lower cobalt credits and a one-off credit related to Energy Regulation Board (ERB) tariff provision in FY2018.

OUTLOOK

Full-year production for FY2020 is expected to reach 90-100 kt from integrated production with equivalent contribution from custom production. Integrated C1 cost for FY2020 is expected at US cents 240-250 pound.

Konkola underground mine

The Konkola underground mine remains a key priority. The operational philosophy re-designed to include industrial architecture, contractor partnering, accelerated dewatering & development under a reliable life of mine plan, is central to the ramp-up plan. A feasibility study to develop a deeper flat level is under way as part of the 'dry mine' project.

Nchanga operations

At Nchanga, the focus continues to be plant reliability at the TLP, and on driving productivity in the open-cast mines through right balance between waste and ore excavation.

Smelter and refinery

A 35-days-planned, biennial maintenance shutdown is scheduled in June-July 2019 as part of preventive maintenance programme to improve the plant reliability and improved feed rates of above 80 tonnes per hour (tph). We are equally focused to improve the capacity re-build for our 500 tpd sulphur burning plant to support leaching operations.

OUR STRATEGIC PRIORITIES

Our focus and priorities will be to:

- Deliver volume growth through successful implementation of vendor partnering model
- Increase production of underground mine at Konkola with an additional, deeper horizontal development
- Refocus and strengthen industrial architecture & infrastructure to delivery stability in short term and growth in long term
- Improve equipment availability and reliability
- Ensure a reliable Tailings Leach facility with the potential to increase recoveries
- Reduce the cost base through the contractor business-partnering model and value-focused initiatives
- Strengthen the team expertise with strong mining, maintenance and health & safety specialists

PORT BUSINESS

Vizag General Cargo Berth (VGCB)

During FY2019, VGCB operations showed a decrease of 8% in discharge and 5% in dispatch compared to FY2018. This was mainly driven by lower availability of railway rakes in the region.



Board of Directors



ANIL AGARWAL, 66
Executive Chairman | N*

Date of Appointment

Mr. Agarwal was appointed to the Board in May 2003 and became the Executive Chairman in March 2005.

Background

Mr. Agarwal founded the Group in 1976. In over three decades, the Group, under his leadership and with his strategic guidance, has grown from an Indian domestic miner into a global natural resources group with a world-class portfolio of large, diversified, structurally low-cost assets. His entrepreneurial style of identifying and turning around companies has led the Group's expansive and profitable growth. He is also known for his commitment to ensuring that the growth and profitability of the Group aids the eradication of poverty through development initiatives within the communities in which Vedanta operates.

Current Positions

- Director of Sterlite Technologies Limited and Chairman Emeritus of Vedanta Limited

Previous Experience

- Chairman of Vedanta Limited



NAVIN AGARWAL, 58
Executive Vice Chairman

Date of Appointment

Mr. Agarwal was appointed to the Board in November 2004 and became the Executive Vice Chairman in June 2005.

Background

Mr. Agarwal has been associated with the Group since its inception and has over 35 years of strategic executive experience. He has been instrumental in leading the growth of the Group through organic projects and acquisitions. He plays a pivotal role in providing direction for development of the top leadership talent at the Group. He is credited with creating a culture of business excellence and delivering superior benchmark performance through application of advanced technology and global best practices. He has led Vedanta's evolution to the highest standards of corporate governance and enhanced engagement with key stakeholders.

Current Positions

- Executive Chairman of Vedanta Limited

Previous Experience

- Chairman of the Vedanta's Executive Committee
- Chairman of Cairn India Limited

Director	Strategy	Mining/ Energy	Financial	Board Governance	Executive Compensation	Indian Business Experience	UK market	Sustainability	Government Relations	Communication
Anil Agarwal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Navin Agarwal	✓	✓	✓	✓	✓	✓		✓	✓	✓
Srinivasan Venkatakrishnan	✓	✓	✓		✓	✓		✓	✓	✓
Deepak Parekh	✓		✓	✓	✓	✓		✓	✓	✓
Geoffrey Green	✓			✓	✓		✓		✓	✓
Ravi Rajagopal	✓		✓	✓		✓	✓	✓	✓	✓
Katya Zotova	✓	✓	✓	✓			✓	✓	✓	✓
Edward T Story	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



SRIVIVASAN VENKATAKRISHNAN, 58
Chief Executive Officer | S

Date of Appointment

Mr. Venkatakrishnan was appointed to the Board in August 2018.

Background

Mr. Venkatakrishnan (Venkat) has extensive global leadership experience at major natural resources companies. He has a strong track record and achieved significant success, delivering major projects on time and on budget improving productivity, strengthening the balance sheet, reducing operating and overhead costs, and improving overall safety and sustainability performance.

Current Positions

- Whole-time Director and Chief Executive Officer of Vedanta Limited

Previous Experience

- Chief Executive Officer of AngloGold Ashanti Limited
- Chief Financial Officer of AngloGold Ashanti Limited
- Chief Financial Officer of Ashanti Goldfields Limited

Qualifications and Awards

Mr. Venkatakrishnan is a qualified Chartered Accountant who holds a Bachelor's degree from the University of Madras.

Key to committees

- * Committee Chairman/Chair
- A Audit Committee
- R Remuneration Committee
- N Nominations Committee
- S Sustainability Committee



DEEPAK PAREKH, 74
Independent Non-Executive Director and Senior Independent Director | A, N, R

Date of Appointment

Mr. Parekh joined the Board in June 2013.

Background

Mr. Parekh has a diversity of both executive and non-executive global experience across a number of sectors, including financial services, infrastructure, pharmaceuticals, electronics and leisure.

Current Positions

- Chairman of Housing Development Finance Corporation, India's leading financial services conglomerate
- Non-executive Chairman of BAE Systems (Services) Pvt. Ltd. and Siemens, in India
- Director of Indian Hotels Company Limited, National Investment and Infrastructure Fund (NIIF), Fairfax Holdings Corporation and DP World

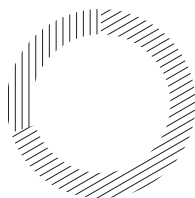
Previous Experience

- Various directorships, including GlaxoSmithKline Pharmaceuticals Limited and Mahindra & Mahindra Limited

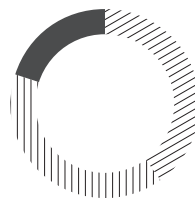
Qualifications and Awards

Mr. Parekh was a recipient of the Padma Bhushan in 2006, Knight in the Order of the Legion of Honour by the French Republic in 2010 and Bundesverdienstkreuz –Cross of the Order of Merit by the Federal Republic of Germany in 2014. He was also the first international recipient of the ICAEW outstanding achievement award in 2010.

BOARD BALANCE



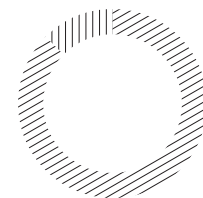
NON-EXECUTIVE DIRECTOR TENURE



INTERNATIONAL EXPERIENCE



GENDER DIVERSITY



Board of Directors

Continued



GEOFFREY GREEN, 69
Independent Non-Executive Director | R*, A

Date of Appointment

Mr. Green was appointed to the Board in August 2012.

Background

Mr. Green has a wealth of knowledge in respect of UK corporate governance, regulatory and strategic matters, with many years of legal and commercial experience advising major UK listed companies on corporate and governance issues, mergers & acquisitions and corporate finance.

Current Positions

- Non-executive Chairman of the Financial Reporting Review Panel, one of the main subsidiary bodies of the Financial Reporting Council

Previous Experience and Positions

- Partner at Ashurst LLP
- Senior partner and Chairman of Ashurst's management Board for 10 years
- Head of Ashurst's Asian practice based in Hong Kong, responsible for leading the firm's strategy and business development for the region

Qualifications

Mr. Green has a degree in law from Cambridge University and qualified as a solicitor at Ashurst LLP.



EKATERINA (KATYA) ZOTOVA, 41
Independent Non-Executive Director | S*, N, R

Date of Appointment

Ms. Zotova was appointed to the Board in August 2014.

Background

Ms. Zotova has a wide range of commercial experience in the oil & gas industry, including strategy, portfolio management, corporate finance and mergers & acquisitions.

Current Positions

- Senior external advisor to McKinsey & Company

Previous Experience

- Principal at L1 Energy LLP/Pamplona Capital where she was responsible for major merger & acquisition transactions
- Head of International Acquisitions and Divestments for Citigroup's oil & gas investment banking division where she worked directly with oil majors and national oil companies
- A variety of finance, business development and mergers & acquisitions roles during her 14 year career at Royal Dutch Shell including Head of Portfolio Management for Upstream International

Qualifications

Ms. Zotova has a summa cum laude degree in finance and management from the Academy of National Economy in Moscow and an MBA from Rotterdam School of Management/Columbia Business School.



RAVI RAJAGOPAL, 64
Independent Non-Executive Director | A*, S

Date of Appointment

Mr. Rajagopal was appointed to the Board in July 2016.

Background

Mr. Rajagopal has substantial international executive experience having worked in a variety of senior finance and operational roles at a number of global companies.

Current Positions

- Chairman of Fortis Healthcare Limited
- Chairman, JM Financial Services, Singapore and senior advisor to JM Financial Services
- Independent Director and Chair of the Audit Committee of Airtel Africa, a subsidiary of Bharti Airtel
- Trustee of the Science Museum Foundation, UK

Previous Experience

- Member of Diageo's India Advisory Board, which he formed in 2008 and led until 2015
- CFO for Europe and Group Financial Controller at Diageo PLC
- A variety of senior roles across Diageo Group from 1997, including group controller at Diageo PLC, CFO for Europe and global head of M&A
- Business responsibility for Diageo plc's spirits business across sub-Saharan Africa
- Progressively senior roles from 1979 across five different businesses for ITC India (a BAT plc associate in India)
- Nominee non-executive director of United Spirits, India until October 2016

Qualifications

Mr. Rajagopal has a degree in Commerce from Madras University and is a fellow of the Institute of Chartered Accountants of India and the Cost and Works Accountants of India. He has also completed the Advanced Management Program at Harvard Business School.

Key to committees

- * Committee Chairman/Chair
- A Audit Committee
- R Remuneration Committee
- N Nominations Committee
- S Sustainability Committee



EDWARD T. STORY, 75
Independent Non-Executive Director | A

Date of Appointment

Mr. Story was appointed to the Board in June 2017.

Background

Mr. Story brings to the Board over 50 years of global executive experience in the oil and gas industry.

Current Positions

- President and Chief Executive Officer of SOCO International PLC, an international oil and gas exploration and production company listed on the London Stock Exchange with operations in Vietnam and Egypt

Previous Experience

- Senior executive positions at various international oil and gas companies such as Snyder Oil Corporation, Conquest Exploration Company, Superior Oil Company, Exxon Corporation and Esso Standard Oil
- A Non-Executive Director of Cairn Energy PLC
- A Non-Executive Director of Cairn India Limited

Qualifications

- Mr. Story holds a Bachelor of Science degree from Trinity University, San Antonio, Texas, a Master's degree in Business Administration from the University of Texas and an honorary Doctorate degree by the Institute of Finance and Economics of Mongolia

Introduction to Governance

The Board is responsible for the long term success of the Group and good governance plays a key role in the delivery of shareholder value. Further to the Company’s delisting from the Official List of the London Stock Exchange, the Board remains committed to maintaining the highest standards of corporate governance and ethical business practices. The spirit of good governance guides how we do business and underpins how we serve our stakeholders.

LEADERSHIP

The Company’s Board of Directors provides entrepreneurial leadership for the Group and strategic direction to management. It is collectively responsible for promoting the long term success of the Group through the creation and delivery of sustainable shareholder value.

In this section, you will find information about the Vedanta Board and its Committees, areas of focus for the Board and the division of responsibilities.

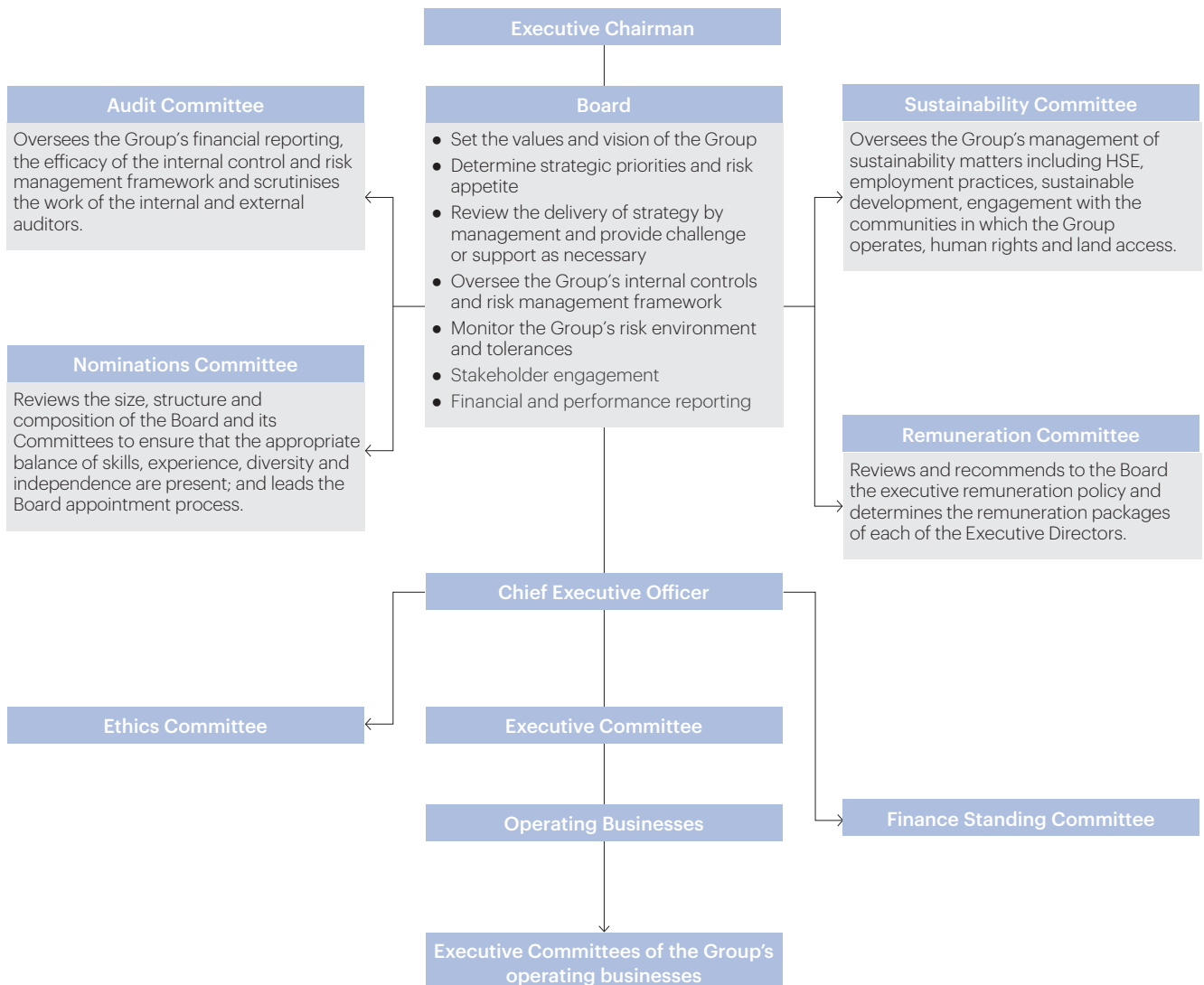
The reporting structure, as shown below, between the Board, Board Committees and Management Committees forms the backbone of the Group’s Corporate Governance framework. As part of its decision-making processes, the Board considers the long term consequences of its decisions, the interests of various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

The Board of Directors

Comprises of eight Directors including the Executive Chairman, Executive Vice Chairman, Chief Executive Officer and five Non-Executive Directors.

Board Committees

The Board delegates certain responsibilities to committees which operate within their defined terms of reference. The Board has four established committees (together, the Board Committees), namely Audit, Remuneration, Sustainability and Nominations Committees.



Each Board Committee has formally delegated duties included in its terms of reference, which are available on the Company’s website at www.vedantaresources.com/boardcommittees. The Board Committees’ terms of reference are reviewed regularly to ensure that they comply with current legal and regulatory requirements, reflect corporate best practice and facilitate the effective operation of the relevant Board Committee. The Chair of each of the Board Committees reports formally to the Board on their respective Committee’s activities following each meeting. Additionally, from time to time, the Board Committees submit reports and recommendations to the Board on any matter which they consider significant to the Group.

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

the Head of HSE and Sustainability attends the Sustainability Committee meetings to formally record each meeting.

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

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

DIVISION OF RESPONSIBILITIES

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

The role of the Executive Chairman	The role of the Executive Vice Chairman	The role of the Chief Executive Officer
<ul style="list-style-type: none"> Leads the Board and ensures that it discharges its responsibilities effectively Develops succession plans for Board appointments for approval by the Board Identifies strategic priorities and new business opportunities to enhance shareholder value Promotes the highest standards of integrity, probity and governance Chairs the Board meetings and facilitates the active engagement of all Directors Oversees the Directors’ induction, performance and ongoing development Engages with the Company’s stakeholders to ensure that an appropriate balance is maintained between the various interests 	<ul style="list-style-type: none"> Supports the Executive Chairman in executing the overall vision and strategy of the Group Leads the Group’s principal subsidiary, Vedanta Limited, as its Chairman Enhances and sustains the Group’s overall HSE, people, digital and technology, ethics and compliance practices at global standards Oversees stakeholder engagement in India and globally Ensures effective execution of growth projects to deliver value Provides mentoring to some of the key corporate functions like the people function, management assurance and investor relations including key leadership development 	<ul style="list-style-type: none"> Ensures effective implementation of Board decisions Develops operational business plans for the Board’s approval Provides leadership to the senior management team for the delivery of the Group’s operational business plans following Board approval Provides oversight and management of all of the Group’s operations and performance including environmental, social, governance, health and safety and sustainability Manages the Group’s risk profile in line with the risk appetite set by the Board Ensures that prudent and robust risk management and internal control systems are in place throughout the Group Recommends annual budgets to the Board for approval Supports the Executive Chairman in maintaining effective communications with various stakeholders Leads the Executive Committee

Non-Executive Directors

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

It is responsible for implementing the strategy adopted by the Board, allocating resources in line with delegated authorities, managing risk and monitoring the operational and financial performance of the Group. Authority is delegated by the Executive Committee to the respective Chief Executive Officer of each of the Group’s businesses. The Group Chief Executive Officer keeps the Board informed of the Executive Committee’s activities through his standing reports to the Board.

MANAGEMENT COMMITTEES

The Executive Committee

The Executive Committee supports the Chief Executive Officer in the day-to-day running of the Group and meets monthly.

The Finance Standing Committee

The Finance Standing Committee has delegated authority from the Board for approval of certain matters including approval of financing arrangements and corporate guarantees below the financial threshold for Board approval. It comprises of the Executive Chairman, Executive Vice Chairman,

Introduction to Governance

Continued

Chief Executive Officer, Chief Financial Officer and Director of Vedanta Limited. The Company Secretary updates the Board on the activities of the Finance Standing Committee at the subsequent Board meeting and the minutes of all Finance Standing Committee meetings are reviewed by the Board.

Key matters reserved for Board consideration

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

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

Board focus during the year

Governance and Risk

- Reviewed the Group’s progress on compliance with the Modern Slavery Act;
- Approval of the Company’s Diversity & Inclusion Policy and review of the progress made towards the Group’s diversity goals;
- Approval of the Payments to Governments’ and Tax transparency reports;
- Reviewed the findings of the Board and Board Committee evaluation and agreed appropriate actions;
- Convened the Company 2018 Annual General Meeting and approved the business to be considered at the meeting;
- Received updates from each of the Board Committees; and
- Approved changes to the Finance Standing Committee’s terms of reference.

Strategy

- Considered new business opportunities, including the submission of bids by the Group for steel assets such as Electrosteel Steels Limited and Essar Steel Limited under the Indian Insolvency and Bankruptcy Code
- Considered and approved the takeover offer by Volcan Investments Limited for the minority interest in the shares of the Company and the subsequent re-registration of the Company, a related party transaction for which Messrs Anil and Navin Agarwal did not participate in the approval of the transaction due to the conflict of interest
- Approved the purchase by Cairn India Holdings Limited, a wholly owned subsidiary of Vedanta Limited, of an economic interest in the upside of an investment in Anglo American PLC held by Volcan Investments Limited, which was a related party transaction. Due to conflicts of interest, Messrs Anil and Navin Agarwal did not participate in the approval of the transaction
- Approval of a parent company guarantee and the entering into revenue sharing contracts with the Government of India in respect of the 41 exploration blocks in India awarded to the Group pursuant to the Open Acreage Licensing Policy
- Discussed the impact of the closure of some of the Group’s businesses and the actions being taken to address the issue
- Reviewed HSE goals and performance across the Group with focus on the actions taken to address the number of fatalities within the Group



Operational and financial performance

- Approved the Group’s Business Plan FY2019-2020
- Reviewed the Group’s operational performance, including safety and environment across its businesses, through updates from the Chief Executive Officer at each scheduled Board meeting
- Review of KCM’s performance and business turnaround plan
- Received updates on the Cairn India tax litigation with the Government of India
- Reviewed the fatal incidents across the Group and received updates on corrective actions taken to prevent recurrences
- Reviewed the Group’s financial performance and debt management initiatives through updates from the Chief Financial Officer at each scheduled Board meeting
- Reviewed and approved changes to the Group’s financial covenants in respect of its financing facilities
- Reviewed the Company’s credit rating
- Approved the going concern statement and Viability Statement for inclusion in the Company’s Annual Report and Accounts FY2018
- Approved the Group’s Annual Report and full- and half-year financial results
- Declared the Company’s dividends
- Reviewed the Group’s Treasury position, considered Management’s liability management proposals and approved interim financial statements for the issuance of a bond by a wholly owned Group subsidiary and approval of the bond issuance
- Approved amendments to the Company’s Articles of Association following the delisting and the subsequent re-registration of the Company
- Approved the cancellation of Treasury shares
- Approved various corporate guarantees in respect of financing facilities to Group companies including the roll-over of KCM’s guarantees

Stakeholder feedback

- Received regular investor relations updates with feedback from bondholders and other stakeholders

Introduction to Governance

Continued

The balance of skills, experience, knowledge and independence of the Directors on the Board is kept under regular review. This section includes information about the induction and development of the Directors.

BOARD BALANCE

The majority of the Board is comprised of independent Non-Executive Directors for effective governance. This ensures that an appropriate balance is maintained between Executive and Non-Executive Directors and that no individual or small group of Directors can dominate the decision-making process.

The Board regards each of the five Non-Executive Directors as being fully independent in character and judgement and free from any relationship or circumstance that could affect or appear to affect their independent judgement.

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

BOARD INDUCTION

On appointment to the Board, each Director undergoes a comprehensive induction programme which is tailored to their individual needs but is intended to provide an introduction to the Group's operations, challenges and risks. Newly appointed

Directors also receive an overview of their duties, corporate governance policies and Board processes. During the year, Mr. Srinivasan Venkatakrishnan joined the Board and completed an induction including site visits to a number of the Group's major businesses.

ONGOING BOARD TRAINING AND DEVELOPMENT

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

BOARD EVALUATION

The effectiveness of the Board is crucial to the overall success of the Group and the Board continuously assesses its effectiveness. The Board and its Committees also provide feedback to Management during the year.

Accountability

Effective risk management is central to achieving our strategic objectives. This section includes information about the responsibilities and focus of the Audit, Remuneration and Sustainability Committees.



RAVI RAJAGOPAL
Chairman

AUDIT COMMITTEE

Current composition

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

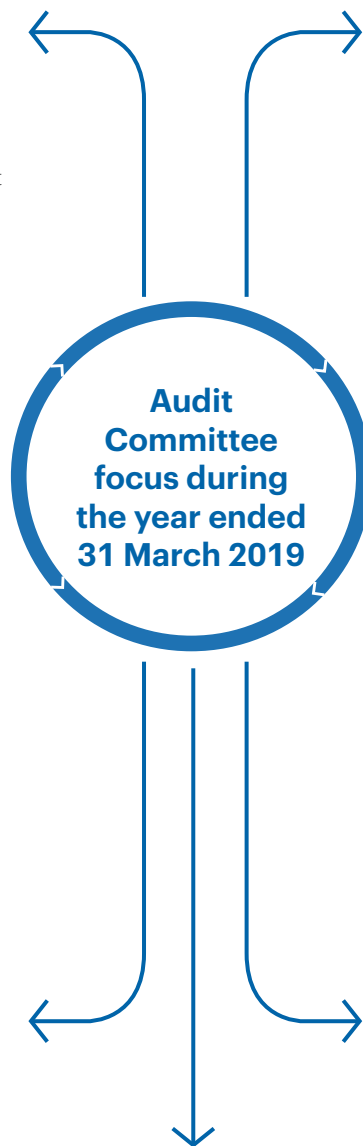
Financial reporting

It is one of the Audit Committee's key duties to monitor the integrity of the Company's financial statements. As part of this process it reviews in detail the preliminary results statements, the Annual Report and Accounts and half-year report. The appropriateness of accounting policies used is considered, accounting judgements are reviewed and the external audit findings discussed.

- Review and approval of preliminary announcement, Annual Report and financial statements
- Review of key significant issues for year-end audit (further details on pages 138-139)
- Six-monthly reviews of significant accounting issues and receipt of reports on key accounting issues
- Review and approval of the half-year report
- Discussions on impairment reviews
- Review of pending tax issues and the financial exposure to the Group
- Review of Audit Committee Report for the Annual Report and Accounts FY2018
- Review of legal cases and the associated risks arising to ensure that appropriate provisions are made and disclosed
- Review of the going concern basis for the preparation of the financial statements including working capital forecasts, monthly projections and funding requirements
- Review of the Group's Viability Statement for the year ended 31 March 2018

Internal audit

- Review of internal audit observations and monitoring of implementation of any corrective actions identified
- Review of the performance of the internal audit function
- Review of 2018-2019 internal audit plan
- Approval of the 2019-2020 Internal Audit Plan
- Review of the Group's Anti-Bribery Policy and its implementation



Internal controls, risk management and governance

The Audit Committee reviews internal control and risk management processes and output from the regular review of risks carried out during the year by the internal audit function.

- Internal audit review including reviews of the internal control framework, changes to the control gradings within the Group and whistle-blower cases
- Review of past project capex overruns and controls in place to minimise future occurrences
- Review of the Group's risk management infrastructure, risk profile, significant risks, risk matrix and resulting action plans
- Review of the KCM business and grading improvement plan
- Review of reports from subsidiary company Audit Committees and the Risk Management Committee
- Review of feedback from the performance evaluation of the Audit Committee
- Reviewing the Group's cyber security controls
- Received updates on upcoming corporate governance developments and considered the reporting framework following the delisting of the Company from the London Stock Exchange

The audit and external auditor

- Review of the significant audit risks with the external auditor during the interim review and year-end audit
- Consideration of external audit findings and a review of significant issues raised
- Review of key audit issues and management's report
- Review of the materiality figure for the external audit
- Review of the independence of the external auditor and the provision of non-audit services including non-audit fees paid to the external auditor
- Review of the external auditor's performance and making recommendations in respect of the re-appointment of the external auditor
- Review of the management representation letter
- Review of the audit plan, scope of the 2019 external audit of the financial statements and key risk areas for the 2019 audit

Fraud and whistleblowing

- Receiving reports on fraud and monitoring the effectiveness of the whistle-blower policy to ensure that it remains robust and fit for purpose

Accountability

Continued

Audit Committee Expertise

The Directors who serve on the Audit Committee have the necessary qualifications and bring a wide range and depth of financial and commercial experience across various industries.

Their collective knowledge, skills, experience and objectivity enables the Audit Committee to work effectively to challenge management.

Financial Reporting

The Audit Committee oversees the integrity of the Company's financial reporting process in order to ensure that the information provided to the Company's stakeholders is fair, balanced and understandable and provides the information necessary for stakeholders to assess the Company's position and performance, business model and strategy. The Audit Committee reviewed and challenged the key accounting and other judgements presented by management throughout the year and for the preparation of the Annual Report and Accounts FY2019. As a result, and as supported by the high standard of reporting by management, the Audit Committee concluded that it has discharged its responsibilities effectively.

The Group has a comprehensive financial reporting system, which is reviewed and modified in line with accounting standards to ensure that all published financial information is accurate.

Annual Report and Accounts FY2019 Review

A detailed audit plan (the Audit Plan) was prepared by the external auditor, EY which was reviewed by the Audit Committee. The Audit Plan sets out the audit scope, key audit risks identified, materiality issues, the client team working on the audit and the audit timetable. The audit scope covers the significant components of the audit and audit plans for each component and geographical location. Each of the key audit risks and the external auditor's response on how it will investigate these risks was considered by the Audit Committee.

Significant issues considered by the Audit Committee

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

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

Significant issues	How these issues were addressed
<p>Impairment/reversal of impairment assessment of</p> <ul style="list-style-type: none"> Rajasthan Oil & Gas block including exploration and evaluation assets Copper operations in Zambia Copper operations in India <p>More information is provided in Note 2(c) and Note 6 to the financial statements</p>	<p>Given the progress on key growth projects expected to result in the enhanced recovery of resources in a commercially viable manner leading to a higher forecast of oil production and adoption of integrated development strategy for various projects leading to savings in cost, the Rajasthan oil & gas block including exploration and evaluation assets was considered for reversal of previously recognised impairment in the year ending 31 March 2018 and the impairment reversal was accounted for. In the current year, the Committee reviewed the significant assumptions including the oil price, discount to price and other key assumptions. Based on this review, the Committee was satisfied that there was no indication that the assets may be impaired or that the previously recorded impairment charge may reverse.</p> <p>The impairment assessment of copper operations in Zambia is considered a significant issue considering the delay in production ramp up and other operational challenges. The significant assumptions of commodity prices, increase in production and discount rate were reviewed by the Committee.</p> <p>The Committee was briefed that Vedanta Limited's application for renewal of Consent to Operate (CTO) for its existing copper smelter was rejected by the Tamil Nadu Pollution Control Board (TNPCB) in April 2018. Subsequently the Government of Tamil Nadu issued directions to close and seal the existing copper smelter plant permanently. The Committee was also briefed on subsequent legal developments.</p> <p>Additionally, the Committee was informed that the High Court of Madras in a Public Interest Litigation held that the application for renewal of the Environmental Clearance (EC) 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 the site with immediate effect. SIPCOT has cancelled the land allotted for the proposed Expansion Project and TNPCB issued an order directing the withdrawal of the Consent to Establish (CTE) which was valid till 31 March 2023.</p> <p>The Committee was further briefed about the state of compliances and the actions taken by the Company.</p> <p>The Committee was also informed that the impairment assessment approach and assumptions are consistent across all business segments. With the existence of sufficient headroom over carrying value of assets, including the sensitivity carried out under various scenarios, it was concluded that no impairment is required for Zambia copper operations and copper operations in India.</p>

Significant issues	How these issues were addressed
Revenue recognition across the business <ul style="list-style-type: none"> Provisional pricing for sale of goods Oil & Gas revenue Power tariff with Grid Corporation of Odisha Limited (GRIDCO) Power Purchase Agreement with Punjab State Power Corporation Limited (PSPCL) 	<p>The Committee reviewed the process and compliance around the Group's revenue recognition policy and its consistent application. The Committee also sought management's view on revenue recognition principles.</p> <p>The Committee was satisfied that the cut-off procedures, transfer of risks and process followed for the pricing of goods were consistent and it concluded that these risks have been mitigated.</p> <p>The Committee reviewed the developments in the various disputes with GRIDCO and PSPCL. The receivables were reviewed for recoverability together with revenue recognition in terms of the requirements of IFRS 15. The assessment was supported by legal opinion from external legal counsel, wherever required.</p> <p>The Committee considered the revenue recognition and recoverability of receivables to be fairly stated in the financial statements.</p>
Litigation, environmental and regulatory risks Additional information on these matters is disclosed in Note 33 to the financial statements	<p>A comprehensive legal paper was placed before the Committee for its consideration. The mitigating factors were discussed by the Committee with senior management.</p> <p>The Committee also reviewed the probable, possible and remote analysis carried out by management and disclosure of contingent liabilities in the financial statements. In all significant cases, management's assessment was supported by legal opinions from external legal counsel.</p>
Taxation Additional information on these matters is disclosed in Note 33 to the financial statements	<p>A comprehensive tax paper outlining taxation disputes in respect of withholding taxes following past acquisitions, eligibility of tax incentives and output taxes and other matters was placed before the Committee for its consideration. The Committee discussed these tax issues and reviewed the assessment of probable, possible and remote analysis and the process followed by management.</p> <p>The contingent liability disclosure was also reviewed by the Committee. In certain cases, views of tax experts supporting management's assessment was also provided to the Committee.</p>
Recoverability of various tax balances Refer Note 11 and 34(ii) to the financial statements	<p>The Committee reviewed the recoverability of deferred tax assets and other income tax receivables and the Zambian Revenue Authority (KCM VAT) receivables, and accepted management's assessment of the recoverability of these balances.</p>
Disclosure of special items Refer Note 6 to the financial statements	<p>The Committee reviewed each of the items classified as special items and the related disclosures to ensure that the separate disclosure of these items in the financial statements was appropriate.</p>

Risk management and internal control framework

Vedanta's risk management framework serves to identify, assess and report on the principal and emerging risks facing the Group's businesses in a consistent manner. The Group's organisational structures, policies and procedures, standards and Code of Business Conduct and Ethics together form the system of internal control that governs how the Group conducts its business and manages the associated risks. The responsibilities, processes and information flows for ensuring that significant risks are recognised and reported up to the Board are shown below:

THE BOARD

- Sets 'risk appetite'
- Reviews significant reported risks



THE AUDIT COMMITTEE

- Reviews the effectiveness of internal control/risk systems and reports to the Board
- Reviews the risk matrix, significant risks, status of risks and mitigating factors
- Considers and approves remedial actions, where appropriate
- Reviews action plans put in place to mitigate risks
- Reviews significant findings reported by the internal audit function, MAS
- Reviews internal audit plans
- Assesses the effectiveness of the internal audit function
- Reviews whistleblower reports presented by MAS



MAS

- Plans and carries out internal audits through arrangements with leading international accounting and audit firms
- Recommends improvements to the Group's internal control system
- Reviews compliance with Group policies and procedures
- Facilitates the updating of the risk matrix
- Discusses findings in respect of the risk management and internal control framework with senior management and reports to the Audit Committee
- Presents the findings of these audits to the Executive Committee, with each Business Executive Committee made responsible for closing any findings
- Investigates whistleblower cases

Accountability

Continued

The responsibilities, processes and information flows for ensuring that significant risks are recognised and reported up to the Board are shown below:

During the year, the MAS team supported the respective business teams at Vedanta Limited and its subsidiaries towards compliance with the US Sarbanes-Oxley Act 2002 requirements (the Act), including documenting internal controls as required by section 404 of the Act. KCM is excluded from the scope of the Act. The effectiveness of internal controls is assessed by Vedanta's own administration and certified by independent auditors, as set forth in the Act.

Vedanta's risk management framework serves to identify, assess and respond to the principal and emerging risks facing the Group's business and is designed to be simple and consistent and provide clarity on managing and reporting risks to the Board. The Group's management systems, organisational structures, processes, standards and Code of Business Conduct and Ethics together form the system of internal control that governs how the Group conducts its business and manages the associated risks.

The Audit Committee reviewed the internal control system in place during the year and up to the date of this Report to ensure that it remains effective. The review included a report on the risk matrix, significant risks and actions put in place to mitigate these risks. Any weaknesses identified by the review were addressed by enhanced procedures to strengthen the relevant controls and these are in turn reviewed at regular intervals.

During the year, the Committee continued to monitor the market conditions, risks and uncertainties relevant to the Group, reviewed the risk management framework and reported to the Board on relevant risks affecting the Group. The Committee received regular updates from management confirming that risks relevant to the Group were appropriately categorised to ensure that the Committee understood the potential impact to the Group and adequate resources were allocated to manage the risks. The Committee has reviewed the Principal Risks and Uncertainties for the Group disclosed in the Annual Report and Accounts 2019 and consider them to be appropriate.

Fraud and UK Bribery Act

The Board has a zero-tolerance policy for corruption. Vedanta's Code of Business Conduct and Ethics contains guidelines for conducting the Company's business with the highest standards of business ethics.

Vedanta also maintains a Supplier Code of Conduct which ensures that all its suppliers and service providers are also operating with the highest standards on business ethics.

The Group's whistle-blower policy encourages employees of the Company, its subsidiaries and all external stakeholders to raise concerns about suspected wrong doing within the Group in confidence. The whistle-blower policy also covers the requirements of the UK legislation in respect of slavery and human trafficking reporting.

The Audit Committee regularly reviews the Group's whistle-blower arrangements and monitors the outcome of investigations, ensuring that all reported whistle-blower incidents are appropriately investigated and actioned.

External auditor independence and provision of non-audit services by the external auditor

EY is the Company's external auditor. The Audit Committee is responsible for reviewing the external auditor's independence

and assessing their ongoing effectiveness. The objectivity of the external auditor is a crucial aspect in providing external assurance and such objectivity and independence is maintained through the following:

In accordance with the Auditing Practices Board Ethical Standards, EY has rules in place to ensure that none of its employees working on Vedanta's audit hold any shares in the Company. EY is also required to inform the Company of any significant facts and matters that may reasonably be thought to bear on its independence or on the objectivity of the Audit Engagement Partner and the audit team. The lead partner must rotate every five years. The Company's Audit Engagement Partner is currently Mirco Bardella, who was appointed with effect from 5 August 2016.

External auditor remuneration

The Audit Committee is responsible for determining the external auditor's remuneration on behalf of the Board. The Audit Committee considers and approves all the fees that the Company pays for audit, audit-related and non-audit services performed by EY.

Non-audit services

The Group's policy on the provision of non-audit services by the external auditor specifies the services which the external auditor is permitted to undertake. It also specifies non-audit services which EY is prohibited from undertaking in order to safeguard their objectivity as such services present a high risk of conflict and could undermine the external auditor's independence.

Prohibited non-audit services include work relating to the financial statements that will ultimately be subject to audit, certain tax, consultancy and advisory services and the provision of internal audit services amongst others. The policy also identifies those services which the external auditor is permitted to deliver to the Group. These include work on mergers & acquisitions, regulatory reviews, any certification required under loan agreements or bond covenants, assurance opinion on bond issuance work and assurance work in respect of compliance and corporate governance amongst others.

The external auditor's independence is also safeguarded by limiting the aggregate value of non-audit services performed by EY. Under the Company's Non-Audit Services Policy, a cap for non-audit services will be set at 70% of the average audit fees based on a three-year average and will first be applied from the fourth year commencing on 1 April 2020. The Audit Committee monitors all non-audit services each year to ensure that they are in compliance with the requirements. Of the permitted services, any assignment in excess of US\$30,000 is only awarded to the external auditor with the prior approval of the Audit Committee.

All permitted non-audit services and the fees paid to the external auditor for non-audit work are reported to the Audit Committee. A breakdown of the non-audit fees paid to EY is disclosed in Note 37 to the financial statements.

Permitted non-audit work is only undertaken by the external auditor, where, it is more efficient or prudent to engage them because of their knowledge and experience with the Group and/ or for reasons of confidentiality.



KATYA ZOTOVA
Chair

SUSTAINABILITY COMMITTEE

Current composition

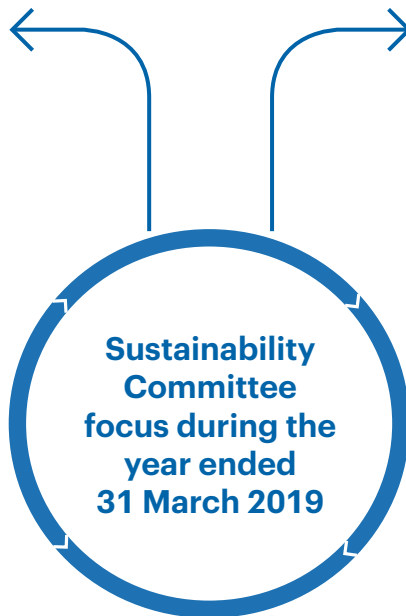
- Katya Zotova (Chair)
- Ravi Rajagopal
- Srinivasan Venkatakrishnan
- Deshnee Naidoo
- Sunil Duggal

Sustainability framework

- Review of the Sustainability Committee performance and Terms of Reference
- Review and approve annual HSE and sustainability targets
- Periodical review of HSE programmes and performance
- Review VSAP score and VSF implementation for the Group
- Review sustainability issues significant to the Group and its stakeholders

Health and safety

- Review of the Group’s safety performance particularly in light of the fatalities during the year and the implementation of remedial actions and controls to address the issues including the leadership response to improve safety performance
- Review progress on implementation of the safety performance standards
- Review of progress on the safety standard implementation at BALCO mines



Environment

- Review of the corrective action implementation plan following the third party tailing dam assessment by Golders Associates and preparation by the businesses for the monsoons
- Review of the Group’s resource conservation targets and achievements
- Review of the high potential incidents within the Group and remedial action taken
- Review of progress on KCM’s water and tailings management

Community relations and engagement

- Review of the Group’s stakeholder engagement strategy
- Review of management’s initiatives in improving stakeholder communications on HSE and sustainability
- Review of the Group’s Social Licence to Operate
- Review of the background in respect of social and regulatory matters at Vedanta Limited’s copper business which led to the closure of this businessE

Investor relations and stakeholder engagement

The Company is committed to maintaining strong relationships with its shareholders and bondholders as well as other stakeholders.

SHAREHOLDERS

Vedanta Resources Limited (and its subsidiaries) is wholly owned by Volcan Investments Limited and its subsidiary, Volcan Investments Cyprus Limited. Vedanta Resources Limited operates on a stand-alone, arms-length basis while maintaining a collaborative strategic relationship with Volcan.

BONDHOLDERS

As at 31 March 2019, the Company had US\$4.2bn of listed bonds outstanding. A regular dialogue is maintained with the Company's bondholders through biannual financial results on the Company's website, together with live broadcasts via teleconference calls. Bond investors also meet with the Company's investor relations team at various events such as bond conferences to discuss financial results and other matters.

CREDIT RATING AGENCIES

As at 31 March 2019, Vedanta Resources had a credit rating of B+ (negative outlook) from S&P and BA3 (negative outlook) from Moodys. The Company maintains regular dialogue with both agencies to provide current and potential investors with an independent assessment of the Company's credit profile and to support any future debt issuances.

STAKEHOLDER ENGAGEMENT

The Board remains committed to its responsibilities to a broad range of stakeholders and incorporates this into its decision-making process. The Group is working to continually improve its own engagement with its various stakeholders.

Directors' Report

The Directors are pleased to present their annual report on the business of the Group, together with the financial statements and auditor's report, for the year ended 31 March 2019.

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

Review of the business and future developments of the business of the Company	Strategic Report on pages 2–127
Employment policies and employee involvement	Strategic Report on pages 60–75

STRATEGIC REPORT

The Strategic Report has been prepared in accordance with the Companies Act 2006 ('the Act') which requires the Company to set out a fair review of the business of the Group during the financial year, including an analysis of the position of the Group at the end of the financial year and the trends and factors likely to affect the future development, performance and position of the business. The Strategic Report can be found on pages 2 to 127.

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

REVIEW OF BUSINESS AND FUTURE DEVELOPMENTS

A review of the business and future developments of the Group is presented in the Strategic Report on pages 2 to 127.

DIVIDENDS

The Directors recommend a final dividend for the year ended 31 March 2019 of 65.0 US cents per ordinary share (2018: A second interim dividend of 41.0 US cents per ordinary share was paid in lieu of a final dividend).

DIRECTORS

The Directors as at the date of this Report are set out on pages 128 to 131.

Details of the remuneration of the Directors, their interests in the shares of the Company and service contracts are contained in the Directors' Remuneration Report on pages 147 to 154.

DIRECTORS' AND OFFICERS' INDEMNITY

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

MATERIAL INTEREST IN SHARES

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

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

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

SHARE CAPITAL

As at 31 March 2019 the issued share capital of the Company was comprised of 285,246,698 ordinary shares of US\$0.10 each and 50,000 deferred shares of £1 each.

RIGHTS AND OBLIGATIONS ATTACHING TO SHARES

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

During the year, 22,502,483 ordinary shares held in treasury were cancelled and the nominal share capital reduced accordingly. A further 1,704,333 shares, which had previously been purchased under Vedanta's Buyback Programme were held by an independent company, Gorey Investments Limited (Gorey) and were treated in the consolidated accounts of Vedanta as treasury shares. These shares were transferred to Volcan as per the terms of the takeover offer.

6,904,995 ordinary shares of 10 US cents each which were previously issued on the conversion of certain convertible bonds issued by one of the Company's subsidiaries and held through a global depository receipt (GDRs) carried no voting rights. These GDRs were also redeemed and the underlying shares were transferred to Volcan under the terms of the takeover offer.

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

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

FINANCIAL INSTRUMENTS

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

EMPLOYEES

Information on the Group's employees and its policies with respect to employees can be found in the Sustainability Report section of the Strategic Report on page 60 to 75. In summary, the Group's commitment to communication and dialogue with employees continues. The existence of a Group-wide intranet enables engagement and communication with employees throughout the Group. It also helps management to share information, ideas and opportunities quickly and to achieve

Directors' Report

Continued

a common awareness on the part of all employees of the financial and economic factors affecting the performance of the Company. Employees have opportunities to voice their opinions and ask questions through the Group intranet and engage in question and answer sessions with the Executive Chairman.

SLAVERY AND HUMAN TRAFFICKING STATEMENT

The Group has published its slavery and human trafficking statement for the year ended 31 March 2019 in accordance with s54 of the Modern Slavery Act 2015 which can be found on www.vedantaresources.com. The statement outlines the steps taken by the Group to address the risk of slavery and human trafficking occurring within its operations and supply chains.

DIVERSITY & INCLUSION POLICY

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

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

GENDER DIVERSITY

The Company currently has one woman on its Board (13%) while its two principal listed subsidiaries in India, Vedanta Limited and Hindustan Zinc Limited, have two female Directors each on their Boards, 20% and 43%, respectively. A number of the Company's business and functional heads are women including in roles such as CEO, Africa Base Metals, Director-Investor Relations, Head- Group HR and Head of Tax, to name a few.

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

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

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

PROGRESS ON MEASURABLE OBJECTIVES

	FY2018-19	FY2017-18
WOMEN IN SENIOR MANAGEMENT	6.51%	6.2%
WOMEN RECRUITED DURING THE YEAR	23.1%	20.87%
TOTAL FULL TIME FEMALE EMPLOYEES ACROSS THE GROUP	10.6%	11%

POLITICAL DONATIONS

It is the Board's policy that neither Vedanta nor any of its subsidiary companies outside India may, under any circumstances, make donations or contributions to political organisations. Subsidiaries in India may make political donations or contributions as this is customary in India and permitted under local legislation. In exceptional circumstances, if political donations or contributions are deemed necessary in the United Kingdom and European Union for legitimate business reasons, they will not be made without the approval of the Board and shareholders at a general meeting. Any political donations made in India will be disclosed in the Company's Annual Report and Accounts. The Company's subsidiary, Vedanta Limited purchased electoral bonds valued at US\$10million during the financial year ended 31 March 2019 (2018: Nil).

GOING CONCERN

The Directors have considered the Group's cash flow forecasts for the next 12-month period, from the date of signing the financial statements ending 31 March 2019. The Board is satisfied that the Group's forecasts and projections show that the Group will be able to operate within the level of its current facilities for the foreseeable future. This takes into account reasonably possible changes in trading performance on cash flows and forecast covenant compliance; the transferability of cash within the Group; the flexibility that the Group has over the timings of its capital expenditure; and other uncertainties. For these reasons, the Group continues to adopt the going concern basis in preparing its financial statements.

POST BALANCE SHEET EVENTS

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

RESEARCH AND DEVELOPMENT

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

AGREEMENTS: CHANGE OF CONTROL

There are a number of agreements that take effect, alter or terminate upon a change of control of the Company,

(defined as a transfer of 35% shareholding) such as commercial contracts, bank loan agreements and capital market borrowing. The following are considered to be significant in terms of their likely impact on the business of the Group as a whole:

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

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

GREENHOUSE GAS (GHG) EMISSIONS REPORTING

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

We calculate and report greenhouse gas inventory i.e. Scope 1 (process emissions and other direct emissions) and Scope 2 (purchased electricity) as defined under the World Business Council for Sustainable Development (WBCSD) and World Resource Institute (WRI) GHG protocols. The increase in GHG emissions during the year was due to the acquisition of the steel business, Electrosteel Steels Limited and the ramp-up in our Aluminium and Power businesses. The relative increase in GHG emissions in the power sector was higher compared to revenue generated, resulting in overall higher GHG intensity.

GHG EMISSIONS (TONNES OF CO₂e)

Business	FY2019		FY2018	
	Scope 1	Scope 2	Scope 1	Scope 2
Zinc India	3,957,640	879,141	4,830,185	154,564
Zinc International	146,548	508,921	87,919	594,167
Oil & Gas	1,658,183	118,000	1,550,610	84,980
Iron Ore	1,951,258	265	1,837,129	18,428
Ports	376	6,248	-	11,641
Copper India & Australia	30,571	48,600	624,738	87,591
Copper Zambia	155,840	4,683	150,306	4,780
Aluminium	33,166,782	2,655,128	30,889,044	237,024
Power	13,342,185	777	11,168,053	7,451
Steel	3,795,249	-	-	-
Total	58,204,632	4,221,764	51,137,984	1,200,626

*The inclusion of Electrosteel Steels Limited, has contributed to the significant increases in GHG emissions during the year.

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

GHG INTENSITY RATIO (TONNES OF CO₂e/MN US\$)

Business	FY2018-19	FY2017-18
Zinc India	1,637	1,480
Zinc International	1,672	1,276
Oil & Gas	939	1,105
Iron Ore	4,691	3,806
Ports	179	406
Copper India & Australia	52	186
Copper Zambia	148	121
Aluminium	8,564	8,676
Power	14,286	12,760
Steel	6,325	-
Consolidated Group	4,449	3,382

Directors' Report

Continued

DISCLOSURE OF INFORMATION TO AUDITORS

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

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

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

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

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

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

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

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

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

- Properly select and apply accounting policies
- Present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information

- Provide additional disclosures when compliance with the specific requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the Group's financial position and financial performance
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business

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

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

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

The Directors confirm that to the best of their knowledge:

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

Signed on behalf of the Board

Deepak Kumar
Company Secretary
20 May 2019

Remuneration Committee Report



Dear Shareholders,

On behalf of the Board, I am pleased to present the Directors' Remuneration Report for the year ended 31 March 2019.

Upon contract closure of Tom Albanese, Kuldip Kaura served as Chief Executive Officer from 1st September 2017 till 30 August 2018. Srinivasan Venkatakrishnan joined the Company as Chief Executive Officer and a member of the Board on 31 August 2018.

BUSINESS PERFORMANCE AT A GLANCE

We had a strong operational and financial performance in FY2019. During the year, we completed the acquisition of ESL which complements our Iron Ore business through vertical integration. Our ramp-up plans for growth projects are all on track and with that we have a firm base for an even stronger performance next year.

A synopsis of the business performance is outlined below:

FINANCIAL & OPERATIONAL PERFORMANCE:

In FY2019 we recorded an EBITDA of US\$3,393 million, 14% lower y-o-y but with a robust margin of 29%. (FY2018: US\$3,963 million, margin 35%).

Production volumes contributed to an increase in EBITDA of US\$148 million, which was primarily on account of ramp up of volumes at aluminium and volume addition from ESL acquisition. However, this was offset by lower volumes at Zinc India and at Zinc International.

Copper India operations remained closed for the year which had an EBITDA impact of \$231mn y-o-y.

Market factors resulted in a net fall in EBITDA of US\$244 million compared to FY2018. This was mainly driven by input raw material inflation primarily Alumina and Coal driven by global factors and lower commodity prices. This decrease was partially offset by currency depreciation.

In April 2019, to proactively refinance our near-term maturities, we raised US\$1 billion through bonds in two tranches at a blended average cost of 8.75% and average maturity of 5.8 years. This will extend the average maturity of the outstanding debt at VRL to c. 4 years

During FY2019 gross debt increased to US\$16.0 billion, (FY2018: US\$15.2 billion) primarily due to the acquisition debt for Electrosteel Steels and temporary borrowings at Zinc India.

Net debt increased to US\$10.3 billion as at 31 March 2019 from US\$9.6 billion as at 31 March 2018, primarily due to the acquisition debt for ESL in FY2019

In addition to the financial performance of the group, we also achieved significant strategic milestones during the financial year 2019 that will fuel the growth in the coming years and create value for the organisation.

SUSTAINABILITY AND SAFETY SCORECARD:

The philosophy of a sustainable development agenda is at the core of Vedanta's strategic priorities and governs every business decision. Employee safety and achieving zero harm remained our number one priority. However, our lost time injury rate increased by 35% from 0.34 to 0.46. We also deeply regret the 14 fatalities at our operations. For this reason, fatality prevention remains the centre point of our focus. Our GHG intensity reduced by 14.5% from the 2012 baseline. This is in line with our expectations of reducing GHG intensity by 16% by 2020. We achieved water savings of 3 million m³ against a target of 4 million m³ and energy savings of 1.6 million GJ against target of 2 million GJ. Additionally, fly ash utilisation increased to 111% during the fiscal year against a target of 75%. We continue to remain focused on reducing our environmental footprint and improving our resource efficiency

During the year, the Remuneration Committee took up various matters pertaining to the remuneration of the Executive Directors of the Company, which included determining the remuneration for the year 2018-19, approving the annual bonus to be paid to the executives and the long term incentive design and grant of awards.

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

Yours sincerely,

Geoffrey Green
Chairman of the Remuneration Committee

Directors' Remuneration Policy Report

POLICY OVERVIEW

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

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

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

The Committee has set remuneration taking into consideration both UK and Indian market practice to ensure it is globally competitive as majority of the Executive Directors are based in UK with the exception of Mr Navin Agarwal, who is India based, along with the majority of the Group's professional management team. The Committee also considers the inflation rates prevalent in the UK and India in the setting of remuneration.

The Committee recognises that the financial performance of the Company is heavily influenced by macro-economic considerations such as commodity prices and exchange rate movements. These factors are therefore taken into consideration when setting executive remuneration.

HOW THE VIEWS OF INVESTORS ARE TAKEN INTO ACCOUNT

The Committee will seek to engage directly with the investors and their representative bodies should any material changes be proposed to the Remuneration Policy.

HOW THE VIEWS OF EMPLOYEES ARE TAKEN INTO ACCOUNT

In setting the policy for Executive Directors' remuneration, the Committee considers the pay and employment conditions across the Group, including annual base compensation increases across the general employee population and the overall spend on annual bonuses. Employees may be eligible to participate in the annual bonus arrangement and receive awards under the LTIP. Opportunities and performance metrics may vary by employee level, with specific business metrics incorporated where possible.

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

Summary of the Remuneration Policy for Directors

The following table sets out the key aspects of the remuneration policy for Directors:

Element of pay	Purpose and link to strategy	Operation	Maximum opportunity	Performance measures
Base compensation¹	Reflects individual's experience and role within the Group Reward for performance of everyday activities	The Committee reviews base compensation annually, taking account of the scale of responsibilities, the individual's experience and performance Changes are implemented with effect from 1 April each year Base compensation is paid in cash on a monthly basis Base compensation is typically set with reference to a peer group of UK-listed mining comparator companies. Comparisons are also made against positions of comparable status, skill and responsibility in the metals and mining industries globally, and in the manufacturing and engineering industries more generally	There is no prescribed maximum annual increase. Base compensation increases are applied in line with the annual review and are competitive within the UK and Indian market and internationally for comparable companies. The Committee is also guided by the general increase for the employee population but on occasions may need to recognise, for example, development in role and/or change in responsibility	Business and individual performance are considered when setting base compensation
Taxable benefits	To provide market-competitive benefits	Benefits vary by role and are reviewed periodically Benefits are set in line with local market practices	The value of benefits is based on the cost to the Company and is not pre-determined	N.A.
Pension	To provide for sustained contribution and contribute towards retirement planning	Directors receive pension contributions into their personal pension plan or local provident scheme or cash in lieu of pension contribution Contribution rates are set in line with local market practices	Annual contribution of up to 20% of base compensation	N.A.
Annual bonus	Incentivises executives to achieve specific, predetermined goals during the financial year	This is a cash payment which is determined by the Committee after year end, based on performance against the pre-determined financial and non-financial metrics Not pensionable Clawback provisions apply for overpayments due to misstatement or error and other circumstances	Up to 150% of base compensation per annum	The bonus is measured against a balanced scorecard of performance metrics. At least 50% of the bonus potential will be based on financial performance and the remainder of the bonus potential will be based on operational, strategic and sustainability measures The Committee has the ability to adjust the bonus outturn if it believes that the outturn is not reflective of the Group's underlying performance or warranted based on the Health, Safety and Environment (HSE) record

Directors' Remuneration Policy Report

Continued

Element of pay	Purpose and link to strategy	Operation	Maximum opportunity	Performance measures
Long Term Incentive Plan (LTIP)²	Encourage and reward strong performance aligned to the long term interests of the Company	Annual grant of conditional cash award units which vest after three years, subject to performance and continued employment Clawback provisions apply for overpayments due to misstatement or error and other circumstances	Up to 150% of base compensation per annum.	Performance conditions are focused on the delivery of increased value over the medium to long term. 100% of the award is linked to Financial, operational & strategic performance parameters including Total Shareholder Return (TSR) at Vedanta Limited level. 30% of the award will vest for achieving threshold performance, increasing pro-rata to full vesting for the achievement of stretch performance targets. The Committee has the ability to adjust the LTIP outturn if it believes that the outturn is not reflective of the Group's underlying performance or warranted based on the HSE record.
Non-Executive Directors' fees	To attract and retain high-calibre Non-Executive Directors through the provision of market-competitive fees.	Fees are paid in cash. Fees are determined based on the significant travel and time commitments, the risk profile of the Company and market practice for similar roles in international mining groups.	As for the Executive Directors, there is no prescribed maximum annual increase. The Committee is guided by the general increase for the employee population but on occasions may need to recognise, for example, development in role and/or change in responsibility. Additional fees may be paid if there is a material increase in time commitment and the Board wishes to recognise this additional workload.	Business and individual performance are considered

1 Base compensation includes base salary plus fixed cash allowances and statutory benefits, which are a normal part of the fixed remuneration package for employees in India.

2 LTIP is Vedanta Resources Limited Conditional Cash Award which is a cash-based plan and the vesting is subject to performance against pre-determined targets upon completion of the performance period and sustained employment with the company.

SELECTION OF PERFORMANCE METRICS

The annual bonus is based against a balanced scorecard of financial, operational, sustainability and strategic metrics. The mix of targets will be reviewed each year by the Committee to ensure that they remain appropriate to reflect the priorities for the Group in the year ahead. A sliding scale of targets is set to encourage continuous improvement and challenge the delivery of stretch performance.

The LTIP is measured against financial and strategic metrics. One of the key metric for the LTIP was relative TSR performance. Owing to delisting of Vedanta Resources PLC, the cash units were linked to Vedanta Limited, being the major operating arm of the company, however other financial/strategic metrics are at company-level performance. A sliding scale of challenging performance targets is set.

The Committee will review the choice of performance measures and the appropriateness of the performance targets prior to each grant. The Committee reserves the discretion to set different targets for future awards, providing that, in the opinion of the Committee, the new targets are no less challenging in light of the circumstances at the time than those used previously.

APPROACH TO RECRUITMENT AND PROMOTIONS

The remuneration package for a new Executive Director – i.e. base compensation, taxable benefits, pension, annual bonus and long term incentive awards – would be set in accordance with the terms of the Company's prevailing remuneration policy at the time of appointment and would reflect the experience of the individual.

The base compensation for a new executive may be set below the normal market rate, with phased increases over the first few years, as the executive gains experience in their new role. Annual bonus potential will be limited to 150% of base compensation and long term incentives will be limited to 150% of base compensation per annum.

In addition, the Committee may offer additional long term based elements when it considers these to be in the best interests of the Company to take account of remuneration relinquished when leaving the former employer and would reflect the nature, time horizons and performance requirements attached to that remuneration.

For an internal Executive Director appointment, any variable pay element awarded in respect of the prior role may be allowed to pay out according to its terms, adjusted as relevant to take into account the appointment. In addition, any other ongoing remuneration obligations existing prior to appointment may continue.

For external and internal appointments, the Committee may agree that the Company will meet certain relocation expenses and continuing allowances as appropriate.

For the appointment of a new Chairman or Non-Executive Director, the fee arrangement would be set in accordance with the remuneration policy at that time.

SERVICE CONTRACTS FOR EXECUTIVE DIRECTORS

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

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

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

Mr Srinivasan Venkatakrisnan has been appointed as Executive Director and CEO of Vedanta Resources effective 31 August 2018. He is on a fixed three-year term which expires on 31 August 2021 with a notice period of three months or base compensation in lieu thereof.

It is the Group's policy that the notice period in the Directors' service contracts does not exceed 12 months.

PAYMENTS FOR LOSS OF OFFICE

The Executive Directors' service contracts provide for pay in lieu of notice in respect of base compensation, as set out above.

The annual bonus may be payable with respect to the period of the financial year served although it will be pro-rated for time and paid at the normal pay-out date. Any share-based entitlements granted to an Executive Director under the Company's share plans will be determined based on the relevant plan rules.

The default treatment under the LTIP is that any outstanding awards lapse on cessation of employment. However, in certain prescribed circumstances, such as death, disability, retirement or other circumstances at the discretion of the Committee, 'good leaver' status may be applied. For good leavers, awards will normally vest on the original vesting date, subject to the satisfaction of the relevant performance conditions at that time and reduced pro-rata to reflect the proportion of the performance period actually served. However, the Committee has discretion to determine that awards vest at an earlier date and/or to dis-apply time pro-rating, although it is envisaged that this would only be applied in exceptional circumstances.

In determining whether an executive should be treated as a good leaver or not, the Committee will take into account the performance of the individual and the reasons for their departure.

LETTERS OF APPOINTMENT FOR NON-EXECUTIVE DIRECTORS

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

Annual Report on Remuneration

MEMBERSHIP OF THE REMUNERATION COMMITTEE

The members of the Remuneration Committee all of whom are independent Non-Executive Directors served during the year.

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

ADVISERS TO THE COMMITTEE

The Committee retained New Bridge Street (NBS), a trading name of Aon PLC, to provide independent advice on remuneration matters. NBS is a signatory to the Remuneration Consultants Group's Code of Conduct, which requires its advice to be objective and impartial. NBS does not provide any other services to the Company. Other pay information for employees below Board-level is provided to the Company by Aon in India. The Committee has reviewed the operating processes in place at NBS and is satisfied that the advice it receives is objective and independent. The Committee considers various external reports from NBS on remuneration

in the UK as well as India to provide detailed insights that aid remuneration decisions. In addition, advisers to the Committee during the year, and their roles, are set out below.

- The Group Chief Human Resources Officer advised the Committee during the year on general remuneration policies and practices followed in India and the global market, Executive Directors' remuneration and benefits and remuneration policy applicable to the wider employee population within the Group
- The Executive Directors provide input on remuneration packages for the senior management group to ensure parity amongst senior management in different businesses but at similar roles. Executive Directors may attend meetings at the invitation of the Committee, but no Director is present during discussions of their own remuneration
- New Bridge Street reviewed and confirmed the Company's TSR performance in respect of the performance share plan

Single total figure for remuneration

The table below summarises Directors' remuneration received during the year ended 31 March 2019 and the prior year for comparison.

		Base compensation including salary or fees £000	Taxable Benefits £000	Pension £000	Annual bonus £000 ⁸	Long term incentives £000 ⁹	Total £000 ^{10,11}
Executive Directors							
Anil Agarwal ¹	2018/19	1656	112		1016	1670	4455
	2017/18	1608	123		1029	1044	3804
Navin Agarwal ^{2,3,7}	2018/19	1080	206	153	652	833	2924
	2017/18	1101	119	177	710	646	2754
Srinivasa Venkatakrishnan ^{4,5,7}	2018/19	587	64	146	-		796
Non-Executive Directors⁶							
Geoffrey Green	2018/19	115					115
	2017/18	115					115
Ed Story	2018/19	95					95
	2017/18	79					79
Deepak Parekh	2018/19	133					133
	2017/18	125					125
Katya Zotova	2018/19	123					123
	2017/18	122					122
Ravi Rajagopal	2018/19	115					115
	2017/18	111					111

Notes

- Mr Anil Agarwal's taxable benefits in kind include provision of medical benefits; car and fuel in the UK for business purposes.
- Mr Navin Agarwal is based out of India and is drawing the majority of his remuneration in INR. For the financial year ended 31 March 2019, Mr Navin Agarwal received a Vedanta Limited salary of INR 89,598,663 excluding medical and leave travel allowances, Vedanta Resources Limited fees of £85,000, Hindustan Zinc Limited fees of INR 200,000 & Commission of INR 1,500,000.
- Mr Navin Agarwal's taxable benefits in kind include housing and related benefits and use of a car and driver.
- Mr Srinivasan Venkatakrishnan's taxable benefits in kind include housing and related benefits, and Medical benefits in UK
- In addition to the above remuneration paid to Srinivasan Venkatakrishnan the company also paid GBP 255,394, GBP 752,705 and GBP 459,429 as part of Buy-out awards under Cash Bonus, Deferred Cash Bonus and Long Term Incentive Plan awards respectively which were forfeited by his previous employer at the time of leaving. This was part of the contract terms as approved by the committee at the time of joining
- Non-Executive Directors are reimbursed for expenses incurred while on Company business. No other benefits are provided to Non-Executive Directors
- All of the Group's pension schemes are based on cash contribution and do not confirm an entitlement to a defined benefit. Pension contributions are made into the Deputy Executive Chairman and Chief Executive Officer's personal pension schemes (or local provident fund) and will become payable on the retirement, normally at age 58. The Executive Chairman does not receive pension benefits.
- Amounts shown in the table relate to the payment of the annual bonus made to the Executive Directors during the year. The exchange rate used is for the period of reporting The Annual Bonus for FY2019 is yet to be determined which will be tabled for approval of the Board.
- The Amount shown here pertains to the Performance Share Plan (PSP) 2015 and PSP 2016. The Performance Period for PSP 2015, PSP 2016 and PSP 2017 came to an early closure on 3rd September 2018 owing to delisting of Vedanta Resources Plc. Upon testing of TSR achievement as per the scheme rules, the EDs were eligible for vesting of 63.75%, 35% and 0% for PSP 2015, PSP 2016 & PSP 2017 respectively against the grant made to them.
- NIC Contribution as per the statutory requirement is made for all Executive and Non-Executive Directors
- The exchange rate applicable as at 31 March 2018 was INR85.4732 to £1 & USD 1.3262 to £1 and at 31 March 2019 was INR 91.7384 to £1 & USD 1.3126 to £1

Voluntary Disclosures – Chief Executive (Non-Board position)

Kuldip Kaura was appointed as the Interim Chief Executive Officer (CEO) of the company effective 1st September 2017 till the joining of Srinivasan Venkatakrishnan on 31 August 2018. Kuldip Kaura was not a member of the Board of the Company, consequently, the following disclosures have been made voluntarily to demonstrate the remuneration arrangements that the Committee believe were appropriate for the CEO, including the variable pay mechanisms designed to motivate the CEO to implement the Group's strategy effectively.

Annual Report on Remuneration

Continued

Single total figure for remuneration for erstwhile CEO

The table below summarises Directors' remuneration received during the year ended 31 March 2019 and the prior year for comparison.

		Base compensation including salary or fees £000	Taxable benefits £000	Pension £000	Annual bonus £000 ²	Long term incentives £000	Total £000 ^{3,4}
CEO (Not on the Board)							
Kuldip Kaura ¹	2018/19	528	27		296		851
	2017/18	524	57		-		580

- The Remuneration for Mr Kuldip Kaura as appended above is for the period for which he was the Interim CEO for the Company i.e. from 1 April, 2018 to 30th August 2018. His Base compensation includes an amount of USD 400,000 which is paid by Vedanta Limited. The Taxable benefits in kind for Mr. Kaura include Accommodation and provision of medical benefits in UK
- Amounts shown in the table relate to the payment of the annual bonus made during the year. The exchange rate used is for the period of reporting. The Annual Bonus for FY2019 is yet to be determined which will be tabled for approval of the Board.
- NIC Contribution as per the statutory requirement is made
- The exchange rate applicable as at 31 March 2018 was INR85.4732 to £1 & USD 1.3262 to £1 and at 31 March 2019 was INR91.7384 to £1 & USD 1.3126 to £1.

External appointments

The Board's policy on external appointments is that an Executive Director may, only with the prior approval of the Board, accept an appointment external to the Group (other than any appointment as a Non-Executive Director to related parties or Volcan Investments Limited (Volcan) in the case of Messrs Anil Agarwal and Navin Agarwal) of a publicly listed company anywhere and that the fees for any such appointment may be retained by the individual.

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

Payments to past Directors

No payments were made to past Executive Directors during the year ended 31 March 2019

Payments for loss of office

No payments were made in respect of loss of office during the year ended 31 March 2019.

Non-Executive Directors' fees

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

	2018-19 £000	2019-20 £000
Board membership		
Non-Executive Director	85	85
Senior Independent Non-Executive Director	18	18
Committee membership		
Audit Committee Chairman	20	20
Remuneration Committee Chairman	20	20
Nominations Committee Chairman	-	-
Sustainability Committee Chairman	20	20
Member of Audit Committee	10	10
Member of Remuneration Committee	10	10
Member of Nominations Committee	7.5	7.5
Member of Sustainability Committee	10	10

Approval of the Directors' Remuneration Report

The Directors' Remuneration Report, including both the Directors' Remuneration Policy Report and the Annual Report on Remuneration, was approved by the Board on 20 May 2019.

Geoffrey Green
Chairman of the Remuneration Committee

Independent Auditor's Report

to the members of Vedanta Resources Limited

OPINION

In our opinion:

- Vedanta Resources Limited's group financial statements and parent company financial statements (the "financial statements") give a true and fair view of the state of the group's and of the parent company's affairs as at 31 March 2019 and of the group's profit for the year then ended;
- the group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice including FRS 101 "Reduced Disclosure Framework"; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

WHAT WE HAVE AUDITED

We have audited the group and parent company financial statements of Vedanta Resources Limited for the year ended 31 March 2019 which comprise:

Group	Parent company
the Consolidated Income Statement;	the Company Balance Sheet;
the Consolidated Statement of Comprehensive Income;	the Company Statement of Changes in Equity;
the Consolidated Statement of Financial Position;	the related notes 1 to 12 to the Company financial statements, including a summary of significant accounting policies.
the Consolidated Cash Flow Statement;	
the Consolidated Statement of Changes in Equity; and	
The related notes 1 to 40 to the group financial statements, including a summary of significant accounting policies.	

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

BASIS FOR OPINION

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

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

CONCLUSIONS RELATING TO GOING CONCERN

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the group's or the parent company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Independent Auditor's Report continued

to the members of Vedanta Resources Limited

OVERVIEW OF OUR AUDIT APPROACH



<p>Materiality</p>	<ul style="list-style-type: none"> • Overall group materiality of \$68m which represents approximately 2% of EBITDA. • EBITDA represents an earnings-based measure for determining materiality and we consider this to be the most relevant performance measure to the users of the financial statements.
<p>Audit scope</p>	<ul style="list-style-type: none"> • We performed an audit of the complete financial information of eleven components and audit procedures on specific balances for a further four components. • The components where we performed full or specific audit procedures accounted for 97% of EBITDA, 94% of revenue and 97% of total assets. • For the remaining 51 components in the group we have performed limited procedures appropriate to respond to the risk of material misstatement. • We have obtained an understanding of the entity-level controls of the group which assists us in identifying and assessing risks of material misstatement due to fraud or error, as well as assisting us in determining the most appropriate audit strategy.
<p>What has changed</p>	<ul style="list-style-type: none"> • Misstatement of CWIP balances is no longer considered a key audit matter due to the change in the associated risk profile. In prior audit periods this risk arose due to the many significant CWIP projects that the company had. However, many of these projects have been brought into commercial production, thereby reducing the opportunity to override any controls over the CWIP process. • Related party transactions continue to be an area of audit focus, however, for the current year, we have classified the structured investment transaction between CIHL and its ultimate parent Volcan Investments Limited as a key audit matter due to the complexity relating to the valuation of the instrument and the importance of the appropriate disclosure.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in our opinion thereon, and we do not provide a separate opinion on these matters.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
<p>Revenue recognition Refer to the Audit Committee Report (page 137); Accounting policies (page 174); and Note 5 of the Consolidated Financial Statements (page 199)</p> <p>For the year ended 31 March 2019 the group recognised total revenue of \$14,031 million (2018: \$15,294 million).</p> <p>Revenue recognition has been identified as a key audit matter due to the diverse and complex revenue streams across the Group.</p> <p>We have identified the following key areas for consideration:</p> <ul style="list-style-type: none"> • Complex calculation of power tariff agreements with Grid Corporation of Odisha Limited ("GRIDCO") and Punjab State Power Corporation Limited ("PSPCL"). • Complexity associated with the calculation of profit petroleum within the Vedanta Limited Oil and Gas division. • Cut-off: the variety of terms that define when title, risk and rewards are transferred to the customer, as well as the high value of the transactions, give rise to the risk that revenue is not recognised in the correct period. • Measurement: at the end of each reporting period there are a number of contracts that are either provisionally priced or subject to hedging arrangements through forward contracts. These calculations are based on estimations and susceptible to potential manipulation. <p>The level of risk has remained consistent with the prior year, but we note that additional work has been performed on ensuring that the new accounting standards have been appropriately implemented.</p>	<p>We performed our audit procedures across the group's revenue streams considering the revenue recognition policies. Our procedures were performed mainly by the component teams under the direction and supervision of the group audit engagement team.</p> <p>The procedures performed to address this key audit matter include:</p> <ul style="list-style-type: none"> • Performed walk throughs of the revenue recognition processes at each full and one specific scope component and assessed the design effectiveness of key controls. • For the components referred to above, tested the controls, including IT controls, over the revenue recognition process to confirm operating effectiveness. • Inspected the term of all the agreements to assess the reasonability of the inputs used in the calculation of the power tariff in respect of the revenue recognised for GRIDCO and PSPCL. Other procedures relating to the revenue of the Power division are mentioned in the recoverability of disputed receivables key audit matter section. • Inspected the terms of all the Vedanta Oil and Gas profit sharing agreements and tested the underlying cost recovery and profit petroleum calculation used by management. • Selected a sample of sales across the group made pre and post year-end, agreeing the date of revenue recognition to third party support, such as bills of lading, to confirm sales are recognised according to contract conditions. • Examined invoice samples with complex shipping terms to ensure that revenue has been recognised appropriately. • Ensured that the impact of applying IFRS 15 has been appropriately accounted for within the financial statements, including in the relevant disclosures. • Re-calculated the provisional pricing adjustments and validated the prices used to third party data. • For the zinc and lead price forwards taken out during the year we tested any resulting realised and unrealised loss, including the agreement of market forward rates used in determining the unrealised fair value loss at year end. <p>We performed audit procedures over this risk area in ten full scope components and one specific scope component, where revenue was present, which covered 94% of the revenue balance impacted by this risk.</p>	<p>Based on the procedures performed we consider revenue to be fairly stated in the financial statements and appropriately disclosed in accordance with IFRS 15.</p>

Independent Auditor's Report continued

to the members of Vedanta Resources Limited

Risk	Our response to the risk	Key observations communicated to the Audit Committee
<p>Recoverability of Property, Plant & Equipment and Exploration & Evaluation assets Refer to the Audit Committee Report (page 137); Accounting policies (page 174-176); and Note 16 of the Consolidated Financial Statements (page 207)</p> <p>At 31 March 2019 the carrying value of Property, Plant and Equipment (PP&E) was \$17,726 million (2018: \$17,727 million), which includes \$404 million of Evaluation and Exploration (E&E) assets (2018: \$2,326 million).</p> <p>The recoverability of PP&E and E&E assets has been identified as a key audit matter due to:</p> <ul style="list-style-type: none"> • The significance of the carrying value of the assets being assessed. • The size of recent impairment charges and reversals. • The recent challenges in respect of the group's license to operate in certain jurisdictions. • Our assessment that the recoverable amount of the group's Cash Generating Units ("CGUs") involves significant judgements about the future cash flow forecasts and the discount rate that is applied. <p>We focused our effort on those CGU's with impairment and impairment reversal indicators. The key judgements centred on forecast production profiles, forecast volumes, prices and discount rate assumptions.</p> <p>An impairment reversal trigger was identified at the Vedanta Limited Oil and Gas division namely in the Krishna Godavari (KG) block.</p> <p>The commencement of commercial production and certainty over development activities have led to an impairment reversal being recorded. An impairment reversal test resulted in an impairment reversal of \$38m (pre-tax).</p> <p>Although the magnitude of impairment and impairment reversals recognised in the year is reduced, the level of risk has remained consistent with the prior year.</p>	<p>In addressing this key audit matter procedures were performed by both our group and component teams. Macroeconomic assumptions and consistency of approach were ensured by the group team with location specific inputs addressed by component teams.</p> <p>The procedures performed to address this key audit matter include:</p> <ul style="list-style-type: none"> • Critically assessed through an analysis of internal and external factors impacting the entity, whether there were any indicators of impairment (or reversal of impairment) in line with IAS 36 for PP&E and IFRS 6 for E&E assets across the Group. • Specifically, in relation to the CGUs where impairment and impairment reversal indicators were identified, we have obtained and evaluated the valuation models used to determine the recoverable amount by challenging the key assumptions used by management including: <ul style="list-style-type: none"> – Considering forecasted and achieved volumes in relation to asset development plans. – Critically assessing management's forecasting accuracy by comparing prior year forecasts to actual results and assessing the potential impact of any variances. – Corroborating the price assumptions used in the models against the analysts' consensus. – Testing the appropriateness of the weighted average cost of capital, used to discount the impairment models, by engaging our internal valuations experts. – Testing the integrity of the models alongside their clerical accuracy. • We assessed the competence and objectivity of the Group's external experts, to satisfy ourselves that they are appropriate in their roles within the estimation process. <p>We performed audit procedures over this risk area in thirteen components (full and specific scope), which covered 97% of the risk amount. Impairment triggers were identified in two locations (Vedanta Limited Copper and KCM) where full impairment tests were prepared and audit procedures were performed over these valuation models. An impairment reversal trigger was identified at the KG Block only; a full impairment reversal test was carried out accordingly.</p>	<p>We are satisfied that the impairment reversal in relation to the Oil and Gas CGU is fairly stated and that there are no further impairments or impairment reversals at any CGUs in the group.</p> <p>We conclude that the related disclosures as per IAS 36 are appropriately presented in the financial statements.</p>

Risk	Our response to the risk	Key observations communicated to the Audit Committee
<p>Recoverability of disputed receivables Refer to the Audit Committee Report (page 137); Accounting policies (page 186); and Note 18 of the Consolidated Financial Statements (page 208)</p> <p>At 31 March 2019 the value of disputed receivables related to power contracts, to which we identified additional risk, was \$505 million (2018: \$402 million).</p> <p>There are entities within the group that have a significant value of receivables for which the recovery is subject to increased risk due to disagreements over the quantification or timing of the balance. Some of these balances are subject to litigation. The risk is specifically related to PSPCL (TPSL) and GRIDCO (Vedanta Limited Power). These receivables also have long outstanding elements of their balance. The level of risk has remained consistent with the prior year.</p>	<p>Our procedures were performed mainly by the component teams under the direction and supervision of the group audit engagement team.</p> <p>The procedures performed to address this key audit matter include</p> <ul style="list-style-type: none"> • Assessed the recoverability of the GRIDCO and PSPCL receivables by: <ul style="list-style-type: none"> – Inspecting the relevant state regulatory commission, appellate tribunal and Supreme Court rulings. – Examining the underlying power purchase agreements. – Held inquiries with the company legal department on developments and expected timing of resolution of the disputes. – Inspecting external legal opinions in respect of the merits of the cases. – Challenged management on the penalty provision, the classification of the receivables and the discounting of the non-current portion. – Critically assessed the independence, objectivity and competence of relevant legal professionals to ensure the validity and accuracy of the legal opinions obtained. <p>We performed audit procedures over this risk area in three full scope components, which covered 100% of the risk amount.</p>	<p>Based on the procedures performed we consider the disputed receivables to be fairly stated and appropriately disclosed in the financial statements.</p>
<p>Claims and exposures relating to taxation and litigation Refer to the Audit Committee Report (page 137); Accounting policies (page 183); and Note 33 of the Consolidated Financial Statements (page 237)</p> <p>The Group has disclosed in note 33 contingent liabilities \$2,914 million for tax and legal claims (2018: \$3,618 million) of which \$1,827 million (2018: \$2,704 million) relates to income tax matters.</p> <p>Taxation and litigation exposures have been identified as a key audit matter due to the large number of complex tax and legal claims across the group, particularly in relation to the operations located in India.</p> <p>There is significant judgment required by management in assessing the exposure of each case, and thus a risk exists that such cases may not be adequately provided for, or disclosed appropriately.</p> <p>There have been no significant developments during the current year regarding the ongoing tax litigations that are present within the group.</p> <p>We consider this risk as a key audit matter because of the potential financial impact on the financial statements.</p> <p>Additionally, the treatment of taxation and litigation cases require significant judgement due to the complexity of the cases, timescales for resolution, and the need to negotiate with various authorities and other parties.</p> <p>The level of risk has remained consistent with the prior year.</p>	<p>Our procedures were performed centrally where cases impacted a number of components. For location specific issues, component teams undertook the majority of the procedures under the direction and supervision of the Group audit engagement team.</p> <p>The procedures performed to address this key audit matter include:</p> <ul style="list-style-type: none"> • Obtained the Group legal and tax summary and critically assessed management's position through discussions with the Heads of Legal, and of Tax and operational management, on both the probability of success in significant cases, and the magnitude of any potential loss. • Inspected external legal opinions (where considered necessary) and other evidence to corroborate management's assessment of the risk profile in respect of legal claims. • Engaged internal tax specialists to technically appraise the tax positions taken by management with respect to local tax issues. • Ensured that management's assessment is consistent across the group for similar cases, or that differences in positions are adequately justified. • Assessed the relevant disclosures made within the financial statements to ensure they appropriately reflect the facts and circumstances of the respective tax and legal exposures, and are in accordance with the requirements of IAS 37. <p>We performed audit procedures over this risk area in eleven full scope components, which covered 91.5% of the risk amount.</p>	<p>We are satisfied that the accounting treatment in respect of potential tax exposures and legal cases is appropriate based on our procedures performed.</p> <p>We conclude that the related disclosures are appropriately presented in the financial statements.</p>

Independent Auditor’s Report continued

to the members of Vedanta Resources Limited

Risk	Our response to the risk	Key observations communicated to the Audit Committee
<p>Economic interest purchase from a related party Refer to the Audit Committee Report (page 137); Accounting policies (page 172-192); and Note 35 of the Consolidated Financial Statements (page 244)</p> <p>The Group, has purchased from Volcan (its ultimate parent company) the economic interests in a structured investment. The Group has disclosed the nature of the structured investment in note 35.</p> <p>We considered this to be a key audit matter due to the complexity involved regarding the valuation of this instrument and the fact that this is a related party transaction gives rise to the risk that the transaction is not recorded and disclosed appropriately by management.</p> <p>As the transaction occurred during the year, this is a new area of audit focus.</p>	<p>Our procedures were performed by the group audit engagement team.</p> <p>The procedures performed to address this key audit matter include:</p> <ul style="list-style-type: none"> • Obtained and reviewed the valuation report of third party experts engaged by management to determine the fair value of the instrument. We have also evaluated the experience and competence of the experts used. • Engaged our EY Valuations team to evaluate the valuation methodology as well as corroborate the significant assumptions used, in the valuation of this instrument. • Reviewed the board minutes of all group entities involved in the transaction, for evidence of approval of the related party transaction. • Challenged management on Volcan’s financial ability to meet it’s obligations under the contract and read financial information to assess Volcan’s financial position. • Assessed the adequacy of the related disclosures in the financial statements regarding this transaction. <p>We performed audit procedures over the entire transaction.</p>	<p>We are satisfied that the investment has been accounted for appropriately.</p> <p>We have evaluated the valuation of the instrument and have found the fair value to be within a reasonable range.</p> <p>We have also ensured that all the required disclosures have been included in the 31 March 2019 financial statements.</p>

In the prior year, our auditor’s report included a key audit matter in relation to Accounting for assets under construction. In the current year, we no longer consider this risk to be a key audit matter due to:

- The reduced quantity of projects in the under-construction stage thereby reducing the opportunity for management to override any controls over the capital work in progress process.

AN OVERVIEW OF THE SCOPE OF OUR AUDIT

Tailoring the scope

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

The group has decentralised processes and controls over the key areas of our audit focus with responsibility lying with component management for the majority of estimation processes and significant risk areas. We have tailored our audit response accordingly and thus for the majority of our focus areas, audit procedures were undertaken directly by the component audit teams, including testing on the verification of operational data and other routine processes, under the direction and supervision of the group engagement team.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, of the 66 reporting components of the group, we selected 16 components covering entities within India, Zambia and South Africa, which represent the principal business units within the group.

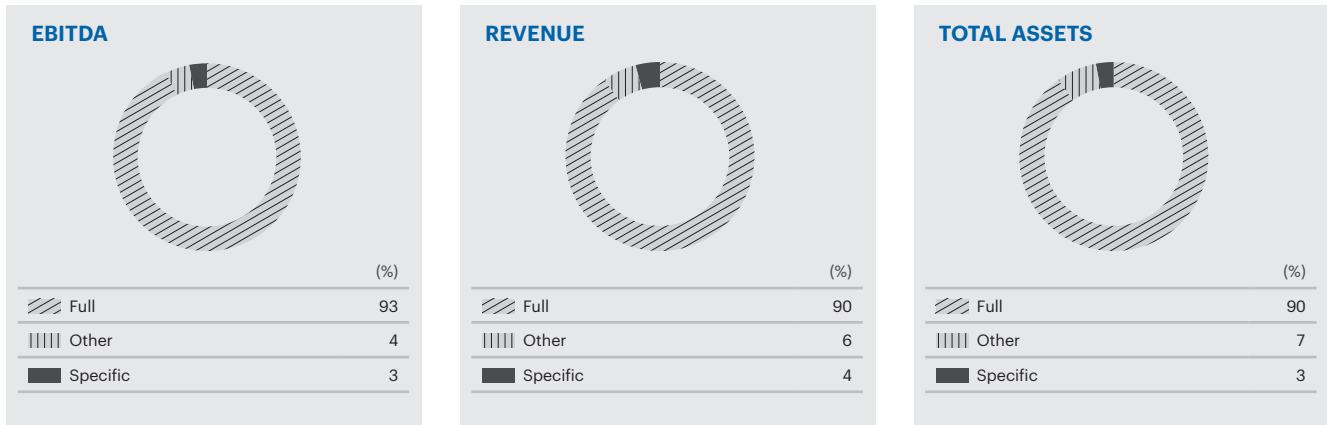
Of the 16 components selected, we performed an audit of the complete financial information of eleven components (“full scope components”) which were selected based on their size or risk characteristics. For four components (“specific scope components”), we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile. There was one component where review scope procedures were performed.

The reporting components where we performed audit procedures accounted for 96% (2018: 94%) of the group’s EBITDA, 94% (2018: 91%) of the group’s revenue and 97% (2018: 92%) of the group’s total assets. For the current year, the full scope components contributed 93% (2018: 94%) of the group’s EBITDA, 90% (2018: 91%) of the group’s revenue and 90% (2018: 90%) of the group’s total assets. The specific scope component contributed 3% (2018: 0%) of the group’s EBITDA, 4% (2018: 0%) of the group’s revenue and 7% (2018: 2%) of the group’s total assets. The audit scope of these components may not have included testing of all significant accounts of the component but will have contributed to the coverage of the specified significant accounts tested for the group.

Of the remaining 51 components that together represent 3% of the group’s EBITDA, none are individually greater than 2% of the group’s EBITDA. For these components, we performed other procedures, including analytical reviews, consolidation adjustment audit procedures and in some instances completed statutory financial statement audits. This ensured we responded appropriately to any potential risks of material misstatement to the group financial statements.

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

The charts below illustrate the coverage obtained from the work performed by our audit teams.



* Investments in companies within the Group have been eliminated in the calculation of the coverage of total assets.

CHANGES FROM THE PRIOR YEAR

Scoping is consistent with the prior year with the following exception: Electrosteel Steels Limited, which was acquired in the current year, has been designated as a new specific scope component for purposes of the 2019 audit, due to its contribution to specific accounts within the financial statements as well as the associated risk attached to those accounts.

INTEGRATED TEAM STRUCTURE

The overall audit strategy is determined by the senior statutory auditor, Mirco Bardella. The senior statutory auditor is based in the UK however, since group management and many operations reside in India, the group audit team includes members from both the UK and India. The senior statutory auditor visited India twice during the current year’s audit and members of the group audit team in both jurisdictions work together as an integrated team throughout the audit process. Whilst in India, he focused his time on the significant risk and judgement areas of the audit, interactions with management and group and component teams. During the current year audit, Mr Bardella reviewed key working papers and met with key representatives of the integrated and Indian component audit teams for certain full scope components, to discuss the audit approach and issues arising from their work.

INVOLVEMENT WITH COMPONENT TEAMS

It was concluded that audit procedures on 11 full scope components would be performed directly by the component audit teams and the procedures on 1 full scope component, the parent company, would be performed by the group audit team. For the 4 specific scope components, where the work was performed by component auditors, we determined the appropriate level of involvement to enable us to determine that

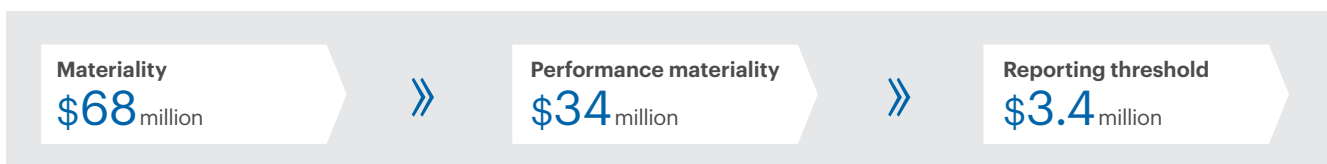
sufficient audit evidence had been obtained as a basis for our opinion on the Group as a whole. In addition, the integrated group team also included key members of certain full scope components ensuring knowledge was transferred effectively through the team. The work on specific scope components was either performed by the group audit team directly or by a component team and reviewed by the group audit team.

During the current year the Senior Statutory Auditor and senior members of the audit team visited KCM in Zambia and the various component audit teams in India. These visits involved key members of the group audit team meeting with local management and discussing the audit approach with the component teams together with any issues arising from their work. The primary team interacted regularly with the component teams where appropriate during various stages of the audit, reviewed key working papers and were responsible for the scope and direction of the audit process. The group audit team participated in key discussions, via conference calls with all full and specific scope entities. This, together with the additional procedures performed at group level, gave us appropriate evidence for our opinion on the group financial statements.

OUR APPLICATION OF MATERIALITY

The scope of our work is influenced by materiality. We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

As we develop our audit strategy, we determine materiality at the overall level and at the individual account level (referred to as our ‘performance materiality’).



Independent Auditor's Report continued

to the members of Vedanta Resources Limited

MATERIALITY

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

We determined materiality for the Group to be \$68 million (2018: \$81 million), which is 2% (2018: 2%) of EBITDA. The lower materiality threshold was due to a decrease in group EBITDA to \$3,393 million (2018: \$4,051 million) driven by lower commodity prices and higher costs of production compared to the prior year. Our materiality amount provides a basis for determining the nature and extent of risk assessment procedures, identifying and assessing the risk of material misstatement and determining the nature and extent of further audit procedures. Materiality is assessed on both quantitative and qualitative grounds. With respect to disclosure and presentational matters, amounts in excess of the quantitative thresholds above may not be adjusted if their effect is not considered to be material on a qualitative basis.

We believe that EBITDA provides us with an earnings-based measure that is significant to users of the financial statements on which we could set our materiality. EBITDA is a key performance indicator for the group and is also a key metric used by the group in the assessment of the performance of management. We also noted that market and analyst commentary on the performance of the group uses EBITDA as a key metric. We therefore considered EBITDA to be the most appropriate performance metric on which to base our materiality calculation as we considered that to be the most relevant performance measure to the stakeholders of the entity.

We determined materiality for the Parent company to be \$14.86 million (2018: \$13.1 million), which is 1% (2018: 1%) of Equity.

During the course of our audit, we reassessed initial materiality due to changes in the group's forecasted EBITDA, resulting in a marginally lower materiality.

PERFORMANCE MATERIALITY

The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

We set our performance materiality at 50% of our planning materiality, calculated as \$34m (2018: \$41m). This was based upon our overall risk analysis, our assessment of the group's control environment, the short reporting cycle and the number and amounts of individual misstatements (corrected and uncorrected) identified in the prior periods as well as the nature of misstatements.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the group as a whole and our assessment of the

risk of misstatement at that component. In the current year, the range of performance materiality allocated to components was \$6.7m to \$20.1m (2018: \$6.8m to \$22.0m).

REPORTING THRESHOLD

An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of \$3.4m (2018: \$4.1m), which is set at 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

OTHER INFORMATION

The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. The directors are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

OPINIONS ON OTHER MATTERS PRESCRIBED BY THE COMPANIES ACT 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for
- which the financial statements are prepared is consistent with the financial statements; and
- the Strategic Report and Directors' Report have been prepared in accordance with applicable legal requirements.

MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

In the light of the knowledge and understanding of the group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic Report or the Directors' Report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

RESPONSIBILITIES OF DIRECTORS

As explained more fully in the directors' responsibilities statement set out on page 146, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

Mirco Bardella (Senior statutory auditor)

for and on behalf of Ernst & Young LLP, Statutory Auditor
London
20 May 2019

Notes:

1. The maintenance and integrity of the Vedanta Resources Limited web site is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the web site.

2. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at <https://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

USE OF OUR REPORT

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Consolidated Income Statement

for the year ended March 31, 2019

(US\$ million)

	Note	Year ended 31 March 2019			Year ended 31 March 2018*		
		Before Special items	Special items (Note 6)	Total	Before Special items	Special items (Note 6)	Total
Revenue	5	14,031	-	14,031	15,294	-	15,294
Cost of sales		(11,532)	-	(11,532)	(12,062)	33	(12,029)
Gross profit		2,499	-	2,499	3,232	33	3,265
Other operating income		229	-	229	154	-	154
Distribution costs		(276)	-	(276)	(277)	-	(277)
Administrative expenses		(541)	-	(541)	(417)	-	(417)
Impairment reversal /(charge) [net], loss on PP&E	6	-	38	38	-	650	650
Operating profit		1,911	38	1,949	2,692	683	3,375
Investment revenue	7	480	-	480	465	-	465
Finance costs	8	(1,267)	9	(1,258)	(1,239)	(108)	(1,347)
Other gains and (losses) [net]	9	(75)	-	(75)	(16)	11	(5)
Profit before taxation (a)		1,049	47	1,096	1,902	586	2,488
Net tax expense (b)	11(a)	(656)	(16)	(672)	(675)	(338)	(1,013)
Profit for the year from continuing operations (a+b)		393	31	424	1,227	248	1,475
Attributable to:							
Equity holders of the parent		(253)	16	(237)	163	76	239
Non-controlling interests		646	15	661	1,064	172	1,236
Profit for the year from continuing operations		393	31	424	1,227	248	1,475

* Restated refer Note 1(b)

Consolidated Statement of Comprehensive Income

for the year ended March 31, 2019

(US\$ million)

	Year ended 31 March 2019	Year ended 31 March 2018*
Profit for the year from continuing operations	424	1,475
Items that will not be reclassified subsequently to income statement:		
Remeasurement of net defined benefit plans (note 27)	(6)	1
Tax effects on net defined benefit plans	4	1
Loss on fair value of financial asset investment (note 17)	(6)	-
Total (a)	(8)	2
Items that may be reclassified subsequently to income statement:		
Exchange differences arising on translation of foreign operations	(608)	58
Gain on fair value of available-for-sale financial assets (note 17)	-	14
Gains/ (losses) of cash flow hedges recognised during the year	16	(62)
Tax effects arising on cash flow hedges	(7)	24
(Gains)/ losses on cash flow hedges recycled to income statement	(28)	55
Tax effects arising on cash flow hedges recycled to income statement	9	(19)
Total (b)	(618)	70
Other comprehensive (loss)/ income for the year (a+b)	(626)	72
Total comprehensive (loss)/ income for the year	(202)	1,547
Attributable to:		
Equity holders of the parent	(484)	271
Non-controlling interests	282	1,276
Total comprehensive (loss)/ income for the year	(202)	1,547

* Restated refer Note 1(b)

Consolidated Statement of Financial Position

for the year ended March 31, 2019

(US\$ million)

	Note	As at 31 March 2019	As at 31 March 2018*
ASSETS			
Non-current assets			
Goodwill	14	12	12
Intangible assets	15	108	123
Property, plant and equipment	16	17,322	15,401
Exploration and evaluation assets	16	404	2,326
Leasehold land		63	57
Financial asset investments	17	707	25
Non-current tax assets	11(d)	504	521
Other non-current assets	18	1,010	659
Deferred tax assets	11(c)	778	917
		20,908	20,041
Current assets			
Inventories	19	2,060	2,038
Trade and other receivables	18	1,504	1,527
Financial instruments (derivatives)	25	11	24
Current tax assets		1	2
Short-term investments	20	4,164	4,808
Cash and cash equivalents	21	1,133	798
		8,873	9,197
Total assets		29,781	29,238
LIABILITIES			
Current liabilities			
Borrowings	22(a)	5,456	5,460
Trade and other payables	24	6,878	6,078
Financial instruments (derivatives)	25	66	22
Retirement benefits	27	17	18
Provisions	26	38	22
Current tax liabilities		61	54
		12,516	11,654
Net current liabilities		3,643	2,457
Non-current liabilities			
Borrowings	22(a)	10,524	9,734
Trade and other payables	24	244	118
Financial instruments (derivatives)	25	14	18
Deferred tax liabilities	11(c)	776	749
Retirement benefits	27	71	62
Provisions	26	371	351
Non equity non-controlling interests	23	12	12
		12,012	11,044
Total liabilities		24,528	22,698
Net assets		5,253	6,540
Equity			
Share capital	30	29	30
Share premium		202	202
Treasury shares	30	-	(558)
Share-based payment reserve	29	-	13
Hedging reserve		(98)	(93)
Other reserves		(97)	155
Retained earnings		(964)	(79)
Equity attributable to equity holders of the parent		(928)	(330)
Non-controlling interests	31	6,181	6,870
Total equity		5,253	6,540

* Restated refer Note 1(b)

Financial Statements of Vedanta Resources Limited (formerly Vedanta Resources plc) with registration number 4740415 were approved by the Board of Directors on 20 May 2019 and signed on their behalf by

Srinivasan Venkatakrishnan
Chief Executive Officer

Consolidated Cash Flow Statement

for the year ended March 31, 2019

	(US\$ million)	
Note	Year ended 31 March 2019	Year ended 31 March 2018
Operating activities		
Profit before taxation	1,096	2,488
Adjustments for:		
Depreciation and amortisation	1,482	1,271
Investment revenues	(480)	(465)
Finance costs	1,258	1,347
Other (gains) and losses (net)	75	5
Loss /(Profit) on disposal of PP&E	9	(1)
Write-off of unsuccessful exploration costs	7	-
Share-based payment charge	18	19
Impairment (reversal)/ charge (net), loss on PP&E	(38)	(650)
Other non-cash items	-	10
Operating cash flows before movements in working capital	3,427	4,024
Increase in inventories	(10)	(355)
Increase in receivables	(335)	(607)
Increase in payables	577	247
Cash generated from operations	3,659	3,309
Dividend received	6	4
Interest income received	159	224
Interest paid	(1,278)	(1,312)
Income taxes paid	(547)	(567)
Dividends paid	(113)	(164)
Net cash inflow from operating activities	1,886	1,494
Cash flows from investing activities		
Purchases of property, plant and equipment and intangibles	(1,327)	(1,104)
Proceeds on disposal of property, plant and equipment	18	10
Proceeds from redemption of short-term investments	22(b) 12,588	16,863
Purchases of short-term investments	22(b) (11,949)	(13,422)
Purchases of financial asset investments	17 & 22(b) (254)	-
Consideration paid for business acquisition (net of cash and cash equivalents acquired)	3(a) & 3(b) (752)	(134)
Net cash (used in)/ from investing activities	(1,676)	2,213
Cash flows from financing activities		
Issue of ordinary shares	1	0
Purchase of shares under DSBP scheme	-	(2)
Dividends paid to non-controlling interests of subsidiaries	(1,028)	(1,414)
Share purchase by subsidiary	(21)	(31)
Sale of treasury shares	19	-
Exercise of stock options in subsidiary	1	5
Repayment of working capital loan (net)	22(b) (90)	(612)
Proceeds from other short-term borrowings	22(b) 1,324	1,115
Repayment of other short-term borrowings	22(b) (2,433)	(4,362)
Buyback of non-convertible bond	22(b) -	(1,129)
Proceeds from medium and long term borrowings	22(b) 2,855	3,640
Repayment of medium and long term borrowings	22(b) (461)	(1,817)
Net cash from/ (used in) financing activities	167	(4,607)
Net increase/ (decrease) in cash and cash equivalents	377	(900)
Effect of foreign exchange rate changes	(42)	16
Cash and cash equivalents at beginning of the year	798	1,682
Cash and cash equivalents at end of the year	21 & 22(b) 1,133	798

Consolidated Statement of Changes in Equity

for the year ended March 31, 2019

(US\$ million)

	Attributable to equity holders of the parent								Non-controlling Interests	Total equity
	Share capital (Note 30)	Share premium	Treasury Shares	Share-based payment reserves	Hedging reserve	Other reserves	Retained earnings	Total		
At 1 April 2018	30	202	(558)	13	(93)	155	(79)	(330)	6,870	6,540
Profit/(loss) for the year	-	-	-	-	-	-	(237)	(237)	661	424
Other comprehensive loss for the year	-	-	-	-	(5)	(242)	-	(247)	(379)	(626)
Total comprehensive income/(loss) for the year	-	-	-	-	(5)	(242)	(237)	(484)	282	(202)
Transfers	-	-	-	-	-	(10)	10	-	-	-
Dividends paid (note 13)	-	-	-	-	-	-	(113)	(113)	(1,008)	(1,121)
Sale/cancellation of treasury shares	(2)	-	557	-	-	-	(536)	19	-	19
Exercise of stock options	1	-	1	(19)	-	-	18	1	-	1
Recognition of share-based payment	-	-	-	6	-	-	-	6	-	6
Non-controlling interest on business combination (Note 3(a))	-	-	-	-	-	-	-	-	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**	-	-	-	-	-	-	(12)	(12)	3	(9)
At 31 March 2019	29	202	-	-	(98)	(97)	(964)	(928)	6,181	5,253

** Includes purchase of shares by Vedanta Limited through ESOP trust for its stock options and share based payment charge by subsidiaries.

For the year ended 31 March 2018*

(US\$ million)

	Attributable to equity holders of the parent								Non-controlling Interests	Total equity
	Share capital (Note 30)	Share premium	Treasury Shares	Share-based payment reserves	Hedging reserve	Other reserves	Retained earnings	Total		
At 1 April 2017	30	202	(558)	28	(91)	140	(160)	(409)	6,424	6,015
Profit for the year	-	-	-	-	-	-	239	239	1,236	1,475
Other comprehensive income/(loss) for the year	-	-	-	-	(2)	34	-	32	40	72
Total comprehensive income/(loss) for the year	-	-	-	-	(2)	34	239	271	1,276	1,547
Acquisition of shares under DSBP scheme	-	-	(1)	-	-	-	(2)	(3)	-	(3)
Transfers	-	-	-	-	-	(19)	19	-	-	-
Dividends paid/ payable (Note 13)	-	-	-	-	-	-	(164)	(164)	(828)	(992)
Exercise of stock options	0	-	1	(27)	-	-	26	0	-	0
Recognition of share-based payment	-	-	-	12	-	-	-	12	-	12
Non-controlling interest on business combination (Note 3(b))	-	-	-	-	-	-	-	-	17	17
Recognition of put option liability/conversion option asset/derecognition of non controlling interest	-	-	-	-	-	-	(15)	(15)	(22)	(37)
Other changes in non-controlling interests**	-	-	-	-	-	-	(22)	(22)	3	(19)
At 31 March 2018	30	202	(558)	13	(93)	155	(79)	(330)	6,870	6,540

* Restated refer Note 1(b)

** Includes purchase of shares by Vedanta Limited through ESOP trust for its stock options and additional stake purchased during the year in erstwhile Cairn India Limited and share based payment charge by subsidiaries

Other Reserves Comprise

	(US\$ million)				
	Currency translation reserve	Merger reserve ⁽²⁾	Financial asset investment revaluation reserve	Other reserves ⁽³⁾	Total
At 1 April 2017	(2,168)	4	7	2,297	140
Exchange differences on translation of foreign operations	26	-	-	-	26
Gain on fair value of available-for-sale financial assets	-	-	7	-	7
Remeasurements	-	-	-	1	1
Transfer from/(to) retained earnings ⁽¹⁾	-	-	-	(19)	(19)
At 1 April 2018	(2,142)	4	14	2,279	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 31 March 2019	(2,380)	4	11	2,268	(97)

(1) Transfer to other reserve during the year ended 31 March 2019 includes US\$ Nil million of legal reserve (31 March 2018: US\$4 million) and withdrawal of US\$12 million from debenture redemption reserve (31 March 2018: US\$23 million of debenture redemption reserve). Further, US\$2 million has been transferred to Capital redemption reserve on account of reduction in share capital due to cancellation of treasury shares.

(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 2018: US\$4 million), debenture redemption reserve of US\$144 million (31 March 2018 US\$156 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.

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for the year ended 31 March 2019

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. Vedanta and its consolidated subsidiaries (collectively, the “Group”) is a diversified natural resource group engaged in exploring, extracting and processing minerals and oil and gas. The Group engages in the exploration, production and sale of zinc, lead, silver, copper, aluminium, iron ore and oil & gas and have a presence across India, South Africa, Namibia, Ireland, Australia, Liberia and UAE. The Group is also in the business of commercial power generation, steel manufacturing and port operations in India and manufacturing of glass substrate in South Korea and Taiwan.

Buy back and delisting of Vedanta Resources plc Shares

On 31 July 2018, Volcan Investments (“Volcan”) and Vedanta announced that they had reached agreement on the terms of a recommended cash offer (the “Offer”) by Volcan for the remaining issued and to-be-issued share capital of Vedanta not currently owned by Volcan.

The Volcan Offer was declared unconditional in all respects on 3 September 2018 and Volcan announced that Vedanta had applied for its shares to be cancelled from listing on the Official List of the UK Listing Authority and to trading on the main market for listed securities of the London Stock Exchange, such cancellation took effect on 1 October 2018.

At the General Meeting of Vedanta shareholders held on 1 October 2018, the resolution put to shareholders in relation to the re-registration of VRPLC as a private limited company was duly passed on a poll. Re-registration of VRPLC as a private limited company became effective on 29 October 2018 pursuant to which the name has been changed to Vedanta Resources Limited.

Following the delisting of the Company’s shares from the Official list of the London Stock Exchange, 6,904,995 ordinary shares of US 10 Cents each, which were issued on the conversion of certain convertible bonds issued by one of Vedanta’s subsidiaries and held through a global depositary receipt (GDR), were redeemed and the GDR listing was cancelled.

Details of Group’s various businesses are as follows. The Group’s percentage holdings in each of the below businesses are disclosed in note 39.

- 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 project located in South Africa.

- The Group’s oil and gas business is owned and operated by Vedanta Limited (prior to merger this was owned and operated by erstwhile Cairn India Limited) and its subsidiary, Cairn Energy Hydrocarbons Limited and consists of exploration and 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.
- 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 2(c)(i)(x))
- 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

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for the year ended 31 March 2019

and were put into care and maintenance since 09 July 2014 following a rock fall incident in June 2014.

- Furthermore, the Group's Zambia operations (i.e. KCM) is largely an integrated copper producer with various facilities at Konkola, Nchanga, Nkana and Nampundwe, Zambia including mines, concentrators, smelters, acid plants, a tailings leach plant ("TLP") and a refinery.
- The Group's Aluminium business is owned and operated by Vedanta Limited and by Bharat Aluminium Company Limited ("BALCO"). The aluminium operations include a refinery and captive power plant at Lanjigarh and a smelter and captive power plants at Jharsuguda both situated in the State of Odisha in India. BALCO's partially integrated aluminium operations are comprised of two bauxite mines, captive power plants, smelting and fabrication facilities in central India.
- The Group's power business is owned and operated by Vedanta Limited, BALCO, and Talwandi Sabo Power Limited ("TSPL"), a wholly owned subsidiary of Vedanta Limited, which are engaged in the power generation business in India. Vedanta Limited power operations include a thermal coal-based commercial power facility of 600 MW at Jharsuguda in the State of Odisha in Eastern India. BALCO power operations included 600 MW (2 units of 300 MW each) thermal coal based power plant at Korba, of which a unit of 300 MW was converted to be used for captive consumption vide order from Central Electricity Regulatory Commission (CERC) dated 1 January 2019. Talwandi Sabo Power Limited ("TSPL") power operations include 1,980 MW (three units of 660 MW each) thermal coal-based commercial power facilities. Power business also includes the wind power plants commissioned by HZL and a power plant at MALCO Energy Limited ("MEL") (under care and maintenance) situated at Mettur Dam in State of Tamil Nadu in southern India.
- The Group's other activities include Electrosteel Steels Limited ("ESL") acquired on 4 June 2018. ESL is engaged in the manufacturing and supply of billets, TMT bars, wire rods and ductile iron pipes in India.
- The Group's other activities also include Vizag General Cargo Berth Private Limited ("VGCB") and Maritime Ventures Private Limited ("MVPL"). Vizag port project includes mechanisation of coal handling facilities and upgradation of general cargo berth for handling coal at the outer harbour of Visakhapatnam Port on the east coast of India. 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. VGCB commenced operations in the fourth quarter of fiscal 2013. 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 the Financial Statements continued

for the year ended 31 March 2019

1. BASIS OF PREPARATION AND BASIS OF MEASUREMENT OF FINANCIAL STATEMENTS

a) Basis of preparation

The consolidated financial statements have been prepared in accordance with those parts of the Companies Act 2006 applicable to companies reporting under International Financial Reporting Standards (IFRS) and IFRS as adopted by the European Union and related interpretations.

These financial statements have been prepared in accordance with the accounting policies, set out below and were consistently applied to all periods presented unless otherwise stated.

These financial statements are approved for issue by the Board of Directors on 20 May 2019.

Certain comparative figures appearing in these consolidated financial statements have been regrouped and/or reclassified to better reflect the nature of those items.

These financial statements are presented in US dollars being the functional currency of the Company and all values are rounded off to the nearest million except where otherwise indicated. Amounts less than US\$0.5 million have been presented as "0".

b) Restatement/Reclassification

(i) The Group has revised the presentation of forward premium relating to derivative instruments to present it along with the mark-to-market gain/loss on these instruments, as these more appropriately reflect the substance of the forward premiums on derivative transactions. As a result of the change, forward premium expense amounting to US\$103 million has been reclassified from 'Finance cost' to 'Cost of sales' (31 March 2019 : US\$40 million and 31 March 2018 : US\$88 million) and 'Other gains and losses' (31 March 2019 : US\$9 million and 31 March 2018 : US\$15 million). The net cash inflow from operating activities in the consolidated cash flow statement remains unchanged.

(ii) The classification of export incentives from government has also been revised to present it under 'other operating income', as the revised classification is more appropriate. As a result of the change, export incentives amounting to US\$66 million has been reclassified from 'revenue' to 'other operating income' for the comparative year ended 31 March 2018.

(iii) In the comparative period, the Group acquired equity stake in AvanStrate Inc. (ASI). As permitted by IFRS 3, the Group had used provisional fair values that were determined as at 31 March 2018 for consolidation. In the current year, these fair values were finalised. Hence, the comparative year amounts have been restated accordingly. Please refer note 3(b) for further details.

None of the above had any effect on the equity as at 01 April 2017.

c) Basis of Measurement

The consolidated financial statements have been prepared on a going concern basis using historical cost convention and on an accrual method of accounting, except for certain financial assets and liabilities which are measured at fair value as explained in the accounting policies below.

d) Parent Company financial statements

The financial statements of the parent company, Vedanta Resources Limited, incorporated in the United Kingdom, have been prepared in accordance with FRS 101 and UK company law. The Company financial statements and associated notes have been presented separately.

2(a) ACCOUNTING POLICIES

(i) Basis of consolidation

Subsidiaries:

The consolidated financial statements incorporate the results of the Company and all its subsidiaries (the "Group"), being the entities that it controls. Control is evidenced where the Group has power over the investee, is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Power is demonstrated through existing rights that give the ability to direct relevant activities, which significantly affect the entity returns.

The financial statements of subsidiaries are prepared for the same reporting year as the Company. Where necessary, adjustments are made to the financial statements of subsidiaries to align the accounting policies in line with accounting policies of the Group.

For non-wholly owned subsidiaries, a share of the profit/ (loss) for the financial year and net assets is attributed to the non-controlling interests as shown in the consolidated income statement, consolidated statement of comprehensive income and consolidated statement of financial position.

Liability for put option issued to non-controlling interests which do not grant present access to ownership interest to the Group is recognised at present value of the redemption amount, and is reclassified from equity. At the end of each reporting period, the non-controlling interests subject to put option is derecognised and the difference between the amount derecognised and present value of the redemption amount, which is recorded as a financial liability, is accounted for as an equity transaction.

For acquisitions of additional interests in subsidiaries, where there is no change in control, the Group recognises a reduction to the non-controlling interest of the respective subsidiary with the difference between this figure and the cash paid, inclusive of transaction fees, being recognised in equity. Similarly, upon dilution of controlling interests the difference between the cash received from sale or listing of the subsidiary shares and the increase to non-controlling interest is also recognised in equity. The results of subsidiaries acquired or disposed off during the year are included in the consolidated income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Intra-Group balances and transactions, and any unrealised profits arising from intra-Group transactions, are eliminated. Unrealised losses are eliminated unless costs cannot be recovered.

Joint arrangements

A Joint arrangement is an arrangement of which two or more parties have joint control. Joint control is considered when there is contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Investments in joint arrangements

Notes to the Financial Statements continued

for the year ended 31 March 2019

are classified as either joint operations or joint venture. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement, have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint arrangement whereby, the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

The group has both joint operations and joint ventures.

Joint operations

The Group has Joint operations within its Oil and gas segment. It participates in several unincorporated joint operations which involve the joint control of assets used in oil and gas exploration and producing activities. The Group accounts for its share of assets, liabilities, income and expenditure of joint operations in which the Group holds an interest. Liabilities in unincorporated joint operations where the Group is the operator, is accounted for at gross values (including share of other partners) with a corresponding receivable from the venture partners. These have been included in the consolidated financial statements under the appropriate headings.

Details of joint operations are set out in note 38.

Joint Venture

The Group accounts for its interest in joint venture using the equity method, after initially being recognised at cost in the consolidated statement of financial position. Goodwill arising on the acquisition of joint venture is included in the carrying value of investments in joint venture.

Investments in associates:

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies. Investments in associates are accounted for using the equity method. Goodwill arising on the acquisition of associates is included in the carrying value of investments in associate.

Equity method of accounting

Under the equity method of accounting applicable for investments in associates and joint ventures, investments are initially recorded at the cost to the Group and then, in subsequent periods, the carrying value is adjusted to reflect the Group's share of the post-acquisition profits or losses of the investee, and the Group's share of other comprehensive income of the investee, other changes to the investees net assets and is further adjusted for impairment losses, if any. Dividend received or receivable from associate and joint ventures are recognised as a reduction in carrying amount of the investment.

The consolidated income statement and consolidated statements of comprehensive income include the Group's share of investee's results, except where the associate is generating losses, share of such losses in excess of the Group's interest in that associate are not recognised. Losses recognised under the equity method in excess of the Group's investment in ordinary shares are applied to the other components of the Group's interest that forms part of Group's

net investment in the investee in the reverse order of their seniority (i.e. priority in liquidation).

If the Group's share of losses in an associate or joint venture equals or exceeds, its interests in the associate or joint venture, the Group discontinues the recognition of further losses. Additional losses are provided for, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate/joint venture.

Unrealised gains arising from transactions with associates are eliminated against the investment to the extent of the Group's interest in these entities. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

The carrying amount of equity accounted investments are tested for impairment in accordance with the policy described in note 2 (a)(x) below.

(ii) Business combinations

Business combinations are accounted for under the acquisition method. The acquiree's identifiable assets, liabilities and contingent liabilities that meet the conditions for recognition are recognised at their fair value at the acquisition date, except certain assets and liabilities required to be measured as per the applicable standards.

Excess of fair value of purchase consideration and the acquisition date non-controlling interest over the acquisition date fair value of identifiable assets acquired and liabilities assumed is recognised as goodwill. Goodwill arising on acquisitions is reviewed for impairment annually. Where the fair values of the identifiable assets and liabilities exceed the purchase consideration, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the surplus is credited to the consolidated income statement in the period of acquisition. Where it is not possible to complete the determination of fair values by the date on which the first post-acquisition financial statements are approved, a provisional assessment of fair value is made and any adjustments required to those provisional fair values are finalised within 12 months of the acquisition date.

Those provisional amounts are adjusted through goodwill during the measurement period, or additional assets or liabilities are recognised to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised at that date. These adjustments are called as measurement period adjustments. The measurement period does not exceed twelve months from the acquisition date.

Any non-controlling interest in an acquiree is measured at fair value or as the non-controlling interest's proportionate share of the acquiree's net identifiable assets. This accounting choice is made on a transaction by transaction basis.

Notes to the Financial Statements continued

for the year ended 31 March 2019

Acquisition expenses are charged to the income statement.

If the Group acquires a group of assets in a company that does not constitute a business combination in accordance with IFRS 3 Business Combinations, the cost of the acquired group of assets is allocated to the individual identifiable assets acquired based on their relative fair value.

(iii) Revenue recognition

Sale of goods/ rendering of services (Revenue from contracts with customers)

The Group's revenue from contracts with customers comprises is mainly from the sale of copper, aluminium, iron ore, zinc, oil and gas, power, steel, glass substrate and port operations. Revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer which usually is on delivery of the goods to the shipping agent at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. Revenue is recognised net of discounts, volume rebates, outgoing sales taxes/ goods and service tax and other indirect taxes excluding excise duty. Revenues from sale of by-products are included in revenue.

Certain of the Group's sales contracts provide for provisional pricing based on the price on the London Metal Exchange (LME) and crude index, as specified in the contract. Revenue in respect of such contracts is recognised when control passes to the customer and is measured at the amount the entity expects to be entitled – being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, provisional pricing features are accounted in accordance with IFRS 9 'Financial Instruments' rather than IFRS 15 and therefore the IFRS 15 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration received post transfer of control are included in total revenue from operations on the face of the Consolidated Income Statement and disclosed by way of note to the financial statements. Final settlement of the price is based on the applicable price for a specified future period. The Group's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represent the Group's share of oil, gas and condensate production, recognised on a direct entitlement basis, when control is transferred to the buyers. Direct entitlement basis represents entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of the production remaining after such cost recovery. The stipulated share of production is arrived at after reducing government's share of profit petroleum which is accounted for when the obligation in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at a rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

Where the Group acts as a port operator, revenues relating to operating and maintenance phase of the port contract are measured at the amount that Group expects to be entitled to for the services provided.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs part of its obligation by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration when that right is conditional on Group's future performance.

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is received. Contract liabilities are recognised as revenue when the Group performs under the contract.

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

Interest income

Interest income from debt instruments is recognised using the effective interest rate method. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of a financial asset. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options) but does not consider the expected credit losses.

Dividends

Dividend income is recognised in the consolidated income statement only when the right to receive payment is established, provided it is probable that the economic benefits associated with the dividend will flow to the Group, and the amount of the dividend can be measured reliably.

(iv) Special items

Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior years. Also tax charges related to Special items and certain one-time tax effects are considered Special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with IFRS. The determination as to which items should be disclosed separately requires a degree of judgement.

(v) Property, plant and equipment (PP&E)

Mining properties and leases

When a decision is taken that a mining property is viable for commercial production (i.e. when the Group determines that the mining property will provide sufficient and sustainable return relative to the risks and the Group decided to proceed with the mine development), all further pre-production primary development expenditure other than that on land, buildings, plant, equipment and capital work in progress is capitalised as property, plant and equipment under the heading "Mining

Notes to the Financial Statements continued

for the year ended 31 March 2019

properties and leases" together with any amount transferred from "Exploration and evaluation" assets. The costs of mining properties and leases include the costs of acquiring and developing mining properties and mineral rights.

The stripping cost incurred during the production phase of a surface mine is deferred to the extent the current period stripping cost exceeds the average period stripping cost over the life of mine and recognised as an asset if such cost provides a benefit in terms of improved access to ore in future periods and certain criteria are met. When the benefit from the stripping costs are realised in the current period, the stripping costs are accounted for as the cost of inventory. If the costs of inventory produced and the stripping activity asset are not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset.

The Company uses the expected volume of waste compared with the actual volume of waste extracted for a given value of ore/mineral production for the purpose of determining the cost of the stripping activity asset.

Deferred stripping costs are included in mining properties within property, plant and equipment and disclosed as a part of mining properties. After initial recognition, the stripping activity asset is depreciated on a unit of production method over the expected useful life of the identified component of the ore body.

In circumstances where a mining property is abandoned, the cumulative capitalised costs relating to the property are written off in the period in which it occurs i.e. when the Group determines that the mining property will not provide sufficient and sustainable returns relative to the risks and the Group decides not to proceed with the mine development.

Commercial reserves are proved and probable reserves as defined by the 'JORC' Code, 'MORC' code or 'SAMREC' Code. Changes in the commercial reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

Oil & gas assets- (developing/producing assets)

For oil and gas assets a successful efforts based accounting policy is followed. Costs incurred prior to obtaining the legal rights to explore an area are expensed immediately to the consolidated income statement.

All costs incurred after the technical feasibility and commercial viability of producing hydrocarbons has been demonstrated are capitalised within property, plant & equipment - development/producing assets on a field-by-field basis. Subsequent expenditure is capitalised only where it either enhances the economic benefits of the development/producing asset or replaces part of the existing development/producing asset. Any remaining costs associated with the part replaced are expensed.

Net proceeds from any disposal of development/producing assets are credited against the previously capitalised cost. A gain or loss on disposal of a development/producing asset is recognised in the consolidated income statement to the extent that the net proceeds exceed or are less than the appropriate portion of the net capitalised costs of the asset.

Exploration and evaluation assets

Exploration and evaluation expenditure incurred prior to obtaining the mining right or the legal right to explore are expensed as incurred.

Exploration and evaluation expenditure incurred after obtaining the mining right or the legal right to explore, are capitalised as exploration and evaluation assets (property, plant and equipment) and stated at cost less impairment, if any. Exploration and evaluation assets are transferred to the appropriate category of property, plant and equipment when the technical feasibility and commercial viability has been determined. Exploration and evaluation assets are assessed for impairment and impairment loss, if any, is recognised prior to reclassification.

Exploration expenditure includes all direct and allocated indirect expenditure associated with finding specific mineral resources which includes depreciation and applicable operating costs of related support equipment and facilities and other costs of exploration activities:

- Acquisition costs - costs associated with acquisition of licences and rights to explore, including related professional fees.
- General exploration costs - costs of surveys and studies, rights of access to properties to conduct those studies (e.g., costs incurred for environment clearance, defence clearance, etc.), and salaries and other expenses of geologists, geophysical crews and other personnel conducting those studies.
- Costs of exploratory drilling and equipping exploratory and appraisal wells.

Exploration expenditure incurred in the process of determining oil and gas exploration targets is capitalised within "exploration and evaluation assets" and subsequently allocated to drilling activities. Exploration drilling costs are initially capitalised on a well-by-well basis until the success or otherwise of the well has been established. The success or failure of each exploration effort is judged on a well-by-well basis. Drilling costs are written off on completion of a well unless the results indicate that hydrocarbon reserves exist and there is a reasonable prospect that these reserves are commercial.

Following appraisal of successful exploration wells, if commercial reserves are established and technical feasibility for extraction demonstrated, then the related capitalised exploration costs are transferred into a single field cost centre within property, plant & equipment - development/producing assets (oil and gas properties) after testing for impairment. Where results of exploration drilling indicate the presence of hydrocarbons which are ultimately not considered commercially viable, all related costs are written off to the income statement.

Expenditure incurred on the acquisition of a licence interest is initially capitalised on a licence-by-licence basis. Costs are held undepleted, within exploration and evaluation assets until such time as the exploration phase on the licence area is complete or commercial reserves have been discovered.

Net proceeds from any disposal of an exploration asset are initially credited against the previously capitalised costs. Any surplus/ deficit is recognised in the income statement.

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for the year ended 31 March 2019

Other property, plant and equipment

The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing an asset to working condition and location for its intended use. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as separate items (major components) of property, plant and equipment. All other expenses on existing property, plant and equipment, including day-to-day repair and maintenance expenditure and cost of replacing parts, are charged to the consolidated income statement for the period during which such expenses are incurred.

Gains and losses on disposal of an item of property, plant and equipment computed as the difference between the net disposal proceeds and the carrying amount of the asset is included in the consolidated income statement when the asset is derecognised. Major inspection and overhaul expenditure is capitalised, if the recognition criteria are met.

(vi) Assets under construction

Assets under construction are capitalised in the assets under construction account. At the point when an asset is capable of operating in the manner intended by management, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset and any obligatory decommissioning costs are capitalised until the period of commissioning has been completed and the asset is ready for its intended use.

(vii) Depreciation, depletion and amortisation expense

Mining properties and other assets in the course of development or construction, freehold land and goodwill are not depreciated or amortised.

Relating to mining properties

The capitalised mining properties are amortised on a unit-of-production basis over the total estimated remaining commercial proved and probable reserves of each property or Group of properties and are subject to impairment review. Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future capital expenditure required to access the commercial reserves. Changes in the estimates of commercial reserves or future capital expenditure are dealt with prospectively.

Leasehold land and buildings are depreciated on a straight-line basis over the period of the lease or, if shorter, their useful economic life.

Oil & gas assets

All expenditures carried within each field are amortised from the commencement of production on a unit of production basis, which is the ratio of oil and gas production in the period to the estimated quantities of commercial reserves at the end of the period plus the production in the period, generally on a field-by-field basis or group of fields which are reliant on common infrastructure.

Commercial reserves are proven and probable oil and gas reserves, which are defined as the estimated quantities of crude oil, natural gas and natural gas liquids which geological, geophysical and engineering data demonstrate with a

specified degree of certainty to be recoverable in future years from known reservoirs and which are considered commercially producible.

Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future field development costs required to access the commercial reserves. Changes in the estimates of commercial reserves or future field development costs are dealt with prospectively.

Other Assets

Depreciation on Property, plant and equipment is calculated using the straight-line method (SLM) to allocate their cost, net of their residual values, over their estimated useful lives (determined by the management) as given below. Management's assessment takes into account, inter alia, the nature of the assets, the estimated usage of the assets, the operating conditions of the assets, past history of replacement and maintenance support.

Estimated useful life of assets are as follows:

Buildings operations and administration	3-60 years
Plant and machinery	15-40 years
Railway Sidings	15 years
Office equipment	3-6 years
Furniture and fixtures	8-10 years
Vehicles	8-10 years

Major inspection and overhaul costs are depreciated over the estimated life of the economic benefit to be derived from such costs. The carrying amount of the remaining previous overhaul cost is charged to the income statement if the next overhaul is undertaken earlier than the previously estimated life of the economic benefit.

The Group reviews the residual value and useful life of an asset at least at each financial year end and, if expectations differ from previous estimates, the change is accounted for as a change in accounting estimate.

The Group has reassessed the economic lives of commercial thermal power plants to be the lower of its technical useful life or the term of the power purchase agreement. This has had no material impact on these financial statements.

(viii) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Subsequently, intangibles assets are measured at cost less accumulated amortisation and accumulated impairment losses, if any.

The Group recognises port concession rights as "Intangible Assets" arising from a service concession arrangement, in which the grantor controls or regulates the services provided and the prices charged, and also controls any significant residual interest in the infrastructure such as property, plant and equipment, irrespective whether the infrastructure is existing infrastructure of the grantor or the infrastructure is constructed or purchased by the Group as part of the service concession arrangement. Such an intangible asset is recognised by the Group initially at cost determined as the fair value of the consideration received or receivable for the construction service delivered and is capitalised when the project is complete in all respects. Port concession rights are amortised on straight line basis over the balance of license

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period. The concession period is 30 years from the date of the award. Any addition to the port concession rights are measured at fair value on recognition. Port concession rights also include certain property, plant and equipment in accordance with IFRIC 12 "Service Concession Arrangements".

Intangible assets are amortised over their estimated useful life on a straight line basis. Software is amortised over the estimated useful life ranging from 0 – 5 years. Amounts paid for securing mining rights are amortised over the period of the mining lease ranging from 16-25 years. Technological know-how and acquired brand are amortised over the estimated useful life of ten years.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the consolidated income statement when the asset is derecognised.

The amortisation period and the amortisation method are reviewed at least at each financial year end. If the expected useful life of the asset is different from previous estimates, the change is accounted for prospectively as a change in accounting estimate.

(ix) Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-current assets and disposal groups classified as held for sale are not depreciated and are measured at the lower of carrying amount and fair value less costs to sell. Such assets and disposal groups are presented separately on the face of the consolidated statement of financial position.

(x) Impairment

Non-financial assets

Impairment charges and reversals are assessed at the level of cash-generating units. A cash-generating unit (CGU) is the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or group of assets.

The Group assesses at each reporting date, whether there is an indication that an asset may be impaired. The Group conducts an internal review of asset values annually, which is used as a source of information to assess for any indications of impairment or reversal of previously recognised impairment losses. Internal and external factors, such as worse economic performance than expected, changes in expected future prices, costs and other market factors are also monitored to assess for indications of impairment or reversal of previously recognised impairment losses.

If any such indication exists or in case of goodwill where annual testing of impairment is required then an impairment review is undertaken, the recoverable amount is calculated, as the higher of fair value less costs of disposal and the asset's value in use.

Fair value less costs of disposal is the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the entity and not applicable to entities in general. Fair value for mineral and oil and gas assets is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal, using assumptions that an independent market participant may take into account. These cash flows are discounted at an appropriate post-tax discount rate to arrive at the net present value.

Value in use is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal. The cash flows are discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted. Value in use is determined by applying assumptions specific to the Group's continued use and cannot take into account future development. These assumptions are different to those used in calculating fair value and consequently the value in use calculation is likely to give a different result to a fair value calculation.

The carrying amount of the CGU is determined on a basis consistent with the way the recoverable amount of the CGU is determined. The carrying value is net of deferred tax liability recognised in the fair value of assets acquired in the business combination.

If the recoverable amount of an asset or CGU is estimated to be less than its carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount. An impairment loss is recognised in the consolidated income statement.

Any reversal of the previously recognised impairment loss is limited to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had previously been recognised except if initially attributed to goodwill.

Exploration & evaluation assets:

In assessing whether there is any indication that an exploration and evaluation asset may be impaired, the Group considers, as a minimum, the following indicators:

- the period for which the Group has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the Group has decided to discontinue such activities in the specific area;
- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale; and
- reserve information prepared annually by external experts.

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When a potential impairment is identified, an assessment is performed for each area of interest in conjunction with the group of operating assets (representing a cash-generating unit) to which the exploration and evaluation assets is attributed. Exploration areas in which reserves have been discovered but require major capital expenditure before production can begin, are continually evaluated to ensure that commercial quantities of reserves exist or to ensure that additional exploration work is under way or planned. To the extent that capitalised expenditure is no longer expected to be recovered, it is charged to the consolidated income statement.

(xi) Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(a) Financial Assets – Recognition

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

For purposes of subsequent measurement, financial assets are classified in four categories:

Debt instruments at amortised cost

A 'debt instrument' is measured at amortised cost if both the following conditions are met:

- a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
- b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the Effective Interest Rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in interest income in consolidated income statement. The losses arising from impairment are recognised in consolidated income statement.

Debt instruments at fair value through other comprehensive income (FVOCI)

A 'debt instrument' is classified as at the FVOCI if both of the following criteria are met:

- a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
- b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognised in other comprehensive income (OCI). However, interest income, impairment losses and reversals and foreign exchange gain or loss are recognised

in the consolidated income statement. On derecognition of the asset, cumulative gain or loss previously recognised in other comprehensive income is reclassified from the equity to consolidated income statement. Interest earned whilst holding fair value through other comprehensive income debt instrument is reported as interest income using the EIR method.

Debt instruments at fair value through profit or loss (FVTPL)

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorisation as at amortised cost or as FVOCI, is classified as at FVTPL.

In addition, the Group may elect to designate a debt instrument, which otherwise meets amortised cost or FVOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). The Group has not designated any debt instrument as at FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes being recognised in consolidated income statement.

Equity instruments

All equity investments in scope of IFRS 9 are measured at fair value. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which IFRS 3 applies are classified as at FVTPL. For all other equity instruments, the Company may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The Group makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the Group decides to classify an equity instrument as at FVOCI, then all fair value changes on the instrument, excluding dividends, are recognised in the OCI. There is no recycling of the amounts from OCI to profit and loss, even on sale of investment. However, the Group may transfer the cumulative gain or loss within equity. For equity instruments which are classified as FVTPL, all subsequent fair value changes are recognised in the consolidated income statement.

(b) Financial Asset - Derecognition

The Group derecognises a financial asset when the contractual rights to cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

(c) Impairment of financial assets

In accordance with IFRS 9, the Group applies expected credit loss ("ECL") model for measurement and recognition of impairment loss on the following financial assets:

- i) Financial assets that are debt instruments, and are measured at amortised cost e.g., loans, debt securities and deposits
- ii) Financial assets that are debt instruments and are measured as at FVOCI

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iii) Trade receivables or any contractual right to receive cash or another financial asset that result from transactions that are within the scope of IFRS 15.

The Group follows 'simplified approach' for recognition of impairment loss allowance on trade receivables, contract assets and lease receivables. The application of simplified approach does not require the Group to track changes in credit risk. Rather, it recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

At each reporting date, for recognition of impairment loss on other financial assets and risk exposure, the Group determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the Group reverts to recognising impairment loss allowance based on 12-month ECL.

Lifetime ECL are the expected credit losses resulting from all possible default events over the expected life of a financial instrument. The 12-month ECL is a portion of the lifetime ECL which results from default events that are possible within 12 months after the reporting date.

ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original EIR.

ECL impairment loss allowance (or reversal) during the year is recognised as income/expense in profit or loss. The consolidated statement of financial position presentation for various financial instruments is described below:

- i) Financial assets measured at amortised cost: ECL is presented as an allowance, i.e., as an integral part of the measurement of those assets in the balance sheet. The Company does not reduce impairment allowance from the gross carrying amount.
- ii) Debt instruments measured at FVOCI: Since financial assets are already reflected at fair value, impairment allowance is not further reduced from its value. Rather, ECL amount is presented as 'accumulated impairment amount' in the OCI.

For assessing increase in credit risk and impairment loss, the Group combines financial instruments on the basis of shared credit risk characteristics with the objective of facilitating an analysis that is designed to enable significant increases in credit risk to be identified on a timely basis.

The Group does not have any purchased or originated credit-impaired (POCI) financial assets, i.e., financial assets which are credit impaired on purchase/origination.

(d) Financial liabilities – Recognition & Subsequent measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, or as loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value, and in the case of financial liabilities at amortised cost, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the consolidated income statement.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied. For liabilities designated as FVTPL, fair value gains/losses attributable to changes in own credit risk are recognised in OCI. These gains/losses are not subsequently transferred to profit or loss. However, the Group may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the consolidated income statement. The Group has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (Loans and Borrowings and Trade and Other payables)

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in consolidated income statement when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the consolidated income statement.

(e) Financial liabilities – Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the consolidated income statement.

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(f) Embedded Derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss.

If the hybrid contract contains a host that is a financial asset within the scope of IFRS 9, the Group does not separate embedded derivatives. Rather, it applies the classification requirements contained in IFRS 9 to the entire hybrid contract. Derivatives embedded in all other host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value through profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in Consolidated Income Statement, unless designated as effective hedging instruments.

(g) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs.

(h) Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

(i) Derivative financial instruments and hedge accounting Initial recognition and subsequent measurement

In order to hedge its exposure to foreign exchange, interest rate, and commodity price risks, the Group enters into forward, option, swap contracts and other derivative financial instruments. The Group does not hold derivative financial instruments for speculative purposes.

Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives are taken directly to consolidated income statement, except for the effective portion of cash flow hedges, which is recognised in OCI and later reclassified to consolidated income statement when the hedge item affects profit or loss or treated as basis adjustment if a hedged

forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm commitment
- Hedges of a net investment in a foreign operation

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting. The documentation includes the Group's risk management objective and strategy for undertaking hedge, the hedging/economic relationship, the hedged item or transaction, the nature of the risk being hedged, hedge ratio and how the entity will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

(i) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in consolidated income statement immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in consolidated income statement. Hedge accounting is discontinued when the Company revokes the hedge relationship, the hedging instrument or hedged item expires or is sold, terminated, or exercised or no longer meets the criteria for hedge accounting.

(ii) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in OCI in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the consolidated income statement.

Amounts recognised in OCI are transferred to consolidated income statement when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised in OCI are transferred to the initial carrying amount of the non-financial asset or liability

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If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognised in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

(iii) Hedges of a net investment

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, are accounted for in a way similar to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognised in OCI while any gains or losses relating to the ineffective portion are recognised in the consolidated income statement. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is reclassified to the consolidated income statement (as a reclassification adjustment).

(j) Financial guarantees

Financial guarantees issued by the Group on behalf of related parties are designated as 'Insurance Contracts'. The Group assesses at the end of each reporting period whether its recognised insurance liabilities (if any) are adequate, using current estimates of future cash flows under its insurance contracts. If that assessment shows that the carrying amount of its insurance liabilities is inadequate in the light of the estimated future cash flows, the entire deficiency is recognised in consolidated income statement.

(xii) Leases

Determining whether an arrangement contains lease

At inception of an arrangement, the Group determines whether the arrangement is or contains a lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

At inception or on reassessment of an arrangement that contains lease, the Group separates payments and other consideration required by the arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset; subsequently the liability is reduced as payments are made and an imputed finance cost on the liability is recognised using the Group's incremental borrowing rate.

Group as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance

of the liability. Finance charges are recognised in finance costs in the consolidated income statement, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Group's policy on the general borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognised as an expense in the consolidated income statement on a straight-line basis over the lease term.

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

(xiii) Inventories

Inventories and work-in-progress are stated at the lower of cost and net realisable value.

Cost is determined on the following basis:

- Purchased copper concentrate is recorded at cost on a first-in, first-out ("FIFO") basis; all other materials including stores and spares are valued on weighted average basis; except in Oil and Gas business where stores and spares are valued on a FIFO basis.
- Finished products are valued at raw material cost plus costs of conversion, comprising labour costs and an attributable proportion of manufacturing overheads based on a weighted average basis (except in copper business where FIFO is being followed); and
- By-products and scrap are valued at net realisable value.

Net realisable value is determined based on estimated selling price, less further costs expected to be incurred for completion and disposal.

(xiv) Government grants

Grants and subsidies from the government are recognised when there is reasonable assurance that (i) the Group will comply with the conditions attached to them, and (ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognised as income on a systematic basis in the consolidated income

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statement over the periods necessary to match them with the related costs, which they are intended to compensate.

Government grants relating to tangible fixed assets are deducted in calculating the carrying amount of the assets and recognised in the consolidated income statement over the expected useful lives of the assets concerned as a reduced depreciation expense.

When loans or similar assistance are provided by governments or related institutions, with an interest rate below the current applicable market rate, the effect of this favourable interest is regarded as a government grant. The loan or assistance is initially recognised and measured at fair value and the government grant is measured as the difference between the initial carrying value of the loan and the proceeds received. The loan is subsequently measured as per the accounting policy applicable to financial liabilities.

(xv) Taxation

Tax expense represents the sum of current tax and deferred tax.

Current tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the reporting date and includes any adjustment to tax payable in respect of previous years.

Subject to the exceptions below, deferred tax is provided, using the balance sheet method, on all temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes and on carry forward of unused tax credits and unused tax losses:

- Tax payable on the future remittance of the past earnings of subsidiaries where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future;
- Deferred income tax is not recognised on initial recognition as well as on the impairment of goodwill which is not deductible for tax purposes or on the initial recognition of an asset or liability in a transaction that is not a business combination, and at the time of the transaction, affects neither the accounting profit nor taxable profit (tax loss); and
- Deferred tax assets (including MAT credit entitlement) are recognised only to the extent that it is more likely than not that they will be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. Tax relating to items recognised outside consolidated income statement is recognised outside consolidated income statement (either in other comprehensive income or equity).

The carrying amount of deferred tax assets (including MAT credit entitlement) is reviewed at each reporting date and is adjusted to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Deferred tax is provided on temporary differences arising on acquisitions that are categorised as Business Combinations. Deferred tax is recognised at acquisition as part of the assessment of the fair value of assets and liabilities acquired. Subsequently deferred tax is charged or credited in the income statement/other comprehensive income as the underlying temporary difference is reversed.

(xvi) Retirement benefit schemes

The Group operates or participates in a number of defined benefits and contribution schemes, the assets of which are (where funded) held in separately administered funds.

For defined benefit schemes, the cost of providing benefits under the plans is determined by actuarial valuation each year separately for each plan using the projected unit credit method by third party qualified actuaries.

Remeasurement including, effects of asset ceiling and return on plan assets (excluding amounts included in interest on the net defined benefit liability) and actuarial gains and losses arising in the year are recognised in full in other comprehensive income and are not recycled to the consolidated income statement.

Past service costs are recognised in the consolidated income statement on the earlier of:

- the date of the plan amendment or curtailment, and
- the date that the Group recognises related restructuring costs

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset at the beginning of the period. Defined benefit costs are split into current service cost, past service cost, net interest expense or income and remeasurement, and gains and losses on curtailments and settlements.

Current service cost and past service costs are recognised within cost of sales and administrative expenses and distribution expenses. Net interest expense or income is recognised within finance costs.

For defined contribution schemes, the amount charged to the consolidated income statement in respect of pension costs and other post-retirement benefits is the contributions payable in the year, recognised as and when the employee renders related service.

(xvii) Share-based payments

Certain employees (including executive directors) of the Group receive part of their remuneration in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares ('equity-settled transactions').

The cost of equity-settled transactions with employees is measured at fair value of share awards at the date at which they are granted. The fair value of share awards is determined with the assistance of an external valuer and the fair value at

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the grant date is expensed on a proportionate basis over the vesting period based on the Group's estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date at which point the estimate is adjusted to reflect the current expectations.

The resultant increase in equity is recorded in share-based payment reserve.

In case of cash-settled transactions, a liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognised in employee benefits expense. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The fair value is determined with the assistance of an external valuer.

(xviii) Provisions, contingent liabilities and contingent assets

The assessments undertaken in recognising provisions and contingencies have been made in accordance with the applicable IFRS.

Provisions represent liabilities for which the amount or timing is uncertain. Provisions are recognised when the Group has a present obligation (legal or constructive), as a result of past events, and it is probable that an outflow of resources, that can be reliably estimated, will be required to settle such an obligation. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Unwinding of the discount is recognised in the consolidated income statement as a finance cost. Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of Group or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in extremely rare cases where there is a liability that cannot be recognised because it cannot be measured reliably. The Group does not recognise a contingent liability but discloses its existence in the consolidated financial statements.

In the normal course of business, contingent liabilities may arise from litigation and other claims against the Group. There are certain obligations which management has concluded, based on all available facts and circumstances, are not probable of payment or are very difficult to quantify reliably, and such obligations are treated as Contingent liabilities and disclosed in the notes but are not reflected as liabilities in the financial statements. Although there can be no assurance regarding the final outcome of the legal proceedings in which the Group is involved, it is not expected that such contingencies will have a material effect on its financial position or profitability.

Contingent assets are not recognised but disclosed in the financial statements when an inflow of economic benefit is probable.

The Group has significant capital commitments in relation to various capital projects which are not recognised in the consolidated statement of financial position.

(xix) Restoration, rehabilitation and environmental costs

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine or oil fields. Such costs, discounted to net present value, are provided for and a corresponding amount is capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are charged to the consolidated income statement over the life of the operation through the depreciation of the asset and the unwinding of the discount on the provision. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes to lives of operations, new disturbance and revisions to discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate. The unwinding of the discount is shown as a finance cost in the consolidated income statement.

Costs for restoration of subsequent site damage which is caused on an ongoing basis during production are provided for at their net present value and charged to the consolidated income statement as extraction progresses. Where the costs of site restoration are not anticipated to be material, they are expensed as incurred.

(xx) Accounting for Foreign currency transactions and translations

The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. For all principal operating subsidiaries, the functional currency is normally the local currency of the country in which it operates with the exception of KCM and Oil and gas business operations which have a US Dollar functional currency as that is the currency of the primary economic environment in which they operate. The financial statements are presented in US Dollars.

In the financial statements of individual group companies, transactions in currencies other than the respective functional currencies are translated into their functional currencies at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in other currencies are translated into functional currencies at exchange rates prevailing on the reporting date. Non-monetary assets and liabilities denominated in other currencies and measured at historical cost or fair value are translated at the exchange rates prevailing on the dates on which such values were determined.

All exchange differences are included in the consolidated income statement except those where the monetary item is designated as an effective hedging instrument of the currency risk of designated forecasted sales or purchases, which are recognised in the other comprehensive income.

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for the year ended 31 March 2019

Exchange differences which are regarded as an adjustment to interest costs on foreign currency borrowings, are capitalised as part of borrowing costs in qualifying assets.

For the purposes of consolidation of financial statements, items in the consolidated income statement of those businesses for which the US dollar is not the functional currency are translated into US dollars at the average rates of exchange during the year/ exchange rates as on the date of transaction. The related consolidated statement of financial position is translated into US dollars at the rates as at the reporting date. Exchange differences arising on translation are recognised in the consolidated statement of comprehensive income. On disposal of such entities the deferred cumulative exchange differences recognised in equity relating to that particular foreign operation are recognised in the consolidated income statement.

(xxi) Buyers' credit / suppliers' credit

The Group enters into arrangements whereby financial institutions make direct payments to suppliers for raw materials and project materials. The financial institutions are subsequently repaid by the Group at a later date providing working capital timing benefits. These are normally settled up to twelve months (for raw materials) and up to 36 months (for project materials). Where these arrangements are for raw materials with a maturity of up to twelve months, the economic substance of the transaction is determined to be operating in nature and these are recognised as Operational buyers' credit/suppliers' credit (under Trade and other payables). Where these arrangements are for project materials with a maturity up to thirty-six months, the economic substance of the transaction is determined to be financing in nature, and these are presented within borrowings in the statement of financial position. Interest expense on these are recognised in the finance cost.

(xxii) Current and non-current classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current / non-current classification. An asset is classified as current when it satisfies any of the following criteria:

- it is expected to be realised in, or is intended for sale or consumption in, the Group's normal operating cycle.
- it is held primarily for the purpose of being traded;
- it is expected to be realised within 12 months after the reporting date; or
- it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting date.

All other assets are classified as non-current.

A liability is classified as current when it satisfies any of the following criteria:

- it is expected to be settled in the Group's normal operating cycle;
- it is held primarily for the purpose of being traded;
- it is due to be settled within 12 months after the reporting date; or
- the Group does not have an unconditional right to defer settlement of the liability for at least 12 months after the

reporting date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current only.

(xxiii) Borrowing costs

Borrowing cost includes interest expense as per effective interest rate (EIR) and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost.

Borrowing costs directly relating to the acquisition, construction or production of a qualifying capital project under construction are capitalised and added to the project cost during construction until such time that the assets are substantially ready for their intended use i.e. when they are capable of commercial production. Borrowing costs relating to the construction phase of a service concession arrangement is capitalised as part of the cost of the intangible asset. Where funds are borrowed specifically to finance a qualifying capital project, the amount capitalised represents the actual borrowing costs incurred. Where surplus funds are available out of money borrowed specifically to finance a project, the income generated from such short-term investments is deducted from the total capitalised borrowing cost. If any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing then becomes part of general borrowing. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the year.

All other borrowing costs are recognised in the consolidated income statement in the period in which they are incurred.

Capitalisation of interest on borrowings related to construction or development projects is ceased when substantially all the activities that are necessary to make the assets ready for their intended use are complete or when delays occur outside of the normal course of business.

EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial liability or a shorter period, where appropriate, to the amortised cost of a financial liability. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options).

(xxiv) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand and short-term money market deposits which have a maturity of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above and additionally includes unpaid dividend account.

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for the year ended 31 March 2019

2(b) APPLICATION OF NEW AND REVISED STANDARDS

The Group has adopted with effect from 01 April 2018, the following new standards and amendments.

IFRS 15 – Revenue from contracts with customers

The Group has adopted IFRS 15 Revenue from contracts with Customers with effect from April 1, 2018 which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. The standard replaces most of the current revenue recognition guidance. The core principle of the new standard is for companies to recognise revenue when the control of the goods and services is transferred to the customer as against the transfer of risk and rewards. As per the Group's current revenue recognition practices, transfer of control happens at the same point as transfer of risk and rewards thus not effecting the revenue recognition. The amount of revenue recognised reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

Under this standard, services provided post transfer of control of goods are treated as separate performance obligation and requires proportionate revenue to be deferred along with associated costs and to be recognised over the period of service. The Group provides shipping and insurances services after the date of transfer of control of goods and therefore has identified it as a separate performance obligation. As per the result of evaluation of contracts of the relevant revenue streams, it is concluded that the impact of this change is immaterial to the Group and hence no accounting changes have been done.

The Group has products which are provisionally priced at the date revenue is recognised. Revenue in respect of such contracts are recognised when control passes to the customer and is measured at the amount the entity expects to be entitled – being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, subsequent movements in provisional pricing are accounted for in accordance with IFRS 9 "Financial Instruments" rather than IFRS 15 and therefore the IFRS 15 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration received post transfer of control has been included in total revenue on the face of the Consolidated Income statement. The accounting for revenue under IFRS 15 does not, therefore, represent a substantive change from the Group's previous practice for recognising revenue from sales to customers.

Further, export incentives received from Government that were included within revenue are now included within other operating income.

The Group has adopted the modified transitional approach as permitted by the standard under which the comparative financial information is not restated. The accounting changes required by the standard are not having material effect on the recognition or measurement of revenues and no transitional adjustment is recognised in retained earnings at 01 April 2018. Additional disclosures as required by IFRS 15 have been included in these financial statements.

Previous period Accounting Policy: Revenue Recognition

Revenues are measured at the fair value of the consideration received or receivable, net of discounts, volume rebates, outgoing sales taxes, goods and service tax, excise duty and other indirect taxes. Revenues from sales are recognised when all significant risks and rewards of ownership of the commodity sold are transferred to the customer and the commodity has

been delivered to the shipping agent. Revenues from sale of by-products are included in revenue.

Certain of the Group's sales contracts provide for provisional pricing based on the price on the London Metal Exchange ("LME") and crude index, as specified in the contract, when shipped. Final settlement of the price is based on the applicable price for a specified future period. The Group's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represent the Group's share of oil, gas and condensate production, recognised on a direct entitlement basis, when significant risks and rewards of ownership are transferred to the buyers. Direct entitlement basis represents entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of the production remaining after such cost recovery. The stipulated share of production is arrived after reducing government's share of profit petroleum which is accounted for when the obligation, in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

Where the Group acts as a port operator, revenues and costs relating to each construction contract of service concession arrangements are recognised over the period of each arrangement only to the extent of costs incurred that are probable of recovery. Revenues and costs relating to operating phase of the port contract are measured at the fair value of the consideration received or receivable for the services provided.

Revenue from rendering of services is recognised on the basis of work performed.

IFRS 9: Financial Instruments

IFRS 9 has reduced the complexity of the current rules on financial instruments as mandated in IAS 39. It has fewer classification and measurement categories as compared to IAS 39. It eliminates the rule-based requirement of segregating embedded derivatives from financial assets and tainting rules pertaining to held to maturity investments. For financial assets which are debt instruments, IFRS 9 establishes a principle-based approach for classification based on cash flow characteristics of the asset and the business model in which an asset is held. For an investment in an equity instrument which is not held for trading, IFRS 9 permits an irrevocable election, on initial recognition, on an individual share-by-share basis, to present all fair value changes from the investment in other comprehensive income. No amount recognised in other comprehensive income on such equity investment would ever be reclassified to profit or loss. It requires the entity, which chooses to designate a liability as at fair value through profit or loss, to present the portion of the fair value change attributable to the entity's own credit risk in the other comprehensive income. IFRS 9 replaces the 'incurred loss model' in IAS 39 with an 'expected credit loss' model. The measurement uses a dual measurement approach, under which the loss allowance is measured as either 12 month expected credit losses or lifetime expected credit losses. The standard also introduces new presentation and disclosure requirements.

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For transition, the Group has elected to apply the limited exemptions in IFRS 9 relating to the classification, measurement and impairment requirements for financial assets and accordingly has not restated comparative periods.

The Group has adopted IFRS 9 from 01 April 2018. The areas impacted on adopting IFRS 9 on the Group are detailed below.

Classification and measurement

The measurement and accounting treatment of the Group's financial assets is materially unchanged with the exception of equity securities previously categorised as available for sale. These will be held at fair value through other comprehensive income, meaning the recycling of gains and losses on disposal and impairment losses is no longer permitted for this category.

Impairment

Based on the Group's assessment, under expected credit loss model, the impairment of financial assets held at amortised cost does not have a material impact on the Group's results, given the low exposure to counterparty default risk as a result of the credit risk management processes that are in place.

Hedge accounting

The Group has adopted the IFRS 9 hedge accounting requirements. The adoption of the new standard has no effect on the amounts recognised in relation to the existing hedging arrangements.

Previous period Accounting Policy: Financial Instruments

Financial asset investments

Financial asset investments are classified as available for sale under IAS 39 and are initially recorded at fair value plus transaction costs that are directly attributable to the acquisition of financial asset investments and then remeasured at subsequent reporting dates to fair value. Unrealised gains and losses on financial asset investments are recognised through other comprehensive income. On disposal or impairment of the investments, the gains and losses in equity are recycled to the income statement.

Investments in equity instruments are recorded in non-current assets unless they are expected to be sold within one year.

The Group assesses at each reporting date whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred 'loss event') has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated.

Short-term investments

Short-term investments represent short-term investments that do not meet the definition of cash and cash equivalents for one or more of the following reasons:

- They have a maturity profile greater than 90 days;
- They may be subject to a greater risk of changes in value than cash;
- They are held for investment purposes.

These include Short-term marketable securities and other Bank Deposits.

Short-term marketable securities are categorised as held for trading and are initially recognised at fair value with any gains or

losses arising on remeasurement recognised in the consolidated income statement.

Other bank deposits are subsequently measured at amortised cost using the effective interest method.

Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash at bank and in hand, short-term deposits with banks and short-term highly short-term investments that are readily convertible into cash which are subject to insignificant risk of changes in value and are held for the purpose of meeting short-term cash commitments.

Trade receivables

Trade receivables are stated at their transaction value as reduced by appropriate allowances for estimated irrecoverable amounts. An allowance for impairment of trade receivables is made where there is an event, which based on previous experience, is an indication of a reduction in the recoverability of the carrying value of the trade receivables.

Trade receivables are subsequently measured at amortised cost using the effective interest method, less any impairment. Interest income is recognised on non-current receivables on specific items by applying the effective interest rate method.

Trade payables

Trade and other payables are recognised at their transaction cost, which is its fair value, and subsequently measured at amortised cost except for the put option liability that is measured at fair value.

Equity instruments

Equity instruments issued by the Company are recorded at the proceeds received, net of direct issue costs.

Borrowings

Interest bearing loans and overdrafts are recorded initially at the fair value. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on an accruals basis and charged to the income statement using the effective interest method. They are netted against the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Convertible bonds

Convertible bonds denominated in the functional currency of the issuing entity are accounted for as compound instruments. The equity components and the liability components are separated out on the date of the issue. The equity component is recognised in a separate reserve and is not subsequently remeasured. The liability component (net of transaction cost) is held at amortised cost. The interest expense on the liability component is calculated by applying the effective interest rate, being the prevailing market interest rate at the date of issuance for similar non-convertible debt. The difference between this amount and interest paid is added to the carrying amount of the liability component.

Convertible bonds not denominated in the functional currency of the issuing entity or where a cash conversion option exists, are split into two components: a debt component and a component representing the embedded derivative in the convertible bond. The debt component represents a liability for future coupon payments and the redemption of the principal amount. The embedded derivative, a financial liability, represents the value of the option that bondholders have to convert into ordinary

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shares. At inception the embedded derivative is recorded at fair value and the remaining balance, after deducting a share of issue costs, is recorded as the debt component. Subsequently, the debt component is measured at amortised cost and the embedded derivative is measured at fair value at each balance sheet date with the change in the fair value recognised in the income statement. The embedded derivative and the debt component are disclosed together and the current/non-current classification follows the classification of the debt component which is the host contract.

Financial instruments fair valued through profit and loss Held for trading financial assets

Financial assets are classified as held for trading if they have been acquired principally for the purpose of selling in the near term. The change in fair value of trading investments incorporates any dividend and interest earned on the held for trading investments and is accounted for in the income statement.

Derivative financial instruments

In order to hedge its exposure to foreign exchange, interest rate and commodity price risks, the Group enters into forward contracts, option contracts, swap contracts and other derivative financial instruments. The Group does not hold derivative financial instruments for speculative purposes.

Derivative financial instruments are initially recorded at their fair value on the date of the derivative transaction and are re-measured at their fair value at subsequent balance sheet dates. The resultant gains or losses are recognised in the income statement unless these are designated as effective hedging instruments.

Hedge accounting

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

Fair Value Hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in income statement immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. Hedge accounting is discontinued when the Group revokes the hedge relationship, the hedging instrument or hedged item expires or is sold, terminated, or exercised or no longer meets the criteria for hedge accounting.

Cash flow Hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recorded in the consolidated statements of comprehensive income. The gain or loss relating to the ineffective portion is recognised immediately in the income statement. Amounts recognised in the consolidated statement of comprehensive income are transferred to the income statement when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast transaction occurs. When the hedged item is a non-financial asset, the amount recognised in the consolidated statement of comprehensive income is transferred to the carrying amount of the asset when it is recognised. Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated or exercised, or no longer qualifies for

hedge accounting. If a hedged transaction is no longer expected to occur, the net cumulative gain or loss recognised in the consolidated statement of comprehensive income is transferred to the income statement.

Hedge of net investment in foreign operation-

For derivative instruments that are designated and qualify as a hedge of a net investment in a foreign operation, the gain or loss is reported in the consolidated statement of comprehensive income as part of the exchange difference on translation of foreign operations to the extent it is effective. Any ineffective portions of net investment hedges are recognised in the income statement immediately. Under a hedge of a net investment, the cumulative gain or loss remains in the consolidated statement of comprehensive income when the hedging instrument expires or is sold, terminated or exercised, or when the hedge no longer qualifies for hedge accounting or the Group revokes designation of the hedge relationship. The cumulative gain or loss is recognised in the income statement as part of the gain / loss on disposal when the net investment in the foreign operation is disposed.

Derivative financial instruments that do not qualify for hedge accounting are marked to market at the financial position date and gains or losses are recognised in the income statement immediately.

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of host contracts and the host contracts are not carried at fair value with unrealised gains or losses recognised in the income statement.

Impairment:

A financial asset is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount, and the present value of the estimated future cash flows discounted at the original effective interest rate. An impairment loss in respect of an available-for-sale financial asset is calculated by reference to its fair value.

Significant financial assets are tested for impairment on an individual basis. The remaining financial assets are assessed collectively in groups that share similar credit risk characteristics. All impairment losses are recognised in the consolidated statements of income. Any cumulative loss in respect of an available-for-sale financial asset recognised previously in the consolidated statements of comprehensive income is transferred to the consolidated statements of income on recognition of impairment. An impairment loss is reversed, if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost and available-for-sale financial assets that are debt securities, the reversal is recognised in the consolidated statements of income. For available-for-sale financial assets that are equity securities, the change in fair value is recognised directly in the consolidated statement of comprehensive income.

In respect of trade and other receivables, the Group would provide for impairment losses unless the Company is satisfied that no recovery of the amount owing is possible; at that point the

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amounts are considered irrecoverable and are written off against the financial asset directly.

Amendment to IAS 23: Borrowing Cost

The amendment clarifies that an entity considers any borrowings made specifically for the purpose of obtaining a qualifying asset as part of the general borrowings, when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete. The amendment is applicable to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. The amendment is effective from 01 January 2019, with earlier application permitted. The Group has applied the amendment prospectively from the current reporting year i.e. for the borrowing costs incurred on or after 01 April 2018.

Based on the Amendment, the Group has now capitalised certain borrowing costs on general borrowings. This has resulted in capitalisation of interest expense of US\$78 million for the year ended March 31, 2019 and a corresponding increase in depreciation of US\$1 million. The consequent incremental impact on profit for the year net of tax was US\$53 million.

The change did not have any significant impact on the Group's consolidated balance sheet and the consolidated statement of cash flows.

Other Amendments

The adoption of IFRIC 22 "Foreign Currency Transactions and Advance Consideration" and other minor changes to IFRS's applicable for the year ended 31 March 2019 did not have a significant impact on the Group's financial statements.

Standards issued but not yet effective

The following standards/amendments to standards have been issued but are not yet effective up to the date of issuance of the Group's Financial Statements. Except specifically disclosed below, the Group is evaluating the requirements of these standards, improvements and amendments and has not yet determined the impact on the financial statements.

IFRS 16: Lease

IFRS 16, Leases, replaces the existing standard on accounting for leases, IAS 17, with effect from 1 April 2019. This standard introduces a single lessee accounting model and requires a lessee to recognise a 'right of use asset' (ROU) and a corresponding 'lease liability' for all leases. Lease costs will be recognised in the 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 Groups acts as a lessee in lease arrangements mainly involving office premises and other properties. The Group has elected to apply the modified retrospective approach on transition, and accordingly the comparative figures will not be restated. For contracts in place at this date, the Group will continue to apply its existing definition of leases under current accounting standards ("grandfathering"), instead of reassessing whether existing contracts are or contain a lease at the date of application of the new standard. Further, as permitted by IFRS 16, the Group will not bring leases of low value assets or short-term leases with 12 or fewer months remaining on to balance sheet.

Transition to IFRS 16 does not have a material effect on the Group's Financial Statements.

Other recently issued accounting pronouncements and not effective for the year ended March 31, 2019

Standards not yet effective for the financial statements for the year ended March 31, 2019	Effective for annual periods beginning on or after
IFRIC 23 Uncertainty over Income Tax Treatments	1 January 2019
Amendments to IFRS 9 Prepayment features with Negative Compensation	1 January 2019
Amendments to IAS 28 Long term interests in Associates and Joint Ventures	1 January 2019
Annual improvements to IFRS standards 2015-2017 cycle	1 January 2019
Amendments to IAS 19: Plan Amendment, Curtailment or Settlement	1 January 2019
Amendments to References to the Conceptual Framework in IFRS Standards	1 January 2020
Amendment to IFRS 3 Business Combinations	1 January 2020
Amendments to IAS 1 and IAS 8: Definition of Material	1 January 2020
IFRS 17 Insurance Contracts	1 January 2021

The Group is currently evaluating the impact of these pronouncements.

2(c) SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of consolidated financial statements in conformity with IFRS requires management to make judgments, 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) Oil & Gas reserves

Significant technical and commercial judgements are required to determine the Group's estimated oil and natural gas reserves. Oil & 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.

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Net entitlement reserves estimates are subsequently calculated using the Group's current oil price and cost recovery assumptions, in line with the relevant agreements.

Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or oil and gas prices could impact the depletion rates, carrying value of assets (refer note 16) and environmental and restoration provisions.

(ii) 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 indicator exists. 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.

During the financial year ended 31 March 2018, the Group had recognised impairment reversal (net) against exploration and evaluation oil and gas assets. The details of impairment reversal and the assumptions and sensitivities used are disclosed in note 6. Carrying values of exploration and evaluation assets are disclosed in note 16.

(iii) 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 or impairment reversal of previous recorded impairment are identified in accordance with IAS 36.

During the financial year ended 31 March 2018, the Group had recognised impairment reversal of its developing/producing oil and gas assets in Rajasthan. During the current year, an impairment reversal has been recorded in the oil and gas assets in Krishna Godavari (KG) basin. The details of impairment charge/reversal and the assumptions and sensitivities used are disclosed in note 6.

In the current year, the management has reviewed the key assumptions i.e. future production, oil prices, discount to price, Production sharing contract (PSC) life, discount rates, etc. for all of its oil and gas assets. Based on analysis of events that have occurred since then, there did not exist any indication that the assets may be impaired or previously recorded impairment charge may reverse except for the assets in KG basin. Hence, detailed impairment analysis has not been conducted in the current financial year, except for assets in KG basin.

Carrying values of oil & gas assets are disclosed in note 16.

(iv) Mining properties and leases

The carrying value of mining property and leases is arrived at by depreciating the assets over the life of the mine using the unit of production method based on proved and probable reserves. The estimate of reserves is subject to assumptions

relating to life of the mine and may change when new information becomes available. Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or commodity prices could thus impact the carrying values of mining properties and leases and environmental and restoration provisions.

Management performs impairment tests when there is an indication of impairment. The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/assumptions	Basis
Future production	proved and probable reserves, resource estimates (with an appropriate conversion factor) considering the expected permitted mining volumes and, in certain cases, expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Exchange rates	management best estimate benchmarked with external sources of information
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/ CGU

Details of impairment charge/reversal and the assumptions used and carrying values are disclosed in note 6 and note 16 respectively.

(v) Assessment of Impairment of Goa iron ore mines:

Pursuant to an order passed by the Hon'ble Supreme Court of India on 07 February 2018, the second renewal of the mining leases granted by the State of Goa in 2014-15 to all miners including Vedanta were cancelled. Consequentially all mining operations stopped with effect from 16 March 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of The Mines and Minerals (Development and Regulation) (MMDR) Act. Significant uncertainty exists over the resumption of mining at Goa under the current leases. The Group had assessed the recoverable value of all its assets and liabilities associated with existing mining leases which led to a non-cash impairment charge in March 2018. There are no significant changes subsequent to the financial year ended 31 March 2018.

Details of this impairment charge and method of estimating recoverable value is disclosed in note 6.

(vi) Restoration, rehabilitation and environmental costs

Provision is made for costs associated with restoration and rehabilitation of mining sites as soon as the obligation to incur such costs arises. Such restoration and closure costs are typical of extractive industries and they are normally incurred at the end of the life of the mine or oil fields. The costs are estimated on an annual basis on the basis of mine closure plans and the estimated discounted costs of dismantling and removing these facilities and the costs of restoration are capitalised as soon as the obligation to incur such costs arises. The provision for decommissioning oil and gas assets is based on the current estimate of the costs for removing and decommissioning producing facilities, the forecast timing and currency of settlement of decommissioning liabilities and the appropriate discount rate.

Notes to the Financial Statements continued

for the year ended 31 March 2019

A corresponding provision is created on the liability side. The capitalised asset is charged to the consolidated income statement through the depreciation over the life of operation of the asset and the provision is increased each period via unwinding the discount on the provision. Management estimates are based on local legislation and/or other agreements. The actual costs and cash outflows may differ from estimates because of changes in laws and regulations, changes in prices, analysis of site conditions and changes in restoration technology. Details of such provision are set out in note 26.

(vii) Provisions and liabilities

Provisions and liabilities are recognised in the period when it becomes probable that there will be a future outflow of funds resulting from past operations or events that can be reasonably estimated. The timing of recognition requires the application of judgement to existing facts and circumstances which may be subject to change especially when taken in the context of the legal environment in India. The actual cash outflows may take place over many years in the future and hence the carrying amounts of provisions and liabilities are regularly reviewed and adjusted to take into account the changing circumstances and other factors that influence the provisions and liabilities. This is set out in note 26.

(viii) The HZL and BALCO call options

The Group had exercised its call option to acquire the remaining 49% interest in BALCO and 29.5% interest in HZL. The Government of India has however, contested the validity of the options and disputed their valuation performed in terms of the relevant agreements the details of which are set out in note 34 (l). In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Group considers the strike price of the options to be at fair value, accordingly, the value of the option would be nil, and hence, the call options have not been recognised in the financial statements.

(ix) Recoverability of deferred tax and other income tax assets

The Group has carry forward tax losses, unabsorbed depreciation and MAT credit that are available for offset against future taxable profit. Deferred tax assets are recognised only to the extent that it is probable that taxable profit will be available against which the unused tax losses or tax credits can be utilised. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets. This requires assumptions regarding future profitability, 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.

Additionally, the Group has tax receivables on account of refund arising on account of past amalgamation and relating to various tax disputes. The recoverability of these receivables involve application of judgement as to the ultimate outcome of the tax assessment and litigations. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific tax law, in particular India, and the likelihood of settlement.

Management uses in-house and external legal professionals to make informed decision (refer note 11(d)).

The details of MAT assets (recognised and unrecognised) are set out in note 11(c).

(x) Copper operations India

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. 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.

Notes to the Financial Statements continued

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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.

The company has appealed this before the National Green Tribunal (NGT). NGT vide its order on 15 December 2018 has set aside the impugned orders and directed the TNPCB to pass fresh orders for renewal of consent and authorisation to handle hazardous substances, subject to appropriate conditions for protection of environment in accordance with law. The State of Tamil Nadu and TNPCB approached Supreme Court in Civil Appeals on 02 January 2019 challenging the judgment of NGT dated 15 December 2018 and the previously passed judgment of NGT dated 08 August 2013. The Supreme Court vide its judgment dated 18 February 2019 set aside the judgments of NGT dated 15 December 2018 and 08 August 2013 on the basis of maintainability alone.

The company has also filed a writ petition before Madras High Court challenging the various orders passed against the company in 2018 and 2013. The case was heard on 01 March 2019 wherein the company pressed for interim relief for care and maintenance of the plant. The Madras High Court has directed the State of Tamil Nadu and TNPCB to file their counter to our petition for interim relief.

The company is taking appropriate legal measures to address the matters.

Even though there can be no assurance regarding the final outcome of the process and the timing of such process in relation to the approval for the expansion project, 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 and the expansion project and is not expecting any material impairment loss on this account. The carrying value of the assets under operation and under expansion as at 31 March 2019 is US\$290 million and US\$147 million respectively.

The company has carried out an impairment analysis considering the key variables and concluded that there exists no impairment. The company has done an additional sensitivity with a delay in commencement of operations both at the existing and expansion plants by three years and noted that the recoverable amount of the assets would still be in excess of their carrying values.

(xi) Assessment of impairment at Konkola Copper Mines (KCM)

The KCM operations in Zambia have been experiencing lower equipment availability, throughput constraints and other operational challenges for quite some time which led to the production ramp-up, specifically at the Konkola mine, during the year being lower than expected.

Additionally, changes in fiscal regime during the year including imposition of customs duty on imported concentrate has further impacted the Company's ability to procure copper concentrate from outside Zambia, which is pertinent for optimised concentrate blending at smelter and generate enough acid from its dedicated 1,850 tpd acid facility at smelter for its integrated operation at Tail Leaching Plant (TLP).

Due to these factors, the Group has reviewed the carrying value of its property, plant and equipment at KCM as at balance sheet date, estimated the recoverable amounts of the assets and concluded that no impairment was required as the recoverable amount (estimated based on fair value less costs of disposal) exceeded the carrying amount as at 31 March 2019. Refer to 2(c)(i)(iv) for key estimates and assumptions. Additionally, the model assumes as a key assumption, the production ramp-up over a period of next four years through successful implementation of development plans at the Konkola mine and the associated capex and funding assumptions.

The Group has also carried out a sensitivity analysis on key variables like movement in copper prices, discount rate and delayed production ramp-up. Based on the sensitivity analysis carried out for each individual assumption while keeping other assumptions as constant, the recoverable amount is still expected to exceed the carrying value. Mining companies have made representations to the Government for roll back of the additional taxes. In the absence of this, which is a critical requirement from a future investment perspective in key identified areas, coupled with non-achievement of planned production ramp-up, there could be significant risk of impairment.

The carrying value of assets as at 31 March 2019 is US\$1,513 million (31 March 2018: US\$1,576 million).

(xii) PSC Extension Rajasthan Block

On 26 October 2018, the Government of India (GoI), acting through the Directorate General of Hydrocarbons (DGH) has 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 has granted the extension under the Pre-NELP Extension Policy, the applicability whereof to PSC for RJ is sub-judice and pending before the Hon'ble Delhi High Court. To address two of the conditions stated by DGH, Vedanta Limited has taken the following steps:

- Submission of Audited Accounts and End of year statement: Vedanta Limited and one of the joint venture partners have divergent views on the cost oil entitlement and therefore the End of Year statement for the year ended March 31, 2018 and Investment Multiple as at 31 March 18 could not be finalised. To resolve this, the Company has initiated arbitration proceedings against the joint venture partner. Consequentially, profit petroleum pertaining to the said Block for the year ended March 31, 2019 and applicable Investment Multiple calculated based on management's cost oil computation (resulting into Government's share of profit petroleum @ 40% for DA-1 & DA-2 and @20% for DA-3 for FY2019), remains provisional. The computation is after considering relevant independent legal advice.
- Profit Petroleum: DGH has raised a demand for the period upto 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 and retrospective allocation of certain common costs between Development Areas (DAs) of Rajasthan Block. The company believes that it has sufficient as well as reasonable basis (pursuant to PSC provisions & approvals) for having claimed such costs and for allocating common costs between different DAs and has responded to the government accordingly. Group's view is also supported by an independent legal opinion.

Notes to the Financial Statements continued

for the year ended 31 March 2019

Pursuant to the aforesaid approval of 26 October 2018, the Group has recomputed its reserves till 2030 and has reclassified exploration costs of US\$1,994 million to property plant and equipment. This has led to a reduction in depletion charge of US\$126 million for the period from 26 October 2018 till 31 March 2019.

Ravva Block

The Government of India has granted its approval for a ten-year extension of PSC for Ravva Block with effect from 28 October 2019, subject to certain conditions. The extension has been granted with a 10% increase in GOI share of profit oil. Management has reviewed the conditions and is confident of fulfilling or disposing of such conditions.

The Group does not expect any material adjustment to the financial statements on account of the aforesaid matters.

II. Significant Judgements:

(i) Assessment of IFRIC 4- 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 IAS 17 "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 33.

(ii) Contingencies

In the normal course of business, contingent liabilities may arise from litigation, taxation and other claims against the Group. A tax provision is recognised when the Group has a present obligation as a result of past events, and it is probable that the Group will be required to settle that obligation.

Where it is management's assessment that the outcome cannot be reliably quantified or is uncertain the claims are disclosed as contingent liabilities unless the likelihood of an adverse outcome is remote. Such liabilities are disclosed in the notes but are not provided for in the financial statements.

When considering the classification of a legal or tax cases as probable, possible or remote there is judgement involved. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of

country specific applicable law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision.

Although there can be no assurance regarding the final outcome of the legal proceedings, the Group does not expect them to have a materially adverse impact on the Group's financial position or profitability. These are set out in note 33.

(iii) Revenue recognition and receivable recovery in relation to the power division

In certain cases, the Group's power customers are disputing various contractual provisions of Power Purchase Agreements (PPA). Significant judgement is required in both assessing the tariff to be charged under the PPA in accordance with IFRS 15 and to assess the recoverability of withheld revenue currently accounted for as receivables.

In assessing this critical judgment management considered favorable external legal opinions the Group has obtained in relation to the claims and favorable court judgements in the related matter. In addition the fact that the contracts are with government owned companies implies the credit risk is low. Refer note 18.

(iv) Special items

Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior periods. Also, tax charges related to Special items and certain one-time tax effects are considered Special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with IFRS.

The determination as to which items should be disclosed separately requires a degree of judgement. The details of special items is set out in note 6.

3. BUSINESS COMBINATION AND OTHERS

a) Electrosteel Steels Limited

On 4 June 2018, the Group, through its subsidiary Vedanta Star Limited (VSL) acquired management control over Electrosteel Steels Limited (ESL) as the previous Board of Directors of ESL was reconstituted on that date. Further, on 15 June 2018, pursuant to the allotment of shares to VSL, the Group holds 90% of the paid-up share capital of ESL through VSL. The acquisition will complement the Group's existing Iron Ore business as the vertical integration of steel manufacturing capabilities has the potential to generate significant efficiencies. ESL was admitted under corporate insolvency resolution process in terms of the Insolvency and Bankruptcy Code, 2016 of India. The financial results of ESL from the date of acquisition to 31 March 2019 have been included in the Consolidated Financial Statements of the Group.

Notes to the Financial Statements continued

for the year ended 31 March 2019

The fair value of the identifiable assets and liabilities of ESL as at the date of the acquisition were as follows:

Particulars	(US\$ million) Fair Value
Property, Plant and Equipment	718
Non-current tax assets	1
Other non-current assets	8
Non-current assets	727
Inventories	122
Trade and other receivables	57
Short-term investments	46
Cash and cash equivalents	36
Current Assets	261
Total Assets (A)	988
Liabilities	
Borrowings	1
Trade and other payables	168
Provisions (Non-Current)	2
Total Liabilities (B)	171
Net Assets (C=A-B)	817
Satisfied by:	
Total Cash Consideration (D)	788
Non-Controlling interest on acquisition (10% of net assets after adjustment of borrowings from immediate parent (VSL) of US\$527 million) (E)	29
Bargain Gain/Goodwill (C-D-E)	-
Acquisition costs recognised in Consolidated Income Statement	(3)

Since the date of acquisition, ESL has contributed US\$600 million and US\$40 million to the Group revenue and profit before taxation respectively for the year ended 31 March 2019. If ESL had been acquired at the beginning of the year, the Group revenue would have been US\$14,127 million and the profit before taxation of the Group would have been US\$1,092 million.

The gross carrying amount of trade and other receivables equals the fair value of trade and other receivables. None of the trade and other receivables was impaired and the full contractual amounts were expected to be realised. Property has been valued using the Market approach - Sales comparison method (SCM). This method models the behavior of the market by comparing with similar properties that have been recently sold/ rented or for which offers to purchase/ rentals have been made. Plant and equipment have been valued using the cost approach - Depreciated replacement cost (DRC) method. For estimating DRC, gross current replacement cost is depreciated in order to reflect the value attributable to the remaining portion of the total economic life of the plant and equipment. The method takes into account the age, condition, depreciation, obsolescence (economic and physical) and other relevant factors, including residual value at the end of the plant and equipment's economic life.

Non-controlling interest has been measured at the non-controlling interest's proportionate share of ESL's identifiable net assets.

(b) Avanstrate Inc.

(a) On 28 December 2017, the Group acquired 51.63% equity stake in AvanStrate Inc. (ASI) for a cash consideration of JPY 1 million (\$ 0.01 million) and acquired debts for JPY 17,058 million (US\$151 million). Additionally, a loan of JPY 815 million (\$7 million) was extended to ASI. ASI is involved in manufacturing of glass substrate. Provisional fair values that were determined as at 31 March 2018 for consolidation were finalised during the current year.

As per the shareholding agreement (SHA) entered with the other majority shareholder holding 46.6% in ASI, the Group has call option, conversion option to convert part of its debt given to ASI into equity of ASI as well as it has issued put option to the other majority shareholder. These are exercisable as per the terms mentioned in the SHA.

The final fair value of the identifiable assets and liabilities of ASI as adjusted for measurement period adjustments as at the date of the acquisition were as follows. The comparative year amounts have been restated accordingly.

Notes to the Financial Statements continued

for the year ended 31 March 2019

(US\$ million)

Particulars	Provisional Fair Value	Fair Value Adjustments	Fair Value at Acquisition
Property, Plant and Equipment	242	-	242
Intangible assets	32	-	32
Deferred tax assets	20	-	20
Other non-current assets	6	-	6
Non-Current Assets	300	-	300
Inventories	22	-	22
Trade and other receivables	36	-	36
Cash and cash equivalents	24	-	24
Current Assets	82	-	82
Total Assets (A)	382	-	382
Borrowings (excluding borrowings from immediate parent)	99	-	99
Deferred tax liabilities	78	6	84
Trade and other payables	23	-	23
Total Liabilities (B)	200	6	206
Net Assets (C=A-B)	182	(6)	176
Satisfied by:			
Cash Consideration paid for 51.63% stake & Debt acquired	158	-	158
Less: Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests	-	(17)	(17)
Total Purchase Consideration (D)	158	(17)	141
Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of US\$141 million) (E)	12	5	17
Bargain Gain (C-D-E)	12	6	18
Acquisition costs recognised in Consolidated Income Statement	(7)	-	(7)

The gross carrying amount of trade and other receivables equals the fair value of trade and other receivables. None of the trade and other receivables was impaired and the full contractual amounts were expected to be realised. Property, plant and equipment have been valued using cost approach - cost of reproduction new (CRN) method. For estimating CRN, appropriate indices were used to develop trend factors that have been applied on the acquisition/historical costs of the different assets over the period during which the asset has been commissioned or in other words life spent. The estimated CRN was further adjusted for applicable physical deterioration to arrive at fair value. The physical deterioration was based on the estimated age and remaining useful life. Fair value of assumed debt was determined using yield-method, wherein, the expected cash flows including interest component and principal repayments have been discounted at an appropriate market interest rate.

Non-controlling interest has been measured at the non-controlling interest's proportionate share of ASI's identifiable net assets.

(c) Acquisition of new hydrocarbon blocks

In August, 2018, Vedanta Limited was awarded 41 hydrocarbon blocks out of 55 blocks auctioned under the open acreage licensing policy (OALP) by Government of India (GOI). The blocks awarded to Vedanta Limited comprise of 33 onshore and 8 offshore blocks. Vedanta Limited will share a specified proportion of the net revenue from each block with GOI and has entered into 41 separate revenue sharing contracts (RSC) on 1 October 2018.

The bid cost of US\$551 million represents Vedanta Limited's total committed capital expenditure on the blocks for the committed work programs during the exploration phase. Vedanta Limited has provided bank guarantees for minimum work programme commitments amounting to US\$309 million for the 41 exploration blocks. These have been disclosed in note 33.

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for the year ended 31 March 2019

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
- Copper-Zambia
- 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.

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\$10 million for the year ended 31 March 2019 (31 March 2018: US\$21 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 2019 and 31 March 2018. Items after operating profit are not allocated by segment.

Notes to the Financial Statements continued

for the year ended 31 March 2019

(a) Reportable segments

Year ended 31 March 2019

(US\$ million)

	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India*/Australia	Copper-Zambia	Aluminium	Power	Others	Elimination	Total operations
REVENUE											
Sales to external customers	2,955	392	1,892	415	1,537	1,025	4,180	924	711	-	14,031
Inter-segment sales	-	-	-	1	0	60	3	10	7	(81)	-
Segment revenue**	2,955	392	1,892	416	1,537	1,085	4,183	934	718	(81)	14,031
Segment Result											
EBITDA ⁽¹⁾	1,516	100	1,100	90	(36)	(63)	316	219	151	-	3,393
Depreciation and amortisation ⁽²⁾	(268)	(61)	(611)	(35)	(21)	(102)	(240)	(86)	(58)	-	(1,482)
Operating profit / (loss) before special items	1,248	39	489	55	(57)	(165)	76	133	93	-	1,911
Investment revenue											480
Finance costs											(1,267)
Other gains and (losses) [net]											(75)
Special items											47
PROFIT BEFORE TAXATION											1,096
Segments assets											
Financial asset investments	2,704	872	3,983	547	1,074	1,844	7,432	2,635	1,270	-	22,361
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											
Borrowings	733	197	1,421	190	585	578	2,909	243	207	-	7,063
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

Notes to the Financial Statements continued

for the year ended 31 March 2019

Year ended 31 March 2018

(US\$ million)

	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India*/Australia	Copper-Zambia	Aluminium	Power	Others	Elimination	Total operations
REVENUE											
Sales to external customers	3,354	535	1,480	481	3,828	1,181	3,541	854	40	-	15,294
Inter-segment sales	-	-	-	4	0	102	4	23	2	(135)	-
Segment revenue**	3,354	535	1,480	485	3,828	1,283	3,545	877	42	(135)	15,294
Segment Result											
EBITDA ⁽¹⁾	1,902	220	849	48	162	73	414	258	37	-	3,963
Depreciation and amortisation ⁽²⁾	(233)	(28)	(461)	(69)	(25)	(112)	(257)	(75)	(11)	-	(1,271)
Operating profit/(loss) before special items	1,669	192	388	(21)	137	(39)	157	183	26	-	2,692
Investment revenue											465
Finance costs											(1,239)
Other gains and (losses) [net]											(16)
Special items											586
PROFIT BEFORE TAXATION											2,488
Assets											
Segments assets	2,575	862	3,706	613	1,447	2,017	7,440	2,950	425	-	22,035
Financial asset investments											25
Deferred tax assets											917
Short-term investments											4,808
Cash and cash equivalents											798
Tax assets											523
Others											132
Total Assets											29,238
Liabilities											
Segment liabilities	638	170	851	250	1,368	758	2,061	268	30	-	6,394
Borrowings											15,194
Current tax liabilities											54
Deferred tax liabilities											749
Others											307
Total Liabilities											22,698
Other segment information											
Additions to property, plant and equipment, exploration and evaluation assets and intangible assets***	473	255	163	22	84	27	221	11	280		1,536
Impairment reversal/(charge) ⁽³⁾	-	-	1,448	(759)	-	-	-	-	-	-	689

(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).

* The annual consent to operate (CTO) under the Air and Water Acts for copper smelters in India was rejected by the State Pollution Control Board on 09 April 2018 for want of further clarification and consequently the operations have presently been suspended. The matter is presently pending in High Court (refer note 2(c)(i)(x)).

** Export incentive has been reclassified from 'segment revenue' to 'other operating income'. Refer Note 1 (b)

*** Including acquisition through business combination

Notes to the Financial Statements continued

for the year ended 31 March 2019

(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 2019	Year ended 31 March 2018
India	8,643	8,212
China	1,089	2,181
UAE	164	613
Malaysia	696	826
Others	3,439	3,462
Total	14,031	15,294

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 2019	As at 31 March 2018
India	16,094	16,045
Zambia	1,534	1,624
Namibia	144	171
South Africa	605	570
Taiwan	176	188
Others	147	130
Total	18,700	18,728

Information about major customer

No customer contributed 10% or more to the Group's revenue during the year ended 31 March 2019 and 31 March 2018.

Disaggregation of revenue

Below table summarises the disaggregated revenue from contracts with customers:

	(US\$ million)
Particulars	Year ended 31 March 2019
Zinc Metal	2,437
Lead Metal	563
Silver Bars	367
Oil	1,809
Gas	75
Iron ore	99
Pig Iron	294
Metallurgical coke	8
Copper Products	2,353
Aluminium Products	4,017
Power	682
Steel Products	600
Others	624
Revenue from contracts with customers	13,928
Revenue from contingent rents (refer note 33E(ii))	242
Gains/(losses) on provisionally priced contracts (refer note 5)	(139)
Total Revenue	14,031

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for the year ended 31 March 2019

5. TOTAL REVENUE

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Sale of products (including excise duty)	13,758	15,188
Less: Excise duty	-	(164)
Sale of products (net of excise duty)	13,758	15,024
Sale of services	31	31
Revenue from contingent rents (refer note 33E(ii))	242	239
Total Revenue	14,031	15,294

Revenue from sale of products and from sale of services for the year ended March 31, 2019 comprises of revenue from contracts with customers of US\$13,928 million and a net loss on mark-to-market of US\$139 million on account of gains/ losses relating to sales that were provisionally priced as at 31 March 2018 with the final price settled in the current year, gains/ losses relating to sales fully priced during the year, and marked to market gains/ losses relating to sales that were provisionally priced as at 31 March 2019. It further includes US\$668 million for which contract liabilities existed at the beginning of the year.

Revenue from sale of products are recorded at a point in time and those from sale of services and are recognised over a period of time.

6. SPECIAL ITEMS

	Year ended 31 March 2019			Year ended 31 March 2018		
	Special items	Tax effect of Special items	Special items after tax	Special items	Tax effect of Special items	Special items after tax
Reversal of provision of DMF ¹	-	-	-	46	(16)	30
Gratuity- change in limits ²	-	-	-	(13)	3	(10)
Gross profit special items	-	-	-	33	(13)	20
Impairment reversal of oil and gas assets ³	38	(13)	25	1,448	(570)	878
Impairment of iron ore assets ⁴	-	-	-	(759)	225	(534)
Total impairment reversal/ (charge) (net)	38	(13)	25	689	(345)	344
Loss on unusable assets under construction- Aluminium ⁵	-	-	-	(39)	14	(25)
Operating special items	38	(13)	25	683	(344)	339
Financing special items ⁶	9	(3)	6	(108)	6	(102)
Bargain gain net of acquisition cost ⁷	-	-	-	11	-	11
Special items	47	(16)	31	586	(338)	248

1. During the year ended 31 March 2018, the Group had recognised the reversal of provisions of US\$46 million relating to contribution to the District Mineral Foundation. Effective 12 January 2015, the Mines and Minerals Development and Regulation Act, 1957 prescribed the establishment of the District Mineral Foundation (DMF) in any district affected by mining related operations. The provisions required contribution of an amount equivalent to a percentage of royalty not exceeding one-third thereof, as may be prescribed by the Central Government of India. The rates were prescribed on 17 September 2015 for minerals other than coal, lignite and sand and on 20 October 2015 for coal, lignite and sand as amended on 31 August 2016. The Supreme Court order dated 13 October 2017 had determined the prospective applicability of the contributions from the date of the notification fixing such rate of contribution and hence DMF would be effective;

a) for minerals other than coal, lignite and sand from the date when the rates were prescribed by the Central Government; and;

b) for coal, lignite and sand, DMF would be effective from the date when the rates were prescribed by the Central Government of India or from the date on which the DMF was established by the State Government by a notification, whichever is later.

Pursuant to the aforesaid order, the Group had recognised a reversal of DMF provision for the period for which DMF is no longer leviable.

2. The Indian subsidiaries of the Company participate in a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. In a few of these companies, the maximum liability was capped at the statutory

prescribed limit of INR 1 million (US\$0.02 million). Consequent to the increase in the statutory limit to INR 2 million (US\$0.03 million), the increase in provision representing past service cost had been recognised as a special item.

3. During the year, the Group has recognised net impairment reversal of US\$38 million in respect of Oil & Gas Block KG-ONN-2003/1 (CGU) on booking of commercial reserves and subsequent commencement of commercial production. The impairment reversal has been recorded against Oil & Gas producing facilities. The recoverable amount of the Group's share in KG-ONN-2003/1 (CGU) was determined to be US\$30 million.

The recoverable amount of the KG-ONN-2003/1 CGU was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US \$ 62 per barrel for the year ended March 31, 2019 and scales upto long term nominal price of US \$ 65 per barrel by year ended March 31, 2022 derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2.5%

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for the year ended 31 March 2019

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.

During the year ended 31 March 2018, the Group had recognised net impairment reversal of US\$1,448 million on its assets in the oil and gas segment comprising of:

a) reversal of previously recorded impairment charge of US\$1,465 million relating to Rajasthan oil and gas block ('CGU') mainly following the progress on key Growth Projects expected to result in the enhanced recovery of resources in a commercially viable manner leading to a higher forecast of oil production and adoption of an integrated development strategy for various projects leading to savings in cost. Of this reversal, US\$500 million reversal has been recorded against oil and gas properties and US\$965 million reversal has been recorded against exploratory and evaluation assets. The recoverable amount of the CGU, US\$2,514 million, 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 current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal discounted cash flow 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 is based on assumption for oil price of US\$62 per barrel for FY2019 and scales up to the long term nominal price of US\$65 per barrel over the next three years thereafter 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 10.1% derived from the post-tax weighted average cost of capital after factoring in the risks ascribed to PSC extension including successful implementation of key Growth Projects. Based on the sensitivities carried out by the Group, change in crude price assumptions by US\$1/bbl and changes to discount rate by 0.5% would lead to a change in recoverable value by US\$64 million and US\$53 million respectively.

b) Impairment charge of US\$17 million representing the carrying value of assets relating to exploratory wells in Block PR-OSN-2004/1 which was relinquished during the year ended 31 March 2018.

4. During the year ended 31 March 2018, the Group had recognised an impairment charge of US\$759 million as against the net carrying value of US\$865 million on its iron ore assets in Goa in the Iron Ore segment. Pursuant to an order passed by the Hon'ble Supreme Court of India

on 7 February 2018, the second renewal of the mining leases granted by the State of Goa in 2014-15 to all miners including Vedanta were cancelled. Consequently, all mining operations stopped with effect from 16 March 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of The Mines and Minerals (Development and Regulation) (MMDR) Act.

Significant uncertainty exists over the resumption of mining at Goa under the current leases. The Group had assessed the recoverable value of all its assets and liabilities associated with existing mining leases which led to a non-cash impairment charge in March 2018. The recoverable value of the mining reserve (grouped under 'mining property and leases') was assessed as Nil, as there is no reasonable certainty towards re-award of these mining leases. Similarly, upon consideration of past precedence, the provision for restoration and rehabilitation with respect to these mines has been assessed as Nil, as the Group believes that the same would be carried out by the future successful bidder at the time of mine closure. The net recoverable value of other assets and liabilities was assessed at US\$114 million based on the fair value less cost of sales methodology using a Level 3 valuation technique. The fair value was determined based on the estimated selling price of the individual assets using depreciated replacement cost method.

5. During the year ended 31 March 2018, the Group had recognised a loss of US\$39 million relating to certain items of capital work-in-progress at the aluminium operations, which were no longer expected to be used.

6. During the year ended 31 March 2019, the Group has partly reversed the provision for interest of US\$9 million for dues towards SSNP pursuant to the Honourable Supreme Court of India order. A charge of US\$17 million in this matter was recognised pursuant to an unfavourable arbitration order during the year ended 31 March 2018.

Additionally during the year ended 31 March 2018, the Group had recognised US\$91 million loss as financing special items arising on the bond buybacks completed during the year.

7. On 28 December 2017, the Group through its wholly owned subsidiary, acquired 51.6% equity stake in AvanStrate Inc. (ASI) for a cash consideration of JPY 1 million (\$ 0.01 million) and acquired debts for JPY 17,058 million (US\$151 million) and incurred acquisition expenses of US\$7 million. Additionally, a loan of JPY 815 million (US\$7 million) was extended to ASI. The transaction was accounted for on a provisional basis in the financial statements for the year ended 31 March 2018 under IFRS 3 and the resultant bargain purchase gain, net of US\$7 million of acquisition expenses, was recorded in the consolidated income statement. Provisional fair values that were determined as at 31 March 2018 for consolidation were finalised during the current year and consequentially amounts for the year ended March 31, 2018 have been restated (Refer note 3(b)).

7. INVESTMENT REVENUE

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Fair value gain on financial assets held for trading/ fair value through profit or loss (FVTPL) ⁽¹⁾	265	258
Interest Income:		
Interest income- financial assets held for trading/FVTPL	129	108
Interest income- bank deposits at amortised cost	23	21
Interest income- loans and receivables at amortised cost	31	38
Interest income- others	17	34
Dividend Income:		
Dividend Income- available-for-sale investments/investments held at FVOCI	0	0
Dividend income- financial assets held for trading/ FVTPL	6	4
Foreign exchange gain (net)	27	2
Net loss arising on qualifying hedges and non-qualifying hedges	(18)	-
Total	480	465

(1) Includes mark to market gain of US\$137 mn relating to structured investment. (Refer note 35)

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for the year ended 31 March 2019

8. FINANCE COSTS

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Interest expense – financial liabilities at amortised cost	1,295	1,204
Other finance costs (including bank charges)	69	68
Total interest cost	1,364	1,272
Unwinding of discount on provisions (note 26)	13	13
Net interest on defined benefit arrangements	9	8
Special items (note 6)	(9)	108
Capitalisation of finance costs/borrowing costs (note 16)	(119)	(54)
Total	1,258	1,347

All borrowing costs are capitalised using rates based on specific borrowings and general borrowings with the interest rate of 8.0% per annum for the year ended 31 March 2019.

9. OTHER GAINS AND (LOSSES) (NET)

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Foreign exchange loss (net)	(65)	(11)
Change in fair value of financial liabilities measured at fair value	(1)	(1)
Net (loss)/ gain arising on qualifying hedges and non-qualifying hedges	(9)	(4)
Bargain gain net of acquisition cost (note 6)	-	11
Total	(75)	(5)

10(a). PROFIT/ (LOSS) FOR THE YEAR HAS BEEN STATED AFTER CHARGING/ (CREDITING):

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Depreciation & amortisation	1,482	1,271
Costs of inventories recognised as an expense	4,182	5,533
Auditor's remuneration for audit services (note 37)	3	3
Research and development	1	1
Net Loss/ (profit) on disposal of Property, plant and equipment	9	(1)
Provision for receivables*	(0)	76
Impairment of assets	-	693
Impairment reversal/(charge) of oil & gas assets	(38)	(1,448)
Employee costs (note 28)	577	540

* Includes provision of US\$66 million relating to iron ore business recognised as special items during the year ended 31 March 2018. (Refer note 6).

10(b). EXCHANGE GAIN/ (LOSS) RECOGNISED IN THE CONSOLIDATED INCOME STATEMENT:

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Cost of sales	(79)	(40)
Investment revenue	9	2
Other gains and losses	(74)	(15)
Total	(144)	(53)

Notes to the Financial Statements continued

for the year ended 31 March 2019

11. TAX

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

(US\$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Current tax:		
Current tax on profit for the year	554	516
Charge/(credit) in respect of current tax for earlier years	(1)	6
Total current tax (a)	553	522
Deferred tax		
Origination and reversal of temporary differences	103	140
Charge in respect of deferred tax for earlier years	-	13
Charge in respect of Special items (note 6)	16	338
Total deferred tax (b)	119	491
Net tax expense ((a)+(b))	672	1,013
Profit/ (loss) before taxation	1,096	2,488
Effective tax rate (%)	61.3%	40.7%

Tax expense

(US\$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Tax effect of special items (Note 6)	16	338
Tax expense – others	656	675
Net tax expense	672	1,013

(b) A reconciliation of income tax expense applicable to profit/ (loss) before taxation at the Indian statutory income tax rate to income tax expense/ (credit) at the Group's effective income tax rate for the year ended 31 March 2019 is 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 2019	Year ended 31 March 2018
Profit before taxation	1,096	2,488
Indian statutory income tax rate	34.944%	34.608%
Tax at statutory income tax rate	383	861
Disallowable expenses	81	21
Non-taxable income	(27)	(37)
Tax holidays and similar exemptions	(116)	(158)
Effect of tax rates differences of subsidiaries operating in other jurisdictions	(22)	73
Dividend distribution tax	158	63
Unrecognised tax assets (net)*	204	165
Changes in deferred tax balances due to change in income tax rate from 34.608% to 34.944%	-	12
Capital Gains subject to lower tax rate	(2)	(12)
Charge/(credit) in respect of previous years	(1)	19
Others	14	6
Total	672	1,013

* Deferred tax charge for the year ended 31 March 2019 includes US\$121 million (31 March 2018: US\$ Nil million) representing reversal of deferred tax asset created on carry forward losses not expected to be utilised during the statutory permitted period.

Notes to the Financial Statements continued

for the year ended 31 March 2019

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 a tax holiday. Such a 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').

The Group has such types of undertakings at Haridwar and Pantnagar, which are part of Hindustan Zinc Limited (Zinc India). FY2018 was the last year of eligibility for deduction for Haridwar unit. In the current year, Pantnagar 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 a tax holiday. Such a 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

For the year ended March 31, 2019:

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. 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\$116 million for the year ended 31 March 2019 (31 March 2018: US\$158 million).

(c) Deferred tax assets/liabilities

The Group has accrued significant amounts of deferred tax. The majority of the deferred tax liability represents accelerated tax relief for the depreciation of property, plant and equipment, the depreciation of mining reserves and the fair value uplifts created on acquisitions, net of losses carried forward by Vedanta Limited (post the re-organisation) and unused tax credits in the form of MAT credits carried forward in Vedanta Limited, Cairn Energy Hydrocarbons Limited and Hindustan Zinc Limited. Significant components of Deferred tax (assets) and liabilities recognised in the consolidated balance sheet are as follows:

(US\$ million)

Significant components of deferred tax liabilities/(assets)	Opening balance as at 01 April 2018	Charged/(credited) to Income Statement	Charged/(credited) to other comprehensive income	Deferred tax on acquisition through business combination	Exchange difference transferred to translation of foreign operation	Closing balance as at 31 March 2019
Property, plant and equipment, Exploration and Evaluation and other intangible assets	2,484	113	-	-	(155)	2,442
Unabsorbed depreciation/business loss	(914)	(78)	-	-	113	(879)
Voluntary retirement scheme	(6)	-	-	-	1	(5)
Employee benefits	(27)	-	(4)	-	14	(17)
Fair value of derivative assets/ liabilities	(9)	6	(2)	-	(3)	(8)
Fair valuation of other assets/liabilities	145	(25)	-	-	-	120
MAT credits entitlement	(1,705)	110	-	-	103	(1,492)
Other temporary differences	(136)	(7)	-	-	(20)	(163)
Total	(168)	119	(6)	-	53	(2)

Notes to the Financial Statements continued

for the year ended 31 March 2019

For the year ended March 31, 2018:

(US\$ million)

Significant components of deferred tax liabilities/(assets)	Opening balance as at 01 April 2018	Charged/(credited) to Income Statement	Charged/(credited) to other comprehensive income	Deferred tax on acquisition through business combination	Exchange difference transferred to translation of foreign operation	Closing balance as at 31 March 2019
Property, plant and equipment, Exploration and Evaluation and other intangible assets	2,179	298	-	(3)	10	2,484
Unabsorbed depreciation/business loss	(989)	73	-	-	2	(914)
Voluntary retirement scheme	(7)	1	-	-	0	(6)
Employee benefits	(28)	2	(1)	-	(0)	(27)
Fair value of derivative assets/ liabilities	(5)	1	(5)	-	0	(9)
Fair valuation of other assets/liabilities	177	(97)	-	61	4	145
MAT credits entitlement	(1,916)	200	-	-	11	(1,705)
Other temporary differences	(151)	13	-	6	(4)	(136)
Total	(740)	491	(6)	64	23	(168)

Deferred tax assets and liabilities have been offset where they arise in the same taxing jurisdiction with a legal right to offset but not otherwise. Accordingly the net deferred tax (assets)/liability has been disclosed in the Balance Sheet as follows :

(US\$ million)

	As at 31 March 2019	As at 31 March 2018
Deferred tax assets	(778)	(917)
Deferred tax liabilities	776	749
Net Deferred tax (assets) / Liabilities	(2)	(168)

Recognition of deferred tax assets on MAT credits entitlement is based on the respective legal entity's present estimates and business plans as per which the same is expected to be utilised within the stipulated fifteen year period from the date of origination.

tax losses have been recognised to the extent of deferred tax liabilities on taxable temporary differences available. It is expected that any reversals of the deferred tax liability would be offset against the reversal of the deferred tax asset at respective entities.

Deferred tax assets in the Group have been recognised to the extent there are sufficient taxable temporary differences relating to the same taxation authority and the same taxable entity which are expected to reverse. For certain components of the Group, deferred tax assets on carry forward unused

Unused tax losses / unused tax credit for which no deferred tax asset has been recognised amount to US\$4,129 million and US\$3,533 million as at 31 March 2019 and 31 March 2018 respectively.

As at 31 March 2019

(US\$ million)

Unutilised tax losses/ Unused tax credit Particulars	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total
Unutilised business losses	389	812	88	1,679	2,968
Unabsorbed depreciation	-	-	-	975	975
Unutilised R&D credit	-	-	-	1	1
Unabsorbed interest allowance*	-	-	-	185	185
Total	389	812	88	2,840	4,129

As at 31 March 2018

(US\$ million)

Unutilised tax losses/ Unused tax credit Particulars	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total
Unutilised business losses	615	866	2	1,711	3,194
Unabsorbed depreciation	-	-	-	25	25
Unutilised Capital losses	19	22	-	-	41
Unutilised R&D credit	-	-	-	1	1
Unabsorbed interest allowance*	-	-	-	272	272
Total	634	888	2	2,009	3,533

* As per UK's corporate interest restriction rules, the disallowed interest expense for any year can be carried forward and claimed in future years for unlimited life subject to specified conditions

Notes to the Financial Statements continued

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No deferred tax assets has been recognised on these unused tax losses/ unused tax credit as there is no evidence that sufficient taxable profit will be available in future against which these can be utilised by the respective entities.

Additionally, the Group has not recognised MAT credit for one of its components, details of which are as under:

Year of Expiry	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
2022	15	15
2023	2	2
2024	7	8
2025	7	8
2026	15	15
2027	9	10
2028	1	1
2029	1	1
	57	60

The Group has not recognised any deferred tax liabilities for taxes that would be payable on the Group's share in unremitted earnings of certain of its subsidiaries because the Group controls when the liability will be incurred and it is probable that the liability will not be incurred in the foreseeable future. The amount of unremitted earnings are US\$4,260 million and US\$4,830 million as at 31 March 2019 and 31 March 2018 respectively.

(d) Non-current tax assets

Non-current tax assets of US\$504 million (31 March, 2018: US\$521 million) mainly represents income tax receivable from Indian tax authorities by Vedanta Limited relating to the refund arising consequent to the Scheme of Amalgamation

& Arrangement made effective in August 2013 pursuant to approval by the jurisdiction High Court and receivables relating to matters in tax disputes in Group companies including tax holiday claim.

12. UNDERLYING ATTRIBUTABLE PROFIT/(LOSS) FOR THE YEAR

Underlying earnings is an alternative earnings measure, which the management considers to be a useful additional measure of the Group's performance. The Group's Underlying profit/ loss is the profit/ loss for the year after adding back special items, other losses/(gains) [net] (note 9) and their resultant tax (including taxes classified as special items) and non-controlling interest effects. This is a Non-IFRS measure.

	Note	(US\$ million)	
		Year ended 31 March 2019	Year ended 31 March 2018
(Loss)/ Profit for the year attributable to equity holders of the parent		(237)	239
Special items	6	(47)	(586)
Other gains/(losses) [net]	9	75	16
Tax and non-controlling interest effect of special items (including taxes classified as special items) and other gains/ (losses) [net]		(17)	497
Underlying attributable (loss)/ profit for the year		(226)	166

13. DIVIDENDS

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Amounts recognised as distributions to equity holders:		
Equity dividends on ordinary shares:		
Final dividend for 2017-18: 41.0 US cents per share (2016-17: 35.0 US cents per share)*	114	97
Interim dividend paid during the year: NIL US cents per share (2017-18: 24.0 US cents per share)	-	68
Proposed for approval by shareholders		
Equity dividends on ordinary shares:		
Final dividend for 2018-19: 65.0 US cents per share (2017-18: 41.0 US cents per share)	185	114

* This includes US\$1 million (31 March 2018: US\$1 million) dividend on equity shares held by a separate investment trust holding treasury shares of the Company.

14. GOODWILL

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
At 01 April	12	17
Impairment during the year	-	(5)
At 31 March	12	12

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for the year ended 31 March 2019

Goodwill is allocated for impairment testing purposes to the following CGU's.

- US\$12 million Copper India (As at 31 March 2019 & 31 March 2018)
- US\$5 million - Impaired during the year ended 31 March 2018

The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired.

The Company has undertaken an impairment review of goodwill of US\$12 million as at 31 March 2019. The carrying amount of goodwill allocated to the relevant cash generating unit is considered to be insignificant in comparison with the

total carrying value of the cash generating unit. The carrying amount of goodwill was evaluated using the higher of Fair value less cost of disposal ('FVLCD') or value in use based on discounted future cash flows of the cash generating unit to which the goodwill pertains and comparing this to the total carrying value of the relevant cash generating units. It was determined that the carrying amount of goodwill is not impaired and nor was impairment indicated following a reasonably possible change in a key assumption.

15. INTANGIBLE ASSETS

Intangible assets include Port concession rights to operate a general cargo berth for handling coal at the outer harbour of the Visakhapatnam port on the east coast of India, software licences, technological know-how, acquired brand and others.

(US\$ million)

	Port concession rights ⁽¹⁾	Software license	Others ⁽²⁾	Total
Cost				
As at 1 April 2017	93	18	10	121
Addition	0	1	0	1
Disposals/Adjustments	(0)	(1)	-	(1)
Acquisition through business combination (note 3(b))	-	0	32	32
Exchange differences	(1)	0	2	1
As at 1 April 2018	92	18	44	154
Addition	0	1	0	1
Disposals/Adjustments	(0)	(0)	-	(0)
Acquisition through business combination (note 3(a))	-	0	-	0
Exchange differences	(5)	(2)	(2)	(9)
As at 31 March 2019	87	17	42	146
Accumulated amortisation				
As at 1 April 2017	14	10	1	25
Charge for the year	3	4	0	7
Disposals/Adjustments	-	(1)	-	(1)
Exchange differences	(0)	0	(0)	(0)
As at 1 April 2018	17	13	1	31
Charge for the year	3	3	4	10
Disposals/Adjustments	(0)	0	-	(0)
Exchange differences	(1)	(1)	(1)	(3)
As at 31 March 2019	19	15	4	38
Net book value				
As at 1 April 2017	79	8	9	96
As at 1 April 2018	75	5	43	123
As at 31 March 2019	68	2	38	108

(1) Vizag General Cargo Berth Private Limited (VGCB), a special purpose vehicle, was incorporated for the coal berth mechanisation and upgrades at Visakhapatnam port. VGCB is wholly owned by Vedanta Limited. The project is to be carried out on a design, build, finance, operate, transfer basis and the concession agreement between Visakhapatnam Port and VGCB was signed in June 2010. In October 2010, VGCB was awarded with the concession after fulfilling conditions stipulated as a precedent to the concession agreement. Visakhapatnam Port has provided, in lieu of license fee an exclusive license to VGCB for designing, engineering, financing, constructing, equipping, operating, maintaining, and replacing the project/project facilities and services. The concession period is 30 years from the date of the award of the concession. The capacity of upgraded berth would be 10.18 mmtpa and the Vishakhapatnam Port would be entitled to receive 38.10% share of the gross revenue as royalty. VGCB is entitled to recover a tariff from the user(s) of the project facilities and services as per its tariff notification. The tariff rates are linked to the Wholesale Price Index (WPI) and would accordingly be adjusted as specified in the concession agreement every year. The ownership of all infrastructure assets, buildings, structures, berths, wharfs, equipment and other immovable and movable assets constructed, installed, located, created or provided by VGCB at the project site and/or in the port's assets pursuant to concession agreement would be with VGCB until expiry of this concession agreement. The cost of any repair, replacement or restoration of the project facilities and services shall be borne by VGCB during the concession period. VGCB has to transfer all its rights, titles and interest in the project facilities and services free of cost to Visakhapatnam Port at the end of the concession period.

(2) Others include technological know-how and acquired brand relating to acquisition of AvanStrate Inc.

Notes to the Financial Statements continued

for the year ended 31 March 2019

16. PROPERTY, PLANT AND EQUIPMENT

(US\$ million)

	Mining property and leases	Freehold Land and buildings	Plant and equipment	Assets under construction	Oil & Gas properties ⁽³⁾	Others	Total Property, plant and equipment	Exploratory and evaluation assets ⁽⁴⁾	Grand Total
Cost									
At 1 April 2017	2,863	1,716	13,327	2,445	9,921	114	30,386	9,837	40,223
Additions	252	25	341	475	139	11	1,243	19	1,262
Transfers	11	4	552	(568)	31	1	31	(31)	-
Disposals/Adjustments	-	(1)	(142)	(16)	(2)	(3)	(164)	(10)	(174)
Acquisition through business combination (note 3(b))	-	49	163	27	-	3	242	-	242
Exchange differences	54	13	34	16	-	2	119	-	119
At 1 April 2018	3,180	1,806	14,275	2,379	10,089	128	31,857	9,815	41,672
Additions	164	73	281	602	468	26	1,614	79	1,693
Transfers	321	167	441	(967)	8,468	38	8,468	(8,468)	-
Unsuccessful Exploration cost	-	-	-	-	-	-	-	(7)	(7)
Reclassification	-	-	-	1	-	-	1	-	1
Disposals/Adjustments	(8)	(2)	(169)	(17)	(2)	(7)	(205)	-	(205)
Acquisition through business combination (note 3(a))	-	134	517	66	-	1	718	-	718
Exchange differences	(216)	(122)	(774)	(160)	-	(10)	(1,282)	-	(1,282)
At 31 March 2019	3,441	2,056	14,571	1,904	19,023	176	41,171	1,419	42,590
Accumulated depreciation, amortisation and impairment									
At 1 April 2017	1,425	357	4,132	78	9,011	31	15,034	8,436	23,470
Charge for the year	183	52	557	-	461	11	1,264	-	1,264
Disposals/Adjustments	-	-	(125)	-	(2)	(1)	(128)	-	(128)
Reclassification	-	-	0	-	-	(0)	-	-	-
Impairment/(impairment reversal) of assets (note 6)	638	13	29	46	(500)	(0)	226	(947)	(721)
Exchange differences	12	9	38	0	-	1	60	-	60
At 1 April 2018	2,258	431	4,631	124	8,970	42	16,456	7,489	23,945
Charge for the year	219	66	568	-	609	15	1,477	-	1,477
Disposals/Adjustments	-	(1)	(96)	-	(2)	(7)	(106)	-	(106)
Transfer from E&E assets	-	-	(3)	-	6,474	3	6,474	(6,474)	-
Reclassification	-	-	1	-	-	-	1	-	1
Impairment/(impairment reversal) of assets (note 6)	-	-	-	-	(38)	-	(38)	-	(38)
Exchange differences	(119)	(34)	(253)	(3)	-	(6)	(415)	-	(415)
At 31 March 2019	2,358	462	4,848	121	16,013	47	23,849	1,015	24,864
Net book value									
At 1 April 2017	1,438	1,359	9,195	2,367	910	83	15,352	1,401	16,753
At 1 April 2018	922	1,375	9,644	2,255	1,119	86	15,401	2,326	17,727
At 31 March 2019	1,083	1,594	9,723	1,783	3,010	129	17,322	404	17,726

(1) During the year ended 31 March 2019, interest and foreign exchange losses capitalised was US\$119 million (31 March 2018: US\$54 million).

(2) Certain property, plant and equipment are pledged as collateral against borrowings, the details related to which have been given in note 22 on Borrowings.

(3) Oil and Gas Properties includes development assets under construction of carrying value US\$1,517 million (31 March 2018: US\$339 million).

(4) Oil & Gas properties and exploration and evaluation assets net block includes share of jointly owned assets with the joint venture partners US\$3,331 million (31 March, 2018 US\$3,292 million). Refer note 2(c)(i)(xii) for reasons for transfer of exploration and evaluation assets to property, plant and equipment.

Notes to the Financial Statements continued

for the year ended 31 March 2019

17. FINANCIAL ASSET INVESTMENTS

Financial asset investments represent investments classified and accounted for as fair value through profit or loss or through other comprehensive income (refer note 25).

Financial Asset Investments

Year of Expiry	As at 31 March 2019	As at 31 March 2018
At 1 April 2018	25	11
Purchase of structured investment (refer note 35)	541	-
Movements in fair value (including on investments purchased during the year)	143	14
Exchange difference	(2)	(0)
At 31 March 2019	707	25

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 on 31 March 2019 and 31 March 2018.

18. OTHER NON-CURRENT ASSETS AND TRADE AND OTHER RECEIVABLES

	As at 31 March 2019			As at 31 March 2018		
	Non- Current	Current	Total	Non- Current	Current	Total
Bank Deposits ⁽²⁾	3	-	3	19	-	19
Site restoration assets	79	-	79	72	-	72
Trade Receivables ⁽¹⁾	533	593	1,126	209	644	853
Others ⁽⁴⁾	108	55	163	71	83	154
Trade receivables from related parties	-	5	5	-	4	4
Cash call / receivables from joint operations	-	298	298	-	99	99
Financial (A)	723	951	1,674	371	830	1,201
Balance with Government Authorities	120	208	328	164	233	397
Advance for supplies	-	221	221	-	309	309
Others ⁽³⁾	167	124	291	124	155	279
Non-financial (B)	287	553	840	288	697	985
Total (A+B)	1,010	1,504	2,514	659	1,527	2,186

The credit period given to customers ranges from zero to 90 days.

(1) In July 2017, the Appellate Tribunal for Electricity dismissed the appeal filed by one of the Group's subsidiaries, Talwandi Sabo Power Limited (TSPL) with respect to the interpretation of how the calorific value of coal and costs associated with it should be determined. However, APTEL had allowed payment of shunting and unloading charges. TSPL filed an appeal before the Honourable Supreme Court, which by an order dated 7 March 2018 has decided the matter in favour of TSPL. PSPCL has not paid the due amount as per the direction of the Supreme court. Therefore, TSPL filed its contempt petition before the Supreme court. The matter is pending for adjudication. The outstanding trade receivables in relation to this dispute as at 31 March 2019 is US\$164 million (31 March 2018: US\$123 million).

In another matter relating to assessment of whether there has been a change in law following the execution of the Power Purchase Agreement, the Appellate Tribunal for Electricity has dismissed the appeal in July 2017 filed by TSPL. TSPL filed an appeal before the Honourable Supreme Court to seek relief which is yet to be listed. The outstanding trade receivables in relation to this dispute and other matters as at 31 March 2019 is US\$154 million (US\$127 million as at 31 March 2018). The Group, based on external legal opinion and its own assessment of the merits of the case, remains confident that it is highly probable that the Supreme court will uphold TSPL's appeal and has thus continued to treat these balances as recoverable.

Additionally, as at 31 March 2018 US\$112 million was outstanding on account of certain disputes relating to computation of tariffs and differential revenues recognised with respect to tariffs pending finalisation by the Odisha state regulatory commission. During the current year the said disputes were settled. However, the customer has raised certain claims on the company in respect of short supply of power for which a provision of \$ 31 million has been made. A Minutes of Meeting (MOM) has been signed with the customer and subsequently Vedanta Limited has received payment of US\$8 million in March 2019. Pending ratification of MOM by Odisha Electricity Regulatory Commission (OERC) and adjudication on certain issues related to the claim, the customer has withheld US\$181 million, which the company is confident of recovering.

(2) Includes US\$ Nil of restricted bank deposits maintained as debt service reserve account (31 March 2018: US\$16 million) and US\$3 million (31 March 2018: US\$3 million) under lien with banks.

(3) Includes claim receivables, advance recoverable (oil and gas business), prepaid expenses, export incentive receivables and others.

(4) Includes claims receivables, advance recoverable (oil and gas business), unbilled revenue (contract assets) and others. It also includes advance profit petroleum US\$43 million (refer note 34(iv)). The outstanding balance of contract assets was US\$21 million (31 March 2018 : US\$64 million).

Notes to the Financial Statements continued

for the year ended 31 March 2019

19. INVENTORIES

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Raw materials and consumables	1,369	1,330
Work-in-progress	454	578
Finished goods	237	130
Total	2,060	2,038

Inventory held at net realisable value amounted to US\$642 million (31 March 2018: US\$168 million). The write down of inventories amounts to US\$38 million (31 March 2018: US\$7 million) and this has been charged to the Consolidated Income Statement.

20. SHORT-TERM INVESTMENTS

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Bank deposits ⁽¹⁾	122	483
Other investments	4,042	4,325
Total	4,164	4,808

(1) Includes US\$28 million (31 March 2018: US\$31 million) on lien with banks, US\$19 million (31 March 2018: US\$6 million) of margin money, US\$47 million (31 March 2018: US\$9 million) maintained as debt service reserve account and US\$9 million (31 March 2018: US\$12 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 income statement. These investments do not qualify for recognition as cash and cash equivalents due to their maturity period and risk of change in value of the investments. Refer Note 25 for further details.

21. CASH AND CASH EQUIVALENTS

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Cash and cash equivalents consist of the following		
Cash at bank and in hand	620	604
Short-term deposits	441	158
Restricted cash and cash equivalents ⁽¹⁾	72	36
Total	1,133	798

(1) Restricted cash and cash equivalents includes US\$15 million (31 March 2018: US\$36 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\$57 million (31 March 2018: Nil) kept in short term deposits under lien with banks as margin money.

Short-term deposits are made for periods of between one day and three months, depending on the immediate cash requirements of the Group, and earn interest at the respective short-term deposit rates.

22(a) BORROWINGS

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Current borrowings consist of:		
Banks and financial institutions	4,132	3,607
Current maturities of long term borrowings	1,324	1,853
Current borrowings (A)	5,456	5,460
Non-current borrowings consist of:		
Banks and financial institutions	6,585	5,892
Non-convertible bonds	3,142	3,360
Non-convertible debentures	2,034	1,779
Redeemable Preference shares	0	463
Others	87	93
Non-current borrowings	11,848	11,587
Less: Current maturities of long term borrowings	(1,324)	(1,853)
Non-current borrowings, net of current maturities (B)	10,524	9,734
Total (A+B)	15,980	15,194

Notes to the Financial Statements continued

for the year ended 31 March 2019

The Group has discounted trade receivables on recourse basis US\$196 million (31 March 2018: US\$120 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 net interest expense to EBITDA ratio. The Group has complied with the covenants as per the terms of the loan agreement.

Details of the Non-convertible bonds and Non-convertible debentures issued by the Group have been provided below (carrying value):

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Non-Convertible Bonds :		
0.230% bonds due October, 2032 (Repayable in 10 instalments)	18	17
6.125% bonds due August 2024	993	992
7.125% bonds due June, 2023	495	494
6.375% bonds due July, 2022	995	993
8.250% bonds due June, 2021	641	640
6.000% bonds due January, 2019	-	224
	3,142	3,360
Non-Convertible Debentures		
8.75% due September-2021	36	38
9.18% due July-2021	145	-
9.27% due July-2021	144	-
8.50% due June-2021	238	-
8.75% due April-2021	36	38
8.50% due April-2021	340	-
8.55% due April-2021	145	-
7.80% due December-2020	72	77
9.00% due November-2020**	29	-
8.25% due september-2020	62	65
7.85% due August-2020	72	77
9.45% due August-2020	289	308
8.00% due June-2020*	29	31
7.90% due July-2020	43	46
8.70% due April-2020	87	92
7.95% due April-2020*	43	46
7.50% due November-2019*	29	31
8.20% due November-2019	43	46
8.25% due October-2019	43	46
7.75% due September-2019	36	38
8.65% due September-2019	22	23
7.60% due May-2019	51	54
9.17% due July-2018	-	185
9.10% due April 2018	-	384
8.91% due April 2018	-	154
	2,034	1,779

* The debenture holders of these NCDs and the company have put and call option at the end of 5 years from the respective date of the allotment of the NCDs

** The debenture holders of these NCDs and the company have put and call option at the end of 1 year from the respective date of the allotment of the NCDs

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Security Details

The Group has taken borrowings in various countries towards funding of its acquisitions and working capital requirements. The borrowings comprise of funding arrangements from various banks and financial institutions taken by the parent and subsidiaries. Out of the total borrowings of US\$15,980 million (31 March 2018: US\$15,194 million) shown above total secured borrowings are US\$6,547 million (31 March 2018: US\$5,665 million) and unsecured borrowings are US\$9,433 million (31 March 2018: US\$9,529 million). The details of security provided by the Group in various countries, to various lenders on the assets of Parent and subsidiaries are as follows:

		(US\$ million)	
Facility Category	Security details	As at 31 March 2019	As at 31 March 2018
Project buyers credit from banks (grouped under banks and financial institutions)	Secured by exclusive charge on the assets of Vedanta Limited's aluminium division at Jharsuguda imported under facility and first charge on Jharsuguda aluminium's current assets on pari passu basis	2	19
	Other secured project buyer's credit	-	0
Working Capital Loans (grouped under banks and financial institutions)	Secured by first pari passu charge on current assets, present and future of Vedanta Limited	16	47
	Secured by hypothecation of stock of raw materials, work-in-progress, semi-finished, finished products, consumable stores and spares, bills receivables, book debts and all other movables, both present and future in BALCO. The charges rank pari passu among banks under the multiple banking arrangements for fund based facilities	18	26
	First pari passu charge on the entire current assets of the Vedanta Limited, both present and future. First pari passu charge on all rights, title, claim and benefit in all the whole of the current assets of the Vedanta Limited, both present and future, including stock and raw material, stock in process, semi finished and finished goods, stores and spares not relating to plant, and machinery (consumable stores and spares)	80	98
	First charge on the entire current assets of the Vedanta Limited, present and future, on pari passu basis	7	-
	Secured by a first pari passu charge on all present and future inventories, book debts and all other current assets of TSPL.	40	91
	First pari passu charge on current assets of Vedanta Limited	52	-
	Secured by charge on current assets of AvanStrate	6	-
	Other secured working capital loans	-	26
External commercial borrowings (grouped under banks and financial institutions)	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	45	45
	The facility is secured by first pari passu charge on all movable project assets related to 1200 MW power project and 3.25 LTPA Smelter project both present and future along with secured lenders at BALCO	50	50

Notes to the Financial Statements continued

for the year ended 31 March 2019

(US\$ million)

Facility Category	Security details	As at 31 March 2019	As at 31 March 2018
Non convertible debentures	Secured by way of movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project with a minimum security cover of 1 time of the outstanding amount of the debenture and specifically exclude the 1MTPA alumina refinery of the company along with 90 MW power plant in Lanjigarh and all its related expansions	123	131
	Secured by the whole of the movable fixed assets of the 1.6 MTPA Aluminium Smelter along with 1215 MW captive power plant in Jharsuguda and 1 MTPA alumina refinery alongwith 90 MW co-generation plant in Lanjigarh, including its movable plant and machinery, capital works-in-process, machinery spares, tools and accessories, and other movable fixed assets	116	123
	Secured by way of first ranking pari passu charge on movable fixed assets in relation to the Lanjigarh Refinery Expansion Project (having capacity beyond 2 MTPA and upto 6 MTPA) situated at Lanjigarh, Odisha. The Lanjigarh Refinery Expansion Project shall specifically exclude the '1 MTPA alumina refinery of the Company along with 90 MW power plant in Lanjigarh' and all its related capacity expansions	181	192
	Secured by way of "movable fixed assets" in relation to the 1.6 MTPA Aluminium Smelter alongwith 1215 MW (135MW * 9) captive power plant located in Jharsuguda and 1 MTPA Alumina Refinery alongwith 90 MW Co-generation power plant located at Lanjigarh in Odisha State and shall include all present movable plant and machinery, machinery spares, tools and accessories, fixtures, mechanical and electrical equipments, machinery and all other movable fixed assets and all estate, right, title, interest, property, claims and demands whatsoever in relation to assets	289	308
	Secured by a first pari - passu charge on the whole of the present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location	578	384
	Secured by first pari passu charge on movable and/or immovable fixed assets of the TSPL with a minimum asset cover of 1 time during the tenure of NCD	470	315
	Secured by way of first pari-passu charge on the specific movable and/or immovable fixed assets of VGCB, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of bonds outstanding at any point of time	61	65
	Secured by way of first pari-passu charge on all present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of debentures outstanding at any point of time	145	-
	First pari passu charge over the immovable property (excluding of leasehold land and coal block assets) of the BALCO. First pari passu charge on the hypothecated assets (excluding current assets) of BALCO	72	77
	Other secured non-convertible debentures	-	184

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for the year ended 31 March 2019

		(US\$ million)	
Facility Category	Security details	As at 31 March 2019	As at 31 March 2018
Term loan from banks (grouped under banks and financial institutions)	Secured by first pari passu charge on fixed assets of TSPL both present and future	524	627
	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immovable assets of the Aluminium Division of the Vedanta Limited comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Odisha, both present and future	738	849
	A pari passu charge by way of hypothecation of all the movable fixed assets of the Vedanta Limited pertaining to its Aluminium Division project consisting of (i) alumina refinery having output of 1 MTPA (Refinery) along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha (Power Plant); and (ii) aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Odisha (Smelter) (the Refinery, Power Plant and Smelter). Also, a first pari passu charge by way of equitable mortgage on the land pertaining to the mentioned project of aluminium division	513	606
	Secured by a pari - passu charge by way of hypothecation on the movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project. Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of the Vedanta Limited along with 90 MW power plant in Lanjigarh and all its related expansions	70	-
	A pari-passu charge by way of hypothecation on the movable fixed assets of the Vedanta Limited pertaining to its Aluminium Division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	251	-
	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immovable assets of the Aluminium Division of the Vedanta Limited comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Odisha and additional charge on Lanjigarh Expansion project, both present and future	171	190
	A pari-passu charge by way of hypothecation/equitable mortgage of the movable/immovable fixed assets of the Vedanta Limited pertaining to its Aluminium Division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	431	-
	Secured by charge on Cairn Energy Hydrocarbons Limited's (CEHL) all banks accounts, cash & investments, all receivables and current assets (but excluding any shares issued to CEHL by its subsidiaries, all of its right, title and interest in and to Production Sharing Contract and all of its fixed assets of any nature)	379	426
	As security for the Parent's (THL Zinc Limited) obligation under the limited guarantee, the Parent pledges all of its shares and other securities held by it in BMM and is a security cession and not an outright cession of all its rights, title and interest in and to all and any claims held by the Parent in and against the BMM	60	-
	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	30	30
	Secured by first pari passu charge on movable property, plant and equipment (except for coal block) of the BALCO	214	232
	Secured by first pari passu charge on all present and future movable fixed assets including but not limited to plant & machinery, spares, tools and accessories of BALCO (excluding coal block assets) by way of a deed of hypothecation	140	152
	Unattested deed of Hypothecation executed in favour of Vistra ITCL (India) Limited, Security Trustee for the lenders of Vedanta Star limited by providing security for the facility, by a charge, by way of hypothecation over the hypothecated properties of ESL	488	-
Secured against assets of KCM	113	293	
Others	75	79	
Total		6,547	5,665

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22(b). MOVEMENT IN NET DEBT⁽¹⁾

(US\$ million)

	Cash and cash equivalents	Short term investments	Financial asset investment net of related liabilities and derivatives ⁽¹⁾	Total cash and short-term investments	Debt due within one year		Debt due after one year		Total Net Debt
					Debt carrying value	Debt carrying value	Debt carrying value	Debt carrying value	
At 1 April 2017	1,682	8,043	-	9,725	(7,659)	(10,570)		(8,504)	
Cash flow	(924)	(3,441)	-	(4,365)	3,859	(694)		(1,200)	
Net debt on acquisition through business combination (note 3(b))	24	-	-	24	-	(99)		(75)	
Other non-cash changes ⁽²⁾	-	209	-	209	(1,669)	1628		168	
Foreign exchange currency translation differences	16	(3)	-	13	9	1		23	
At 1 April 2018	798	4,808	-	5,606	(5,460)	(9,734)		(9,588)	
Cash flow	341	(639)	254	(44)	1,199	(2,394)		(1,239)	
Net cash flow on acquisition through business combination (note 3(a))	36	46	-	82	(1)	-		81	
Other non-cash changes ⁽²⁾	-	187	137	324	(1,449)	1,398		273	
Foreign exchange currency translation differences	(42)	(238)	-	(280)	255	206		181	
At 31 March 2019	1,133	4,164	391	5,688	(5,456)	(10,524)		(10,292)	

(1) Net debt is a Non-IFRS measure and represents total debt after fair value adjustments under IAS 32 and IFRS 9 as reduced by cash and cash equivalents, short-term investments and structured investment, net of the deferred consideration payable for such investments (referred above as Financial asset investment net of related liabilities) (refer note 35), if any

(2) Other non-cash changes comprise of amortisation of borrowing costs, foreign exchange difference on net debt and reclassification between debt due within one year and debt due after one year. It also includes US\$324 million (31 March 2018: US\$209 million) of fair value movement in investments and accrued interest on investments.

23. NON-EQUITY NON-CONTROLLING INTERESTS

As at 31 March 2019, non-equity non-controlling interests amounts to US\$12 million (31 March 2018: US\$12 million), being deferred shares in KCM held by ZCCM. The deferred shares have no voting rights or rights to KCM's dividends, but are entitled on a winding up to a return of up to US\$0.99 per share once all of KCM's ordinary shares have received a distribution equal to their par value and any share premium created on their issue and which remains distributable to them.

The deferred shares are held at historic cost, being the fair value attributed to them at the time of initial acquisition of KCM in the year ended 31 March 2005. They are classified as non-current liabilities as they are repayable only on the winding up of KCM, for an amount different than the pro rata share of net assets upon liquidation. The shares have been valued at US\$0.99 per share, which is the maximum amount payable to the deferred shareholders. These deferred shares have not been discounted as the effect would not be material.

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24. TRADE AND OTHER PAYABLES

(US\$ million)

	As at 31 March 2018			As at 31 March 2018		
	Non- Current	Current	Total	Non- Current	Current	Total
Operational buyers' credit/ suppliers' credit	-	1,173	1,173	-	1,448	1,448
Dividend payable to NCI	-	24	24	-	46	46
Trade payables	-	1,680	1,680	-	1,653	1,653
Liabilities for capital expenditure	7	864	871	19	609	628
Profit petroleum Payable	-	148	148	-	127	127
Other payables ⁽¹⁾	189	1,024	1,213	10	742	752
Security deposits and retentions	2	23	25	2	38	40
Put option liability with non-controlling interests ⁽²⁾	29	-	29	21	-	21
Financial (A)	227	4,936	5,163	52	4,663	4,715
Statutory liabilities	-	484	484	-	453	453
Advance from customers ⁽³⁾	17	1,408	1,425	66	886	952
Other payables	-	50	50	-	76	76
Non-financial (B)	17	1,942	1,959	66	1,415	1,481
Total (A+B)	244	6,878	7,122	118	6,078	6,196

Trade payables are majorly non-interest bearing and are normally settled upto 180 days terms.

Operational buyers' credit/ suppliers' credit are interest-bearing liabilities and are normally settled within a period of twelve months. These represent arrangements whereby operational suppliers of raw materials are paid by financial institutions, with the Group recognising the liability for settlement with the institutions at a later date.

The fair value of trade and other payables is not materially different from the carrying value presented.

(1) Includes US\$143 million (non-current) and US\$156 million (current) of deferred consideration payable as at 31 March 2019 in relation to purchase of structured investment. (Refer note 35)

(2) The non-controlling shareholders of ASI have an option to offload their shareholding to the Group. The option is exercisable at any time within the period of three years following the fifth anniversary of the date of shareholders' agreement (22 December 2017) at a price higher of US\$0.757 per share and the fair market value of the share. Therefore, the liability is carried at higher of the two. Subsequent changes to the put option liability are treated as equity transaction and hence accounted for in equity.

(3) Advance from customers are contract liabilities and include amounts received under long term supply agreements. The advance payment plus a fixed rate of return/ discount will be settled by supplying respective commodity over a period up to twenty four months under an agreed delivery schedule as per the terms of the respective agreements. As these are contracts that the Group expects, and has the ability, to fulfil through delivery of a non-financial item, these are recognised as advance from customers and will be released to the income statement as respective commodity is delivered under the agreements. The portion of the advance that is expected to be settled within the next 12 months has been classified as a current liability. The increase in contract liabilities is due to additional amounts received during the year.

25. FINANCIAL INSTRUMENTS

Financial Assets and Liabilities :

The following tables present the carrying value and fair value of each category of financial assets and liabilities as at 31 March 2019 and 31 March 2018:

(US\$ million)

As at 31 March 2019	Fair value through profit or loss	Fair value through other comprehensive income	Derivatives designated as hedging instruments	Amortised cost	Total carrying value	Total fair value
Financial Assets						
Financial instruments (derivatives)	5	-	6	-	11	11
Financial asset investments held at fair value*	690	17	-	-	707	707
Short term investments						
- Bank deposits	-	-	-	122	122	122
- Other investments	4,042	-	-	-	4,042	4,042
Cash and cash equivalents				1,133	1,133	1,133
Other non-current assets and trade and other receivables	35	-	-	1,639	1,674	1,674
Total	4,772	17	6	2,894	7,689	7,689

* Includes structured investment (refer note 35).

Notes to the Financial Statements continued

for the year ended 31 March 2019

(US\$ million)

As at 31 March 2019	Fair value through profit or loss	Derivatives designated as hedging instruments	Amortised cost	Others*	Total carrying value	Total fair value
Financial Liabilities						
Financial instruments (derivatives)	79	1	-	-	80	80
Trade and other payables	221	-	4,913	29	5,163	5,163
Borrowings	-	-	15,980	-	15,980	15,873
Total	300	1	20,893	29	21,223	21,116

* Represents put option liability accounted for at fair value - Refer Note 3(b) and 24

(US\$ million)

As at 31 March 2018	Held for trading	Loans and receivables	Available for sale	Derivatives	Total carrying value	Total fair value
Financial Assets						
Financial instruments (derivatives)	-	-	-	24	24	24
Financial asset investments held at fair value	-	-	25	-	25	25
Short term investments						
- Bank deposits	-	483	-	-	483	483
- Other investments	4,325	-	-	-	4,325	4,325
Cash and cash equivalents	-	798	-	-	798	798
Other non-current assets and trade and other receivables	-	1,201	-	-	1,201	1,201
Total	4,325	2,482	25	24	6,856	6,856

As at 31 March 2018	Amortised cost	Derivatives	Others*	Total carrying value	Total fair value
Financial Liabilities					
Financial instruments (derivatives)	-	40	-	40	40
Trade and other payables	4,694	-	21	4,715	4,715
Borrowings	15,194	-	-	15,194	15,311
Total	19,888	40	21	19,949	20,066

* Represents put option liability accounted for at fair value - Refer Note 3(b) and 24

Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

Notes to the Financial Statements continued

for the year ended 31 March 2019

The below tables summarise the categories of financial assets and liabilities as at 31 March 2019 and 31 March 2018 measured at fair value:

(US\$ million)

	As at 31 March 2019		
	Level 1	Level 2	Level 3
Financial assets			
At fair value through profit or loss			
- Short term investments	939	3,091	12
- Financial asset investments held at fair value*	-	690	-
- Financial instruments (derivatives)	-	5	-
- Other non-current assets and trade and other receivables		35	
At fair value through other comprehensive income			
- Financial asset investments held at fair value	15	-	2
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	6	-
Total	954	3,827	14
Financial liabilities			
At fair value through profit or loss			
- Financial instruments (derivatives)	-	79	-
- Trade and other payables		221	
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	1	-
Trade and other payables- Put option liability with non controlling interest (refer note 3(b))	-	-	29
Total	-	301	29

* Includes structured investment (refer note 35)

(US\$ million)

	As at 31 March 2018		
	Level 1	Level 2	Level 3
Financial assets			
At fair value through profit or loss			
- Held for trading	1,163	3,162	-
- Financial instruments (derivatives)	-	24	-
Available-for-sale investments			
- Financial asset investments held at fair value	23	-	2
Total	1,186	3,186	2
Financial liabilities			
At fair value through profit or loss/ designated for hedging			
- Financial instruments (derivatives)	-	40	-
Trade and other payables- Put option liability with non controlling interest (refer note 3(b))	-	-	21
Total	-	40	21

The below table summarises the fair value of borrowings which are carried at amortised cost as at 31 March 2019 and 31 March 2018:

(US\$ million)

	As at 31 March 2019		As at 31 March 2018	
	Level 1	Level 2	Level 1	Level 2
Borrowings	3,068	12,805	3,444	11,867
Total	3,068	12,805	3,444	11,867

Notes to the Financial Statements continued

for the year ended 31 March 2019

The fair value of the financial assets and liabilities are at the amount that would be received to sell an asset and paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used to estimate the fair values:

- Investments traded in active markets are determined by reference to quotes from the financial institutions; for example: Net asset value (NAV) for investments in mutual funds declared by mutual fund house. For other listed securities traded in markets which are not active, the quoted price is used wherever the pricing mechanism is same as for other marketable securities traded in active markets. Other current investments and structured investments are valued by referring to market inputs including quotes, trades, poll, primary issuances for securities and /or underlying securities issued by the same or similar issuer for similar maturities and movement in benchmark security, etc.
- Financial assets forming part of Trade and other receivables, cash and cash equivalents (including restricted cash and cash equivalents), bank deposits, financial liabilities forming part of trade and other payables and short-term borrowings: Approximate their carrying amounts largely due to the short-term maturities of these instruments.
- Other non-current financial assets and financial liabilities: Fair value is calculated using a discounted cash flow model with market assumptions, unless the carrying value is considered to approximate to fair value.
- Long term fixed-rate and variable rate borrowings: Listed bonds are fair valued based on the prevailing market price. For all other long term fixed-rate and variable-rate borrowings, either the carrying amount approximates the fair value, or fair value has been estimated by discounting the expected future cash flows using a discount rate equivalent to the risk-free rate of return adjusted for the appropriate credit spread.
- Quoted financial asset investments: Fair value is derived from quoted market prices in active markets.
- Derivative financial assets/liabilities: The Group enters into derivative financial instruments with various counterparties. Interest rate swaps, foreign exchange forward contracts and commodity forward contracts are valued using valuation techniques, which employs the use of market observable inputs. The most frequently applied valuation techniques by the Group include forward pricing and swap models, using present value calculations. The models incorporate various inputs including the foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. Commodity contracts are valued using the forward LME rates of commodities actively traded on the listed metal exchange i.e. London Metal Exchange, United Kingdom (UK).

For all other financial instruments, the carrying amount is either the fair value, or approximates the fair value.

The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationship and the value of other financial instruments recognised at fair value.

The estimated fair value amounts as at 31 March 2019 have been measured as at that date. As such, the fair values of

these financial instruments subsequent to reporting date may be different than the amounts reported at each year-end.

There were no significant transfers between level 1, level 2 and level 3 during the current year.

Risk management framework

The Group's businesses are subject to several risks and uncertainties including financial risks.

The Group's documented risk management policies act as an effective tool in mitigating the various financial risks to which the businesses are exposed to in the course of their daily operations. The risk management policies cover areas such as liquidity risk, commodity price risk, foreign exchange risk, interest rate risk, counterparty credit risk and capital management.

Risks are identified at both the corporate and individual subsidiary level with active involvement of senior management. Each operating subsidiary in the Group has in place risk management processes which are in line with the Group's policy. Each significant risk has a designated 'owner' within the Group at an appropriate senior level. The potential financial impact of the risk and its likelihood of a negative outcome are regularly updated.

The risk management process is coordinated by the Management Assurance function and is regularly reviewed by the Group's Audit Committee. The Audit Committee is aided by the other committees of the Board including the Risk Management Committee, which meets regularly to review risks as well as the progress against the planned actions. Key business decisions are discussed at the periodic meetings of the Executive Committee. The overall internal control environment and risk management programme including financial risk management is reviewed by the Audit Committee on behalf of the Board.

The risk management framework aims to:

- improve financial risk awareness and risk transparency
- identify, control and monitor key risks
- identify risk accumulations
- provide management with reliable information on the Group's risk situation
- improve financial returns

Treasury management

Treasury management focuses on liability management, capital protection, liquidity maintenance and yield maximisation. The treasury policies are approved by the Committee of the Board. Daily treasury operations of the subsidiary companies are managed by their respective finance teams within the framework of the overall Group treasury policies. Long term fund raising including strategic treasury initiatives are managed jointly by the business treasury team and the central team at corporate treasury while short-term funding for routine working capital requirements is delegated to subsidiary companies. A monthly reporting system exists to inform senior management of the Group's investments and debt position, exposure to currency, commodity and interest rate risk and their mitigants including the derivative position. The Group has a strong system of internal control which enables effective monitoring of adherence to Group's policies.

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for the year ended 31 March 2019

The internal control measures are effectively supplemented by regular internal audits.

The investment portfolio at the Group is independently reviewed by CRISIL Limited and Group portfolio has been rated as Tier I or “Very Good” meaning highest safety. The investments are made keeping in mind safety, liquidity and yield maximisation.

The Group uses derivative instruments to manage the exposure in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks.

For the year ended 31 March 2019:

(US\$ million)

Financial asset investment	Total Exposure (fair value)	Effect on pre-tax profit/ (loss) of a 10% increase in the equity price	Effect on pre-tax equity of a 10% increase in the equity price	Effect on pre-tax profit/ (loss) of a 10% decrease in the equity price	Effect on pre-tax equity of a 10% decrease in the equity price
Structured investment	690	60	-	(28)	-

The above sensitivities are based on change in price of the underlying equity shares of AA plc and provide the estimated impact of the change on profit and equity assuming that all other variables remain constant.

Commodity Price risk

The Group is exposed to the movement of base metal commodity prices on the London Metal Exchange. Any decline in the prices of the base metals that the Group produces and sells will have an immediate and direct impact on the profitability of the businesses. As a general policy, the Group aims to sell the products at prevailing market prices. The commodity price risk in import of input commodities such as Copper Concentrate & Alumina, for our Copper and Aluminium business respectively, is hedged on back-to-back basis ensuring no price risk for the business. Hedging is used primarily as a risk management tool and, in some cases, to secure future cash flows in cases of high volatility by entering into forward contracts or similar instruments. The hedging activities are subject to strict limits set out by the Board and to a strictly defined internal control and monitoring mechanism. Decisions relating to hedging of commodities are taken at the Executive Committee level, basis clearly laid down guidelines.

Whilst the Group aims to achieve average LME prices for a month or a year, average realised prices may not necessarily reflect the LME price movements because of a variety of reasons such as uneven sales during the year and timing of shipments.

The Group is also exposed to the movement of international crude oil price and the discount in the price of Rajasthan crude oil to Brent price.

Financial instruments with commodity price risk are entered into in relation to following activities:

- economic hedging of prices realised on commodity contracts
- cash flow hedging of revenues, forecasted highly probable transactions

Both treasury and commodities derivative transactions are normally in the form of forward contracts, interest rate and currency swaps and these are in line with the Group’s policies.

Equity price risk

As at 31 March 2019, the Group held economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, having fair value of US\$690 million (31 March 2018: Nil). The instrument is exposed to equity price movements of AA Plc, subject to a put option embedded therein (Refer note 35).

Set out below is the impact of 10% increase/ decrease in equity prices on pre-tax profit/ (loss) for the year and pre-tax equity as a result of changes in value of the investment:

Aluminium

The requirement of the primary raw material, alumina, is partly met from own sources and the rest is purchased primarily on negotiated price terms. Sales prices are linked to the LME prices. At present the Group on selective basis hedges the aluminium content in outsourced alumina to protect its margins.

The Group also enters into hedging arrangements for its aluminium sales to realise average month of sale LME prices.

Copper

The Group’s custom smelting copper operations at Tuticorin is benefitted by a natural hedge except to the extent of a possible mismatch in quotational periods between the purchase of concentrate and the sale of finished copper. The Group’s policy on custom smelting is to generate margins from Treatment charges/Refining charges or “Tc/Rc”, improving operational efficiencies, minimising conversion cost, generating a premium over LME on sale of finished copper, sale of by-products and from achieving import parity on domestic sales. Hence, mismatches in quotational periods are managed to ensure that the gains or losses are minimised. The Group hedges this variability of LME prices through forward contracts and tries to make the LME price a pass-through cost between purchases of copper concentrate and sales of finished products, both of which are linked to the LME price.

Tc/Rc is a major source of income for the Indian copper smelting operations. Fluctuation in Tc/Rc is influenced by factors including demand and supply conditions prevailing in the market for mine output. The Group’s copper business has a strategy of securing a majority of its concentrate feed requirement under long term contracts with mines.

KCM is largely an integrated copper producer and whenever hedging is done, it is with an intention to protect the Group from price fluctuations in copper. KCM also engages in hedging for its custom smelting operations in line with the Group’s policy on custom smelting at Tuticorin, as explained above.

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for the year ended 31 March 2019

Zinc, lead and silver

The sales prices are linked to the LME prices. The Group also enters into hedging arrangements for its Zinc, Lead and Silver sales to realise average month of sale LME prices.

Zinc International

Raw material for zinc and lead is mined in Namibia and South Africa with sales prices linked to the LME prices.

Iron ore

The Group sells its Iron Ore production from Goa on the prevailing market prices and from Karnataka through e-auction route as mandated by State Government of Karnataka in India.

Oil and Gas

The prices of various crude oils are based upon the price of the key physical benchmark crude oil such as Dated Brent, West Texas Intermediate, and Dubai/Oman etc. The crude oil prices move based upon market factors like supply and demand. The regional producers price their crude basis these benchmark crude with a premium or discount over the benchmark based upon quality differential and competitiveness of various grades.

For the year ended 31 March 2019:

(US\$ million except as stated)			
Commodity price sensitivity	Total Exposure	Effect on pre-tax profit/(loss) of a 10% increase in the LME	Effect on pre-tax equity of a 10% increase in the LME
Copper	(21)	(2)	-

For the year ended 31 March 2018:

(US\$ million except as stated)			
Commodity price sensitivity	Total Exposure	Effect on profit/(loss) of a 10% increase in the LME	Effect on total equity of a 10% increase in the LME 31 March 2018
Copper	(568)	(57)	-

The above sensitivities are based on volumes, costs, exchange rates and other variables and provide the estimated impact of a change in LME prices on profit and equity assuming that all other variables remain constant. A 10% decrease in LME prices would have an equal and opposite effect on the Group's financial statements.

The impact on pre-tax profit/(loss) mentioned above includes the impact of a 10% increase in closing copper LME for provisionally priced copper concentrate purchased at Vedanta Limited Copper division custom smelting operations of US\$11 million (31 March 2018: US\$57 million), which is pass through in nature and as such will not have any impact on the profitability.

Financial risk :

The Group's Board approved financial risk policies include monitoring, measuring and mitigating the liquidity, currency, interest rate and counterparty risk. The Group does not engage in speculative treasury activity but seeks to manage risk and optimise interest and commodity pricing through proven financial instruments.

Natural gas markets are evolving differently in important geographical markets. There is no single global market for natural gas. This could be owing to difficulties in large-scale transportation over long distances as compared to crude oil. Globally, there are three main regional hubs for pricing of natural gas, which are USA (Henry Hub Prices), UK (NBP Price) and Japan (imported gas price, mostly linked to crude oil).

Provisionally priced financial instruments

On 31 March 2019, the value of net financial assets linked to commodities (excluding derivatives) accounted for on provisional prices was US\$45 million (31 March 2018: liability of US\$468 million). These instruments are subject to price movements at the time of final settlement and the final price of these instruments will be determined in the financial year beginning 01 April 2019.

Set out below is the impact of 10% increase in LME prices on pre-tax profit/ (loss) for the year and pre-tax equity as a result of changes in value of the Group's commodity financial instruments:

(a) Liquidity risk

The Group requires funds both for short-term operational needs as well as for long term investment programmes mainly in growth projects. The Group generates sufficient cash flows from the current operations which together with the available cash and cash equivalents and short term investments provide liquidity both in the short term as well as in the long term. Anticipated future cash flows, together with undrawn fund based committed facilities of US\$991 million, and cash, short term investments and structured investment net of deferred consideration payable for such investments of US\$5,688 million as at 31 March 2019, are expected to be sufficient to meet the liquidity requirement of the Group in the near future.

During FY2019, Moodys revised the outlook on ratings for Vedanta Resources Limited to Negative from Stable while affirming the corporate family rating at Ba3 in February 2019. This was on account of expectation of weaker earnings on account of downside risk to commodity prices and increased risk of movement of funds outside Vedanta. S&P affirmed the ratings at B+ while revising the Outlook to Negative in March 2019 on account of weaker operating performance due to commodity slowdown which along with higher debt could keep its metrics weaker than required for current rating levels.

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for the year ended 31 March 2019

The maturity profile of the Group's financial liabilities based on the remaining period from the balance sheet date to the contractual maturity date is given in the table below. The figures reflect the contractual undiscounted cash obligation of the Group:

At 31 March 2019

(US\$ million)					
Payment due by period	< 1 year	1-3 years	3-5 years	> 5 years	Total
Trade and other payables(1)	4,748	172	29	-	4,949
Bank and other borrowings(2)	6,481	6,098	3,914	2,900	19,393
Derivative liabilities	66	14	-	-	80
Total	11,295	6,284	3,943	2,900	24,422

At 31 March 2018

(US\$ million)					
Payment due by period	< 1 year	1-3 years	3-5 years	> 5 years	Total
Trade and other payables(1)	4,468	31	21	-	4,520
Bank and other borrowings(2)	6,427	4,164	4,823	2,956	18,370
Derivative liabilities	22	18	-	-	40
Total	10,917	4,213	4,844	2,956	22,930

(1) Excludes accrued interest which has been included with borrowings

(2) Includes current and non-current borrowings and committed interest payments.

At 31 March 2019, the Group had access to following funding facilities:

(US\$ million)			
As at 31 March 2019	Total facility	Drawn	Undrawn
Fund/Non-fund based	13,176	10,952	2,224
Total	13,176	10,952	2,224

(US\$ million)			
As at 31 March 2018	Total facility	Drawn	Undrawn
Fund/Non-fund based	12,003	10,256	1,747
Total	12,003	10,256	1,747

Collateral

The Group has pledged financial instruments with carrying amount of US\$3,197 million and inventories with carrying amount of US\$1,564 million as per the requirements specified in various financial facilities in place. The counterparties have an obligation to release the securities to the Group when financial facilities are surrendered.

(b) Foreign currency risk

Fluctuations in foreign currency exchange rates may have an impact on the consolidated income statement, the consolidated statements of change in equity, where any transaction references more than one currency or where assets/liabilities are denominated in a currency other than the functional currency of the respective consolidated entities.

Considering the countries and economic environment in which the Group operates, its operations are subject to risks arising from the fluctuations primarily in the US dollar, Australian dollar, Namibian dollar, AED, ZAR, GBP, INR, JPY and Euro against the functional currencies of its subsidiaries.

Exposures on foreign currency loans are managed through the Group wide hedging policy, which is reviewed periodically to ensure that the results from fluctuating currency exchange

rates are appropriately managed. The Group strives to achieve asset liability offset of foreign currency exposures and only the net position is hedged.

The Group's presentation currency is the US dollar. The majority of the assets are located in India and the Indian Rupee is the functional currency for the Indian operating subsidiaries except for Oil and Gas business operations which have a US dollar functional currency. Natural hedges available in the business are identified at each entity level and hedges are placed only for the net exposure. Short-term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns, where cost of the project is calculated taking into account the hedge cost. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed.

The following analysis is based on the gross exposure as at the reporting date which could affect the consolidated income statement. The exposure summarised below is mitigated by some of the derivative contracts entered into by the Group as disclosed under the section on "Derivative financial instruments"

Notes to the Financial Statements continued

for the year ended 31 March 2019

The carrying amount of the Group's financial assets and liabilities in different currencies are as follows:

(US\$ million)

	As at 31 March 2019		As at 31 March 2018	
	Financial Assets	Financial liabilities	Financial Assets	Financial liabilities
USD	2,108	10,548	1,221	10,164
INR	4,764	10,049	5,490	9,474
Others	817	626	145	311
Total	7,689	21,223	6,856	19,949

The Group's exposure to foreign currency arises where a Group company holds monetary assets and liabilities denominated in a currency different to the functional currency of that entity, with USD (US Dollar) being the major non-functional currency of the Group's main operating subsidiaries.

The foreign exchange rate sensitivity calculated by the aggregation of the net foreign exchange rate exposure with a simultaneous parallel foreign exchange rates shift in the currencies by 10 % against the functional currencies of the respective entities.

Set out below is the impact of a 10% strengthening in the functional currencies of the respective entities on pre-tax profit/(loss) and pre-tax equity arising as a result of the revaluation of the Group's foreign currency monetary financial assets/liabilities :

(US\$ million)

	For the year ended 31 March 2019		
	Closing exchange rate	Effect on pre-tax profit/(loss) of 10% strengthening in currency	Effect on pre-tax equity of 10% increase in currency
USD	69.1713	149	0

(US\$ million)

	For the year ended 31 March 2018		
	Closing exchange rate	Effect on pre-tax profit/(loss) of 10% strengthening in currency	Effect on pre-tax equity of 10% increase in currency
USD	65.0441	234	-

A 10% weakening of the functional currencies of the respective entities would have an equal and opposite effect on the Group's financial statements.

(c) Interest rate risk

At 31 March 2019, the Group's net debt of US\$10,292 million (31 March 2018: US\$9,588 million net debt) comprises cash, cash equivalents, short term investments and structured investment net of deferred consideration payable for such investments of US\$5,688 million (31 March 2018: US\$5,606 million) offset by debt of US\$15,980 million (31 March 2018: US\$15,194 million).

The Group is exposed to interest rate risk on short-term and long term floating rate instruments and on the refinancing of fixed rate debt. The Group's policy is to maintain a balance of fixed and floating interest rate borrowings and the proportion of fixed and floating rate debt is determined by current market interest rates. The borrowings of the Group are principally denominated in Indian Rupees and US dollars with mix of fixed

and floating rates of interest. The USD floating rate debt is linked to US dollar LIBOR and INR Floating rate debt to Bank's base rate. The Group has a policy of selectively using interest rate swaps, option contracts and other derivative instruments to manage its exposure to interest rate movements. These exposures are reviewed by appropriate levels of management on a monthly basis.

The Group invests cash and short term investments in short-term deposits and debt mutual funds, some of which generate a tax-free return, to achieve the Group's goal of maintaining liquidity, carrying manageable risk and achieving satisfactory returns.

Floating rate financial assets are largely mutual fund investments which have debt securities as underlying assets. The returns from these financial assets are linked to market interest rate movements; however the counterparty invests in the agreed securities with known maturity tenure and return and hence has manageable risk.

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for the year ended 31 March 2019

The exposure of the Group's financial assets to interest rate risk is as follows:

(US\$ million)

	As at 31 March 2019			As at 31 March 2018		
	Floating rate financial assets	Fixed rate financial assets	Non-interest bearing financial assets	Floating rate financial assets	Fixed rate financial assets	Non-interest bearing financial assets
Financial assets	2,120	2,676	2,893	3,021	2,260	1,575
Total financial assets	2,120	2,676	2,893	3,021	2,260	1,575

The exposure of the Group's financial liabilities to interest rate risk is as follows:

(US\$ million)

	As at 31 March 2019			As at 31 March 2018		
	Floating rate financial assets	Fixed rate financial assets	Non-interest bearing financial assets	Floating rate financial assets	Fixed rate financial assets	Non-interest bearing financial assets
Financial liabilities	7,753	9,447	4,023	6,483	10,211	3,255
Total financial liabilities	7,753	9,447	4,023	6,483	10,211	3,255

Considering the net debt position as at 31 March 2019 and the investment in bank deposits, corporate bonds and debt mutual funds, any increase in interest rates would result in a net loss and any decrease in interest rates would result in a net gain. The sensitivity analysis below has been determined based on the exposure to interest rates for financial instruments at the balance sheet date.

The below table illustrates the impact of a 0.5% to 2.0% movement in interest rate of floating rate financial assets/liabilities (net) on profit/(loss) and equity assuming that the changes occur at the reporting date and has been calculated based on risk exposure outstanding as of date. The year end balances are not necessarily representative of the average debt outstanding during the year. This analysis also assumes that all other variables, in particular foreign currency rates, remain constant.

(US\$ million)

	Effect on pre-tax profit/(loss) during the year ended 31 March 2019	Effect on pre-tax profit/(loss) during the year ended 31 March 2018
Increase in interest rates		
0.5%	(28)	(17)
1.0%	(56)	(35)
2.0%	(112)	(69)

A reduction in interest rates would have an equal and opposite effect on the Group's financial statements.

(d) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults.

The Group is exposed to credit risk from trade receivables, contract assets, cash and cash equivalents, short term investments and other financial instruments.

The Group has clearly defined policies to mitigate counterparty risks. For short-term investments, counterparty limits are in place to limit the amount of credit exposure to any one counterparty. This, therefore, results in diversification of credit risk for our mutual fund and bond investments.

For derivative and financial instruments, the Group attempts to limit the credit risk by only dealing with reputable banks and financial institutions.

Credit risk on receivables is limited as almost all credit sales are against letters of credit and guarantees of banks of national standing. Moreover, given the diverse nature of the Group's businesses trade receivables are spread over a number of customers with no significant concentration of credit risk. During the year ended 31 March 2019 and 31 March 2018, no single customer accounted for 10% or more of the Group's net sales. The history of trade receivables shows a negligible provision for bad and doubtful debts. Therefore, the Group does not expect any material risk on account of non-performance by any of our counterparties.

The Group's maximum gross exposure to credit risk as at 31 March 2019 is US\$7,689 million (31 March 2018: US\$ 6,856 million).

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for the year ended 31 March 2019

Of the year end trade and other receivable balance the following, though overdue, are expected to be realised in the normal course of business and hence, are not considered impaired as at 31 March :

(US\$ million)

	2019	2018
Neither past due nor impaired	972	574
Past due but not impaired		
- Less than 1 month	129	126
- Between 1 - 3 months	49	60
- Between 3 - 12 months	76	112
- Greater than 12 months	366	238
Total	1,592	1,110

Receivables are deemed to be past due or impaired with reference to the Group's normal terms and conditions of business. These terms and conditions are determined on a case to case basis with reference to the customer's credit quality and prevailing market conditions. Receivables that are classified as 'past due' in the above table are those that have not been settled within the terms and conditions that have been agreed with that customer.

The credit quality of the Group's customers is monitored on an ongoing basis and assessed for impairment where indicators of such impairment exist. The solvency of the debtor and their ability to repay the receivable is considered in assessing receivables for impairment. Where receivables have been impaired, the Group actively seeks to recover the amounts in question and enforce compliance with credit terms.

Movement in allowances for Financial Assets (other non-current assets and trade and other receivables)

Particulars	US\$ million
As at 01 April 2017	146
Allowance made during the year	37
Reversals during the year	(33)
Foreign Exchange difference	0
As at 31 March 2018	150
Allowance made during the year	7
Reversals during the year	(1)
Foreign Exchange difference	(5)
As at 31 March 2019	151

Derivative financial instruments

The Group uses derivative instruments as part of its management of exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices.

The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts and these are subject to the Group guidelines and policies.

The fair value of all derivatives are separately recorded on the balance sheet within other financial assets (derivatives) and other financial liabilities (derivatives), current and non-current. Derivatives that are designated as hedges are classified as current or non-current depending on the maturity of the derivative.

The use of derivatives can give rise to credit and market risk. The Group tries to control credit risk as far as possible by only entering into contracts with reputable banks and financial institutions. The use of derivative instruments is subject to limits, authorities and regular monitoring by appropriate levels of management. The limits, authorities and monitoring systems are periodically reviewed by management and the Board. The market risk on derivatives is mitigated

by changes in the valuation of the underlying assets, liabilities or transactions, as derivatives are used only for risk management purposes.

Embedded derivatives

Derivatives embedded in other financial instruments or other contracts are treated as separate derivative contracts, when their risks and characteristics are not closely related to those of their host contracts.

Cash flow hedges

The Group enters into forward exchange and commodity price contracts for hedging highly probable forecast transaction and account for them as cash flow hedges and states them at fair value. Subsequent changes in fair value are recognised in consolidated statement of comprehensive income until the hedged transaction occurs, at which time, the respective gain or losses are reclassified to the consolidated income statement. These hedges have been effective for the year ended 31 March 2019.

The Group uses foreign exchange contracts from time to time to optimise currency risk exposure on its foreign currency transactions. The Group hedged part of its foreign currency exposure on capital commitments during fiscal year 2019. Fair value changes on such forward contracts are recognised in the consolidated statement of comprehensive income.

Notes to the Financial Statements continued

for the year ended 31 March 2019

The majority of cash flow hedges taken out by the Group during the year comprise non-derivative hedging instruments for hedging the foreign exchange rate of highly probable forecast transactions and commodity price contracts for hedging the commodity price risk of highly probable forecast transactions.

The cash flows related to above are expected to occur during the year ending 31 March 2020 and consequently may impact the consolidated income statement for that year depending upon the change in the commodity prices and foreign exchange rates movements. For cash flow hedges regarded as basis adjustments to initial carrying value of the property, plant and equipment, the depreciation on the basis adjustments made is expected to affect the consolidated income statement over the expected useful life of the property, plant and equipment.

Fair value hedges

The fair value hedges relate to forward covers taken to hedge currency exposure and commodity price risks.

The Group's sales are on a quotational period basis, generally one month to three months after the date of delivery at a customer's facility. The Group enters into forward contracts

for the respective quotational period to hedge its commodity price risk based on average LME prices. Gains and losses on these hedge transactions are substantially offset by the amount of gains or losses on the underlying sales. Net gains and losses are recognised in the consolidated income statement.

The Group uses foreign exchange contracts from time to time to optimise currency risk exposure on its foreign currency transactions. Fair value changes on such forward contracts are recognised in the consolidated income statement.

Non-qualifying/economic hedge

The Group enters into derivative contracts which are not designated as hedges for accounting purposes, but provide an economic hedge of a particular transaction risk or a risk component of a transaction. Hedging instruments include copper, aluminium and zinc future contracts on the LME and certain other derivative instruments. Fair value changes on such derivative instruments are recognised in the consolidated income statement.

The fair value of the Group's open derivative positions as at 31 March 2019, recorded within financial instruments (derivative) is as follows:

(US\$ million)

	As at 31 March 2019		As at 31 March 2018	
	Liability	Asset	Liability	Asset
Current				
Cash flow hedges				
- Commodity contracts	1	0	15	18
- Forward foreign currency contracts	0	5	-	0
Fair value hedges				
- Commodity contracts	-	0	0	1
- Forward foreign currency contracts	-	1	1	2
Non Qualifying hedges				
- Commodity contracts	11	1	2	1
- Forward foreign currency contracts	53	4	4	2
- Other (Foreign currency swap)	1	0	0	0
Total	66	11	22	24
Non-current				
Fair Value Hedges				
- Forward foreign currency contracts	-	-	16	-
Non Qualifying hedges				
- Commodity contracts	-	-	0	-
- Forward foreign currency contracts	14	-	2	-
Total	14	-	18	-
Grand Total	80	11	40	24

Notes to the Financial Statements continued

for the year ended 31 March 2019

26. PROVISIONS

(US \$ million)

	As at 31 March 2019			As at 31 March 2018		
	Current	Non-Current	Total	Current	Non-Current	Total
Provision for restoration, rehabilitation and environmental	2	369	371	7	344	351
Provision for employee benefits	29	2	31	8	7	15
Others	7	-	7	7	-	7
Total	38	371	409	22	351	373

	Restoration, rehabilitation and environmental	Other
As at 1 April 2017	317	19
Additions	8	0
Utilised	(1)	-
Unused amounts reversed	(10)	-
Unwinding of discount (note 8)	13	-
Revision in estimates	23	-
Reclassified during the year	(6)	(12)
Exchange differences	3	0
Acquisition through business combination	4	-
As at 1 April 2018	351	7
Additions	3	0
Utilised	(2)	-
Unused amounts reversed	(1)	-
Unwinding of discount (note 8)	13	-
Revision in estimates	23	-
Exchange differences	(16)	(0)
Acquisition through business combination (net of disposal)	0	-
As at 31 March 2019	371	7

Restoration, rehabilitation and environmental

The provisions for restoration, rehabilitation and environmental liabilities represent the management's best estimate of the costs which will be incurred in the future to meet the Group's obligations under existing Indian, Australian, Zambian, Namibian, South African and Irish law and the terms of the Group's mining and other licences and contractual arrangements.

Within India, the principal restoration and rehabilitation provisions are recorded within Cairn India where a legal obligation exists relating to the oil and gas fields, where costs are expected to be incurred in restoring the site of production facilities at the end of the producing life of an oil field. The Group recognises the full cost of site restoration as a liability when the obligation to rectify environmental damage arises.

These amounts are calculated by considering discount rates within the range of 2% to 14%, and become payable on closure of mines and are expected to be incurred over a period of one to thirty years. The discount rates at major units are in the range of 2% to 10% at Zinc International with lower range at operations in Ireland and higher range at operations in African Countries, 2% to 3% at Oil & Gas division and 14% at KCM.

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production from a producing field.

Others

Others include provision for disputed cases and claims.

27. RETIREMENT BENEFITS

The Group participates in defined contribution and benefit plans, the assets of which are held (where funded) in separately administered funds.

For defined contribution plans the amount charged to the consolidated income statement is the total amount of contributions payable in the year.

For defined benefit plans, the cost of providing benefits under the plans is determined by actuarial valuation separately each year for each plan using the projected unit credit method by independent qualified actuaries as at the year end. Re-measurement gains and losses arising in the year are recognised in full in Consolidated Statement of Comprehensive Income for the year.

Notes to the Financial Statements continued

for the year ended 31 March 2019

(i) Defined contribution plans

The Group contributed a total of US\$17 million and US\$16 million for the year ended 31 March 2019 and 2018 respectively, to the following defined contribution plans.

Particulars	(US \$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Employer's contribution to Recognised Provident fund and family pension fund	15	14
Employer's contribution to superannuation	2	2
	17	16

Indian pension plans

Central recognised provident fund

In accordance with the 'The Employees Provident and Miscellaneous Provisions Act, 1952', employees are entitled to receive benefits under the Provident Fund. Both the employee and the employer make monthly contributions to the plan at a predetermined rate (12% for the year ended 31 March 2019 and 31 March 2018) of an employee's basic salary. All employees have an option to make additional voluntary contributions. These contributions are made to the fund administered and managed by the Government of India (GOI) or to independently managed and approved funds. The Group has no further obligations under the fund managed by the GOI beyond its monthly contributions which are charged to the consolidated income statement in the period they are incurred.

Family Pension Fund

The Pension Fund was established in 1995 and is managed by the Government of India. The employee makes no contribution to this fund but the employer makes a contribution of 8.33% of salary each month subject to a specified ceiling per employee. This is provided for every permanent employee on the payroll.

At the age of superannuation, contributions ceases and the individual receives a monthly payment based on the level of contributions through the years, and on their salary scale at the time they retire, subject to a maximum ceiling of salary level. The Government funds these payments, thus the Group has no additional liability beyond the contributions that it makes, regardless of whether the central fund is in surplus or deficit.

Superannuation

Superannuation, another pension scheme applicable in India, is applicable only to executives above certain grade. However, in case of oil & gas (applicable from the second year of employment) and Iron Ore Segment, the benefit is applicable to all executives. Vedanta Limited and each relevant Indian subsidiary holds policy with the Life Insurance Corporation of India ("LIC"), to which each of these entities contributes a fixed amount relating to superannuation and the pension annuity is met by the LIC as required, taking into consideration the contributions made. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

Australian pension Scheme

The Group also participates in defined contribution superannuation schemes in Australia. The contribution of a proportion of an employee's salary into a superannuation fund is a compulsory legal requirement in Australia. The employer contributes, into the employee's fund of choice 9.5% of the employee's gross remuneration where the employee is covered by the industrial agreement and 12.50% of the basic

remuneration for all other employees. All employees have an option to make additional voluntary contributions. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

Zambian Pension Scheme

The Konkola Copper Mines (KCM) Pension Scheme is applicable to full-time permanent employees of KCM (subject to the fulfilment of certain eligibility criteria). The management of the scheme is vested in the trustees consisting of representatives of the employer and the members. The employer makes a monthly contribution of 5% to the KCM Pension Scheme and the member makes monthly contribution of 5%.

All contributions to the KCM Pension Scheme in respect of a member cease to be payable when the member attains normal retirement age of 55 years, or upon leaving the service of the employer, or when the member is permanently medically incapable of performing duties in the service of the employer. Upon such cessation of contribution on the grounds of normal retirement, or being rendered medically incapable of performing duties, or early voluntary retirement, the member is entitled to receive his accrued pension. The member is allowed to commute his/her accrued pension subject to certain rules and regulations.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the income statement.

Skorpion Zinc Provident Fund, Namibia

The Skorpion Zinc Provident Fund is a defined contribution fund and is compulsory to all full time employees under the age of 60. Company contribution to the fund is a fixed percentage of 9% per month of pensionable salary, whilst the employee contributes 7% with the option of making additional contributions, over and above the normal contribution, up to a maximum of 12%.

Normal retirement age is 60 years and benefit payable is the member's fund credit which is equal to all employer and employee contributions plus interest. The same applies when an employee resigns from Skorpion Zinc. The Fund provides disability cover which is equal to the member's fund credit and a death cover of 2 times annual salary in the event of death before retirement.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the income statement in the year they are incurred.

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for the year ended 31 March 2019

Black Mountain (Pty) Limited, South Africa Pension & Provident Funds

Black Mountain Mining (Pty) Ltd has two retirement funds, both administered by Alexander Forbes, a registered financial service provider. The purpose of the funds is to provide retirement and death benefits to all eligible employees. Group contributes at a fixed percentage of 10.5% for up to supervisor grade and 15% for others.

Membership of both funds is compulsory for all permanent employees under the age of 60.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated income statement in the year they are incurred.

(ii) Defined benefit plans

(a) Contribution to provident fund trust (the "trusts") of Iron ore division, Bharat Aluminium Company Limited (BALCO), Hindustan Zinc Limited (HZL), Sesa Resources Limited (SRL) and Sesa Mining Corporation Limited (SMCL)

The provident funds of Iron ore division, BALCO, HZL, SRL and SMCL are exempted under section 17 of The Employees Provident Fund and Miscellaneous Provisions Act, 1952. Conditions for grant of exemption stipulates that the employer shall make good deficiency, if any, between the return guaranteed by the statute and actual earning of the Fund. Based on actuarial valuation in accordance with IAS 19 and Guidance note issued by Institute of Actuaries of India for interest rate guarantee of exempted provident fund liability of employees, there is no interest shortfall that is required to be met by Iron ore division, BALCO, HZL, SRL and SMCL as at March 31, 2019 and March 31, 2018. Having regard to the assets of the fund and the return on investments, the Group does not expect any deficiency in the foreseeable future. The Group contributed a total of US\$10 million & US\$10 million for the years ended 31 March 2019 and 2018 respectively in relation to the independently managed and approved funds. The present value of obligation and the fair value of plan assets of the trust are summarised below.

Particulars	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Fair value of plan assets of trusts	317	233
Present value of defined benefit obligation	(306)	(226)
Net liability arising from defined benefit obligation	-	-

Percentage allocation of Plan assets of the trust

Assets by Category	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Government Securities	53.1%	71.2%
Debentures / Bonds	45.7%	28.0%
Equity	1.2%	0.6%
Fixed Deposits	0.0%	0.2%

(b) Post-Retirement Medical Benefits:

The Group has a scheme of medical benefits for employees at BMM and BALCO subsequent to their retirement on completion of tenure including retirement on medical grounds and voluntary retirement on contributory basis. The scheme includes employee's spouses as well. Based on an actuarial valuation conducted as at year-end, a provision is recognised in full for the benefit obligation. The obligation relating to post-retirement medical benefits as at 31 March 2019 was US\$9 million (31 March 2018: US\$10 million). The obligation under this plan is unfunded. The Group considers these amounts as not material and accordingly has not provided further disclosures as required by IAS 19 (Revised 2011) 'Employee benefits'. The remeasurement gain and net interest on the obligation of post-retirement medical benefits of US\$0 million (31 March 2018: US\$0 million) and US\$1 million (31 March 2018: US\$1 million) for the year ended 31 March 2019 have been recognised in other comprehensive income and finance cost respectively.

(c) Other Post-employment Benefits:

India- Gratuity Plan

In accordance with the Payment of Gratuity Act of 1972, Vedanta Limited and its Indian subsidiaries contributes to

a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. The Gratuity Plan provides a lump sum payment to vested employees at retirement, disability or termination of employment being an amount based on the respective employee's last drawn salary and the number of years of employment with the Group.

Based on actuarial valuations conducted as at year end using the projected unit credit method, a provision is recognised in full for the benefit obligation over and above the funds held in the Gratuity Plan. For entities where the plan is unfunded, full provision is recognised in the consolidated statements of financial position.

The iron ore and oil & gas division of Vedanta Limited, SRL, SMCL and HZL have constituted a trust recognised by Indian Income Tax Authorities for gratuity to employees, contributions to the trust are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life Insurance Company Limited and HDFC Standard life insurance.

Zambia

Specified permanent employees of KCM are entitled to receive medical and retirement severance benefits. This comprises

Notes to the Financial Statements continued

for the year ended 31 March 2019

two months' basic pay for every completed year of service with an earliest service start date of 1 July 2004. Under this scheme, benefits are provided based on final pensionable pay and a full actuarial valuation of the scheme is carried out on an annual basis. The accruals are not contributed to any fund and are in the form of provisions in KCM's accounts.

On the death of an employee during service, a lump sum amount is paid to his or her dependants. This amount is equal to sixty months' basic pay for employees who joined before 1 April 2000 and thirty months' basic pay for employees who joined on or after 1 April 2000. For fixed term contract employees, the benefit payable on death is thirty months' basic pay.

Principal actuarial assumptions.

Principal actuarial assumptions used to determine the present value of Other post-employment benefit plan obligation are as follows:

Particulars	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Discount rate	7.8% to 17.0%	7.7% to 18.5%
Expected rate of increase in compensation level of covered employees	2.0%-15.0%	2.0%-15.0%

In India, the mortality tables used, assume that a person aged 60 at the end of the balance sheet date has a future life expectancy of 19 years.

Assumptions regarding mortality for Indian entities are based on mortality table of 'Indian Assured Lives Mortality (2006-2008)' published by the Institute of Actuaries of India.

Assumptions regarding mortality for KCM are based on World Health Organisation Life Tables for 1999 applicable to Zambia which has been taken as a reference point. Based on this a mortality table which is appropriate for the workers of Konkola Copper Mines plc has been derived.

Amount recognised in the Consolidated Statement of Financial Position consists of:

Particulars	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Fair value of plan assets	56	52
Present value of defined benefit obligation	(135)	(122)
Net liability arising from defined benefit obligation	(79)	(70)

Amounts recognised in Consolidated income statement in respect of Other post-employment benefit plan are as follows:

Particulars	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Current service cost	9	7
Past service cost	-	13
Net Interest cost	8	7
Components of defined benefit costs recognised in consolidated income statement	17	27

Amounts recognised in the Consolidated Statement of Comprehensive Income in respect of Other post-employment benefit plan are as follows:

Particulars	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Remeasurement of the net defined benefit obligation:		
Actuarial losses arising from changes in demographic assumptions	0	-
Actuarial losses / (gains) arising from changes in financial assumptions	(1)	0
Actuarial losses / (gains) arising from experience adjustments	7	(1)
Actuarial losses/(gains) on plan assets (excluding amounts included in net interest cost)	0	0
Components of defined benefit costs recognised in consolidated statement of comprehensive income- losses/(gains)	6	(1)

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for the year ended 31 March 2019

The movement of the present value of Other post-employment benefit plan obligation is as follows:

(US\$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Opening balance	(122)	(116)
Acquired in business combination	(2)	-
Current service cost	(9)	(7)
Past service cost	-	(13)
Benefits paid	16	7
Interest cost	(12)	(11)
Actuarial (losses)/gains arising from changes in assumptions	(6)	1
Foreign currency translation	-	0
Derecognition of death benefit obligation during the year	-	22
Reclassification from provisions	-	(7)
Closing balance	(135)	(122)

The movement in the fair value of Other post-employment benefit plan assets is as follows:

(US\$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Opening balance	52	49
Acquired in business combination	2	-
Contributions received	12	5
Benefits paid	(11)	(6)
Remeasurement gain/ (loss) arising from return on plan assets	(0)	(0)
Interest income	4	4
Foreign currency translation	(3)	(0)
Closing balance	56	52

The above plan assets have been invested in the qualified insurance policies.

The actual return on plan assets was US\$4 million and US\$4 million for the year ended 31 March 2019 and 31 March 2018 respectively.

The weighted average duration of the defined benefit obligation is 15 years and 15 years as at 31 March 2019 and 31 March 2018 respectively.

The company expects to contribute US\$8 million to the funded Gratuity plan during the year ending 31 March 2020.

Sensitivity analysis for Defined Benefit Plan

Below is the sensitivity analysis determined for significant actuarial assumptions for the determination of defined benefit obligations and based on reasonably possible changes of the respective assumptions occurring at the end of reporting year while holding all other assumptions constant.

	Increase/ (Decrease) in defined benefit obligation
Discount rate	
Increase by 0.50 %	(3)
Decrease by 0.50%	4
Salary increase	
Increase by 0.50 %	4
Decrease by 0.50%	(3)

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The above sensitivity analysis may not be representative of the actual benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

In presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using the projected unit credit method at the end of reporting period, which is the same as that applied in calculating the defined obligation liability recognised in the consolidated statement of financial position.

Risk analysis

Group is exposed to a number of risks in the defined benefit plans. Most significant risks pertaining to defined benefits plans and management estimation of the impact of these risks are as follows:

Investment risk

Most of the Indian defined benefit plans are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life (ICICI) and HDFC Standard Life. Group does not have any liberty to manage the fund provided to LIC, ICICI prudential and HDFC Standard Life.

28. EMPLOYEE NUMBERS AND COSTS

Average number of persons employed by the Group in the year*

Class of business	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Zinc	5,905	6,035
- India	4,325	4,506
- International	1,580	1,529
Iron ore	2,688	2,869
Copper	7,525	7,724
- India/Australia	1,113	1,162
- Zambia	6,412	6,562
Aluminium	6,784	6,296
Power	98	223
Oil & Gas	1,847	1,780
Other	3,080	156
	27,927	25,083

Costs incurred during the year in respect of Employees and Executive Directors recognised in Consolidated Income Statement

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Salaries and wages	604	555
Defined contribution pension scheme costs (note 27)	17	16
Defined benefit pension scheme costs including interest on defined benefit obligation (note 27)	27	24
Share- based payments charge	21	23
Gratuity- Special Items (note 6)	-	13
Less: cost allocated/directly booked in joint ventures	(92)	(91)
	577	540

*Non IFRS measure

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29. SHARE-BASED PAYMENTS

Employee share schemes

The Group aims to provide superior rewards for outstanding performance and a high proportion of 'at risk' remuneration for Executive Directors. Three employee share schemes were approved by shareholders on Listing in 2003. In 2014, the Board introduced a Performance Share Plan ('PSP') which is the primary arrangement under which share-based incentives are provided to the Executive Directors and the wider management group. In 2015, the Board also introduced a Deferred Share Bonus Plan (DSBP). In 2016, Vedanta Limited (subsidiary of Vedanta Resources Limited) introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders.

The Vedanta Resources Long term Incentive Plan (the 'LTIP') and Employee Share Ownership Plan (the 'ESOP') and Performance Share Plan (the 'PSP')

The maximum value of shares that can be conditionally awarded to an Executive Director in a year is 150% of annual salary. The maximum value of shares that can be awarded to members of the wider management group is calculated by reference to the grade average CTC and individual grade of the employee. The performance conditions attaching to outstanding awards are as follows:

Performance Share Plan (the 'PSP')

Dependent on the level of employee, part of these awards will be subject to a continued service condition only with the remainder measured in terms of Total Shareholder Return ('TSR') (being the movement in a company's share price plus reinvested dividends), compared over the performance period with the performance of the companies as defined in the scheme from the grant date. The extent to which an award vests will depend on the Company's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. The awards granted under PSP plans are either equity-settled or cash-settled. The equity settled plans have an exercise price of 10 US cents per share and the performance period is three years, with no re-testing being allowed. In the cash-based scheme, business performance set against business plan for the financial year is included as an additional condition.

Employee Share Ownership Plan (the 'ESOP')

The awards under this plan are measured in terms of business performance set against business plan for the financial year comprising operational deliverables, enabler parameters and sustainability performance specific to each company. The vesting schedule is graded over three years and varies from company to company.

The exercise price of the awards is 10 US cents per share and the performance period is one year. The exercise period is six months from the date of vesting.

The Vedanta Resources Long term Incentive Plan (the 'LTIP')

The awards under this plan are measured in terms of Total Shareholder Return ('TSR') (being the movement in a company's share price plus reinvested dividends), compared over the performance period with the performance of the companies as defined in the scheme from the grant date. The extent to which an award vests will depend on the Company's TSR rank against a group of peer companies ("Adapted Comparator Group") at the end of the performance period and as moderated by the Remuneration Committee. The exercise price of the awards is 10 US cents per share and the performance period is three years, with no re-testing being allowed.

The Vedanta Resources Deferred Share Bonus Plan (the DSBP)

Under this plan, a portion of the annual bonus is deferred into shares and the awards granted under this scheme are not subject to any performance conditions, but only to service conditions being met. The vesting schedule is staggered over a period of one to three years. In case of DSBP, the shares are purchased from open market and allotted to employees, officers and directors. As on 31 March 2019, there are no options outstanding under the DSBP scheme.

In general, the awards will be settled in equity. The awards are accounted for in accordance with the requirements applying to equity settled share-based payment transactions. The fair value of each award on the day of grant is equal to the average of the middle market quotations of its share price for 5 dealing days before the grant date.

The details of share options for the year ended 31 March 2019 and 31 March 2018 is presented below:

Year of Grant	Exercise Period	Exercise price US cents per share	Options outstanding 1 April 2018	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding at 31 March 2019
2014	17 November 2017- 17 May 2018	10	483,340	-	(28,547)	-	(454,793)	-
2015	1 January 2018 – 1 July 2018	10	8,845	-	-	-	(8,845)	-
2015	30 December 2018 – 30 June 2019	10	4,499,326	-	(167,587)	(1,125,804)	(3,205,935)	-
2016	12 May 2019 - 12 November 2019	10	32,000	-	(7,422)	-	(24,578)	-
2016	11 November 2019 - 11 May 2020	10	371,944	-	(132,776)	(155,277)	(83,891)	-
2017	2 March 2020 – 2 September 2020 (cash based plan)	-	627,660	-	(328,097)	(155,351)	(144,212)	-
2017	14 November 2020 – 14 May 2021 (cash based plan)	-	780,180	-	(566,222)	(169,392)	(44,566)	-
2017	14 November 2020 - 14 May 2021	10	300,670	-	(219,942)	(80,728)	-	-
			7,103,965	-	(1,450,093)	(1,686,552)	(3,966,820)	-

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for the year ended 31 March 2019

Year of Grant	Exercise Period	Exercise price US cents per share	Options outstanding 1 April 2017	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding at 31 March 2018
2014	17 November 2017- 17 May 2018	10	4,247,283	-	(120,483)	(963,690)	(2,679,770)	483,340
2015	1 January 2018 – 1 July 2018	10	21,500	-	(6,000)	(6,655)	-	8,845
2015	30 December 2018 – 30 June 2019	10	4,930,183	-	(430,857)	-	-	4,499,326
2016	12 May 2019 - 12 November 2019	10	32,000	-	-	-	-	32,000
2016	11 November 2019 - 11 May 2020	10	475,000	-	(103,056)	-	-	371,944
2017	2 March 2020 – 2 September 2020 (cash based plan)	-	678,550	-	(50,890)	-	-	627,660
2017	14 November 2020 – 14 May 2021 (cash based plan)	-	-	805,900	(25,720)	-	-	780,180
2017	14 November 2020 - 14 May 2021	10	-	300,670	-	-	-	300,670
			10,384,516	1,106,570	(737,006)	(970,345)	(2,679,770)	7,103,965

During the current year, through a cash offer all the outstanding equity settled options were bought back by Vedanta Resources Limited's parent, Volcan Investments Limited. All the TSR based options were vested based on the TSR performance from the date of grant to the date on which buy-back offer on these options went unconditional. For the service condition related options, no. of options were prorated as per remaining period left till the date of actual vesting except for options issued in December 2015 which got vested in full. For options outstanding under DSBP all options were vested in full. On account of delisting of the Company, the cash based options were also early settled. The accelerated charge on account of early settlement of both the equity settled and cash settled options was recognised in the income statement.

Hence, as at 31 March 2019, no options were exercisable at the year end (31 March 2018: 492,185 options were exercisable). The Weighted average share price for the share options exercised during the year ended 31 March 2019 was GBP 9 (Year ended 31 March 2018: GBP 7). The weighted average maturity period for the options outstanding as on 31 March 2019 is Nil (31 March 2018: 18 months).

Most of the share-based awards of the Group are equity-settled as defined by IFRS 2 "Share-based Payment". The fair value of these awards has been determined at

The assumptions used in the calculations of the charge in respect of the PSP/LTIP awards granted during the year ended 31 March 2018 are set out below:

	Year ended 31 March 2018 PSP/ LTIP	
	November 2017	November 2017
Number of instruments	805,900 (cash settled)	300,670 (equity settled)
Exercise price	-	US\$0.10
Share price at the date of grant	GBP 7.8	GBP 7.8
Contractual life	3years	3years
Expected volatility	61.33%	61.33%
Expected option life	3 years	3 years
Expected dividends	5.77%	5.77%
Risk free interest rate	0.51%	0.51%
Expected annual forfeitures	10%p.a.	10%p.a.
Fair value per option granted	GBP 3.1/GBP 6.6	GBP 3.1

the date of grant of the award allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of awards that will eventually vest as a result of non-market conditions, is expensed on a straight-line basis over the vesting period. Where an award is cash-settled the fair value is recalculated at each reporting date until the liability is settled.

The fair values were calculated using the Stochastic valuation model with suitable modifications to allow for the specific performance conditions of the respective schemes. The inputs to the model include the share price at date of grant, exercise price, expected volatility, expected dividends, expected term and the risk-free rate of interest. Expected volatility has been calculated using historical return indices over the period to date of grant that is commensurate with the performance period of the award. The volatilities of the industry peers have been modelled based on historical movements in the return indices over the period to date of grant which is also commensurate with the performance period for the option. The history of return indices is used to determine the volatility and correlation of share prices for the comparator companies and is needed for the Stochastic valuation model to estimate their future TSR performance relative to the Company's TSR performance. All options are assumed to be exercised immediately after vesting.

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The Group recognised total expenses of US\$6 million (including expenses on DSBP of US\$1 million) and US\$12 million (including expenses on DSBP of US\$2 million) related to equity settled share-based payment transactions in the year ended 31 March 2019 and 31 March 2018 respectively.

The total expense recognised on account of cash settled share based plan during the year ended 31 March 2019 is US\$0 million (31 March 2018 : US\$1 million) and the carrying value of cash settled share based compensation liability as at 31 March 2019 is Nil (31 March 2018 is US\$1 million).

The Vedanta Limited Plans Employee Stock Option Scheme (ESOS) 2016

During the year 2016, Vedanta Limited (subsidiary of Vedanta Resources Limited) introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders. The maximum value of shares that can be conditionally awarded to an Executive Committee in a

year is 125% of annual salary. The maximum value of options that can be awarded to members of the wider management group is calculated by reference to the grade average CTC and individual grade of the employee. The performance conditions attached to the award is measured by comparing company's performance in terms of TSR over the performance period with the performance of the companies as defined in the scheme. The extent to which an award vests will depend on the Vedanta Limited's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. Dependent on the level of employee, part of these awards will be subject to a continued service condition only with the remainder measured in terms of TSR. The exercise price of the awards is 1 INR per share and the performance period is three years, with no re-testing being allowed. Further in some schemes under the plan, business performance set against business plan for the financial year is included as an additional condition. During the year, cash based options were also issued under this scheme.

The details of share options for the year ended 31 March 2019 and 31 March 2018 is presented below:

Year of Grant	Exercise Period	Options outstanding 01 April 2018	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding 31 March 2019
2017	15 December 2019-15 June 2020	7,098,602	-	(590,376)	-	-	6,508,226
2018	1 September 2020-1 March 2021	9,617,340	-	(848,381)	(494,566)	-	8,274,393
2018	16 October 2020-16 April 2021	11,570	-	-	(444)	-	11,126
2018	1 November 2020-1 May 2021	28,740	-	-	(1,102)	-	27,638
2019	1 November 2021-1 May 2022	-	13,793,980	(227,780)	-	-	13,566,200
2019	1 November 2021-1 May 2022 (Cash settled)	-	3,889,980	(42,486)	-	-	3,847,494
		16,756,252	17,683,960	(1,709,023)	(496,112)	-	32,235,077

Year of Grant	Exercise Period	Options outstanding 01 April 2017	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding 31 March 2018
2017	15 December 2019-14 June 2020	7,803,400	-	(704,798)	-	-	7,098,602
2018	1 September 2020-28 February 2021	-	10,048,650	(431,310)	-	-	9,617,340
2018	16 October 2020-15 April 2021	-	11,570	-	-	-	11,570
2018	1 November 2020-30 April 2021	-	28,740	-	-	-	28,740
		7,803,400	10,088,960	(1,136,108)	-	-	16,756,252

The fair value of all awards has been determined at the date of grant of the award allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of awards that will eventually vest as a result of non-market conditions, is expensed on a straight-line basis over the vesting period.

The fair values were calculated using the Stochastic valuation model with suitable modifications to allow for the specific performance conditions of the respective schemes. The inputs to the model include the share price at date of grant, exercise price, expected volatility, expected dividends, expected term and the risk free rate of interest. Expected volatility has been

calculated using historical return indices over the period to date of grant that is commensurate with the performance period of the award. The volatilities of the industry peers have been modelled based on historical movements in the return indices over the period to date of grant which is also commensurate with the performance period for the option. The history of return indices is used to determine the volatility and correlation of share prices for the comparator companies and is needed for the Stochastic valuation model to estimate their future TSR performance relative to the Vedanta Limited's TSR performance. All options are assumed to be exercised immediately after vesting.

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for the year ended 31 March 2019

The assumptions used in the calculations of the charge in respect of the ESOS awards granted during the year ended 31 March 2019 and 31 March 2018 are set out below:

	Year ended March 2019 ESOS November 2018	Year ended March 2018 ESOS September, October & November 2017
Number of instruments	3,889,980 (cash settled)/ 13,793,980 (equity settled)	10,088,960
Exercise price	INR 1	INR 1
Share price at the date of grant	INR 195.0	INR 308.9
Contractual life	3 years	3 years
Expected volatility	44.3%	48%
Expected option life	3 years	3 years
Expected dividends	6.5%	3.7%
Risk free interest rate	7.7%	6.5%
Expected annual forfeitures	10%p.a.	10%p.a.
Fair value per option granted	INR 159.9/INR 96.3	INR 275.3/INR 161.1

The Group recognised total expenses of US\$12 million (2018: US\$7 million) related to equity settled share-based plans under the above scheme in the year ended 31 March 2019.

The Group has awarded certain other cash settled option plans indexed to shares of its subsidiaries. As the amounts under these plans are not material, accordingly no further disclosures have been provided.

The total expense recognised on account of these cash settled option plans during the year ended 31 March 2019 is US\$3 million (2018: US\$3 million) and the carrying value of cash settled share based compensation liability as at 31 March 2019 is US\$5 million (2018: US\$3 million).

30. SHARE CAPITAL

	As at 31 March 2019		As at 31 March 2018	
	Number	Paid up amount (US\$ million)	Number	Paid up amount (US\$ million)
Shares in issue				
Ordinary shares of 10 US cents each	285,246,698	29	303,987,039	30
Deferred shares of £1 each	50,000	0	50,000	0
Total	285,296,698	29	304,037,039	30

Rights and obligations attaching to shares

The rights and obligations attaching to the ordinary and deferred shares are set out in the Articles.

Each ordinary share carries the right to one vote at general meetings of the Company and is entitled to dividends. During the year ended 31 March 2019, the Company issued 3,762,142 ordinary shares at par value of 10 US cents per share to the employees pursuant to the Vedanta Performance Share Plan (31 March 2018: 2,686,214 shares). This included the shares which were issued on vesting of the Company outstanding share plans on account of the takeover offer by Volcan Investments Limited becoming unconditional. In addition, 22,502,483 Treasury shares, equivalent to US\$491 million were cancelled. As a result, the number of Ordinary shares in issue has decreased from that at 31 March 2018 to 285,246,698 shares.

6,904,995 Ordinary shares with no voting rights, which were previously issued on the conversion of certain convertible bonds issued by one of the Group's subsidiaries and held through Global Depositary Receipts, were transferred to Volcan as part of the takeover offer of the Company's shares. Following the takeover, the GDR listing was terminated.

The holders of deferred shares do not have the right to receive notice of any general meeting of the Company nor the right to attend, speak or vote at any such general meeting.

The deferred shares have no rights to dividends and, on a winding-up or other return of capital, entitle the holder only to the payment of the amounts paid on such shares after repayment to the holders of Ordinary Shares of the nominal amount paid up on the Ordinary Shares plus the payment of £100,000 per Ordinary Share. Of the 50,000 deferred shares, one deferred share was issued at par and has been fully paid, and 49,999 deferred shares were each paid up as to one-quarter of their nominal value.

31. NON-CONTROLLING INTERESTS ('NCI')

The Group consists of a parent Company, Vedanta Resources Limited, incorporated in UK and a number of subsidiaries held directly and indirectly by the Group which operate and are incorporated around the world. Note 39 to the financial statements lists details of the interests in the subsidiaries.

Non-controlling interests that are material to the Group relate to Hindustan Zinc Limited (HZL), Cairn India Holdings Limited (CIHL) and its subsidiaries and Vedanta Limited.

As at 31 March 2019, NCIs hold an economic interest of 67.33%, 49.67% and 49.67% respectively in HZL, CIHL and its wholly owned subsidiaries, and Vedanta Limited. In ASI (partly owned subsidiary of CIHL), the NCI's economic interest is 74.01%. The respective NCI holdings as at 31 March 2018 were 67.38%, 49.75% and 49.75% in HZL, CIHL and its wholly

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owned subsidiaries, and Vedanta Limited. In ASI (partly owned subsidiary of CIHL), the NCI's economic interest was 74.06% as at 31 March 2018.

Principal place of business of HZL, CIHL and its subsidiaries and Vedanta Limited is set out under note 39.

The table below shows details of non-wholly owned subsidiaries of the Group that have material non-controlling interests:

The summarised financial information below are on a 100% basis and before inter-company eliminations.

Particulars	Year ended 31 March 2019					Year ended 31 March 2018				
	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total
Profit/ (loss) Attributable to NCI	748	98	330	(515)	661	968	257	508	(497)	1,236
Equity Attributable to NCI**	3,312	1,096	5,826	(4,053)	6,181	3,772	999	6,258	(4,159)	6,870
Dividends paid / payable to NCI	(512)	-	(496)	-	(1,008)	(221)	-	(607)	-	(828)

* Others consist of investment subsidiaries of Vedanta Limited, other individual non-material subsidiaries and consolidation adjustments.

** US\$15 million (31 March 2018 : US\$15 million) loss attributable to NCI of CIHL and its subsidiaries transferred to put option liability. Refer note 3(b) and 24.

Summarised financial information in respect of the components of the Group including subsidiaries that have material non-controlling interests is set out below:

Particulars	As at 31 March 2019					As at 31 March 2018				
	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total
Non-current assets	2,932	3,031	18,635	(3,690)	20,908	2,830	2,413	19,047	(4,249)	20,041
Current assets	3,119	1,117	3,284	1,353	8,873	3,712	1,106	3,574	805	9,197
Current liabilities	1,108	1,061	7,039	3,308	12,516	913	408	7,626	2,707	11,654
Non-current liabilities	24	871	3,150	7,967	12,012	31	1,105	2,415	7,493	11,044
Net assets	4,919	2,216	11,730	(13,612)	5,253	5,598	2,006	12,580	(13,644)	6,540

* Others consist of investment subsidiaries of Vedanta Limited, Vedanta Resources Limited, other individual non-material subsidiaries and consolidation adjustments.

Particulars	Year ended 31 March 2019					Year ended 31 March 2018				
	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total
Revenue	2,981	969	5,442	4,639	14,031	3,379	714	6,985	4,216	15,294
Profit/ (loss) for the year	1,111	217	664	(1,568)	424	1,437	523	1,021	(1,506)	1,475
Other comprehensive income / (loss)**	5	-	(17)	(6)	(18)	(9)	-	14	9	14
Net cash inflow/ (outflow) from operating activities	1,259	148	1,645	(1,166)	1,886	1,560	398	1,235	(1,699)	1,494
Net cash inflow/ (outflow) from investing activities	(173)	114	(540)	(1,077)	(1,676)	294	(803)	1,911	811	2,213
Net cash inflow/ (outflow) from financing activities	(1,368)	(46)	(807)	2,388	167	(2,849)	380	(3,111)	973	(4,607)

* Others consist of Investment subsidiaries of Vedanta Limited, Vedanta Resources Limited, other Individual non-material subsidiaries and consolidation adjustments.

** Excluding exchange differences arising on translation of foreign operations

The effect of changes in ownership interests in subsidiaries that did not result in a loss of control is as follows:

(US\$ million)						
As at 31 March 2019	HZL	CIHL and its subsidiaries	Vedanta Limited	Others	Total	
Other changes in non-controlling interests	-	-	11	21	32	

(US\$ million)						
As at 31 March 2018	HZL	CIHL and its subsidiaries	Vedanta Limited	Others	Total	
Other changes in non-controlling interests	-	17	5	(2)	20	

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32. CAPITAL MANAGEMENT

The Group's objectives when managing capital are to safeguard continuity, maintain a strong credit rating and healthy capital ratios in order to support its business and provide adequate return to shareholders through continuing growth.

The Group sets the amount of capital required on the basis of annual business and long term operating plans which include capital and other strategic investments. The funding requirement is met through a mixture of equity, internal accruals and other borrowings.

The Group monitors capital using a gearing ratio, being the ratio of net debt as a percentage of total capital.

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Total equity	5,253	6,540
Net debt	10,292	9,588
Total capital	15,545	16,128
Gearing	66 %	59%

The increase in the gearing ratio compared to 2018 ratio is primarily due to increase in net debt pursuant to special dividend paid by a subsidiary of the Company.

33. COMMITMENTS, GUARANTEES, CONTINGENCIES AND OTHER DISCLOSURES

A. Commitments

The Group has a number of continuing operational and financial commitments in the normal course of business including:

- Exploratory mining commitments;
- Oil and gas commitments;
- Mining commitments arising under production sharing agreements; and
- Completion of the construction of certain assets.

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Capital commitments contracted but not provided	2,003	2,020

Estimated amount of contracts remaining to be executed on capital accounts and not provided for:

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Oil & Gas sector		
Cairn India	797	668
Aluminium sector		
Lanjigarh Refinery (Phase II)	209	205
Jharsuguda 1.25 MTPA smelter	67	75
Zinc sector		
Zinc India (mines expansion and smelter)	284	305
Gamsberg mining & milling project	26	163
Copper sector		
Tuticorin Smelter 400 KTPA*	404	424
Others	216	180
Total	2,003	2,020

*currently contracts are under suspension under the force majeure clause as per the contract

Commitments related to the minimum work programme (Other than capital commitment):

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Oil & Gas sector		
Cairn India (OALP - New Oil and Gas blocks)	551	-

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B. Guarantees

The aggregate amount of indemnities and other guarantees on which the Group does not expect any material losses, was US\$1,120 million (31 March 2018: US\$416 million).

The Group has given guarantees in the normal course of business as stated below:

- Guarantees and bonds advanced to the customs authorities in India of US\$98 million relating to the export and payment of import duties on purchases of raw material and capital goods (31 March 2018: US\$107 million).
- Guarantees issued for Group's share of minimum work programme commitments of US\$342 million (31 March 2018: US\$26 million).
- Guarantee issued against liabilities for structured investment worth US\$277 million. Liability of US\$299 million pertaining to above mentioned structured investment has been shown under Trade and other payables (refer note 24)
- Guarantees of US\$78 million issued under bid bond (31 March 2018: US\$2 million).
- Bank guarantees of US\$17 million (US\$18 million as on 31 March 2018) has been provided by the Group on behalf of Volcan Investments Limited to Income tax department, India as a collateral in respect of certain tax disputes
- Other guarantees worth US\$308 million (31 March 2018: US\$263 million) issued for securing supplies of materials and services, in lieu of advances received from customers, litigation, for provisional valuation of custom duty and also to various agencies, suppliers and government authorities for various purposes. The Group does not anticipate any liability on these guarantees.

Cairn PSC guarantee to Government

The Group has provided Parent Company guarantee for the Cairn India Group's obligation under the Production Sharing Contract ('PSC').

C. Export Obligations

The Indian entities of the Group have export obligations of US\$562 million (31 March 2018: US\$1,904 million) on account of concessional rates of import duty paid on capital goods under the Export Promotion Capital Goods Scheme and under the Advance Licence Scheme for the import of raw material laid down by the Government of India.

In the event of the Group's inability to meet its obligations, the Group's liability would be US\$78 million (31 March 2018: US\$169 million) reduced in proportion to actual exports, plus applicable interest.

The Group has given bonds of US\$216 million (31 March 2018: US\$226 million) to custom authorities against these export obligations.

D. Contingencies

The Group discloses the following legal and tax cases as contingent liabilities.

Hindustan Zinc Limited: Department of Mines and Geology

The Department of Mines and Geology of the State of Rajasthan issued several show cause notices in August, September and October 2006 to HZL, totalling US\$48 million as at 31 March 2019 (31 March 2018: US\$51 million). These notices alleged unlawful occupation and unauthorised

mining of associated minerals other than zinc and lead at HZL's Rampura Agucha, Rajpura Dariba and Zawar mines in Rajasthan during the period from July 1968 to March 2006. HZL believes it is unlikely that the claim will lead to a future obligation and thus no provision has been made in the financial statements. HZL had filed appeals (writ petitions) in the High Court of Rajasthan in Jodhpur. The High Court restrained the Department of Mines and Geology from undertaking any coercive measures to recover the penalty. Central Government has also been made a party to the case and the matter is likely to be listed now for hearing after completion of pleadings by the Central Government.

Richter and Westglobe: Income Tax

The Group, through its subsidiaries Richter Holdings Limited and Westglobe Limited, in 2007 acquired the entire stake in Finsider International Company Limited (FICL) based in the United Kingdom which held 51% shares of Sesa Goa Ltd, an Indian Company. In October 2013, the Indian Tax Authorities (Tax Authorities) had served an order on Richter and Westglobe for alleged failure to deduct withholding tax on capital gains on the indirect acquisition of shares in April 2007.

The Tax Authorities determined the liability for such non-deduction of tax as US\$127 million (31 March 2018: US\$135 million) in the case of Richter and US\$84 million (31 March 2018: US\$90 million) in the case of Westglobe, comprising tax and interest as at 31 March 2019. Richter and Westglobe filed appeals before the first appellate authority. Appeals (writ petitions) were filed in the High Court of Karnataka challenging the constitutional validity of retrospective amendments made by the Finance Act 2012 and in particular the imposition of obligations to deduct tax on payments made against an already concluded transaction. The Karnataka High Court passed interim orders and directed that the adjudication of liability (TDS quantum and interest) shall no longer remain in force since the tax department passed the orders on merits travelling beyond the limited issue of jurisdiction. The jurisdiction issue will be heard by the High Court.

In another similar matter, ITAT in the case of Cairn UK Holdings Limited held that being a retrospective transaction, interest would not be levied. As a result of the above order from ITAT, the Group now considers the risk in respect of the interest portion of claim to be remote. Accordingly, the Group has revised the contingent liability to US\$74 million in the case of Richter and US\$49 million in the case of Westglobe.

Vedanta Limited: Income tax

In March 2014, Vedanta Limited (notice was served on Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) received a show cause notice from the Indian Tax Authorities ('Tax Authorities') for not deducting withholding tax on the payments made to Cairn UK Holdings Limited (CUHL), for acquiring shares of Cairn India Holdings Limited (CIHL), as part of their internal reorganisation. The Tax Authorities have stated in the notice that a short-term capital gain has accrued to CUHL on transfer of the shares of CIHL to Vedanta Limited, in the financial year 2006-2007, on which tax should have been withheld by Vedanta Limited. Pursuant to this various replies were filed with the Tax Authorities. After several hearings, the Income Tax Authority, in March 2015, issued an order holding Vedanta Limited as 'assessee in default' and raised a demand totalling US\$2,963 million (including interest of US\$1,481 million). Vedanta Limited had filed an appeal before the First

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Appellate Authority, Commissioner of Income Tax (Appeals) which vide order dated 3 July 2017 confirmed the tax demand against Vedanta Limited. Vedanta Limited has challenged the Commissioner of Income Tax's (Appeals) order before the Income Tax Appellate Tribunal (ITAT).

Vedanta Limited also filed a writ petition before the Delhi High Court wherein it has raised several points for assailing the aforementioned Income Tax Authority's order. The matter is pending for adjudication before the Honourable Delhi High Court.

Separately CUHL, on whom the primary liability of tax lies, had received an Order from the ITAT in the financial year 2016-17 holding that the transaction is taxable in view of the clarification made in the Act but also acknowledged that being a retrospective transaction, interest would not be levied. Hence affirming a demand of US\$1,481 million excluding the interest portion that had previously been claimed. The tax department has appealed this order before the Delhi High Court. As a result of the above order from ITAT, the Group considers the risk in respect of the interest portion of claim to be remote. Further, as per the recent recovery notice dated 12 October 2018 received from the Tax Recovery Officer (TRO) appointed for CUHL, tax demand of CUHL of approx. US\$722 million along with interest is outstanding. Further, in the said notice, tax department had also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. Accordingly, amount aggregating to US\$88 million has been paid to the TRO on 26 October 2018 thus reducing the liability to US\$635 million. Vedanta has also paid interim dividend for FY2019 of US\$1 million to the TRO. Accordingly, the Group has revised the contingent liability to US\$634 million (31 March 2018: US\$1,405 million). In the event, the case is finally decided against the Company, the demand payable along with interest as per the above mentioned order would be US\$2,963 million, of which only US\$634 million is considered as possible. Separately, but in connection with this litigation, the Company has filed a Notice of Claim against the Government of India ('GOI') under the UK India Bilateral Investment Treaty (the BIT). The International Arbitration Tribunal passed a favourable order on jurisdiction and recently hearing on merits have been completed and order will be passed in due course. The Government of India has challenged the jurisdiction order of Arbitration Tribunal before the High Court of Singapore.

Ravva Joint Operations arbitration proceedings ONGC Carry

The Ravva Production Sharing Contract (PSC) obliges the contractor parties to pay a proportionate share of ONGC's exploration, development, production and contract costs in consideration for ONGC's payment of costs related to the construction and other activities it conducted in Ravva prior to the effective date of the Ravva PSC (the ONGC Carry). The question as to how the ONGC Carry is to be recovered and calculated, along with other issues, was submitted to an International Arbitration Tribunal in August 2002 which rendered a decision on the ONGC Carry in favour of the contractor parties (including Vedanta Limited (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited)) whereas four other issues were decided in favour of Government of India (GOI) in October 2004 (Partial Award). The GOI then proceeded to challenge the ONGC Carry decision before the Malaysian courts, as Kuala Lumpur was the seat of the arbitration. The Federal Court of Malaysia upheld the Partial

Award. As the Partial Award did not quantify the sums, therefore, contractor parties approached the same Arbitration Tribunal to pass a Final Award in the subject matter since it had retained the jurisdiction to do so. The Arbitral Tribunal was reconstituted and the Final Award was passed in October 2016 in Vedanta Limited's favour. GOI's challenge of the Final Award has been dismissed by the Malaysian High Court and the next appellate court in Malaysia i.e. Malaysian Court of Appeal. GOI then filed an appeal at Federal Court of Malaysia. The matter was heard on 28 February 2019 and the Federal Court dismissed GOI's leave to appeal. Vedanta Limited has also filed for the enforcement of the Partial Award and Final Award with Delhi High Court.

Base Development Cost

Ravva joint operations had received a claim from the Ministry of Petroleum and Natural Gas, Government of India (GOI) for the period from 2000-2005 for US\$129 million for an alleged underpayment of profit petroleum (by recovering higher Base Development Costs ("BDC") against the cap imposed in the PSC) to the Government of India (GOI), out of which, Vedanta Limited's (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) share will be US\$29 million plus interest. Joint venture partners initiated the arbitration proceedings and Arbitration Tribunal published the Award allowing claimants (including Vedanta Limited) to recover the development costs spent to the tune of US\$278 million and disallowed over run of US\$22 million spent in respect of BDC along with 50% legal costs. The High Court of Kuala Lumpur as well as the Court of Appeal dismissed GOI's application of setting aside the part of the Award. GOI challenge to the same before the Federal Court of Malaysia was also dismissed on 17 May 2016. Vedanta Limited has filed an application for enforcement of award before Delhi High Court.

In connection with the above two matters, Vedanta Limited has received an order dated 22 October 2018 from the GOI directing oil marketing companies (OMCs) who are the offtakers for Ravva to divert the sale proceeds to GOI's account. GOI alleges that the Ravva Joint Operations has short paid profit petroleum of US\$314 million (Vedanta Limited's share approximately - US\$93 million) on account of the two disputed issues of ONGC Carry and BDC matters. Against an interim application, filed by Vedanta Limited and other joint venture partner, seeking stay of such action from GOI, before the Delhi High Court, where enforcement petitions for both matters are pending, the Court directed the OMCs to deposit above sums to the Court for both BDC and ONGC Carry matters. However, the Company (and other joint venture partner) has been given the liberty to seek withdrawal of the proportionate amounts (fallen due as of the date of Court order) from the Court upon furnishing a bank guarantee of commensurate value. The interim application is pending adjudication.

While the Company does not believe the GOI will be successful in its challenge, if the Arbitral Awards in above matters are reversed and such reversals are binding, Group would be liable for approximately US\$93 million plus interest (31 March 2018: US\$93 million plus interest).

Proceedings related to the imposition of entry tax

Vedanta Limited and other Group companies i.e. Bharat Aluminium Company Limited (BALCO) and Hindustan Zinc Limited (HZL) challenged the constitutional validity of the local statutes and related notifications in the states of

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for the year ended 31 March 2019

Chhattisgarh, Odisha and Rajasthan pertaining to the levy of entry tax on the entry of goods brought into the respective states from outside.

Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. Post a detailed hearing, although the bench rejected the compensatory nature of tax as a ground of challenge, it maintained status quo with respect to all other issues which have been left open for adjudication by regular benches hearing the matters.

Following the order of the nine judge bench, the regular bench of the Supreme Court proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods bought from other States to the respective High Courts for final determination but retained the issue of jurisdiction for levy on imported goods, for determination by the regular bench of the Supreme Court. Following the order of the Supreme Court, the Group filed writ petitions in respective High Courts.

On 9 October 2017, the Supreme Court has held that states have the jurisdiction to levy entry tax on imported goods. With this Supreme Court judgment, imported goods will rank pari passu with domestic goods for the purpose of levy of Entry tax. Vedanta Limited and its subsidiaries have amended their appeals (writ petitions) in Odisha and Chhattisgarh to include imported goods as well. With respect to Rajasthan, the State Government has filed a counter petition in the Rajasthan High Court, whereby it has admitted that it does not intend to levy the entry tax on imported goods.

The issue pertaining to the levy of entry tax on the movement of goods into a Special Economic Zone (SEZ) remains pending before the Odisha High Court. The Group has challenged the levy of entry tax on any movement of goods into SEZ based on the definition of 'local area' under the Odisha Entry Tax Act which is very clear and does not include a SEZ. In addition, the Government of Odisha further through its SEZ Policy 2015 and the operational guidelines for administration of this policy dated 22 August 2016, exempted the entry tax levy on SEZ operations.

The total claims against Vedanta Limited and its subsidiaries are US\$190 million (31 March 2018: US\$203 million) net of provisions made.

BALCO: Challenge against imposition of Energy Development Cess

BALCO challenged the imposition of Energy Development Cess levied on generators and distributors of electrical energy @ 10 paise per unit on the electrical energy sold or supplied before the High Court on the grounds that the Cess is effectively on production and not on consumption or sale since the figures of consumption are not taken into account and the Cess is discriminatory since captive power plants are required to pay @ 10 paise while the State Electricity Board is required to pay @ 5 paise. The High Court of Chhattisgarh by order dated 15 December 2006 declared the provisions imposing ED Cess on CPPs as discriminatory and therefore ultra vires the Constitution. BALCO has sought refund of ED Cess paid till March 2006 amounting to US\$5 million.

The State of Chhattisgarh moved an SLP in the Supreme Court and whilst issuing notice has stayed the refund of the Cess already deposited and the Supreme Court has also directed

the State of Chhattisgarh to raise the bills but no coercive action be taken for recovery for the same. Final argument in this matter started before the Supreme Court. In case the Supreme Court overturns the decision of the High Court, BALCO would be liable to pay an additional amount of US\$108 million (31 March 2018: US\$101 million) and the company may have to bear a charge of US\$113 million (31 March 2018: US\$106 million).

South Africa Carry Cost

As part of the farm-in agreement for Block 1, the Group was required to carry its joint venture partner, Petro SA, up to a gross expenditure of US\$100 million for a work programme including 3D and 2D seismic studies and at least one exploration well. The Group has spent US\$38 million towards exploration expenditure and a minimum carry of US\$62 million (including drilling one well) was outstanding at the end of the initial exploration period. The Group had sought an extension for execution of deed for entry into the second renewal phase of the exploration period with a request to maintain status quo of the prior approvals due to uncertainty in the proposed changes in fiscal terms impacting the Group financial interest in the block. The same was granted by the South African authority subject to risk of exploration right getting expired on account of recent High Court judgments. The Group had provided for the requisite damages as applicable under the South African Regulations.

During financial year 2018-19, Group has received letter from PASA (Petroleum Agency SA) that exploration right has lapsed through effluxion of time, in line with past judicial precedents and asked to submit a closure application. The Group along with Petro SA has filed the closure application on 19 September 2018. Pending disposal of Group's application the obligation for the aforesaid carry cost of US\$62 million (31 March 2018: US\$62 million) has been assessed as possible and disclosed as a contingency.

Class actions against KCM on behalf of Zambian nationals

Vedanta and KCM had challenged the jurisdiction of the English courts to hear and adjudicate the claims by Zambian residents in relation to KCM's operations in Zambia. The allegations relate to claims of personal injury, significant pollution, environmental damage and claims for aggravated and exemplary damages and for injunctive relief. These allegations are currently defended by KCM. On 27 May 2016, the English High Court of Justice, Queen's Bench Division, Technology and Construction Court ruled that the English courts have jurisdiction to hear and adjudicate the claims. Vedanta and KCM appealed this ruling.

The English Court of Appeal released a judgement on 13 October 2017, dismissing this appeal and ruling that the English courts have jurisdiction to hear and adjudicate the claims. This judgement was solely related to the jurisdiction of the English courts to hear these claims.

Vedanta and KCM had sought permission from the Supreme Court of London to appeal the Court's decision, which was granted by the Supreme Court on 23 March 2018.

The UK Supreme Court hearing on jurisdiction of the UK courts to adjudicate the substantive claims took place on 15 and 16 January, 2019. Both parties presented their arguments and submissions on the days. On 10 Apr 2019, the UK Supreme Court delivered its decision on jurisdiction matter and held that the English Court has jurisdiction to try such claims.

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The Supreme Court, however, agreed with arguments put forward by Vedanta and KCM that England is not the proper place for the trial of these claims and consequently overturned the lower courts on this point. The Court further added that the High Court was entitled to conclude on the evidence before it that there is a real risk that "substantial justice" will not be obtainable in Zambia and because of this, the claims may nonetheless be heard in the English Court.

There has been no hearing or proceeding in any court on the merits of any of these claims to date, none has been scheduled, and the amount of the claims has not been specified. Given the stage of proceedings the amount is presently not quantifiable.

Miscellaneous disputes- Income tax

The Group is involved in various tax disputes amounting to US\$1,070 million (31 March 2018: US\$1,075 million) relating to income tax for the periods for which initial assessments have been completed. These mainly relate to the disallowance of tax holiday for 100% Export Oriented Undertaking under section 10B of the Income Tax Act, 1961, disallowance of tax holiday benefit on production of gas under section 80IB of the Income Tax Act, 1961, tax holiday for undertakings located in certain notified areas under section 80IC of the Income Tax Act, 1961, disallowance of tax holiday benefit for power plants under section 80IA of the Income Tax Act, 1961, on account of depreciation disallowances of the Income Tax Act and interest thereon which are pending at various appellate levels. There are similar matters pending initial assessment by the tax authorities for subsequent years and additional demands, if any, can be determined only once such assessments are completed.

The Group believes that these disallowances are not tenable and accordingly no provision is considered necessary.

Miscellaneous disputes- Others

The Group is subject to various claims and exposures which arise in the ordinary course of conducting and financing its business from the excise, indirect tax authorities and others. These claims and exposures mostly relate to the assessable values of sales and purchases or to incomplete documentation supporting the companies' returns or other claims.

The approximate value of claims (excluding the items as set out separately above) against the Group companies total US\$581 million (31 March 2018: US\$543 million).

The Group considers that it can take steps such that the risks can be mitigated and that there are no significant unprovided liabilities arising.

Except as described above, there are no pending litigations which the Group believes could reasonably be expected to have a material adverse effect on the results of operations, cash flows or the financial position of the Group.

E. Operating Lease commitments: As lessee

(i) Operating leases are in relation to the office premises, office equipment and other assets, some of which are cancellable and some are non-cancellable. There is an escalation clause in the lease agreements during the primary lease period. There are no restrictions imposed by lease arrangements and there are no sub-leases. There are no contingent rents. The total of the future minimum lease payments under non-cancellable leases are as under:

Particulars	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
Within one year of the balance sheet date	2	1
Within two to five years from the balance sheet date	3	1
After five years from the balance sheet date	0	0
Total	5	2

Lease payments recognised as expenses during the year ended 31 March 2019, on non-cancellable leases, is US\$2 million (31 March 2018: US\$1 million).

(ii) TSPL has ascertained that the Power Purchase Agreement (PPA) entered with Punjab State Power Corporation Limited (PSPCL) qualifies to be an operating lease under IAS 17 'Leases'. Based on the assessment that the lease payments by PSPCL are subject to variations on account of various factors like availability of coal, water, etc., the management has determined the entire consideration receivable under the PPA relating to recovery of capacity charges towards capital cost to be contingent rent under IAS 17. The contingent rent recognised as revenue in the consolidated income statement during the year ended 31 March 2019 and 31 March 2018 is US\$242 million and US\$239 million respectively.

34. OTHERS MATTERS

i) Share transactions Call options

a. HZL

Pursuant to the Government of India's policy of divestment, the Group in April 2002 acquired 26% equity interest in HZL from the Government of India. Under the terms of the Shareholder's

Agreement ('SHA'), the Group had two call options to purchase all of the Government of India's shares in HZL at fair market value. The Group exercised the first call option on 29 August 2003 and acquired an additional 18.9% of HZL's issued share capital. The Group also acquired an additional 20% of the equity capital in HZL through an open offer, increasing its shareholding to 64.9%. The second call option provides the Group the right to acquire the Government of India's remaining 29.5% share in HZL. This call option is subject to the right of the Government of India to sell 3.5% of HZL shares to HZL employees. The Group exercised the second call option on 21 July 2009. The Government of India disputed the validity of the call option and has refused to act upon the second call option. Consequently the Group invoked arbitration which is in the early stages. The next date of hearing is to be notified. The Government of India without prejudice to the position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route. Meanwhile, the Supreme Court has, in January 2016, directed status quo pertaining to disinvestment of Government of India's residual shareholding in a public interest petition filed which is currently pending and sub-judice.

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b. BALCO

Pursuant to the Government of India's policy of divestment, the Group in March 2001 acquired 51% equity interest in BALCO from the Government of India. Under the terms of the SHA, the Group has a call option to purchase the Government of India's remaining ownership interest in BALCO at any point from 2 March 2004. The Group exercised this option on 19 March 2004. However, the Government of India has contested the valuation and validity of the option and contended that the clauses of the SHA violate the (Indian) Companies Act, 1956 by restricting the rights of the Government of India to transfer its shares and that as a result such provisions of the SHA were null and void. In the arbitration filed by the Group, the arbitral tribunal by a majority award rejected the claims of the Group on the grounds that the clauses relating to the call option, the right of first refusal, the "tag-along" rights and the restriction on the transfer of shares violate the (Indian) Companies Act, 1956 and are not enforceable. The Group has challenged the validity of the majority award in the High Court of Delhi and sought for setting aside the arbitration award to the extent that it holds these clauses ineffective and inoperative. The Government of India also filed an application before the High Court of Delhi to partially set aside the arbitral award in respect of certain matters involving valuation. The matter is currently scheduled for hearing by the Delhi High Court on 02 August 2019. Meanwhile, the Government of India without prejudice to its position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route.

In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Group considers the strike price of the options to be at fair value, and hence the call options have not been recognised in the financial statements.

ii) Konkola Copper Mines: Value Added Tax

As at 31 March 2019, backlog Value Added Tax (falling under older VAT rule 18 regime) on inputs amounting to US\$45 million (31 March 2018 : US\$72 million) for eight month's period between January 2013 to December 2014 was pending for refund from the Government of republic of Zambia (GRZ). VAT receivable under new VAT rule 18 is US\$119 million (31 March 2018 : US\$116 million). Based on various VAT audits to the satisfaction of Zambia Revenue Authority (ZRA), KCM was granted total refunds for US\$115 million (including US\$12 million of back log VAT) in FY2019.

Sterlite Technologies Limited ('STL')

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Sales	0	11
Purchases	-	0
Other expenses	0	-
Dividend Income	0	0
Management fees expense	2	-
Management fees income	0	0
Net amounts receivable at year end	0	1
Net amounts payable at year end	2	-
Investment in Equity Share	15	23

During FY2018, Government of republic of Zambia have initiated an industry-wide audit of governance and documentations surrounding VAT rules through independent professional audit firms in order to have a more comprehensive review of compliance and governance in VAT regime between 01 January 2013 to 31 December 2015.

The company believes the new comprehensive review would only reaffirm the position of its compliance, given positive outcomes in earlier audits as conducted by ZRA. Accordingly, the company does not recognise any provision against the carrying amount of this receivable. The firm appointed by ZRA has conducted the long pending forensic audit with regards to backlog VAT during FY2019 and the final report has not yet been issued. However, due to delays in closure of the comprehensive assessment, the backlog VAT receivables of US\$45 million has been continued to be classified under "Other non-current assets" in Statement of Financial position as at 31 March 2019.

iii) 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 extended a stay on the order of denial of CTO by JSPCB and continued their interim order to allow the operations till next hearing. Hon'ble High Court has also extended stay against order of Ministry of Environment, Forests and Climate Change (MOEF) dated 20 September 2018 in respect of environment clearance. Presently the stay has been extended till 25 July 2019.

iv) Pursuant to Management Committee recommendation and minutes of Empowered Committee of Secretaries (ECS) filed by Gol, Vedanta Limited had considered cost recovery of US\$251 million in FY2018, being the cost incurred over the initially approved FDP of Pipeline Project. Vedanta Limited's claim for the resultant profit petroleum of US\$43 million (refer note 18), which had been previously paid, has been disputed by the Gol. The Group believes that it has a good case on merits to recover the amount and has therefore treated it as a non-current recoverable amount.

35. RELATED PARTY TRANSACTIONS

The information below sets out transactions and balances between the Group and various related parties in the normal course of business for the year ended 31 March 2019.

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for the year ended 31 March 2019

Sterlite Technologies Limited is related by virtue of having the same controlling party as the Group, namely Volcan. Pursuant to the terms of the Shared Services Agreement dated 5 December 2003 entered into by the Company and STL, the Company provides various commercial services in relation to STL's businesses on an arm's length basis and at normal commercial terms. For the year ended 31 March 2019, the commercial services provided to STL were performed by certain senior employees of the Group on terms set out in the Shared Services Agreement.

Sterlite Power Transmission limited ('SPTL')

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Sales	131	175
Purchases	0	2
Other income	-	0
Reimbursement	0	-
Net Interest Received	1	0
Net amounts receivable at year end	1	1
Net amounts payable at year end	1	1
Investment in Equity Share	2	2

Sterlite Power Transmission limited ('SPTL') is related by virtue of having the same controlling party as the Group, namely Volcan.

Vedanta Foundation

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Donation	1	0
Net advance given at year end	0	1

Vedanta Foundation is a registered not-for-profit entity with a broad focus mainly on education, nutrition and livelihood. The Vedanta Foundation is a related party as it is controlled by members of the Agarwal family who control Volcan. Volcan is also the majority shareholder of Vedanta Resources Limited.

Sesa Goa Community Foundation Limited

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Donation	1	1

Following the acquisition of erstwhile Sesa Goa Limited, the Sesa Goa Community Foundation Limited, a charitable institution, became a related party of the Group on the basis that key management personnel of the Group have significant influence on the Sesa Goa Community Foundation Limited.

Sterlite Power Grid Ventures Limited

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Reimbursement	0	0
Net amounts receivable at year end	0	0

Pursuant to scheme of demerger, SPGVL becomes the subsidiary of Sterlite Power Transmission Limited effective 23 May 2016 which is a subsidiary of Twinstar Overseas Limited.

Sterlite Iron and Steel Company Limited

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Loan given/(repaid)	0	0
Net Interest Income	0	0
Advances given/(received) during the year	0	-
Loan balance receivable at year end	0	1
Net amount receivable at year end (including interest and advance given)	2	2

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Sterlite Iron and Steel Limited is a related party by virtue of having the same controlling party as the Group, namely Volcan.

Vedanta Medical Research Foundation

(US\$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Donation	14	13
Guarantees given during the year (net of relinquishment)	2	5
Guarantees given balance at year end	7	5

Vedanta Medical Research Foundation is a related party of the Group on the basis that key management personnel of the Group exercise significant influence.

Volcan Investments Limited

(US\$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Recovery of expenses	0	0
Dividend paid	73	111
Interest paid on bonds held by Volcan	1	5
Bonds redeemed during the period**	8	82
Value of bonds held by Volcan	13	21
Purchase of structured investment*	541	-
Deferred consideration payable*	299	-
Fair Value of structured investment at year end*	690	-
Net amount receivable at the year end	0	1

** Includes premium on redemption of bonds of US\$ Nil and US\$6 million for the year ended 31 March 2019 and 31 March 2018 respectively.

Volcan Investments Limited is a related party of the Group by virtue of being an ultimate controlling party of the Group.

Bank guarantee has been provided by the Group on behalf of Volcan in favour of Income tax department, India as collateral in respect of certain tax disputes of Volcan. The guarantee amount is US\$17 million (31 March 2018 : US\$18 million).

Pursuant to a buy back offer by Volcan, the Group has rendered 1.7 million shares held by its separate investment trust to Volcan and received US\$19 million as consideration towards the same.

*In December 2018, as part of its cash management activities, Cairn India Holdings Limited (CIHL), a step-down subsidiary of the Company, entered into a tripartite agreement with Volcan and one of its subsidiaries. Under the agreement, CIHL purchased an economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, from Volcan for a total consideration of US\$541 million (GBP 428 million) (of which US\$254 million (GBP 200 million) has been paid up

to March 31 2019), determined based on an independent third-party valuation. The ownership of the underlying shares, and the associated voting interests, remained with Volcan and the investment would mature in two tranches in April 2020 and October 2020. As part of the agreement, CIHL also received a put option (embedded derivative) from the aforementioned subsidiary, the value of which was not material at initial recognition. In February 2019, certain terms of the aforesaid agreement were modified, and it was converted into a biparty agreement between CIHL and Volcan. The revision in the terms did not have any material effect on the fair value of the instrument on that date.

As per the revised agreement, if the share price of AA Plc remain above the Put exercise price, CIHL would be entitled to an amount determined based on the share price of AA Plc multiplied by 15 million and 11 million shares respectively on the aforementioned two maturity dates. Alternatively, CIHL also has an option to realise the instrument for US\$358 million (GBP 274 million) and US\$247 million (GBP 189 million) on the respective maturity dates.

Cairn Foundation

(US\$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Donation	3	3
Net amount payable at the year end	1	2

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for the year ended 31 March 2019

Cairn Foundation though not a related party as per the definition under IAS 24, related party disclosure has been included by way of a voluntary disclosure, following the best corporate governance practices.

India Grid Trust

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Dividend Income	2	1
Investment redeemed during the year	-	0
Investment in Equity Share at year end	15	19

India Grid Trust is a related party of the Group on the basis that the ultimate controlling party of the Group, Volcan Investments Limited, exercises significant influence.

Runaya Refinery LLP

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Purchases	0	-
Amount payable at year end	0	-

Runaya Refinery LLP is a related party of the Group by virtue of being controlled by relative of Group's KMP.

Associates

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Investment made during the year	-	0
Loans given/(repaid) during the year	(0)	-
Investment redeemed during the year	-	0
Loan balance receivable at year end	1	1

Associates include RoshSkor Township (Pty) Ltd., Gaurav Overseas Private Limited and Madanpur SouthCoal Company Limited.

Post Retirement employees benefit trust

Details of transactions during the year with post-retirement employee benefit trusts. The below mentioned trusts are related parties because these are employee trusts.

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
BALCO Employees Provident Fund Trust	2	2
Hindustan Zinc Ltd. Employee Contributory provident fund trust	5	5
Sesa Group Employees Provident Fund Trust	1	1
Sesa Resources Limited Employees Provident Fund Trust	0	0
Sesa Mining Corporate Limited Employees Provident Fund	0	0
HZL Employee group Gratuity Trust	9	3
Sesa Group Employees Gratuity Fund and Sesa Group Executives Gratuity Fund	0	0
Sesa Resources Limited Employees Gratuity Fund	0	0
Sesa Mining Corporation Limited Employees Gratuity Fund	0	0
HZL Superannuation fund Trust	0	0
Sesa Group Executives Superannuation Scheme	0	0
Sesa Resources Limited and Sesa Mining Corporation Limited Employees Superannuation Fund	0	0

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Details of balance payable at the end of the year to post retirement employee benefit trusts.

	(US\$ million)	
	As at 31 March 2019	As at 31 March 2018
BALCO Employees Provident Fund Trust	1	1
Hindustan Zinc Ltd. Employee Contributory provident fund trust	2	1
Sesa Group Employees Provident Fund	0	0
Sesa Resources Limited Employees Provident Fund	0	0
Sesa Mining Corporate Limited Employees Provident Fund	0	0
HZL Employee group Gratuity Trust	8	10
Sesa Group Employees Gratuity Fund and Sesa Group Executives Gratuity Fund	1	1
Sesa Resources Limited Employees Gratuity Fund	0	0
Sesa Mining Corporation Limited Employees Gratuity Fund	0	0
HZL Superannuation fund	0	0
Sesa Group Executives Superannuation Scheme	0	0
Sesa Resources Limited and Sesa Mining Corporation Limited Employees Superannuation Fund	0	0

Remuneration of Key Management Personnel

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Short-term employee benefits	24	20
Post-employment benefits	1	1
Share-based payments	4	5
	29	26
Compensation for Non-Executive Directors	1	1
Commission/Sitting Fees to KMP	0	0

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including any director (whether executive or otherwise).

Other related party*

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Remuneration to relatives	2	1
Commission/ sitting fees to relatives of KMP	0	0

Close relative of the executive chairman.

36. SUBSEQUENT EVENTS

Subsequent to the Balance sheet date, the Company through its wholly owned subsidiary, Vedanta Resources Finance II Plc issued US\$1,000 million bonds in two tranches consisting of :

- (i) US\$400 million of 8% Bonds due April 2023 and
- (ii) US\$600 million of 9.25% Bonds due April 2026.

These bonds are guaranteed by the Company.

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for the year ended 31 March 2019

37. AUDITOR'S REMUNERATION

The table below shows the fees payable globally to the Company's auditor, Ernst & Young LLP and their associate firms, for statutory external audit and audit related services, as well as fees paid to other accountancy firms for statutory external audit and audit related services in each of the two years ended 31 March:

	(US\$ million)	
	Year ended 31 March 2019	Year ended 31 March 2018
Fees payable to the Company's auditor for the audit of Vedanta Resources Limited (formerly Vedanta Resources Plc) annual accounts	1	1
The audit of the Company's subsidiaries pursuant to legislation	2	2
Total audit fees	3	3
Fees payable to the Company's auditor and their associates for other services to the Group		
Other services pursuant to legislation ⁽¹⁾	2	2
Tax services ⁽²⁾	0	0
Corporate finance services ⁽³⁾	1	1
Other services ⁽⁴⁾	0	0
Total non-audit fees	3	3
Total fees paid to the Company's auditor	6	6
Audit fees payable to other auditors of the Group's subsidiaries	0	0
Non-audit fees payable to other auditors of the Group's subsidiaries	-	-
Total fees paid to other auditors	0	0

(1) Other services pursuant to legislation principally comprise assurance services, being quarterly reviews of the Group's subsidiaries results and the half year review of the Group's results.

(2) Tax services principally comprise certification and assurance services as required by Indian and overseas tax regulations.

(3) Corporate finance services principally comprise services in connection with debt raising transactions, group simplification and other acquisition related certifications. These assurance-related services are ordinarily provided by the auditor.

(4) Includes certification related services.

38. JOINT ARRANGEMENTS

Joint Operations

The Group's principal licence interests in oil and gas business are joint operations. The principal licence interests for the year ended 31 March 2019 and 31 March 2018 are as follows:

Oil & Gas blocks/fields	Area	Participating Interest
Operating blocks		
Ravva block-Exploration, Development and Production	Krishna Godavari	22.50%
CB-OS/2 - Exploration	Cambay Offshore	60.00%
CB-OS/2 - Development & production	Cambay Offshore	40.00%
RJ-ON-90/1 - Exploration	Rajasthan Onshore	100.00%
RJ-ON-90/1 - Development & production	Rajasthan Onshore	70.00%
South Africa Block 1- Exploration ⁽¹⁾	Orange Basin South Africa Offshore	60.00%
Non-operating blocks		
KG-ONN-2003/1 ⁽²⁾	Krishna Godavari Onshore	49.00%

(1) Application for closure has been filed with relevant authorities in September 2018

(2) Operatorship has been transferred to Oil and Natural Gas Corporation (ONGC) w.e.f. 07 July 2014

(3) PR-OSN-2004/1 block was relinquished on 30 June 2017

Notes to the Financial Statements continued

for the year ended 31 March 2019

39. LIST OF SUBSIDIARIES

The Group owns directly or indirectly through subsidiaries, more than half of the voting power of all of its subsidiaries as mentioned in the list below, and has power over the subsidiaries, is exposed or has rights, to variable returns from its involvement with the subsidiaries and has the ability to affect those returns through its power over the subsidiaries.

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Direct Subsidiaries of the Parent Company								
Vedanta Resources Holding Limited ('VRHL')	Holding company	5th Floor, 6 St Andrew Street, London EC4A 3AE	United Kingdom	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Resources Jersey Limited ('VRJL')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Resources Jersey II Limited ('VRJL-II')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Finance (Jersey) Limited ('VFJL')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Jersey Investments Limited ('VJIL')	Investment company	13 Castle Street, St. Helier, Jersey JE4 5UT, Channel Islands	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Indirect Subsidiaries of the Parent Company								
Cairn Energy India Pty Limited	Oil and gas exploration, development and production	Level 12, 680 George Street, Sydney NSW 2000, Australia	Australia	50.33%	50.25%	CIHL	100.00%	100.00%
Copper Mines of Tasmania Pty Limited ('CMT')	Copper mining	c/o McCullough Robertson lawyers 44 martin place, Sydney NSW 2000	Australia	50.33%	50.25%	MCBV	100.00%	100.00%
Thalanga Copper Mines Pty Limited ('TCM')	Copper mining	C/O McCullough Robertson lawyers 44 martin place, Sydney NSW 2000	Australia	50.33%	50.25%	MCBV	100.00%	100.00%
Monte Cello Corporation NV ('MCNV')	Investment company	Kaya Flamboyan 6, Curacao	Curacao	100.00%	100.00%	Twin Star	100.00%	100.00%
Richter Holding Limited ('Richter')	Investment company	66, Ippocratous Street, 1015 Nicosia, Cyprus	Cyprus	100.00%	100.00%	VRCL	100.00%	100.00%
Vedanta Resources Cyprus Limited ('VRCL')	Investment company	66, Ippocratous Street, 1015 Nicosia, Cyprus	Cyprus	100.00%	100.00%	VRFL	100.00%	100.00%
Welter Trading Limited ('Welter')	Investment company	28th Oktovriou Street, 205 Louloupis Court, 1st Floor P.C. 3035, Limassol, Cyprus	Cyprus	100.00%	100.00%	VRCL	100.00%	100.00%
Vedanta Limited	Copper smelting, Iron ore mining, Aluminium mining, refining and smelting, Power generation, Oil and Gas exploration, and production	Vedanta Limited 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai-400093, Maharashtra, India	India	50.33%	50.25%	Twin Star	37.26%	37.20%

Notes to the Financial Statements continued

for the year ended 31 March 2019

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Bharat Aluminium Company Limited ('BALCO')	Aluminium mining and smelting	Aluminium Sadan, 2nd Floor, Core-6-Scope Complex, 7 Lodhi Road, New Delhi-110 003	India	25.67%	25.63%	Vedanta Limited	51.00%	51.00%
Electrosteel Steels Limited ⁽³⁾	Manufacturing of Steel (Products : TMT, Wire Rod & DI Pipe)	801, Uma Shanti Apartments, Kanke Road, Ranchi - 834 008, Jharkhand	India	45.30%	-	Vedanta Star Limited	90.00%	-
Goa Sea Ports Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.25%	SPL	100.00%	100.00%
Hindustan Zinc Limited ('HZL')	Zinc mining and smelting	Yashad Bhawan, Udaipur (Rajasthan) - 313004	India	32.67%	32.62%	Vedanta Limited	64.92%	64.92%
MALCO Energy Limited ('MEL')	Power generation	SIPCOT Industrial Complex, Madurai Bypass Road, TV Puram P.O., Tuticorin (Tamil Nadu) - 628 002	India	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Maritime Ventures Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.25%	SPL	100.00%	100.00%
Paradip Multi Cargo Berth Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Sesa Mining Corporation Limited	Iron Ore	Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa)- 403001	India	50.33%	50.25%	SRL	100.00%	100.00%
Sesa Resources Limited ('SRL')	Iron Ore	Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa)- 403001	India	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Sterlite Ports Limited ('SPL')	Infrastructure	MALCO Power company limited, SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Talwandi Sabo Power Limited	Power generation	Vill. Banawala, Mansa - Talwandi Sabo Road, Mansa, Punjab - 151302	India	50.33%	50.25%	Vedanta Limited	100.00%	100.00%

Notes to the Financial Statements continued

for the year ended 31 March 2019

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Vedanta Star Limited***	Holding Company	M 11, First Floor, VIP Road, Harmu Housing Colony, P.S. Argoda, Ranchi 834 002	India	50.33%	-	Vedanta Limited	100.00%	-
Vizag General Cargo Berth Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Killoran Lisheen Finance Limited	Investment company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperary	Ireland	50.33%	50.25%	VLHL	100.00%	100.00%
Killoran Lisheen Mining Limited	Mining	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperary	Ireland	50.33%	50.25%	VLHL	100.00%	100.00%
Lisheen Milling Limited	Manufacturing	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperary	Ireland	50.33%	50.25%	VLHL	100.00%	100.00%
Lisheen Mine Partnership	Mining Partnership Firm	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperary	Ireland	50.33%	50.25%	VLML,KLML	100.00%	100.00%
Vedanta Exploration Ireland Limited	Exploration Company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperary	Ireland	50.33%	50.25%	VLHL	100.00%	100.00%
Vedanta Lisheen Holdings Limited('VLHL')	Investment company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperary	Ireland	50.33%	50.25%	THL Zinc Holding BV	100.00%	100.00%
Vedanta Lisheen Mining Limited ('VLML')	Mining	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperary	Ireland	50.33%	50.25%	VLHL	100.00%	100.00%
Avanstrate Inc. ('ASI') ⁽¹⁾	Holding company	No.1-11-1 Nishi-Gotanda-1, Shinagawa-ku, Tokyo, Japan	Japan	25.99%	25.63%	Cairn India Holdings Limited	51.63%	51.63%
Valliant (Jersey) Limited	Investment Company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRJL-II	100.00%	100.00%

Notes to the Financial Statements continued

for the year ended 31 March 2019

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Cairn India Holdings Limited	Investment company	4th Floor, 22-24 New Street, St. Paul's Gate, St. Helier, Jersey, JE1 4TR	Jersey	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Western Cluster Limited	Mining Company	Amir Building, 18th Street, Sinkor, Tubman Boulevard, Sinkor, Monrovia, Liberia, West Africa	Liberia	50.33%	50.25%	BFL	100.00%	100.00%
CIG Mauritius Holdings Private Limited	Investment company	Ocorian Corporate Services (Mauritius) Limited, 6th Floor, Tower A, 1 CyberCity, Ebene, Mauritius	Mauritius	50.33%	50.25%	Cairn Energy Hydrocarbons Limited	100.00%	100.00%
CIG Mauritius Private Limited	Investment company	Ocorian Corporate Services (Mauritius) Limited, 6th Floor, Tower A, 1 CyberCity, Ebene, Mauritius	Mauritius	50.33%	50.25%	CIG Mauritius Holding Private Limited	100.00%	100.00%
Bloom Fountain Limited ('BFL')	Operating (Iron ore) and Investment Company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Sesa Sterlite Mauritius Holdings Limited*	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.25%	BFL	100.00%	100.00%
THL Zinc Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.25%	THL Zinc Ventures Limited	100.00%	100.00%
THL Zinc Ventures Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Twin Star Energy Holdings Limited ('TEHL')*	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.25%	BFL	100.00%	100.00%
Twin Star Holdings Limited ('Twin Star')	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	100.00%	100.00%	VRHL	100.00%	100.00%
Twin Star Mauritius Holdings Limited ('TMHL')*	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.25%	TEHL	100.00%	100.00%
Westglobe Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	100.00%	100.00%	Richter	100.00%	100.00%

Notes to the Financial Statements continued

for the year ended 31 March 2019

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Amica Guesthouse (Proprietary) Limited	Accommodation and catering services	4 mokke street, Windhoek, Namibia	Namibia	50.33%	50.25%	SZPL	100.00%	100.00%
Namzinc (Proprietary) Limited ('SZ')	Mining	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.25%	SZPL	100.00%	100.00%
Rosh Pinah Healthcare (Proprietary) Limited	Leasing out of medical equipment and building and conducting services related thereto	24 Ondye Drive, Rosh Pinah7 Von Lindeque Street, Mariental, Namibia	Namibia	34.72%	34.67%	SZPL	69.00%	69.00%
Skorpion Mining Company (Proprietary) Limited ('NZ')	Mining	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.25%	SZPL	100.00%	100.00%
Skorpion Zinc (Proprietary) Limited ('SZPL')	Acquisition of immovable and movable properties	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.25%	VNHL	100.00%	100.00%
THL Zinc Namibia Holdings (Proprietary) Limited ('VNHL')	Mining and Exploration	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.25%	THL Zinc Limited	100.00%	100.00%
Lakomasko B.V.	Investment company	Atrium Building, 8th Floor, Strawinskyaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.25%	THL Zinc Holding B.V.	100.00%	100.00%
Monte Cello BV ('MCBV')	Holding company	Atrium Building, 8th Floor, Strawinskyaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
THL Zinc Holding BV	Investment company	Atrium Building, 8th Floor, Strawinskyaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
Cairn Energy Discovery Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.25%	Cairn India Holdings Limited	100.00%	100.00%
Cairn Energy Gujarat Block 1 Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.25%	Cairn India Holdings Limited	100.00%	100.00%
Cairn Energy Hydrocarbons Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.25%	Cairn India Holdings Limited	100.00%	100.00%
Cairn Exploration (No. 2) Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.25%	Cairn India Holdings Limited	100.00%	100.00%
Black Mountain Mining (Proprietary) Limited	Mining	Penge Road, Aggeneys	South Africa	37.24%	37.19%	THL Zinc Limited	74.00%	74.00%
Cairn South Africa Proprietary Limited	Oil and gas exploration, development and production	22 Bree Street, Cape Town, 8001, South Africa	South Africa	50.33%	50.25%	Cairn Energy Hydrocarbons Limited	100.00%	100.00%

Notes to the Financial Statements continued

for the year ended 31 March 2019

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Avanstrate Korea Inc ⁽¹⁾	LCD glass substrate manufacturing	84 ,Hyeongoksandan-ro, Cheongbuk-myeon, Pyeongtaek-city , Gyeonggi, South Korea	South Korea	25.99%	25.63%	Avanstrate (Japan) Inc.	100.00%	100.00%
Cairn Lanka Private Limited	Oil and gas exploration, development and production	Lanka Shipping Tower, No.99, St. Michael's Road, Colombo 03	Sri Lanka	50.33%	50.25%	CIG Mauritius Private Limited	100.00%	100.00%
Avanstrate Taiwan Inc ⁽¹⁾	LCD glass substrate manufacturing	No 8 , Industry III road Annan ,Tainan	Taiwan	25.99%	25.63%	Avanstrate (Japan) Inc.	100.00%	100.00%
Fujairah Gold FZC	Gold & Silver processing	P.O. Box 3992, Fujairah, United Arab Emirates	UAE	50.33%	50.25%	MEL	100.00%	100.00%
Finsider International Company Limited	Investment company	5th Floor, 6 St Andrew Street, London, EC4A 3AE	United Kingdom	100.00%	100.00%	Richter, Westglobe	100.00%	100.00%
Vedanta Finance UK Limited	Investment company	5th Floor, 6 St Andrew Street, London, EC4A 3AE	United Kingdom	100.00%	100.00%	Welter	100.00%	100.00%
Vedanta Resources Finance II Plc ^{***}	Investment company	5th Floor, 6 St Andrew Street, London, EC4A 3AE	United Kingdom	100.00%	-	VRHL	100.00%	-
Vedanta Resources Finance Limited ('VRFL')	Investment company	5th Floor, 6 St Andrew Street, London, EC4A 3AE	United Kingdom	100.00%	100.00%	VRHL	100.00%	100.00%
Sterlite (USA) Inc.	Investment company	Corporation Service Company, 2711 Centerville Road, Suite 400, City of Wilmington, Country of New Castle, Delaware, 19808	USA	50.33%	50.25%	Vedanta Limited	100.00%	100.00%
KCM SmelterCo Limited	Sale of copper and slimes	Private Bag KCM (C) 2000, Stand M 1408, Fern Avenue, Chingola, Zambia	Zambia	79.42%	79.42%	KCM	100.00%	100.00%
Konkola Copper Mines PLC ('KCM')	Mining, production and marketing of Copper and Cobalt Alloys	Private Bag KCM (C) 2000, Stand M 1408, Fern Avenue, Chingola, Zambia	Zambia	79.42%	79.42%	VRHL	79.42%	79.42%

* Under liquidation

*** Incorporated during the year

(1) On 28 December 2017, the Group through its wholly owned subsidiary, acquired 51.6% equity stake in AvanStrate Inc. (ASI) (Refer note 3(b))

(2) The Group also has interest in certain trusts which are neither significant nor material to the Group.

(3) On 04 June 2018, the Group through its wholly owned subsidiary, acquired 90.0% equity stake in Electrosteel Steels Limited (ESL) (Refer note 3(a))

40. ULTIMATE CONTROLLING PARTY

At 31 March 2019, all of the issued shares of the Company were held by Volcan Investments Limited and its wholly owned subsidiary, Volcan Investments Cyprus Limited. Accordingly, the ultimate controlling party of the Group was Volcan, which is controlled by persons related to the Executive Chairman, Mr Anil Agarwal. Volcan Investments Limited is incorporated in the Bahamas and Volcan Investments Cyprus Limited is incorporated in Cyprus. Neither Volcan Investments Limited nor Volcan Investments Cyprus Limited produce Group accounts.

Company Balance sheet

As at 31 March 2019

(US\$ million)

	Note	As at 31 March 2019	As at 31 March 2018
Fixed assets			
Tangible assets	2	7	0
Investments in subsidiaries	3	1,226	1,226
Financial asset investment	5	0	0
		1,233	1,226
Current assets			
Debtors due within one year	6	621	2,207
Debtors due after one year	6	4,487	2,565
Investments	7	29	9
Cash and cash equivalents		8	54
		5,145	4,835
Creditors: amounts falling due within one year			
Trade and other creditors	8	75	77
External borrowings	8	100	252
		175	329
Net current assets			
		4,970	4,506
Total assets less current liabilities			
		6,203	5,732
Creditors: amounts falling due after one year			
Loan from subsidiary	9	176	176
External borrowings	9	4,541	4,237
		4,717	4,413
Net assets			
		1,486	1,319
Capital and reserves			
Called up share capital		29	30
Share premium account		202	202
Share-based payment reserve		-	13
Capital Redemption Reserve		2	-
Other reserves		(2)	(2)
Treasury shares		-	(491)
Profit and loss account		1,255	1,567
Equity shareholders' funds			
		1,486	1,319

The separate Financial Statements of Vedanta Resources Limited (formerly Vedanta Resources Plc) with registration number 4740415 were approved by the Board of Directors on 20 May 2019 and signed on their behalf by

Srinivasan Venkatakrishnan
Chief Executive Officer

Company Statement of Changes in Equity

For the year ended 31 March 2019

(US\$ million)

	Share capital*	Share premium	Share-based payment reserve	Capital redemption Reserve	Treasury Shares**	Retained earnings	Other Reserves	Total
Equity shareholders' funds at 1 April 2018	30	202	13	-	(491)	1,567	(2)	1,319
Profit for the year	-	-	-	-	-	274	-	274
Dividends paid (note 13 of Group financial statements)***	-	-	-	-	-	(114)	-	(114)
Exercise of stock options (note 29 of Group financial statements)	1	-	(19)	-	-	19	-	1
Cancellation of Treasury Shares	(2)	-	-	-	491	(489)	-	-
Recognition of share based payments (note 29 of Group financial statements)	-	-	6	-	-	-	-	6
Transfer to capital redemption reserve	-	-	-	2	-	(2)	-	-
Movement in fair value of Financial Investment	-	-	-	-	-	-	0	0
Equity shareholders' funds as at 31 March 2019	29	202	-	2	-	1,255	(2)	1,486

For the year ended 31 March 2018

(US\$ million)

	Share capital*	Share premium	Share-based payment reserve	Treasury Shares**	Retained earnings	Other Reserves	Total
Equity shareholders' funds at 1 April 2017	30	202	28	(491)	1,300	(2)	1,067
Profit for the year	-	-	-	-	407	-	407
Dividends paid (note 13 of Group financial statements)***	-	-	-	-	(165)	-	(165)
Exercise of stock options (note 29 of Group financial statements)	0	-	(27)	-	27	-	0
Recognition of share based payments (note 29 of Group financial statements)	-	-	12	-	-	-	12
Gift to Employees Benefit Trust****	-	-	-	-	(2)	-	(2)
Movement in fair value of Financial Investment	-	-	-	-	-	(0)	(0)
Equity shareholders' funds as at 31 March 2018	30	202	13	(491)	1,567	(2)	1,319

* For details, refer note 30 of Group financial statements

** The treasury shares have been cancelled during the year. At 31 March 2019, the total number of treasury shares held by the Company was NIL (31 March 2018: 22,502,483).

*** Total dividends of US\$114 million (2018:US\$165 million) includes dividend of US\$1 million (US\$1 million) paid to a separate investment trust which is consolidated in the Group's financial statements with that element of dividends paid by the company being eliminated (Refer note 13 of Group financial statements).

**** Gift to Employees Benefit Trust relates to net purchase of treasury shares under the employee Deferred Share Bonus Plan (Refer to note 29 of Group financial statements).

Notes to the Financial Statements continued

for the year ended 31 March 2019

1. COMPANY ACCOUNTING POLICIES

Basis of Accounting

The company meets the definition of a qualifying entity in accordance with Financial Reporting Standard 100 'Application of Financial Reporting Requirements' (FRS 100) issued by the Financial Reporting Council and in accordance with 101 Reduced Disclosure Framework (FRS 101). Accordingly, these financial statements have been prepared on a going concern basis and in accordance with the provisions of the UK Companies Act 2006 and applicable UK accounting standards.

These financial statements have been prepared under the historical cost convention.

As permitted by section 408 of the Companies Act 2006, the profit and loss account of the Company is not presented as part of these financial statements. The profit after tax for the year of the Company amounted to US\$274 million (2018: Profit US\$407 million)

These financial statements are presented in US dollars being the functional currency of the Company.

In these financial statements, the Company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- The requirements of paragraph 38, 134 and 136 of IAS 1 'Presentation of Financial Statements'
- The requirements of IAS 7 'Statement of Cash Flows';
- The requirements of IFRS 7 'Financial Instruments : Disclosures';
- The requirements of Paragraph 17 of IAS 24 "Related party disclosures"
- The requirements of IAS 24, "Related party disclosures" to disclose related-party transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by such a member.
- Paragraphs 91-99 of IFRS 13 "Fair value measurement" (disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities)
- The requirements of Paragraph 30 and 31 of IAS 8 "Accounting policies, changes in accounting estimates and errors" in relation to standards not yet effective.

Significant accounting policies

Investments in subsidiaries

Investments in subsidiaries represent equity holdings in subsidiaries except preference shares, valued at cost less any provision for impairment. Investments are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable.

Investment in preference shares of subsidiaries

Investments in preference shares of subsidiaries are stated at fair value. The fair value is represented by the face value of the preference shares as the investments are redeemable at any time for their face value at the option of the Company.

Cash and cash equivalents

Cash and cash equivalents in the balance sheet comprise of cash at bank, short term bank deposits and cash in hand.

Currency translation

Transactions in currencies other than the functional currency of the Company, being US dollars, are translated into US dollars at the spot exchange rates ruling at the date of transaction. Monetary assets and liabilities denominated in other currencies at the balance sheet date are translated into US dollars at year end exchange rates, or at a contractual rate if applicable.

Tangible fixed assets

Tangible fixed assets are stated at cost less accumulated depreciation and provision for impairment.

Deferred taxation

Deferred taxation is provided in full on all timing differences that result in an obligation at the balance sheet date to pay more tax, or a right to pay less tax, at a future date, subject to the recoverability of deferred tax assets. Deferred tax assets and liabilities are not discounted.

Share-based payments

The cost of equity-settled transactions with employees is measured at fair value at the date at which they are granted. The fair value of share awards are determined with the assistance of an external valuer and the fair value at the grant date is expensed on a straight-line basis over the vesting period based on the Company's estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date at which point the estimate is adjusted to reflect the current expectations. No adjustment is made to the fair value after the vesting date even if the awards are forfeited or not exercised. Amounts recharged to subsidiaries in respect of awards granted to employees of subsidiaries are recognised as intercompany debtors/creditors until repaid.

The resultant increase in equity is recorded in share based payment reserve.

In case of cash-settled transactions, a liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognised in employee benefits expense. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The fair value is determined with the assistance of an external valuer.

Convertible Bonds

The Convertible bond issued by VRJL and VRJL-II are accounted for as a compound instrument. The gross proceeds (net of issue costs) were lent to the Company by VRJL and VRJL-II. The equity component has been recognised in a separate reserve of the Company and is not subsequently remeasured. The recognition of the equity component by the Company acts to reduce the payable to VRJL and VRJL-II which arises once the gross proceeds are borrowed. The liability component is held at amortised cost. The interest

Notes to the Financial Statements continued

for the year ended 31 March 2019

expensed on the liability component is calculated by applying an effective interest rate. The difference between interest expensed and interest paid is added to the carrying amount of the liability component.

Financial guarantees

Guarantees issued by the Company on behalf of subsidiaries are designated as 'Insurance Contracts'. Accordingly these are shown as contingent liabilities. (Note 10)

The Group has adopted with effect from 01 April 2018, the following new standards and amendments.

Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(a) Financial Assets – Recognition

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset on the trade date.

For purposes of subsequent measurement, financial assets are classified in the following categories:

Debt instruments at amortised cost

A 'debt instrument' is measured at amortised cost if both the following conditions are met:

- The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
- Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the Effective Interest Rate (EIR) method.

Equity instruments

All equity investments in scope of IFRS 9 are measured at fair value. For all equity instruments not held for trading, the Company may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value.

(b) Financial Asset - Derecognition

The Company derecognises a financial asset when the contractual rights to cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

(c) Impairment of financial assets

In accordance with IFRS 9, the Company applies expected credit loss ("ECL") model for measurement and recognition of impairment loss on financial assets.

The Company follows 'simplified approach' for recognition of impairment loss allowance on trade receivables. The Company

recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

At each reporting date, for recognition of impairment loss on other financial assets and risk exposure, the Company determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has increased significantly, lifetime ECL is used instead of 12-month ECL.

ECL is the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original EIR.

(d) Financial liabilities – Recognition & Subsequent measurement

The Company's financial liabilities include trade and other payables and loans and borrowings. All financial liabilities are recognised initially at fair value, and in the case of financial liabilities at amortised cost, net of directly attributable transaction costs.

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method.

(e) Financial liabilities – Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires.

Previous period Accounting Policy: Financial asset investments

Financial asset investments are classified as available for sale under IAS 39 and are initially recorded at cost and then remeasured at subsequent reporting dates to fair value. Unrealised gains and losses on financial asset investments are recognised directly in equity. On disposal or impairment of the investments, the gains and losses in equity are recycled to the income statement.

Borrowings

Interest bearing loans are recorded at the net proceeds received i.e. net of direct transaction costs. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on accruals basis and charged to the profit and loss account using the effective interest method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Debtors

Debtors are stated at their nominal value as reduced by appropriate allowance for estimated irrecoverable amounts. An allowance for impairment for debtors is made where there is an indication of a reduction in the recoverability of the carrying value of the debtor.

Creditors

Creditors are stated at their nominal value.

Notes to the Financial Statements continued

for the year ended 31 March 2019

2. COMPANY TANGIBLE FIXED ASSETS

	(US\$ million)
Cost	
At 1 April 2017	2
Additions	0
Deletions/Disposals	-
At 31 March 2018	2
Additions	7
Deletions/Disposals	(2)
At 31 March 2019	7
Accumulated depreciation	
At 1 April 2017	2
Charge for the period	0
At 31 March 2018	2
Charge for the period	0
Deletions/Disposals	(2)
At 31 March 2019	0
Net book value	
At 1 April 2017	0
At 31 March 2018	0
At 31 March 2019	7

3. INVESTMENTS IN SUBSIDIARIES

	(US\$ million)
Cost	
At 1 April 2017	1,226
At 1 April 2018	1,226
At 31 March 2019	1,226

At 31 March 2019, the Company held 157,538,524 shares in Vedanta Resources Holdings Limited ('VRHL') (March 2018: 157,538,524 shares), being 100% of VRHL's issued equity share capital. The Company also held one deferred share in VRHL (March 2018: one). At 31 March 2019, the Company held two shares in Vedanta Finance Jersey Limited ('VFJL') (March 2018: two), two shares in Vedanta Resources Jersey Limited ('VRJL') (March 2018: two), two shares in Vedanta Resources Jersey II Limited ('VRJL-II') (March 2018: two), two shares in Vedanta Jersey Investment Limited ('VJIL') (March 2018: two), being 100% of its issued equity share capital.

VRHL is an intermediary holding company incorporated in the United Kingdom (note 39 of the financial statements of the Group) and registered in England and Wales. VFJL, VRJL, VJIL and VRJL-II are companies, registered and incorporated in Jersey, established to raise funds for the Vedanta Group.

4. INVESTMENT IN PREFERENCE SHARES OF SUBSIDIARIES

	(US\$ million)
Fair value	
At 1 April 2018	-
Additions	-
Redemption	-
At 31 March 2019	-
At 1 April 2017	5
Additions	-
Redemption	(5)
At 31 March 2018	-

As at 31 March 2019, the Company held nil preference shares in Vedanta Resources Jersey Limited ("VRJL") (March 2018: Nil preference shares). During the previous year, all the preference shares have been redeemed by VRJL.

Notes to the Financial Statements continued

for the year ended 31 March 2019

5. FINANCIAL ASSET INVESTMENT

	(US\$ million)
Fair value	
At 1 April 2018	0
Fair value movement	0
At 31 March 2019	0
At 1 April 2017	0
Fair value movement	(0)
At 31 March 2018	0

The investment relates to an equity investment in the shares of Victoria Gold Corporation. At 31 March 2019, the investment in Victoria Gold Corporation was revalued and gain of US\$0 million (2018: loss of US\$0 million) was recognised in equity.

6. COMPANY DEBTORS

	As at 31 March 2019	As at 31 March 2018
Amounts due from subsidiary undertakings	5,106	4,771
Prepayments and accrued income	1	1
Other taxes	1	0
Total	5,108	4,772
Debtors due within one year	621	2,207
Debtors due after one year	4,487	2,565
Total	5,108	4,772

Amounts due from subsidiary undertakings

At 31 March 2019, the Company had loans due from VRHL of US\$2,180 million (2018: US\$2,110 million) which represented the funds being loaned for funding the subsidiaries. Out of the total loan, US\$1,433 million bears interest 6.82%, US\$547 million at 6.95%, US\$200 million at US\$LIBOR plus 385 basis points.

At 31 March 2019, the Company had loan of US\$2,425 million (2018: US\$2,270 million) due from Vedanta Resources Jersey II Limited (VRJL-II). Out of the total loan US\$523 million bears interest at 6.82%, US\$60 million at 6.50%, US\$1,724 million at 6.95%, US\$118 million at 6.75%.

The loan due from Vedanta Resources Jersey Limited (VRJL) has been fully received during the year (2018: US\$84 million).

The Company was owed US\$472 million (2018: US\$299 million) of accrued interest from VRHL and VRJL-II and VRJL out of which the accrued interest due from VRJL has been fully received during the year.

In addition to the loans, the Company was also owed US\$29 million (2018: US\$8 million) of other receivables from Group companies.

7. COMPANY CURRENT ASSET INVESTMENTS

	As at 31 March 2019	As at 31 March 2018
Bank term deposits	29	9
Total	29	9

8. COMPANY CREDITORS: AMOUNTS FALLING DUE WITHIN ONE YEAR

	As at 31 March 2019	As at 31 March 2018
Accruals	71	68
Advance from related parties	4	9
Term Loans (Note 9)	100	-
Bonds:		
6.000% bonds due in January, 2019*	-	252
Total	175	329

*Repaid fully during the current year.

Notes to the Financial Statements continued

for the year ended 31 March 2019

9. COMPANY CREDITORS: AMOUNTS FALLING DUE AFTER ONE YEAR

(US\$ million)

	As at 31 March 2019	As at 31 March 2018
Loan from subsidiary	176	176
Term loans	1,487	1,088
Bonds:		
6.125% bonds due August, 2024	993	992
8.250% bonds due June, 2021	668	667
6.375% bonds due July, 2022	995	993
7.125% bonds due May, 2023	498	497
6.000% bonds due January, 2019*	-	252
Less: Current Maturities (Note 8)		
Term loans	(100)	
6.000% bonds due January, 2019*	-	(252)
Total	4,717	4,413

* Repaid fully during the current year

As at 31 March 2019 loan from subsidiary included a loan of US\$176 million due to Vedanta Finance UK Limited. During the previous year, its maturity has been extended to January 2021 and the rate of interest has been amended to US\$ LIBOR plus 410 basis points.

Terms loans are made up of the following loans that the Company has entered into:

- In March 2015, the Company entered into a facility agreement with State Bank of India for borrowing up to US\$350 million. US\$100 million is repayable in March 2020 and bears interest at a rate of US\$ LIBOR plus 370 basis points, US\$250 million bears interest at a rate of US\$ LIBOR plus 403 basis points repayable in two instalments being US\$100 million due in June 2021 and US\$150 million due in June 2022. As at 31 March 2019, the outstanding amount under this facility is US\$348 million. Accordingly, an amount of US\$100 million has been reclassified from creditors due after one year to creditors due within one year. Post the Balance Sheet date, US\$100 million under this facility has been repaid.
- In January 2016, the Company entered into a facility agreement with State Bank of India for borrowing up to US\$300 million. US\$120 million is repayable in February 2022 and bears interest at a rate of US\$ LIBOR plus 450 basis points. US\$180 million is repayable in February 2023 and bears interest at a rate of US\$ LIBOR plus 453 basis points. As at 31 March 2019, the outstanding amount under this facility is US\$298 million.
- In November 2017, the Company entered into a facility agreement with Syndicate Bank for borrowing up to US\$100 million and bears interest at a rate of 3 months US\$ LIBOR plus 325 basis points. US\$1 million is repayable in November 2021 and US\$99 million repayable in November 2022. As at 31 March 2019, the outstanding amount under this facility is US\$99 million.
- During the previous year, the Company entered into facility agreements with Yes Bank in different tranches for borrowings up to US\$150 million and bears interest at a rate of US\$ LIBOR plus 299 basis points. US\$15 million is repayable in July 2020, US\$20 million is repayable in January 2021, US\$25 million is repayable in July 2021,

US\$40 million is repayable in January 2022 and US\$50 million is repayable in July 2022. As at 31 March 2019, the outstanding amount under this facility is US\$148 million.

- During the previous year, the Company entered into facility agreements with State Bank of India in different tranches for borrowings up to US\$200 million and bears interest at a rate of US\$ LIBOR plus 339 basis points. The loan is repayable in January 2025. As at 31 March 2019, the outstanding amount under this facility is US\$198 million.
- During the current year, the Company entered into facility agreements with ICICI Bank in different tranches for borrowings up to US\$200 million and bears interest at a rate of US\$ LIBOR plus 339 basis points. The loan is repayable in various instalments till September 2023. As at 31 March 2019, the outstanding amount under this facility is US\$198 million.
- During the current year, the Company entered into facility agreements with Bank of Baroda in different tranches for borrowings up to US\$200 million and bears interest at a rate of US\$ LIBOR plus 300 basis points. The loan is repayable in various instalments till June 2024. As at 31 March 2019, the outstanding amount under this facility is US\$198 million.

10. COMPANY CONTINGENT LIABILITIES

The Company has given a corporate guarantee for loan facilities worth US\$428 million (2018: US\$689 million) on behalf of its subsidiaries, Konkola Copper Mines Plc.

The Company has guaranteed US\$170 million (out of which, US \$34 million has been repaid during the previous year) for a loan facility entered by Valliant Jersey Limited with ICICI bank (2018: US\$136 million). Post the Balance Sheet date, an amount of US\$68 million under this facility has been repaid.

The Company has guaranteed US\$170 million for revolving credit facility entered by Twin Star Holdings Limited with First Abu Dhabi Bank PJSC as facility agent (2018: US\$100 million).

The Company has guaranteed US\$500 million for a syndicated facility entered by Twin Star Holdings Limited with Axis Bank as lead arranger and facility agent. During the previous year, US\$100 million was repaid under this facility. Further during the current year, US\$150 million has been repaid under

Notes to the Financial Statements continued

for the year ended 31 March 2019

this facility (2018: US\$400 million). Post the Balance Sheet date, balance amount of US\$250 million under this facility has been prepaid.

The Company has provided a guarantee for the Cairn India Group's (now merged with Vedanta Limited) obligation under the Production Sharing Contract ('PSC').

The Company has guaranteed US\$180 million for a facility agreement entered by Vedanta Resources Jersey II Limited with Yes Bank as facility agent (2018: US\$180 million).

The Company has guaranteed US\$100 million for a facility agreement entered by Welter Trading Limited with Axis Bank as facility agent (2018: US\$100 million).

The Company has guaranteed US\$575 million for a facility agreement entered by Twin Star Holdings Limited with Citicorp International Limited as facility agent (2018: US\$575 million).

The Company has guaranteed US\$100 million for a facility agreement entered by Twin Star Holdings Limited with First Abu Dhabi Bank PJSC as facility agent. US\$80 million was drawn under this facility and US\$8 million was repaid during the previous year (2018: US\$72 million).

During the year, the Company has guaranteed US\$225 million for a facility agreement entered by Twin Star Holdings Limited with Standard Chartered Bank as facility agent. Post the Balance Sheet date, this loan has been prepaid.

Subsequent to the Balance sheet date, the Company through its wholly owned subsidiary, Vedanta Resources Finance II Plc issued US\$1,000 million bonds which were guaranteed by the Company.

11. RELATED PARTY TRANSACTIONS

During the year the Company entered into transactions, in the ordinary course of business, with other related parties. The Company has taken advantage of the exemption under paragraph 8(k) of FRS101 not to disclose transactions with wholly owned subsidiaries. Transactions entered into and trading balances outstanding at 31 March with other related parties, are as follows:

Name of Company	Relationship	Nature of transaction	(US\$ million)	
			2019	2018
Vedanta Limited	Subsidiary	Management & Brand Fees charged	48	53
Konkola Copper Mines Plc	Subsidiary	Management & Guarantee Fees charged	3	3
Sterlite Technologies Limited	Related Party	Management Fees charged	0	0
Volcan Investments Limited	Holding Company	Dividend paid	73	111
Volcan Investments Limited	Holding Company	Interest paid on bonds	1	5
Volcan Investments Limited**	Holding Company	Redemption of bond	8	82
Vedanta Limited	Subsidiary	Receipt of Service	(0)	(1)
Vedanta Limited	Subsidiary	(Reimbursement)/Payment of Expenses	0	(2)
Vedanta Limited	Subsidiary	Recovery against share option expense	2	8
Konkola Copper Mines Plc	Subsidiary	Recovery against share option expense	0	1
Copper Mines of Tasmania Pty Limited	Subsidiary	Recovery against share option expense	0	0
Fujariah Gold FZC	Subsidiary	Recovery against share option expense	0	(0)
Vedanta Lisheen Holdings Limited	Subsidiary	Recovery against share option expense	-	0
Namzinc Pty Limited	Subsidiary	Recovery against share option expense	0	0
Black Mountain Mining (Pty) Limited	Subsidiary	Recovery against share option expense	0	0
Western Cluster Limited	Subsidiary	Recovery against share option expense	0	0
Twin Star Mauritius Holdings Limited*	Subsidiary	Reimbursement of Expenses	-	0
Twin Star Energy Holdings Limited*	Subsidiary	Reimbursement of Expenses	-	0
THL Zinc Limited	Subsidiary	Reimbursement of Expenses	0	0
THL Zinc Ventures Limited	Subsidiary	Reimbursement of Expenses	0	0
Konkola Copper Mines Plc	Subsidiary	Reimbursement of Expenses	-	0
Cairn India Holdings Limited	Subsidiary	Reimbursement of Expenses	-	1
Sesa Sterlite Mauritius Holdings Limited*	Subsidiary	Reimbursement of Expenses	-	0
Bloom Fountain Limited	Subsidiary	Reimbursement of Expenses	0	-

Notes to the Financial Statements continued

for the year ended 31 March 2019

Outstanding balances

			(US\$ million)	
Name of Company	Relationship	Nature of transaction	2019	2018
Vedanta Limited	Subsidiary	Receivable /(Payable)	7	(8)
Konkola Copper Mines Plc	Subsidiary	Receivable	15	12
Sterlite Technologies Limited	Related Party	Receivable	0	0
Copper Mines of Tasmania Pty Limited	Subsidiary	Receivable	-	0
Fujariah Gold FZC	Subsidiary	Receivable/ (Payable)	0	(0)
Vedanta Lisheen Holdings Limited	Subsidiary	(Payable)	(0)	(0)
Namzinc Pty Limited	Subsidiary	(Payable)	(0)	(0)
Black Mountain Mining (Pty) Limited	Subsidiary	Receivable	0	0
Western Cluster Limited	Subsidiary	Receivable	0	0
Twin Star Mauritius Holdings Limited*	Subsidiary	Receivable	-	-
Twin Star Energy Holdings Limited*	Subsidiary	Receivable	-	-
THL Zinc Limited	Subsidiary	Receivable	0	-
THL Zinc Ventures Limited	Subsidiary	Receivable	0	0
Monte Cello BV	Subsidiary	(Payable)	(1)	(1)
Cairn India Holdings Limited	Subsidiary	Receivable	1	1
Sesa Sterlite Mauritius Holdings Limited*	Subsidiary	Receivable	-	-
Bloom Fountain Limited*	Subsidiary	Receivable	0	0
Volcan Investments Limited	Holding Company	Investment in Bonds	13	21

* During the previous year, Twin Star Mauritius Holdings Limited, Twin Star Energy Holdings Limited and Sesa Sterlite Mauritius Holdings Limited have filed for liquidation and have assigned their payables to the Company to their parent company, Bloom Fountain Limited. All of these entities are under liquidation.

** Includes premium on redemption on bonds of US\$ nil and US\$6 million for the year ended 31 March 2019 and 31 March 2018 respectively.

12. DIRECTORS' EMOLUMENTS

		(US\$ million)	
		Year ended 31 March 2019	Year ended 31 March 2018
Short-term employee benefits*		10	5
Share-based payments		3	3
Total		13	8

*Includes bonus accrued for the year, non cash benefits (vehicle maintenance and medical insurance premium) and NIC contribution.

The aggregate of emoluments received in the year and amounts accrued under the share based plans of the highest paid director was US\$2 million (2018: US\$2 million).

Five Year Summary

SUMMARY CONSOLIDATED INCOME STATEMENT

(US\$ million)

	Year ended 31 March 19	Year ended 31 March 18*	Year ended 31 March 17	Year ended 31 March 16	Year ended 31 March 15
Revenue	14,031	15,294	11,520	10,738	12,879
EBITDA	3,393	3,963	3,191	2,336	3,741
Depreciation and amortisation	(1,482)	(1,271)	(1,031)	(1,455)	(2,006)
Special items	47	586	(17)	(5,210)	(6,744)
Operating profit	1,958	3,278	2,143	(4,329)	(5,009)
Net finance (costs)/ investment revenues	(862)	(790)	(763)	(655)	(632)
Profit before taxation	1,096	2,488	1,380	(4,984)	(5,640)
Net tax credit/(expense)	(672)	(1,013)	(500)	1,482	1,853
Profit after taxation	424	1,475	880	(3,502)	(3,788)
Non-controlling interests	661	1,236	(902)	1,665	1,989
Profit attributable to equity shareholders in parent	(237)	239	(23)	(1,837)	(1,799)
Dividends	(185)	(182)	(138)	(111)	(171)
Retained (loss)/profit	(422)	57	(160)	(1,948)	(1,970)
Dividend per share (US cents per share)	65	65	55	30	63

SUMMARY CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(US\$ million)

	31 March 2019	31 March 2018	31 March 2017	31 March 2016	31 March 2015
Goodwill	12	12	17	17	17
Intangible assets	108	123	96	92	102
Property, plant and equipment	17,726	17,727	16,751	16,648	23,352
Financial asset investments	707	25	11	7	4
Total	18,553	17,887	16,874	16,763	23,475
Stocks	2,060	2,038	1,670	1,366	1,606
Debtors	1,504	1,527	1,085	1,344	1,839
Cash and Liquid Investments	5,297	5,606	9,725	8,937	8,210
Total	8,861	9,171	12,480	11,647	11,655
Short-term borrowings	(5,456)	(5,460)	(7,659)	(4,314)	(3,179)
Other current liabilities	(7,060)	(6,194)	(6,413)	(6,098)	(5,003)
Total current liabilities	(12,516)	(11,654)	(14,072)	(10,412)	(8,183)
Net current assets	(3,643)	(2,457)	(1,588)	1,289	3,529
Total assets less current Liabilities	17,265	17,584	17,432	19,908	28,806
Long term borrowings	(10,524)	(9,734)	(10,570)	(11,950)	(13,489)
Other long term liabilities	(258)	(136)	(77)	(225)	(194)
Provisions and deferred tax assets	(1,218)	(1,162)	(758)	(869)	(2,854)
Total long term liabilities	(12,000)	(11,032)	(11,405)	(13,043)	(16,537)
Equity Non-controlling interests	(6,181)	(6,870)	(6,423)	(7,565)	(10,654)
Non equity Non-controlling interest	(12)	(12)	(12)	(12)	(12)
Net assets attributable to the equity holders of the parent	(928)	(330)	(409)	(713)	1,603

Five Year Summary continued

TURNOVER

(US\$ million)

	2019	2018*	2017	2016	2015
Zinc-	3,347	3,889	2,857	2,503	2,944
India	2,955	3,354	2,525	2,111	2,357
International	392	535	332	392	587
Oil & Gas	1,892	1,480	1,223	1,322	2,398
Iron ore	416	485	615	350	327
Copper: -	2,622	5,111	4,008	4,170	4,778
India/Australia	1,537	3,828	3,134	3,197	3,701
Zambia	1,085	1,283	874	973	1,077
Aluminium	4,183	3,545	2,040	1,694	2,082
Power	934	877	836	708	588
Steel	600				
Other	37	(93)	(59)	(8)	(237)
Group	14,031	15,294	11,520	10,738	12,879

EBITDA

(US\$ million)

	2019	2018*	2017	2016	2015
Zinc	1,616	2,122	1,562	1,063	1,373
India	1,516	1,902	1,423	995	1,193
International	100	220	138	68	181
Oil & Gas	1,100	849	597	570	1,477
Iron ore	90	48	194	73	31
Copper	(99)	235	258	319	277
India/Australia	(36)	162	252	337	281
Zambia	(63)	73	6	(18)	(4)
Aluminium	316	414	344	107	416
Power	219	258	245	196	154
Steel	113				
Other	38	37	(9)	8	13
Group	3,393	3,963	3,191	2,336	3,741

EBITDA MARGIN

(%)

	2019	2018*	2017	2016	2015
Zinc	48	54	55	42	47
India	51	56	56	47	51
International	25	41	42	17	31
Oil & Gas	58	57	49	43	62
Iron ore	22	12	32	21	10
Copper	(4)	5	6	8	6
India/Australia	(2)	5	8	11	8
Zambia	(6)	6	1	(2)	(0)
Aluminium	7	13	17	6	20
Power	24	251	29	28	26
Steel	19	-	-	-	-
Group	24	26	28	22	29

(1) Excluding one-offs

Five Year Summary continued

PRODUCTION

	(000's MT)				
	2019	2018	2017	2016	2015
Aluminium	1,959	1,675	1,213	923	877
BALCO1	571	569	427	332	324
Jharsuguda Aluminium2	1,388	1,106	786	592	553
Copper	267	599	582	566	531
Copper India	90	403	402	384	362
KCM	177	195	180	182	169
Iron Ore (WMT)	7,903	7,903	12,300	5,630	667
Zinc total	960	876	757	841	836
HZL	894	791	672	759	734
Skorpion	66	84	85	82	102
Zinc and Lead MIC	82	72	70	144	209
BMM	65	72	70	63	59
Lisheen	-	-	-	81	150
Gamsberg	17				
Oil & Gas- Gross Production (mmboe)	69	68	69	75	77
Oil & Gas- Working Interest (mmboe)	44	43	44	47	48

(1) BALCO- Including trial run production of NIL KT in 2019 & 16 in 2018.

(2) Jharsuguda- Including trial run production of 61 KT in 2019 & 62 in 2018.

CASH COSTS OF PRODUCTION IN US CENTS

	(US cents/lb)				
	2019	2018	2017	2016	2015
Aluminium – BALCO	92	87	68	75	89
Aluminium-Jharsuguda Aluminium	90	85	65	69	74
Copper India	- ¹	5.7	5.0	5.7	6.4
Copper – KCM	276	239	209	198	258
Zinc including Royalty- HZL	63	62	52	47	50
Zinc without Royalty- HZL	46	44	38	37	39
Zinc COP- Skorpion	110	85	75	74	70
Zinc COP- BMM	66	59	51	63	74
Zinc COP- Lisheen	0	0	0	57	53
Zinc COP- Gamsberg	67				
Oil & Gas (Opex) (US\$/ boe)	7.7	6.6	6.2	6.5	6.2

(1) Tuticorin plant was under shutdown in FY2019.

CASH COSTS OF PRODUCTION IN INR

	(INR/ mt)				
	2019	2018	2017	2016	2015
Aluminium – BALCO	135,906	123,947	101,051	108,629	119,922
Aluminium-Jharsuguda Aluminium	135,466	120,349	96,622	99,408	99,676
Copper India	- ¹	8,112	9,047	8,203	8,639
Zinc including Royalty	96,488	87,971	77,454	68,408	66,805
Zinc without Royalty	70,400	62,882	55,679	52,629	53,071

(1) Tuticorin plant was under shutdown in FY2019.

CAPITAL EXPENDITURE

	(US\$ million)				
	2019	2018	2017	2016	2015
Sustaining	435	385	145	185	221
Expansion	1,076	820	668	566	1,531
Total capital expenditure	1,511	1,205	814	751	1,752

Five Year Summary continued

NET CASH/(DEBT)

(US\$ million)

	2019	2018	2017	2016	2015
Zinc	2,528	3,507	3,881	5,415	5,073
India	2,454	3,411	3,741	5,318	4,937
International	74	96	140	97	137
Oil & Gas	1,388	754	4,185	3,240	2,857
Iron Ore	(141)	(176)	(404)	(459)	(634)
Copper	(317)	(382)	(496)	(494)	(705)
India/Australia	(169)	(7)	57	132	33
Zambia	(148)	(375)	(553)	(627)	(738)
Aluminium	(4,494)	(4,400)	(5,098)	(4,131)	(4,068)
Power	(1,347)	(1,693)	(1,574)	(1,802)	(1,577)
Other	(7,910)	(7,198)	(8,997)	(9,096)	(9,406)
Group	(10,292)	(9,588)	(8,503)	(7,329)	(8,460)

GEARING

(%)

	2019	2018	2017	2016	2015
Gearing	66%	60%	59%	52%	41%

GROUP FREE CASH FLOW

(US\$ million)

	2019	2018	2017	2016	2015
Group Free Cash Flow after Capital Creditors	2,266	1,745	2,212	2,339	2,578
Group Free Cash Flow after Project Capex	1,190	925	1,544	1,773	1,047

CAPITAL EMPLOYED

(US\$ million)

	2019	2018	2017	2016	2015
Average Capital Employed	15,837	15,323	14,350	17,448	23,312

ROCE

(US\$ million)

	2019	2018	2017	2016	2015
ROCE	9.6%	14.3%	12.8%	3.4%	5.2%

* During the year ended 31 March 2019 the Group has revised the presentation of export incentives and forward premiums on derivative instruments (Refer note 1 (b) to the consolidated financial statements). The comparative amounts for the year ended 31 March 2018 have been reclassified. Further the comparative amounts for the year ended 31 March 2018 have been restated on account of finalisation of provisional fair values related to ASI acquisition (Refer note 3(b) to the consolidated financial statements) The selected financial information tables for the financial year ended 31 March 2015, 2016 and 2017 have not been reclassified/restated for these changes.

Production and Reserves Summary

COPPER

Copper Production Summary

Facility	Product	Year ended 31 March 2019 Mt	Year ended 31 March 2018 Mt
Tuticorin	Copper anode	4	3,28,076
	Sulphuric acid	-	1,033,250
	Phosphoric acid	182	191,746
	Copper cathode	2,873	216,749
	Copper rods	2,282	67,207
Silvassa	Copper cathode	86,644	186,418
	Copper rods	108,915	135,332
KCM	Finished Copper	177,035	195,337

Copper Mining Summary

Mine	Type of mine	Ore mined		Copper concentrate		Copper in concentrate & Primary Copper	
		31 March 2019 mt	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt
Mt Lyell (CMT)	Underground	-	-	-	-	-	-
Konkola & Nchanga (KCM)	Underground & Opencast	4,007,474	4,719,835	187,474	217,893	91,135	90,848

Copper Mine Resource and Reserve Summary

Mine	Type of mine	Resources			Reserves		
		Measured and indicated million mt	Copper grade %	Inferred million mt	Copper grade %	Proved and probable reserves million mt	Copper grade %
Mt Lyell (CMT)	Underground	29.6	1.09	30	1.06	-	-
Konkola (KCM)	Underground	103.2	2.69	265.6	3.36	140.3	1.07

Resources are additional to Reserves

Aluminium, Alumina and Bauxite

Aluminium Production Summary

Company	Year ended 31 March 2019 Mt	Year ended 31 March 2018 Mt
BALCO	571,231	569,050
Jharsuguda Aluminium	1,387,784	1,106,041

Alumina Production Summary

Company	Year ended 31 March 2019 Mt	Year ended 31 March 2018 Mt
Jharsuguda Aluminium	1,500,670	1,209,436

Bauxite Production Summary

Company	Year ended 31 March 2019 Mt	Year ended 31 March 2018 Mt
BALCO – Mainpat	0	589,320
BALCO – Bodai Daldali	461,956	581,920

Production and Reserves Summary continued

Bauxite Mine Resource and Reserve Summary

Mine	Resources			Reserves		
	Measured and indicated million mt	Aluminium grade %	Inferred million mt	Aluminium grade %	Proved and probable reserves million mt	Aluminium grade %
BALCO						
Mainpat (Kesra, Kudiridih, Sapnadar)	5.9	40.2	1.3	42.2	4	43.7
Bodai-Daldali (Kawardha)	2.3	45.2	0.5	46.3	1.1	44.5
Total BALCO	8.3	41.6	1.8	43.4	5.1	43.8
MALCO						
Kolli Hills and Yercaud	0.8	44.0			0.2	43.0

Resources are additional to Reserves

Hindustan Zinc

Zinc and Lead Production Summary:

Company	Year ended 31 March 2019 Mt	Year ended 31 March 2018 Mt
HZL		
Zinc	696,283	791,461
Lead	197,838	168,247

Zinc and Lead Mining Summary:

a) Metal mined & metal concentrate

RampuraAgucha*	Type of mine	Ore mined		Zinc concentrate		Lead concentrate		Bulk concentrate	
		RajpuraDariba	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt
Rampura Agucha(1)	Open cut	11,99,823	29,63,564	191,950	606,700	17,947	57,198		
Rampura Agucha	Under ground	33,30,011	20,78,623	718,273	456,938	59,676	33,997		
Rajpura Dariba	Under ground	10,79,955	895,568	91,815	76,495	23,027	18,394		-
Sindesar Khurd	Under ground	53,10,794	45,00,000	350,272	326,890	187,273	146,148		
Zawar	Under ground	28,64,587	21,76,111	104,497	51,288	70,458	32,849		41,697
Total		13,785,170	12,613,866	14,56,807	1,518,311	358,381	288,586		41,697

(1) Includes development ore MT from Kayar

b) Metal in Concentrate (MIC)

RampuraAgucha*	Type of mine	Zinc concentrate		Lead concentrate	
		31 March 2019 mt	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt
RampuraAgucha*	Open cut & Underground	455,516	532,998	44,963	52,355
RajpuraDariba	Underground	44,305	37,237	8,711	7,100
SindesarKhurd	Underground	174,016	162,709	108,818	84,070
Zawar	Underground	54,661	40,071	44,698	30,842
Total		728,498	773,015	207,190	174,367

Includes Kayad

Production and Reserves Summary continued

Zinc and Lead Mine Resource and Reserve Summary

Zinc India

Mine	Resources				Reserves				
	Measured and indicated million	Zinc grade %	Lead grade %	Inferred million mt	Zinc grade %	Lead grade %	Proved and probable reserves million mt	Zinc grade %	Lead grade %
Rampura Agucha	19.5	14.8	2.0	35.6	9.7	2.6	35.3	13.6	1.8
RajpuraDariba	21.8	7.2	2.1	25.8	6.6	1.9	10.2	5.1	1.8
Zawar	20.1	4.7	1.7	75.2	4.6	2.7	10.1	3.4	1.8
Kayad	1.2	19.6	3.0	2.1	3.5	8.1	4.5	5.4	0.9
SindesarKhurd	23.6	4.4	2.2	57.5	3.6	1.9	32.5	4.1	3.2
BamniaKalan	5.2	4.5	1.5	22.8	3.5	1.5	-	-	-
Total	91.4	7.5	2.0	219.0	5.3	2.3	92.6	7.8	2.3

Resources are additional to Reserves

Zinc International

Mine	Resources				Reserves				
	Measured and indicated million	Zinc grade %	Lead grade %	Inferred million mt	Zinc grade %	Lead grade %	Proved and probable reserves million mt	Zinc grade %	Lead grade %
Skorpion	1.2	13.5	-	0.7	11.8	-	2.1	10.5	-
BMM									
- Deeps	14.6	2.7	2.6	-	-	-	5.1	2.9	2.1
- Swartberg	57.3	1.3	3.2	14	1.2	3.4	2.6	0.7	3.4
- Gamsberg	70.9	6.6	0.6	60.1	8.3	0.6	53.7	6.7	0.5
- Big Syncline Project				151.7	2.5	1.0			

Resources are additional to Reserves

Zinc Production Summary:

Company	Year ended 31 March 2019 Mt	Year ended 31 March 2018 Mt
Skorpion	65,948	84,215

Zinc and Lead Mining Summary:

a) Metal mined & metal concentrate

Mine	Type of mine	Ore mined		Zinc Concentrate		Lead Concentrate	
		31 March 2019 mt	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt
Skorpion	Open Cast	1,009,243	537,066	-	-	-	-
BMM	Underground	1,611,301	1,605,892	58,874	55,501	55,548	65,381
Total	Underground	2,620,544	2,142,958	58,874	55,501	55,548	65,381

b) Metal in Concentrate (MIC)

RampuraAgucha*	Type of mine	Zinc concentrate		Lead concentrate	
		31 March 2019 mt	31 March 2018 mt	31 March 2019 mt	31 March 2018 mt
BMM	Underground	27,558	27,175	37,354	45,113

Production and Reserves Summary continued

Iron ore

Iron Ore Production Summary

Company	Year ended 31 March 2019 Mt	Year ended 31 March 2018 Mt
Vedanta Limited		
Saleable Iron Ore	4.7	7.9
Goa	0.3	4.3
Karnataka	4.4	2.3
Dempo	-	1.3

Iron Ore Resource and Reserve Summary

Mine	Resources			Reserves		
	Measured and indicated million mt	Iron Ore grade %	Inferred million mt	Iron ore grade %	Proved and probable reserves million mt	Iron ore grade %
Iron ore Karnataka	15.79	48.3	9.17	43.7	56.3	49.4

During the year ended 31st March 2018, The Honourable Supreme Court of India issued a 'vide' judgement directing that all mining operations in the state of Goa were to cease with effect from 16 March 2018. Pursuant to this order, we halted to our mining activities. The Company has taken an impairment (non-cash item) of US\$533 million net of taxes (US\$758 million gross of taxes) pursuant to this order. This is mainly related to mining reserves. Therefore, the company has not shown any Reserves and Resources related to Iron Ore Goa.

Oil and gas

The Oil and gas reserves data set out below are estimated on the basis set out in the section headed "Presentation of Information".

Cairn India

The Company's gross reserve estimates are updated at least annually based on the forecast of production profiles, determined on an asset-by-asset basis, using appropriate petroleum engineering techniques. The estimates of reserves and resources have been derived in accordance with the Society for Petroleum Engineers "Petroleum Resources Management System (2018)". The changes to the reserves are generally on account of future development projects, application of technologies such as enhanced oil recovery techniques and true up of the estimates. The management's internal estimates of hydrocarbon reserves and resources at the period end, based on the current terms of the PSCs, are as follows:

Particulars	Gross proved and probable hydrocarbons initially in place (mmboe)		Gross proved and probable reserves and resources (mmboe)		Net working interest proved and probable reserves and resources (mmboe)	
	31 March 2019	31 March 2018	31 March 2019	31 March 2018	31 March 2019	31 March 2018
	Rajasthan MBA Fields	2,288	2,288	362	371	253
Rajasthan MBA EOR	-	-	293	335	205	235
Rajasthan Block Other Fields	3,405	3,460	428	430	299	301
Ravva Fields	724	733	39	45	9	10
CBOS/2 Fields	254	251	33	34	13	13
Other fields	335	335	40	48	22	24
Total	7,006	7,067	1,195	1,263	801	842

The Company's net working interest proved and probable reserves is as follows:

Particulars	Proved and Probable reserves		Proved and Probable reserves (developed)	
	Oil	Gas	Oil	Gas
	(mmstb)	(bscf)	(mmstb)	(bscf)
Reserves as of 1 April 2017*	112	48	100	15
Additions / revision during the year	28	12	13	21
Production during the year	(42)	(8)	(42)	(8)
Reserves as of 31 March 2018**	98	52	71	28
Additions / revision during the year#	259	224	149	113
Production during the year	(42)	(12)	(42)	(12)
Reserves as of 31 March 2019***	315	264	178	129

* Includes probable oil reserves of 32.37 mmstb (of which 20.62 mmstb is developed) and probable gas reserves of 37.84 bscf (of which 4.92 bscf is developed)

** Includes probable oil reserves of 26.77 mmstb (of which 5.00 mmstb is developed) and probable gas reserves of 25.12 bscf (of which 4.17 bscf is developed)

*** Includes probable oil reserves of 116.21 mmstb (of which 16.03 mmstb is developed) and probable gas reserves of 89.00 bscf (of which 24.19 bscf is developed)

The increase in reserve is on account of PSC extension for the Rajasthan and Ravva block. For more details, refer to note 2(c)(l)(xii) of the financial statements.

Production and Reserves Summary continued

Source Of information:

In respect of all businesses, the information has been certified by geologist on behalf of Group management.

Basis of Preparation

Ore reserves and mineral resources reported herein comply with the 'Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves'. The code is prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists, and Minerals Council of Australia, and is commonly referred to as the 'JORC Code'. As at the date of this document, the editions of the JORC Code in force are dated December 2012.

The JORC Code uses the term Ore Reserve for Reserves. For the purposes of ore and mineral resources reported herein, the term ore resources have been used throughout.

Oil and Gas reserves and resources have been prepared according to the Petroleum Resources Management Systems (PRMS) approved in June 2018 by the Board of Society of Petroleum Engineers (SPE). The process included approval by six sponsoring societies: the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the European Association of Geoscientists and Engineers, and the Society of Petrophysicists and Well Log Analysts.

Mineral resources are based on mineral occurrences quantified on the basis of geological data and an assumed cut-off grade, and are divided into Measured, Indicated and Inferred categories reflecting decreasing confidence in geological and / or grade continuity. The reporting of resource estimates carries the implication that there are reasonable prospects for eventual economic exploitation. An Ore or Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource. It includes the effect of dilution and losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, need to have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.

These assessments demonstrate at the time of reporting that extraction could be reasonably justified. Ore Reserves are sub-divided in order of decreasing confidence into Proved Ore Reserves and Probable Ore Reserves.

The Measured and Indicated mineral resources have been reported as being exclusive of those mineral resources modified to produce the ore reserves, in addition to the ore reserves. The resource and reserve estimates provided herein comply with the resource and reserve definitions of the JORC Code.

Other information

ALTERNATIVE PERFORMANCE MEASURES

Introduction

Vedanta Group is committed to providing timely and clear information on financial and operational performance to investors, lenders and other external parties, in the form of annual reports, disclosures, RNS feeds and other communications. We regard high standards of disclosure as critical to business success.

Alternative Performance Measure (APM) is an evaluation metric of financial performance, financial position or cash flows that is not defined or specified under International Financial Reporting Standards (IFRS).

The APMs used by the group fall under two categories:

- **Financial APMs:** These financial metrics are usually derived from financial statements, prepared in accordance with IFRS. Certain financials metrics cannot be directly derived from the financial statements as they contain additional information such as profit estimates or projections, impact of macro-economic factors and changes in regulatory environment on financial performance.
- **Non-Financial APMs:** These metrics incorporate non – financial information that management believes is useful in assessing the performance of the group.

APMs are not uniformly defined by all the companies, including those in the Group's industry. APM's should be considered in addition to, and not a substitute for or as superior to, measures of financial performance, financial position or cash flows reported in accordance with IFRS.

Purpose

The Group uses APMs to improve comparability of information between reporting periods and business units, either by adjusting for uncontrollable or one-off factors which impacts upon IFRS measures or, by aggregating measures, to aid the user of the Annual Report in understanding the activity taking place across the Group's portfolio.

APMs are used to provide valuable insight to analysts and investors along with Generally Accepted Accounting Practices (GAAP). We believe these measures assist in providing a holistic view of the company's performance.

Alternative performance measures (APMs) are denoted by ◊ where applicable.

◊ APM terminology*	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements
EBITDA	Operating profit/(loss) before special items	Operating Profit/(Loss) before special items Add: Depreciation & Amortisation
EBITDA margin (%)	No direct equivalent	Not applicable
Adjusted revenue	Revenue	Revenue Less: revenue of custom smelting operations at our Copper & Zinc business
Adjusted EBITDA	Operating profit/(loss) before special items	EBITDA Less: EBITDA of custom smelting operations at our Copper & Zinc business
Adjusted EBITDA margin	No direct equivalent	Not applicable
Underlying profit/(loss)	Attributable Profit/(loss) before special items	Attributable profit/(loss) before special items Less: NCI share in other gains/(losses) (net of tax)
Project Capex	Expenditure on Property, Plant and Equipment (PPE)	Gross Addition to PPE Less: Gross disposals to PPE Add: Accumulated Depreciation on disposals Less: Decommissioning liability Less: Sustaining Capex
Free cash flow	Net cash flow from operating activities	Net Cash flow from operating activities Less: purchases of property, plant and equipment and intangibles less proceeds on disposal of property, plant and equipment Add: Dividend paid and dividend distribution tax paid Add/less: Other non-cash adjustments
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.

Other information continued

ROCE for FY2019 is calculated based on the working summarised below. The same method is used to calculate the ROCE for all previous years (stated at other places in the report).

Particulars	Year ended 31 March 2019
Operating Profit Before Special Items	1,911
Less: Cash Tax Outflow	(386)
Return on Capital Employed (a)	1,525
Opening Capital Employed (b)	16,128
Closing Capital Employed (c)	15,545
Average Capital Employed (d)= (a+b)/2	15,836
ROCE (a)/(d)	9.6%

Adjusted Revenue, EBITDA & EBITDA Margin for FY2019 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	Year ended 31 March 2019
Revenue	14,031
Less: Revenue of Custom smelting operations	2,065
Adjusted Revenue(a)	11,966
EBITDA	3,393
Less: EBITDA of Custom smelting operations	(45)
Adjusted EBITDA(b)	3,438
Adjusted EBITA Margin (b)/(a)	29%

Glossary and Definitions

Adapted Comparator Group

The new comparator group of companies used for the purpose of comparing TSR performance in relation to the LTIP, adopted by the Remuneration Committee on 1 February 2006 and replacing the previous comparator group comprising companies constituting the FTSE Worldwide Mining Index (excluding precious metals)

Adjusted EBITDA

Group EBITDA net of EBITDA from custom smelting operations at Copper India, Copper Zambia & 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, Copper Zambia & 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

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

CMT

Copper Mines of Tasmania Pty Limited, a company incorporated in Australia

Company or Vedanta

Vedanta Resources Limited

Company financial statements

The audited financial statements for the Company for the year ended 31 March 2019 as defined in the Independent Auditors' Report on the individual Company Financial Statements to the members of 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

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

CRRRI

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

Glossary and Definitions continued

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

Glossary and Definitions continued

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

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

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.

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

Glossary and Definitions continued

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

Relationship Agreement

The agreement between the Company, Volcan Investments Limited and members of the Agarwal family which had originally been entered into at the time of the Company's listing in 2003 and was subsequently amended in 2011 and 2014 to regulate the ongoing relationship between them, the principal purpose of which is to ensure that the Group is capable of carrying on business independently of Volcan, the Agarwal family and their associates.

Return on Capital Employed or ROCE

Operating profit before special items net of tax outflow, as a ratio of average capital employed

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

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

Glossary and Definitions continued

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

ZRA

Zambia Revenue Authority



ZINC-LEAD-SILVER | OIL & GAS | ALUMINIUM & POWER | COPPER | IRON ORE & STEEL

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