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12 November 2018

# Vedanta Resources Limited (formerly Vedanta Resources Plc) Interim results for the six months ended 30 September 2018.

# Financial highlights

- Revenue increased by 4% to US\$7.1 billion (H1 FY2018: US\$6.8 billion), driven by aluminium volumes, acquisition of Electrosteels Steel and commodity prices, offset by lower zinc volumes and the ongoing closure of Tuticorin's operations
- EBITDA at US\$1.7 billion, up 1% y-o-y
- Adjusted EBITDA margin of 29% (H1 FY2018: 34%)
- Free cash flow (FCF) post-capex of US\$(174) million (H1 FY2018: US\$232 million) due to higher net interest and higher capex investments into growth projects
- Gross debt increased to US\$15.7 billion and net debt◊ to US\$10.2 billion (FY2018: US\$15.2 billion and US\$ 9.6 billion), primarily due to the acquisition of Electrosteels Steel Limited
- Proactive management has maintained the average debt maturity period of c. three years for the entire debt portfolio.

# **Business highlights**

#### Oil & Gas

- Average gross production of 190kboepd, up 3% y-o-y
- 7 development drilling rigs in Rajasthan; 32 wells drilled till date
- Government of India extended the tenure of the Production Sharing contract (PSC) for Rajasthan block by ten years.
- Secured 41 exploration blocks through OALP-1

#### Zinc India

- Mined metal production at 444kt,down 2% y-o-y; underground production up 27% y-o-y
- Refined lead production at 91kt, up 25% y-o-y
- Record silver production of 10 million ounces, up 22% y-o-y
- On track for ramp-up of mined metal capacity to 1.2mt by FY2020.

## Zinc International

- Trial production of concentrate at Gamsberg started end of September
- Total production at 54kt, 28% lower y-o-y due to lower than planned zinc grades at Skorpion and prioritisation of mine development at BMM.

#### Iron Ore

- Mining cap allocation for Karnataka increased from 2.3mt to 4.5mt
- Goa operations remain suspended due to state-wide directive from the Supreme Court. Ongoing engagement with the Government continues for a resumption of mining operations.

## Copper India

Review by the independent committee of the National Green Tribunal in progress.

## Copper Zambia

■ Integrated production at 48kt, up 11% y-o-y.

#### Aluminium

- Record aluminium production at 976kt, up 30% y-o-y
- Alumina production from Lanjigarh refinery at 673kt, up 18% y-o-y
- Costs impacted by volatility in import alumina prices and coal availability; Focus on structural cost reduction.

#### Steel

- Acquisition of Electrosteel Steels Limited (ESL) completed, and new Board appointed
- Exited Q2 FY 2019 at a monthly run-rate of 1.3mtpa.

#### Power

■ The 1,980MW Talwandi Sabo power plant achieved 93% availability in H1 FY2019.

## **Health and Safety**

- We are deeply saddened by the loss of ten lives at our businesses during the course of H1 FY2019
- HZL has been ranked 1st (2017: 3rd) globally in the Environmental Vertical and 5th globally (2017: 11th) by the Dow Jones Sustainability Index in the Metal and Mining sector.

# Corporate

- On 31 July 2018, Volcan Investments ("Volcan") and Vedanta Resources 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 Resources not currently owned by Volcan.
- The Offer was made on 3 August 2018. Further to the announcement by Volcan on 3 September 2018 that the Offer had become unconditional in all respects, the listing of Vedanta shares on the Official List of the UK Listing Authority, and the trading of Vedanta shares on the main market for listed securities of the London Stock Exchange, was cancelled with effect from 1 October 2018.

# **Consolidated Group results**

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	Six months to 30.09.18	Six months to 30.09.17	% change	Year ended 31.03.18
Revenue	7,058	6,767	4%	15,359
EBITDA◊	1,710	1,694	1%	4,051
EBITDA margin◊	24%	25%		26%
Adjusted EBITDA margin◊	29%	34%		35%
Operating profit before special items	978	1,168	(16%)	2,781
Profit/(loss) attributable to equity holders of the parent	(327)	(66)	-	236
Underlying attributable profit/(loss)◊	(312)	26		162
ROCE %◊*	13.8%	14.7%*		14.9%
Dividend (US cents per share)	-	24		65

<sup>♦</sup> indicates alternative performance measures that are defined in detail in "Other information".

<sup>\*</sup> Recomputed on the basis of operating profit before special items and net of tax outflow, as a ratio of average capital employed

Vedanta Resources Limited will host its interim results call on Thursday, 15 November 2018 at 3:30 PM IST (10:00 AM UK). In order to participate in the call, please pre-register by sending an email to <u>ir@vedanta.co.in</u>. Kindly note that pre-registration is mandatory to participate in the call.

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#### **About Vedanta Resources**

Vedanta Resources Limited ("Vedanta") is a diversified global natural resources company. The group produces aluminium, copper, zinc, lead, silver, iron ore, oil & gas and commercial energy. Vedanta has operations in India, Zambia, Namibia, South Africa, Ireland and Australia. With an empowered talent pool globally, Vedanta places strong emphasis on partnering with all its stakeholders based on the core values of trust, sustainability, growth, entrepreneurship, integrity, respect and care. To access the Vedanta Sustainable Development Report 2018, please visit http://www.vedantaresources.com/media/237848/vedanta-sd-report-2017-18.pdf. For more information on Vedanta Resources, please visit www.vedantaresources.com

#### Disclaimer

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

## STRATEGIC OVERVIEW

Over the last few years, our strategic priorities have remained consistent with a focus on delivering growth and long-term value to our stakeholders while upholding operational excellence and sustainable development through our diversified portfolio.

In FY2018, we invested in the next phase of growth and announced expansion projects in our Oil & Gas and Zinc business. We continued with these investments in H1 FY2019. These projects in addition to the ramp-ups already underway in other businesses, will provide Vedanta with significant growth in its production capacities. At the same time, we continually strive to improve our operations to achieve benchmark performance, optimise costs and improve realisations. We are committed to achieve our objective of zero harm, zero wastage and discharge, thus creating sustainable value for all our stakeholders.

# **Summary of strategic priorities:**

# Operational excellence:

We are focused on all-round operational excellence to achieve benchmark performance across our business by debottlenecking our assets, adopting technology and digitalisation, strengthening people-practices, enhancing vendor and customer bases, optimising the spend base and improving realisations.

# Preserve our licence to operate:

We operate as a responsible business, focusing on achieving zero harm, zero wastage and zero discharge. We also promote social inclusion across our operations. We put management systems and processes in place to ensure our operations create sustainable value for our stakeholders.

## Optimise capital allocation and maintain a strong balance sheet:

Our focus is on generating strong business cash flows, capital discipline, proactive liability management and maintaining a strong balance sheet. We will also review all investments (organic and inorganic) based on our strict capital allocation framework, with a view to maximising returns to shareholders.

## Delivering on growth opportunities:

We have an enviable growth pipe-line and ramping up our growth projects in the correct sequence, on time, within budget with a proper stage-gating process, will remain a focus area.

At Zinc India, we are on track to achieve 1. 2 million tonnes of mined zinc-lead metal capacity, and about 24 million ounces of silver. During the year, we have made significant progress on our Gamsberg zinc project. Trial production has commenced at Gamsberg at the end of September and this project will be ramping up during the course of the year. At our Oil & Gas business, we have secured approvals for extension of our Production Sharing Contract at Rajasthan for another ten years. With this extension, we anticipate an increase in our 2P reserves in Rajasthan. This reserve accretion, our acquisition of the 41 blocks under the Open Acreage Licensing Policy (OALP) as well as our growth and expansion projects, will take us a step closer to our aspiration of meeting 50% of India's crude oil demand.

#### *Augment our reserves & resources (R&R) base:*

We are looking 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.

#### **FINANCE REVIEW**

# **Executive summary**

The first half of FY2019 saw a stable performance and resulted in EBITDA of \$.1.7 billion, up 1% y-o-y with a margin◊ of 29%. (H1 FY2018: US\$ 1.7 billion, margin◊ 34%).

Market factors resulted in net incremental EBITDA of US\$ 112 million compared to H1 FY2018. The increase was driven by improved commodity prices and favourable foreign exchange movements, but was partially offset by an increase in raw material costs (primarily alumina, coal and carbon).

The adjusted EBITDA margin was lower by 5% y-o-y mainly on account of a change in business mix

Volumes contributed negatively to EBITDA by US\$47 million, driven mainly by the closure of Tuticorin operations, and lower volumes at Zinc India. These were partially offset by the ESL acquisition and volume growth at our Aluminium business on account of continuing ramp-up of the smelters.

In H1 FY2019, the gross debt increased to US\$ 15.7 billion, compared to US\$ 15.2 billion as at 31 March 2018. This was primarily due to the acquisition debt for Electrosteel Steels in H1 FY2019.

Similarly, during H1 FY2019, net debt increased from US\$9.6 billion as at 31 March 2018 to US\$10.2 billion as at 30 September 2018 primarily on account of the above acquisition.

At Group level we have been proactively managing our debt maturities at Vedanta Resources Limited (formerly Vedanta Resources Plc) and the various operating entities, and have been able to maintain the average maturity period of c. three years for the entire debt portfolio.

The balance sheet of Vedanta Limited, the Indian-listed subsidiary of Vedanta Resources, continues to remain strong with cash and liquid investments of c.US\$5.5 billion and net debt to EBITDA ratio at 1.0x.

## Consolidated operating profit before special items

Operating profit before special items decreased by US\$190 million to US\$978 million in H1 FY2019. This was primarily driven by an increase in depreciation and amortisation expenses.

# Consolidated operating profit summary before special items

			(US\$ million,	unless stated)
Consolidated operating profit before special items	H1 FY2019	H1 FY2018	% change	FY2018
Zinc	598	858	(30%)	1,861
-India	605	761	(20%)	1,670
-International	(7)	97	-	191
Oil & Gas	244	191	28%	388
Iron Ore	27	(38)	-	(11)
Copper	(118)	43	-	137
-India/Australia	(23)	81	-	176
-Zambia	(95)	(38)	-	(39)
Aluminium	135	66	-	195
Power	73	36	-	184
Steel	19	-		
Others	-	11	-	27
Total Group operating profit before special items	978	1,168	(16%)	2,781

# Consolidated operating profit bridge before special items

	(US\$ million)
Operating profit before special items for H1 FY2018	1,168
Market and regulatory: US\$112 million	_
a) Prices, premium/discount	399
b) Direct raw material inflation	(281)
c) Foreign exchange movement	26
d) Profit petroleum to GOI at Oil & Gas	(41)
e) Regulatory changes	9
Operational: US\$(95) million	
f) Volume	(47)
g) Product and market mix	6
h) Cost	(68)
i) Others	14
Depreciation and amortisation	(206)
Operating profit before special items for H1 FY2019	978

#### a) Prices

Commodity price fluctuations have a significant impact on the Group's business. During H1 FY2019, we saw a positive impact on operating profit of US\$399 million.

Aluminium: average aluminium LME prices increased to US\$2,156 per tonne in H1 FY2019, up 10% y-o-y and with a higher premium, positively impacting operating profit by US\$183 million.

Oil & Gas: the average Brent price for H1 FY2019 was US\$75 per barrel, higher by 47% compared with US\$51 per barrel during H1 FY2018. In addition, a lower discount to Brent during the period (H1 FY2019: 9.2%; H1 FY2018: 12%) has positively impacted operating profit by US\$198 million.

Our usual policy is to sell products at prevailing market prices and not to enter into price hedging arrangements. However, during H2 FY2018, Zinc India entered into a forward contract to sell 70,000 tonnes of Zinc and 15,000 of lead, at average prices of US\$3,075 per tonne and US\$ 2,374 per tonne respectively for the period from April 2018 to June 2018, which did not have any significant impact on the performance.

## b) Direct raw material inflation

Prices of key raw materials such as alumina, thermal coal and carbon increased significantly in H1 FY2019, with an adverse impact on operating profit of US\$281 million.

## c) Foreign exchange fluctuation

Most of our operating currencies depreciated against the US dollar during H1 FY2019. Stronger dollar is favourable to the Group, given the US dollar-linked pricing. This resulted in a positive impact on operating profit partially offset by impact of depreciating Kwacha on VAT receivables in H1 FY2019.

*Key exchange rates against the US dollar:* 

	Avg. half- year ended	Avg. half- year ended		As at	As at	As at
	30 Sept 2018	30 Sept 2017	% change	30 Sept 2018	30 Sept 2017	31 March 2018
Indian rupee	68.51	64.37	6%	72.55	65.36	65.04
South African rand	13.36	13.19	1%	14.14	13.56	11.83
Zambian kwacha	10.14	9.22	10%	12.27	9.72	9.50

# 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), increased by US\$41 million. The increase was primarily due to the past cost recoveries in the previous period partially offset by higher capital expenditure during the current period.

## f) Volumes

Lower volumes reduced operating profit by US\$47million, generated by these key Group businesses:

**Copper India (negative US\$115 million):** The Tuticorin smelter remained closed during H1 FY2019, resulting in operating loss from this business.

**Zinc India (negative US\$39 million):** Integrated zinc production was 13% lower in H1 FY2019, in line with the availability of zinc mined metal. This was partially offset by 25% higher lead production and 22% higher silver production.

**Zinc International (negative US\$38 million):** This was primarily on account of lower sales volumes as compared to H1 FY2018.

**Power (positive US\$53 million):** This was mainly on account of higher PAF at TSPL in H1 FY2019 and also shutdown of TSPL operations in H1 FY2018 for 65 days due to fire incident.

**Aluminium (positive US\$60 million):** Our Aluminium business achieved a 30% increase in production, driven by the steady ramp-up of capacities at Jharsuguda.

**Steel (positive US\$30 million):** During H1 FY2019, Vedanta Limited completed the acquisition of Electrosteel Steels Limited (ESL), contributing positively to operating profits.

#### h) Cost

Costs in H1 FY2019 increased by US\$68 million, due mainly to lower ore grades at Zinc International and Zinc India, higher mine development costs at Zinc India and an increase in polymer cost at our Oil & Gas business. This was partially offset by a fixed cost reduction at Iron Ore Goa.

#### *i*) Others

This primarily includes one-time wage settlement costs and Voluntary retirement Scheme at Zinc India in H1 FY2019 (US\$27 million) partially offset by higher Value added business EBITDA.

## Depreciation and amortisation

Depreciation and amortisation increased by US\$206 million against the previous period. This was driven by higher depreciation at Oil & Gas due to an impairment reversal in FY2018, higher costs at Hindustan Zinc due to a reassessment of the parameters for mine development depletion including cost to complete and the acquisition of new businesses.

# **Income statement**

(US\$ million, unless stated)

			(usp minon, unless state)	
	H1 FY2019	H1 FY2018	% change	FY 2018
Revenue	7,058	6,767	4%	15,359
EBITDA◊	1,710	1,694	1%	4,051
EBITDA margin (%)◊	24%	25%	-	26%
Adjusted EBITDA margin (%)◊	29%	34%	-	35%
Special items	38	29	32%	683
Depreciation	(726)	(522)	39%	(1,263)
Amortisation	(6)	(4)	48%	(7)
Operating profit	1,017	1,197	(15%)	3,464
Operating profit without special items	978	1,168	(16%)	2,781
Net interest expense	(562)	(413)	36%	(878)
Interest cost-related special items	9	(91)	-	(108)
Other gains / (losses) special items	-	-	-	5
Other gains / (losses)	(70)	(17)	-	(1)
Profit before taxation	393	675	(42%)	2,482
Profit before taxation without special items	346	737	(53%)	1,902
Income tax expense	(548)	(256)	-	(675)
Income tax (expense)/credit (special items)	(16)	(10)	66%	(338)
Effective tax rate without special items (%)	158%	35%	-	35%
Profit for the period / year	(171)	410	-	1,469
Profit for the period / year without special items	(201)	481	-	1,227
Non-controlling interest	156	475	(67%)	1,233
Non-controlling interest without special items	141	461	(69 %)	1,065
Attributable profit / (loss)	(327)	(66)	-	236
Attributable profit/loss without special items	(342)	21	-	163
Underlying attributable profit/(loss) ◊	(312)	26	-	162

# Consolidated revenue

Revenue for the period increased by 4% to US\$7,058 million (H1 FY2018: US\$ 6,767 million). This was mainly driven by higher volumes in Aluminium, the acquisition of Electrosteels Steel and improvement in commodity prices. However, this was partially offset by the ongoing closure at Tuticorin and lower volumes at HZL and Zinc International.

(US\$ million, unless stated)

		Net revenue					
Consolidated revenue	H1 FY2019	H1 FY2018	% change	FY 2018			
Zinc	1,603	1,760	(9%)	3,903			
- India	1,440	1,503	(4%)	3,369			
- International	163	257	(37%)	535			
Oil & Gas	978	680	44%	1,480			
Iron Ore	205	191	7%	487			
Copper	1,335	2,375	(44%)	5,116			
- India/Australia	755	1,753	(57%)	3,833			
- Zambia	580	622	(7%)	1,283			
Aluminium	2,231	1,468	52%	3,588			
Power	483	336	44%	877			
Steel	207	-	-	-			
Others <sup>1</sup>	17	(43)	-	(92)			
Revenue	7,058	6,767	4%	15,359			

 $<sup>1. \</sup>hspace{0.5cm} \textit{Includes port business and eliminations of inter-segment sales, which were higher in the current period.} \\$ 

## **Consolidated EBITDA**

The consolidated EBITDAO by segment is set out below:

(US\$ million, unless stated) EBITDA EBITDA margin margin % % **H1** % H1 H1 FY2019 H1 FY2018 FY2019 change Key drivers FY2018 Zinc 742 944 (21%)-India 727 834 (13%) Lower zinc volumes, higher COP 50% 55% 43% -International 15 110 (87%) Lower volumes, higher COP 9% Oil & Gas 572 401 58% 59% 43% Increase in crude prices Iron Ore 45 (3) Higher pig iron sales and margins 22% (1%)Copper (54)111 -India/Australia (12)93 Ongoing shutdown of Tuticorin (2%)5% operations -Zambia (41)18 Higher COP, lower custom volumes (7%)3% Aluminium 242 153 58% Higher volumes, increased LME 11% 10% prices, offset by higher COP Power 117 74 58% TSPL fire incident in Q1 FY 2018 24% 22% Steel 30 New business acquired Others 1 14 16 Total 1,710 1,694 25% 1% EBITDA margin 24% Adjusted EBITDA margino 29% 34%

## EBITDA and EBITDA margin

EBITDA<sup>o</sup> for H1 FY2019 increased to US\$1,710 million, up 1% y-o-y. This was primarily driven by higher volumes at our Aluminium business, improved margins in pig iron, acquisition of ESL and strong commodity prices in aluminium and Brent. These were partially offset by input commodity inflation, the ongoing shutdown of Copper India operations, and lower volumes at Zinc India and Zinc International. (See 'Operating profit variance' for more details.)

The adjusted EBITDA margin was lower by 5% y-o-y mainly on account of change in business mix.

In H1 FY2019, EBITDA margin stood at 24%, and adjusted EBITDA◊ margin was at 29%.

#### Special items

In H1 FY2019 special items included a reversal of the previously recorded non-cash impairment charge of US\$38 million (US\$25 million net of taxes) at our Oil & Gas business.

Further analysis of special items is set out in note 5 of the financial statement.

## Net interest

Finance costs (excluding special items) were lower by 1% y-o-y at US\$ 680 million in H1 FY2019 (H1 FY2018: US\$689 million). This was due to cost savings (c.US\$34 million) on temporary borrowings at HZL in H1 FY2018 and reduction in gross debt, partially offset by an increase in debt due to the ESL acquisition and an increase in borrowing cost in line with markets.

The average borrowing cost increased from 7.2% in H1 FY2018 to 7.4% in H1 FY2019.

Investment revenue in H1 FY2019 decreased to US\$118 million (H1 FY2018: US\$276 million). This was mainly due to lower cash and liquid investments following a record dividend pay-out by Vedanta Limited, as well as a lower return on investments due to a sharp rise in G-Sec yields that resulted in mark-to-market losses on investments.

The average post-tax return on the Group's investments during the first half was 4.1% (H1 FY2018: 6.7%), and the average pre-tax return was 5.3% (H1 FY2018: 8.5%).

<sup>1.</sup> Includes port business and elimination of inter-segment transactions.

This combination of flat finance costs and lower investment revenues led to an increase of US\$149 million in net interest expense (excluding interest cost-related special items) during the period.

# Other gains/(losses) excluding special items

Other gains/(losses) excluding special items for H1 FY2019 amounted to US\$(70) million, compared to US\$(17) million in H1 FY2018 on account of rupee depreciation.

#### **Taxation**

The effective tax rate (ETR) was higher in H1 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 the six months ended 30 September 2018 includes US\$ 121.0 million (30 September 2017: 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\$ 161.1 million (30 September 2017: US\$ 25.9 million) tax on undistributed profits of a subsidiary. Effective tax rate excluding these items & impact on special items for the six months ended 30 September 2018 was 76.7% (30 September 2017: 31.2%)

# Attributable profit/(loss)

The attributable loss before special items for the period was US\$342million (H1 FY2018: profit of US\$21 million). This was mainly driven by higher net interest expense, higher depreciation and an increase in tax charge.

# Fund flow post-capex

The free cash flow (FCF) post-capex for the period was US\$(174) million (H1 FY2018: US\$232 million). This was driven by higher capital expenditure, higher interest expenses and proactive adjustments to managing the working capital funding.

## Fund flow and movement in net debto

Fund flow and movement in net debt in H1 FY2019 are set out below.

(US\$ million, unless stated) Details H1 FY2019 H1 FY2018 FY 2018 EBITDA◊ 1,710 4,051 1,694 Operating exceptional items 46 33 Working capital movements (554)(467)(611)Changes in non-cash items 17 8 28 (214)(385)(109)Sustaining capital expenditure 71 Movements in capital creditors 42 2 Sale of property, plant and equipment 1 10 Net interest (including interest cost-related special items) (497)(925)(551)Tax paid (150)(173)(498)Expansion capital expenditure (504)(272)(820)Free cash flow (FCF) ◊ post capex (174)232 925 (97)Dividend paid to equity shareholders (113)(164)Dividend paid to non-controlling interests (21)(610)(1,414)Tax on dividend from Group companies (69)Acquisition of subsidiary (788)(240)Other movements1 (39)(122)490 Movement in net debt (606)(514)(1,084)

## Debt, maturity profile and refinancing

In H1 FY2019, gross debt increased to US\$15.7 billion compared with US\$15.2 billion as at 31 March 2018. This was due to the acquisition of Electrosteel Steels in H1 FY2019, partly offset by rupee depreciation.

<sup>1.</sup> Includes foreign exchange movements.

Similarly, during H1 FY2019, net debt increased from US\$9.6 billion as at 31 March 2018 to US\$10.2 billion as at 30 September 2018 y-o-y, because of the above acquisition.

Our total gross debt of US\$15.7 billion comprises:

- US\$12.6 billion as term debt (March 2018: US\$11.3 billion);
- US\$2.2 billion of short-term borrowings (March 2018: US\$2.7 billion);
- US\$0.4 billion preference shares issued pursuant to the Cairn merger (March 2018: US\$0.5 billion); and
- US\$0.5 billion of working capital loans (March 2018: US\$0.7 billion).

The Group has been proactively managing its debt maturities at Vedanta Resources Limited (formerly Vedanta Resources Plc) and the various operating entities, and has been able to maintain the average maturity period of c. three years for the entire debt portfolio.

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

	As at 31 March	As at 30 Sept						Beyond
Particulars	2018	2018	FY2019	9FY2020	FY2021	FY2022	FY2023	FY2023
Debt at Vedanta Resources Limited	5.9	6.4	0.5	0.4	0.2	1.5	1.9	1.9
Debt at subsidiaries	5.4	6.2	0.3	0.9	1.4	1.7	0.4	1.5
Total term debt <sup>1</sup>	11.3	12.6	0.8	1.3	1.6	3.2	2.3	3.4

<sup>1.</sup> Term debt excluding preference shares.

Term debt at our subsidiaries was US\$6.2 billion, with the balance at Vedanta Resources Limited (formerly Vedanta Resources Plc). The total undrawn fund-based credit limit was c.US\$1.1 billion as at 30 September 2018.

Cash and liquid investments stood at US\$5.5 billion at 30 September 2018 (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, following the date of signing the financial statements for the period ending 30 September 2018. 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 effects 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 30 September 2018.

#### Credit rating

The Group's credit rating by Moody's is at 'Ba3/outlook stable' for CFR Rating and 'B2' for Senior Unsecured notes. Both the CFR and Senior Unsecured rating by S&P is at 'B+/outlook stable'.

We are targeting a further strengthening of our credit profile to attain investment-grade ratings, through our continuous focus on financial policies, and on operations to generate increased cashflows.

## **Balance** sheet

(US\$ million, unless stated)

	30 September 2018	30 September 2017	31 March 2018
Goodwill	12	17	12
Intangible assets	107	92	123
Property, plant and equipment	17,052	16,486	17,727
Other non-current assets	2,080	2,227	2,179
Cash and liquid investments	5,492	6,103	5,606
Other current assets	3,488	3,217	3,591
Total assets	28,232	28,142	29,238
Gross debt	(15,687)	(15,121)	(15,194)
Other current and non-current liabilities	(7,188)	(6,811)	(7,504)
Net assets	5,357	6,210	6,540
Shareholders' equity	(1,092)	(618)	(329)
Non-controlling interests	6,449	6,828	6,870
Total equity	5,357	6,210	6,540

Shareholders' (deficit)/equity was US\$(1,092) million at 30 September 2018 compared with US\$(329) million at 31 March 2018. This mainly reflects the attributable loss for H1 FY2019 and FCTR movement due to rupee depreciation.

Non-controlling interests decreased to US\$6,449 million at 30 September 2018 (from US\$6,870 million at 31 March 2018) mainly driven by the profit for the period, offset by FCTR movement due to rupee depreciation.

# Property, plant and equipment (PPE)

During FY2018, PPE decreased to US\$17,052 million (March 31, 2018: US\$ 17,727 million). Investment of \$505 million on expansion projects and US\$214 million on sustaining capital expenditure and the acquisition of Electrosteels Steels Limited was offset by depreciation expense during the period and the restatement of rupee-denominated assets caused by rupee depreciation.

# **Project capex**

(US\$ million)

-		(นรจุ ทแแงน)			
			Cumulative	6	Unspent
Capex in progress	Status		spend up to March 2018 <sup>4</sup>	Spent in H1 FY2019 <sup>4</sup>	as at 30 Sept 2018 <sup>5</sup>
Oil & Gas (a) <sup>1</sup>					
Mangala infill, Bhagyam & Aishwariya polymer, liquid handling, ASP, tight oil and gas etc.		1,991	183	179	1,629
Aluminium					
Jharsuguda 1.25mtpa smelter	Line 3 and 4: fully capitalised Line 5: six sections capitalised	2,920	2,846	50	25
Zinc India					
1.2mtpa mine expansion	Phase-wise by FY2020	1,893*	1,265	147	481
Others		139	63	25	51
Zinc International					
Gamsberg mining project <sup>2</sup>	First ore fed through concentrator plant in Sept 2018	400	241	85	73
Copper India					
Tuticorin smelter 400ktpa	Project under Force Majeure	717	189	6	522
AvanStrate Inc (ASI)	Furnaces to be operational by March 2019.	50	3	18	30
Capex flexibility					
Lanjigarh Refinery (Phase II) – 5mtpa	Under evaluation	1,570	836	2	732
Skorpion refinery	Currently deferred until Pit 112 extension	156	14	-	142
Zinc India (1.2mtpa to 1.35mtpa mine expansion)	In principle board approval	698	-	-	698

<sup>\*</sup>Capex approved restated on the basis of historical exchange rates.

<sup>1</sup> Capex approved for Cairn represents Net Capex; Gross capex \$2.5billion.

<sup>2</sup> Capital approved US\$400 million excludes interest during construction (IDC).

<sup>3</sup> Based on exchange rate prevailing at the time of approval.

<sup>4</sup> Based on exchange rate prevailing at the time of incurrence.

<sup>5</sup> Unspent capex represents the difference between total projected capex and cumulative spend as at 30 Sept 2018.

## **OPERATIONAL REVIEW**

## **OIL & GAS**

# **Safety**

There were three lost time injuries (LTIs) in H1 FY2019. Lost time injury frequency rate (LTIFR) for H1 FY2019 was 0.18, compared to 0.16 in the same period for FY2018, amidst a significant increase in activity due to development projects. The Raageshwari and Aishwarya oilfields achieved 10 years and 5 years of Lost Time Injury Free Operations respectively.

Several initiatives were launched to sustain high standards in safety culture, including focused campaigns such as near-miss reporting, housekeeping drives in oil and gas mines under 'Swacchata Pakhwada', and interactive brainstorming sessions on safety excellence.

We were therefore pleased to announce that the Oil & Gas business received the following recognitions for excellence in safety management systems:

- Raageshwari Gas Terminal (RGT) has been certified for '5S' (housekeeping) with 'Par Excellence' rating by Quality Circle Forum of India (QCFI).
- In the seventh FICCI Safety Systems Excellence Award 2018, the Bhagyam oil and gas mine received the prestigious Platinum prize in the mining sector, while the pipeline operations and CBOS-2 asset received Certificates of Appreciation for Good Practices in Safety Systems.

#### **Environment**

The Oil & Gas business is committed to protecting the environment, optimising resource consumption and driving towards the goal of 'zero discharge'. This effort was recognised through the fifth CII Environmental Best Practices Award 2018 for Natural Gas Recovery – Zero Flaring during Frac Well Milling Operation' in Gas Operations.

# **Production performance**

	Unit	H1 FY2019	H1 FY2018	% change	FY 2018
Gross operated production	boepd	190,431	184,062	3%	185,587
Rajasthan	boepd	159,593	156,278	2%	157,983
Ravva	boepd	13,855	17,810	(22%)	17,195
Cambay	boepd	16,984	9,974	70%	10,408
Oil	bopd	182,713	176,632	3%	177,678
Gas	mmscfd	53.9	44.6	21%	47.4
Net production - working interes	st boepd	121,761	117,391	4%	118,620
Oil*	bopd	117,633	113,881	3%	114,774
Gas	mmscfd	28.5	21.0	36%	23.1
Gross production	mmboe	34.8	33.7	3%	67.7
Working interest production	mmboe	22.3	21.5	4%	43.3

<sup>\*</sup>Includes net production of 135 boepd in H1 FY2019 from KG-ONN block, which is operated by ONGC. Cairn holds a 49% stake.

## Operations

Average gross operated production during H1 FY2019 across our assets was 190,431 barrels of oil equivalent per day (boepd), up 3% y-o-y. The increase in volume was primarily due to the infill wells in Mangala and Cambay; new wells brought online as part of the Bhagyam & Aishwariya EOR campaign and production optimisation activities carried out across assets. All our assets recorded an uptime of over 99% in H1 FY2019.

Production details by block are summarised below.

#### Rajasthan block

Gross production from the Rajasthan block averaged 159,593 boepd for H1 FY2019, 2% higher yo-y. The Mangala infill campaign that commenced in Q2 FY2018, was completed during Q1 FY2019 and all 15 wells were brought online. We drilled 32 wells as part of the growth projects

and have brought 8 wells online. Gross production from Development Area-1 (DA-1), Development Area-2 (DA-2) and Development Area-3 (DA-3) averaged 141,254 boepd, 17,794 boepd and 544 boepd respectively.

Gas production from Raageshwari Deep Gas (RDG) averaged 46.85 million standard cubic feet per day (mmscfd) in H1 FY2019, with gas sales, post captive consumption, at 29.8 mmscfd.

#### Ravva block

The Ravva block produced at an average rate of 13,855 boepd for the H1 FY2019. This was lower by 22% y-o-y primarily due to planned plant shut-down in Q1 FY2019 and natural field decline.

## Cambay block

The Cambay block produced at an average rate of 16,984 boepd for the H1 FY2019, up by 70% yo-y, supported by the gains realised from the infill wells campaign completed in Q1 FY2019.

#### **Prices**

	H1 FY2019	H1 FY2018	% change	FY 2018
Average Brent prices - US\$/barrel	74.8	51.0	47%	57.5

Crude oil prices rose consistently during H1 FY2019, climbing to a four-year high of US\$83 per barrel in September 2018. The surge in prices was driven primarily by supply side factors including re-introductions of sanctions on Iran and declining production in Venezuela. Crude oil averaged US\$74.8 per barrel, with a closing rate of US\$83.65 per barrel as of 28 September 2018. The supply side actions, trade war between US-China and demand outlook shall weigh on the crude oil prices.

# Financial performance

(US\$ million, unless stated)

	H1 FY2019	H1 FY2018	% change	FY 2018
Revenue	978	680	44%	1,480
EBITDA◊	572	401	43%	849
EBITDA margin	58%	59%		57%
Depreciation and amortisation	328	210	56%	461
Operating profit before special items	244	191	28%	388
Share in Group EBITDA %	33%	24%	-	21%
Capital expenditure	183	22	-	137
- Sustaining	3	0	-	10
- Projects	179	22	-	127

Revenue for H1 FY2019 was 44% higher y-o-y at US\$978 million (after profit and royalty sharing with the Government of India), as a result of the increase in oil prices. EBITDA was also higher in line with the higher revenues.

The Rajasthan water flood operating cost was US\$4.8 per barrel in H1 FY2019 compared to US\$4.3 per barrel in the previous year, primarily driven by increased interventions and production enhancement initiatives. Overall, the blended Rajasthan operating costs increased to US\$7.2 per barrel during H1 FY2019 compared to US\$6.2 per barrel in the previous year, due to the ramp-up in polymer injection volumes.

In H1 FY2019 capital expenditure was US\$179 million, which was primarily focused on growth projects including the Mangala infill, Bhagyam and Aishwarya EOR, liquid handling upgrade, and RDG and tight oil campaigns.

In H1 FY2019 a reversal of the previously recorded non-cash impairment charge of US\$38 million (US\$25 million net of taxes) was recorded at our Oil & Gas business

# **Exploration and development**

## **Exploration**

Rajasthan – (BLOCK RJ-ON-90/1)

The Barmer basin provides access to multiple play types, with oil in high permeability reservoirs, tight oil and tight gas. We have awarded an integrated contract for a drilling campaign of 7-18 exploration and appraisal wells to build on the resource portfolio. The well spud is expected by Q3 FY2019.

Rajasthan Tight Oil Appraisal

We have made 38 discoveries in the Rajasthan Block, with some comprising complex tight oil reservoirs. In order to monetise them, we will carry out appraisal activities through global technology partnerships over next 12-15 months, prior to conceptualising and developing a full-field development plan. The contract to appraise four fields, targeting 190 mmboe of resources, has been awarded. Drilling is expected to start in H2 FY2019.

Krishna-Godavari Basin Offshore

A two-well exploratory drilling campaign commenced in April 2018 to establish the potential of the block. The first exploration well has been notified as a discovery. Multiple reservoir zones were encountered in the Mesozoic rift formation. The drilling of the second exploration well is scheduled in January 2019.

Ravva

In order to increase the reserve and resource base, we intend to drill 9-16 exploration and development wells. The well spud is expected by Q4 FY2019.

Open Acreage Licensing Policy (OALP)

Cairn Oil & Gas was awarded 41 blocks under OALP and revenue sharing contracts have been signed for them with c. US\$550 million commitment. The 41 blocks, comprising 33 onshore and 8 offshore blocks, with a c.1.4 - 4.2bn boe of resource potential, are located primarily in established basins, with some optimally located close to existing infrastructure. Vendor outreach program has commenced and the plan is to acquire seismic and drill 150+ exploratory wells in the next 2 - 4 years.

#### **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, an 'integrated project development' strategy, with an in-built risk and reward mechanism, has been adopted. This new strategy is being delivered in partnership with leading global oilfield service companies. Major contracts have been awarded and execution has commenced. The growth projects add over 350 mmboe of production at a capex investment of around US\$5/boe.

## *Infill & enhanced oil recovery (EOR) projects*

Mangala infill - 45 wells

The 45-well infill drilling programme has started in Mangala with an estimated ultimate recovery (EUR) of 18 million barrels. One drilling rig is at the site. So far, 10 wells have been drilled and two wells have been brought online.

Bhagyam and Aishwariya EOR Polymer

The incremental value generated from the successful implementation of the Mangala polymer EOR project is being replicated in the Bhagyam and Aishwariya fields to enhance recoveries. The execution has commenced with two drilling rigs at site. To date, 19 wells have been drilled and six wells are online. This project is expected to generate incremental recovery of 40 million barrels.

MBA alkaline surfactant polymer (ASP)

The implementation of the world's largest alkaline surfactant polymer (ASP) project has commenced following the successful pilot test at the Mangala field. The drilling contract has been awarded and the drilling is expected to begin in H2 FY2019. The contract for facilities will be awarded in due course.

Full field implementation of ASP in the MBA fields has an estimated potential incremental recovery of around 200 million barrels of oil.

# Tight oil and gas projects

Tight oil: Aishwariya Barmer Hill (ABH)

ABH is the first tight oil project to monetise the Barmer Hill potential. The drilling of the well began in Q1 FY2019. Currently three rigs are operational and two wells have been drilled. Hydraulic fracturing activity is scheduled to start in Q3 FY2019. This project will generate a EUR of 32 million barrels of oil.

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.

Drilling has started with one rig at site and one well drilled. Hydraulic fracturing activity has begun in existing wells, as has work on surface facilities.

The GIGL pipeline is nearing completion, and facility debottlenecking will enable an increase in gas volumes by Q3 FY2019.

In addition, early gas production facility is being put up to increase production by around 90 mmscfd by the end of Q4 FY2019.

# Other projects

Surface facility upgrade

In order to maximise production at the Mangala Processing Terminal (MPT), we are focusing on increasing liquid handling capacity by around 30%. The contracts for the execution of the work has been awarded and work has started.

## Outlook

The Oil & Gas business now has a robust portfolio comprising of a number of exploration blocks with promising prospects, large pool of development projects and prolific producing fields. Our efforts are focused across these opportunities. The execution of development projects is expected to increase the production volumes progressively.

The closure of integrated 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 H2 FY2019, with the surge in drilling activities and well hook up, we expect the production volumes to be in the range of around 200-220 kboepd. Opex of the year is expected to remain sub-\$7/boe.

#### **ZINC INDIA**

# Safety

During the reporting period, we were deeply saddened to report four fatalities. We saw an increase in lost time injuries, from 6 in H1 FY2018 to 17 in H1 FY2019 and therefore the LTIFR was recorded at 0.63 compared to 0.23 in the previous year.

We have strengthened our efforts to enable a safer work environment for our employees and community.

- Zinc India created the Safety Innovation Cell in H1. The cell aims to develop engineering solutions that eliminate manual intervention in operations.
- Two new safety standards were rolled out "Hot work and Emergency Response" and "Contingency Planning". The standards are required to be followed each time these respective activities are undertaken at each site.
- As a safety outreach activity, 600 radio programmes aimed at improving road safety were broadcast across the state of Rajasthan.

On a positive note, the Chanderiya unit was proud to receive a Safety Excellence award from Frost & Sullivan.

#### **Environment**

The business delivered steady performance in resources conservation and recycling. During the reporting period, the water recycling rate remained at 35%.

Hindustan Zinc has conducted and completed a life cycle assessment study as per ISO 14040/44 standard using the "cradle to grave" approach for its zinc, lead and silver products. Under the approved Science Based Target initiative (SBTi), Hindustan Zinc has committed to reduce absolute Scope 1 and 2 GHG emissions by 14% and absolute Scope 3 GHG emissions by 20% by 2026, against the base year of 2016.

We have also been recognised for our environmental and sustainability initiatives. We have been ranked 1st (2017: 3rd) globally in the Environmental Vertical and 5th globally (2017: 11th) by the Dow Jones Sustainability Index in the Metal and Mining sector. The Chanderiya smelter received the Gold "SEEM National Energy Management" Award. Sindesar Khurd mine received the Bala Gulshan Tandon Excellence Award 2017-18 for Best Performance in Sustainable Development from the Federation of Indian Mineral Industries. CRDL received the 5th CII Environmental Best Practices Award 2018 for its innovation "Paver Block from Industrial Waste".

## **Production performance**

Production (kt)	H1 FY2019	H1 FY2018	% change	FY 2018
Total mined metal	444	452	(2%)	947
Refinery metal production	425	459	(7%)	960
- Refined zinc - integrated	334	386	(13%)	791
- Refined lead - integrated <sup>1</sup>	91	73	25%	168
Production - silver (million ounces ) <sup>2</sup>	10.0	8.2	22%	17.9

<sup>1.</sup> Excluding captive consumption of 3,577 tonnes in H1 FY2019 vs. 3,590 tonnes in H1 FY2018.

#### **Operations**

In H1 FY2019, ore production increased to 6.6 million tonnes, 15% higher y-o-y, driven by a 33% increase in ore production from underground mines, and partially offset by the closure of the opencast mine.

Mined metal production in H1 FY2019 was 444,000 tonnes, lower by 2% y-o-y. This was on account of the closure of the open cast mine in Q4 FY2018, even though production from underground mines was 27% higher y-o-y.

<sup>2.</sup> Excluding captive consumption of 598 thousand ounces in H1 FY2019 vs. 609 thousand ounces in H1 FY2018.

Integrated metal production declined by 7% to 425,000 tonnes. Integrated zinc production was 334,000 tonnes lower y-o-y by 13%, in line with the availability of zinc mined metal. Integrated lead production stood at 91,000 tonnes, 25% higher y-o-y driven by higher lead mined metal production. The pyro metallurgical smelter was retrofitted in Q2 to produce more lead metal, taking advantage of the higher availability of lead mined metal to achieve higher lead production.

Integrated silver production was 10 million ounces, 22% higher y-o-y, in line with higher lead production and better silver grades.

#### **Prices**

	H1 FY2019	H1 FY2018	% change	FY 2018
Average zinc LME cash settlement prices US\$/t	2,820	2,784	1%	3,057
Average lead LME cash settlement prices US\$/t	2,244	2,250	0%	2,379
Average silver prices US\$/ounce	15.8	17.0	(7)%	16.9

Movements in the zinc price and that of the other base metals during H1 FY2019 have been primarily driven by the rapidly evolving trade disputes between the US and its major trading partners. LME zinc prices have plunged from \$3191 in April to an average of \$2433 per tonne in September. According to Wood Mackenzie, Chinese output for 2018 has been forecast to reach 5.45 million tonnes, which is a 9% reduction on last year's 6.0 million tonnes. Fundamentals may improve as latest stock data from the SHFE shows that its warehouses now contain less than 30kt of zinc.

Lead averaged \$2244 per tonne in H1 FY2019 on heightened fears of an escalated trade war between the US and China, and the dispute between the US and Turkey.

Silver prices have slipped to \$15.8 per ounce in H1 FY2019 because of the surging US dollar on the FX market. Silver has been impacted by steep declines in Q2 FY2019, dropping by about 10% since June 2018.

#### **Unit costs**

	H1 FY2019	H1 FY2018	% change	FY 2018
Unit costs (US\$ per tonne)				
- Zinc (including royalty)	1,408	1,322	7%	1,365
- Zinc (excluding royalty)	1,039	979	6%	976

For the six-month period, zinc COP was \$1039 higher by 6% y-o-y. The increase was primarily due to lower integrated production, higher mine development and input commodity inflation, but partly offset by higher acid credits and currency depreciation. Including royalties, the total cost of zinc production increased to US\$ 1,408 per tonne, 7% higher y-o-y.

Of this figure, government levies amounted to US\$412 per tonne (H1 FY2018: US\$382 per tonne), comprised mainly of royalty payments, the Clean Energy Cess, electricity duty and other taxes.

# Financial performance

(US\$ million, unless stated)

	H1 FY2019	H1 FY2018	% change	FY 2018
Revenue	1,440	1,503	(4%)	3,369
EBITDA◊	727	834	(13%)	1,903
EBITDA margin (%)	50%	55%		56%
Depreciation and amortisation	122	73	68%	233
Operating profit before special items	605	761	(20%)	1,670
Share in Group EBITDA (%)	43%	49%		47%
Capital expenditure	256	159	61%	465
- Sustaining	83	40	-	106
- Growth	174	119	46%	359

The revenue for H1 FY2019 stood at US\$ 1,440, down 4% y-o-y, and EBITDA was US\$727 million, down 13% y-o-y. The decrease was primarily driven by lower zinc volumes and higher cost of production, partly offset by higher lead and silver volumes.

## **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 9% to 20.2 km in H1 FY2019.

## Rampura Agucha

The mid-shaft loading system was commissioned at the end of H1 FY2019, allowing waste hoisting to be carried out through the shaft, ahead of schedule. This will help to improve volumes until the off-shaft is fully commissioned. Off-shaft development is on track and commercial production from the main shaft is expected to start from Q4 FY2019.

#### Sindesar Khurd

The production shaft work is progressing well with winders commissioned in manual mode and material hoisting from the shaft expected to start in Q3 FY2019. The new 1.5mtpa mill is expected to be commissioned in Q3 FY2019.

## Zawar mine

At Zawar, civil and erection works of the new 2mtpa mill is on track and expected to commission by Q4 FY2019.

Rajpura Dariba mine has received Environment Clearance by the Ministry of Environment, Forest & Climate Change to increase ore production from 0.9 to 1.08 mtpa and regulatory approval for further expansion to 2.0 mtpa is under process.

The Fumer project at Chanderiya is expected to commission in Q3 FY 2019.

Planning for the next phase of expansion from 1.2 to 1.35 mtpa mined metal capacity announced in April 2018 is underway.

#### Outlook

Mined metal and refined zinc-lead production in H2 FY2019 is expected to be significantly higher than in H1. This reflects the continued ramp-up of underground mines, with overall production in FY2019 slightly higher than that of last year, as guided earlier.

We also re-iterate our previous guidance that silver production will be in the range of 650 to 700mt. COP before royalty is projected to be in the range of USD 950 to 975 per mt in H2 FY2019. The project capex for the year will be around US\$400-450 million.

#### ZINC INTERNATIONAL

# Safety

With deep regret our Zinc International business reported a fatality during H1 FY2019 at our Gamsberg Project in South Africa. The company continues to strengthen compliance of safety management standards in order to prevent such unacceptable incidents and during the period, the business reported a slight improvement in the LTIFR performance (H1 FY2019: 1.47 vs. H1 FY2018: 1.66).

#### **Environment**

We made significant progress in implementing the biodiversity commitments for Gamsberg set out in the Biodiversity Management Plan for Black Mountain Mining (Pty) Ltd. The authorities have started the process to proclaim the offset properties, which were transferred into their name. This will add an additional 21,700 hectares of conservation land.

# Production performance

	H1 FY2019	H1 FY2018	% Change	FY 2018
Total production (kt)	54	74	(28%)	157
Production- mined metal (kt)				
BMM	29	38	(25%)	72
Refined metal Skorpion	25	36	(31%)	84

## **Operations**

During H1 FY2019, total production was at 54,000 tonnes, lower by 28% y-o-y.

Production at Skorpion stood at 25,000 tonnes during H1 FY2019, 31% lower y-o-y due to lower than planned zinc grades hence recoveries.

At BMM, production was 25% lower than the previous year. This was due to prioritisation of mine development in H1 FY2019 to provide for flexibility in ore mining and blending in H2 FY2019.

At Gamsberg, first ore was fed through the concentrator plant in September 2018, and the trial concentrate production began at the end of September following commissioning of flotation.

# **Unit costs**

	H1 FY2019	H1 FY2018	% Change	FY 2018
Zinc (US\$ per tonne) unit cost	2,393	1,564	53%	1,603

The unit cost of production increased by 53% to US\$2,393 per tonne, up from US\$1,564 in the previous year. This was mainly driven by lower production at both Skorpion and BMM, higher oxide consumption and stripping costs of Pit 112 at Skorpion, partially offset by local currency depreciation.

## **Financial Performance**

(US\$ million, unless stated)

	H1 FY2019	H1 FY2018	% Change	FY 2018
Revenue	163	257	(37%)	535
EBITDA	15	110	(87%)	219
EBITDA margin	9%	43%		41%
Depreciation	22	13	66%	28
Operating profit before special items	(7)	97	-	191
Share in group EBITDA %	1%	7%		5%
Capital expenditure	128	92	40%	238
Sustaining	38	30	27%	65
Growth	90	62	46%	173

During the period, revenue decreased by 37% to US\$163 million, driven by lower sales volumes due to lower production in H1 FY19 and liquidation of FY17 stock in H1 FY18 at BMM. The same factors, combined with a higher cost of production, resulted in an EBITDA of US\$15 million, down 87% y-o-y.

## **Projects**

At Gamsberg, 100% of pre-stripping, with 68 million tonnes of waste excavation, was completed in July 2018 as per the plan. An ore stockpile of some 750,000 tonnes has been built ahead of the plan. The crusher has been fully commissioned and a sufficient crushed ore stockpile has been built. The milling area (sag mills/ball mills), water and power infrastructure, together with the tailings storage facility, have been fully commissioned. The operations team has already been fully mobilised. We now expect the ramp-up to full mill capacity of 250kt in 6-9 months.

The first phase of the Gamsberg project is expected to have a mine life of 13 years, leading to volumes over 400,000tpa at Zinc International. Phase 1 of the Gamsberg project only exploits a quarter of the full resource potential. We see Gamsberg reaching a potential of 600ktpa through modular expansion in the future through Phase 2 and Phase 3 projects. Phase 2 can start immediately after completion of Phase 1, and will share some synergies. The mine plans have been developed and an expanded mega pit design has been completed to enable a faster and efficient Phase 2 execution. In terms of output, Phase 2 is expected to add another 200-250ktpa metal in concentrate in 2-3 years.

At Skorpion, Pit 112 continues to feed ore to the refinery. Over 65% of waste pre-stripping has been completed with full completion expected by Q4 FY2019. With fully ramped up Pit 112, production is expected to increase in H2 FY 2019 whereby feed to refinery will be maximised and grades are expected to be higher than 8% against H1 FY2019 grade of ~6%.

# Outlook

In H2 FY2019, we expect production volumes from Skorpion and BMM to be around 96kt. Based on Gamsberg's forecasted mine ore grade, mine plan and ramp up schedule, we are forecasting around 75kt tonnes of metal in concentrate in the current financial year, slightly lower than our earlier guidance. However lower production will be offset by lower costs ranging from \$800-1,000 per tonne.

The cost of production, excluding Gamsberg, is expected to be around US\$ 1,850 - 1,950 per tonne, as guided earlier.

## **IRON ORE**

# Safety

Our LTIFR performance was 0.16, compared to 0.12 in H1 FY2018. We have taken several steps to improve safety management on the ground, with increased leadership tours to drive up the overall safety culture of the business. The site has been divided into clusters, with 104 clustergrid owners designated to manage safety performance within their own cluster. We have also introduced "One-man-one-lock", defensive driving, and the rollout of a Personal Safety Action Plan. Along with continuous refresher trainings, these are some of the initiatives we have implemented during H1 FY2019.

#### **Environment**

During H1 we have conducted the biodiversity study at our Karnataka Mine. To control the dust emissions at Value Added Business (VAB) & Iron Ore Karnataka (IOK), we have used fog canons in operational areas and mine roads. Additionally, during the monsoon season, we have initiated a greenbelt development project at IOK and VAB.

## **Production performance**

	H1 FY2019	H1 FY2018	% Change	FY 2018
Production (dmt)				_
Saleable ore	2.8	4.5	(38%)	7.1
Goa	0.2	2.6	(91%)	4.9
Karnataka	2.6	1.9	36%	2.2
Pig iron (kt)	339	300	13%	646
Sales (dmt)				
- Iron ore	1.8	3.0	(41%)	7.6
- Goa	1.2	2.0	(42%)	5.4
- Karnataka	0.6	1.0	(41%)	2.2
- Pig iron (kt)	338	288	17%	645

## Operations

There was no production during the period at Goa, due to the mine closure. This was pursuant to the Supreme Court judgment dated 7 February 2018, directing mining operations in Goa to cease with effect from 16 March 2018. We continue to engage with the Government with the aim of resuming mining there.

At Karnataka, production was 2.6 million tonnes in H1 FY2019, in line with the new allocated mining cap that has increased from 2.3 to 4.5 million tonnes. Sales were lower at 0.6 million tonnes due to muted e-auction sales.

During the half-year, pig iron production was 13% higher y-o-y at 339,000 tonnes. This was due to lower metallurgical coke availability in the previous year, caused by weather-related supply disruptions in Australia in Q1 FY2018 and a local contractors' strike in Q2 FY2018.

#### **Prices**

The margin in pig iron business increased from US\$47 per tonne in H1 FY2018 to US\$82 per tonne in H1 FY2019, primarily due to higher realisations

# Financial performance

 $(US\$\ million,\ unless\ stated)$ 

	H1 FY2019	H1 FY2018	% Change	FY 2018
Revenue	205	191	7%	487
EBITDA	45	(3)	-	57
EBITDA margin	22%	(1%)		12%
Depreciation	18	35	(48%)	69
Operating (loss) before special items	27	(38)	-	(11)
Share in group EBITDA %	3%	0%		1%
Capital expenditure	2	7	(73%)	11
Sustaining	2	7	(73%)	11
Growth	-	-		-

In H1 FY2019, EBITDA increased to US\$45 million compared with US\$(3) million in H1 FY2018. This was mainly due to higher volumes and significantly improved margins in pig iron, partially offset by lower sales volumes in Goa and Karnataka.

## Outlook

The Company continues to explore all legal avenues to secure the reinstatement of mining operations in Goa.

At Karnataka, the production is expected to be 4.5mt

# COPPER - INDIA / AUSTRALIA

## Safety

During the period, our LTIFR stood at 0.33 against the 0.17 in same period last year<sup>1</sup>. This year, as part of our Chairman's vision to leverage technology, we implemented usage of drones to take stack thickness measurements, thus eliminating the high-risk activity of erecting scaffolding. We also received good support from shop floor employees as well as contract employees during a crisis period, showing the acceptance of our safety culture among our workforce.

# **Production performance**

	H1 FY2019	H1 FY2018	% Change	FY 2018
Production (Kt)				
- India - cathode	40	197	(80%)	403

## **Operations**

The Company's application for renewal of Consent to Operate (CTO) for existing copper smelter was rejected by Tamil Nadu Pollution Control Board (TNPCB) in April 2018. Subsequently the Government of Tamil Nadu vide its order dated May 28, 2018 issued directions to seal the existing copper smelter plant permanently. The Company has appealed before the National Green Tribunal (NGT), Principal Bench. In response, the NGT has appointed a committee comprising of a retired high court justice, a member from Central Pollution Control Board (CPCB) and Ministry of Environment and Forests & Climate Change (MoEF & CC) to oversee the technical matters of the allegations made against Sterlite Copper. The committee will submit its report on the matter of environmental compliance by Nov 30, 2018 and the matter will be listed for hearing immediately after the receipt of report or Dec 10, 2018, whichever is earlier.

Further, 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. Ministry of Environment and Forests (MoEF) has delisted the expansion project since the matter is sub judice. However, in the meanwhile, SIPCOT cancelled the land allotted for the proposed Expansion Project and TNPCB issued order directing the withdrawal of the Consent to Establish (CTE) which was valid till March 31, 2023.

The Company has approached Madras High Court by way of writ petition challenging the cancellation of lease deeds by SIPCOT pursuant to which an interim stay has been granted. The Company has also filed Appeals before the TNPCB Appellate Authority challenging withdrawal of CTE by the TNPCB.

In the interim, we continue with our engagement with the local communities and stakeholders through various outreach and CSR.

Our Silvassa refinery and wire rod plant continues to operate, enabling us to cater to domestic market.

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

<sup>1</sup> Due to the closure of the Tuticorin operations, we have seen a decrease in total man-hours. As a result the LTIFR has increased (LTIFR = LTI/Million man-hours)

# Financial performance

 $(US\$\ million,\ unless\ stated)$ 

	H1 FY2019	H1 FY2018	% change	FY 2018
Revenue	755	1,753	(57%)	3,833
EBITDA◊	(12)	93		201
EBITDA margin	(2%)	5%		5%
Depreciation and amortisation	11	12	(11%)	25
Operating profit before special items	(23)	81		176
Share in Group EBITDA %	(1%)	6%		5%
Capital expenditure	26	10	-	84
- Sustaining	21	8	-	34
- Growth	6	2	-	50

During H1 FY2019, revenue for the business stood at US\$755 million and EBITDA was US\$(12) million, significantly lower due to the shutdown of the Tuticorin operations.

# Outlook

On restart, we expect production to remain at around 100,000 tonnes per quarter.

#### **COPPER ZAMBIA**

# Safety

With deep regret, we reported four fatal incidents during H1 FY2019. The incidents were thoroughly investigated with an extensive safety pause at the operations and the learnings were incorporated in the safety awareness and safety campaigns that were initiated across the business to address the gaps with remediation plans.

We continue our journey to zero harm and committed to run active safety interventions and initiatives. During the period, we conducted safety training for more than 12,500 employees and contractors together. We intend to reinforce our safety awareness discipline and culture through continuous training and control.

#### **Environment**

Improving our water management practices remains a top priority for the business, and specific consumption remained steady across the period. Further improvement projects aligned to our sustainability framework 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.

Our focus is being communicated under the title "Volume growth, product quality, and environmental sustainability "and our efforts are progressing in that direction.

# **Production performance**

Particulars	H1 FY2019	H1 FY2018	% Change	FY 2018
Production (kt)				
Total mined metal	49	45	9%	91
Konkola	16	17	(8%)	37
Nchanga	7	7	11%	13
Tailings Leach Plant	25	21	22%	41
Finished copper	94	101	(7%)	195
Integrated	48	43	11%	84
Custom	47	58	(20%)	111

## **Operations**

Mined metal production was 49,000 tonnes during H1 FY2019, up 9% y-o-y primarily due to improved feed-grades from tailings and Nchanga and higher copper recoveries at the Tailings Leach Plant (TLP). This was achieved as a result of our focused preventive maintenance programmes, although partially offset by a maintenance breakdown and a temporary safety related suspension of operations at Shaft 4 of our Konkola underground mine. This has since been rectified.

#### Konkola

At Konkola, production decreased to 16,000 tonnes, lower by 8% y-o-y, primarily impacted by the maintenance breakdown, safety related temporary suspension of operations at Shaft 4 and lower equipment availability, resulting in lower development.

In order to achieve better productivity with best safety practices, we have conducted a detailed inspection of each area of the operation to ensure readiness of the area for the introduction of new trackless equipments. The equipment mobilisation programme, as well as dewatering and development by business partners, is expected to improve gradually thereafter in Q3 FY2019. In parallel, we are working towards more effective underground fleet traffic management as part of the life-of-mine plan.

# Nchanga

At Nchanga, production increased to 7,000 tonnes, up 11% y-o-y, primarily due to higher ore feed and improved feed-grades. The open cast mines have a sharp focus on waste excavation programmes for enhanced access to high-grade ore body, with the right balance of own/contracting model, together with the required rain-readiness plans, that will result in an improved production run-rate in H2 FY2019.

# Tailings Leach Plant (TLP)

TLP's production stood at 25,000 tonnes, up 22% y-o-y, mainly due to enhanced feed-grades and higher copper recoveries resulting from improved pumps and plant availability, and reliable process controls.

# Smelter and refinery

Production of finished copper (excluding TLP) was down at 69,000 tonnes in H1 FY2019, compared to 81,000 tonnes in H1 FY2018. Of this, custom volumes were lower at 47,000 tonnes, down by 20% y-o-y due to lower concentrate availability in the region, following high demand.

## **Unit costs (integrated production)**

	H1 FY2019	H1 FY2018	% Change	FY 2018
Unit costs (US cents per lb) excluding royalty	275.5	248.8	11%	239.1
Unit costs (US cents per lb) including royalty <sup>1</sup>	355.7	317.8	12%	314.8

<sup>1</sup> Including sustaining capex and interest cost

In H1 FY2019, the unit cost of production (excluding royalties) increased by 11% to US cents 275.5 per lb on y-o-y basis. This was the result of various contributing factors, but primarily related to a significant depreciation of the kwacha against the US dollar and higher waste stripping costs at the open-pit. The increase was, however, partially offset by volume-led absorption.

#### **Prices**

	H1 FY2019	H1 FY2018	% Change	FY 2018
Average LME cash settlement prices (US\$ per tonne)	6,483	6,013	8%	6,451

In CY2018, copper LME touched a four-year high of US\$7,216 amid global growth in demand and supply fears. The prices have since fallen due to geopolitical tensions between US and China and stronger US\$. However average prices for H1 FY2019 were 8% higher y-o-y.

## Financial performance

(US\$ million, unless stated)

	H1 FY2019	H1 FY2018	% Change	FY 2018
Revenue	580	622	(7%)	1,283
EBITDA	(41)	18		73
EBITDA margin	(7%)	3%		6%
Depreciation and amortisation	53	56	(4%)	112
Operating loss before special items	(95)	(38)	-	(39)
Share in group EBITDA (%)	(2%)	1%		2%
Capital expenditure	19	11	76%	24
Sustaining	19	11	76%	24
Growth	-	-		_

Revenue in H1 FY2019 was lower at US\$580 million, down 7% y-o-y due to lower volumes in the custom business, but partially offset by improved metal prices. EBITDA for the period stood at US\$(41) million compared with US\$18 million in H1 FY2018. Benefits from an improved

integrated production and favourable metal prices were negated by the kwacha depreciation on VAT receivables, and incremental process improvement costs.

# Outlook

Full-year production is expected to be around 100-110kt of integrated production, with cost of production at USc 220-240/lb in H2 FY2019. Custom smelting production is expected at 100-110kt.

#### **ALUMINIUM**

# Safety

The LTIFR for the Aluminium business was 0.29 compared to 0.26 in H1 FY2018. We were deeply saddened to report one fatality during the time period.

Over the last six months, the Aluminium business has worked to improve HSE performance and implementation of Vedanta's safety performance standards with priority. Trackers have been introduced to monitor monthly improvements of the respective targets using self-assessment methods.

The Lanjigarh refinery continued to maintain its record of a zero-LTIFR.

#### **Environment**

The Aluminium business continues to focus on reducing its specific energy and water consumption. BALCO has commissioned Chhattisgarh's biggest captive secure landfill. This facility has been designed to handle a total of c. 36,000 cubic meter, or 54,000mt of Spent Pot Lining (SPL). The SPL detoxification unit has been constructed near Raipur and the plant has been established with the required consent to operate.

All locations in the Aluminium business have achieved 100% fly ash utilisation for H1 FY2019 by supplying fly-ash to brick manufacturers, cement industries and towards ash dykes filling, levelling low-lying areas, and road making.

# **Production performance**

Production (kt)	H1 FY2019	H1 FY2018	% change	FY 2018
Alumina - Lanjigarh	673	572	18%	1209
Total aluminium production	976	753	30%	1675
Jharsuguda I	273	191	43%	440
Jharsuguda II¹	420	277	51%	666
BALCO I	128	128	-	259
BALCO II <sup>2</sup>	155	156	(1%)	310

<sup>1</sup> Including trial run production of 30 kt in H1 FY2019 vs. 34 kt in FY2018

## Alumina refinery: Lanjigarh

At Lanjigarh, production increased to 673,000 tonnes, up 18% y-o-y due to debottlenecking and bauxite sourcing in Odisha from Odisha Mining Corporation (OMC). Increased captive alumina production and local bauxite sourcing are key in our efforts to drive the aluminium costs lower. We are in advanced stages of planning for Phase 1 of the potential refinery expansion to c. 4mt, subject to bauxite availability.

#### Aluminium smelters

We achieved record half yearly production of 976,000 tonnes as a result of the ramp-up at Jharsuguda. We exited Q2 FY2019 with a run-rate of 1.9mtpa stabilised production (i.e. production excluding the trial run).

# Jharsuguda I smelter

Production from the Jharsuguda I smelter was 43% higher in comparison to same period past year, when a pot outage incident in April 2017 affected 228 pots. These pots were fully restored by Q3 FY2018.

# Jharsuguda II smelter

Production from the Jharsuguda-II smelter was 51% higher y-o-y due to the completion of rampup of Lines 1 and 2 by the close of FY2018. Line 3 has progressively ramped up with 303 out of 336 pots operational by end of September. We continue to evaluate Line 4 expansion.

 $<sup>2 \</sup>qquad \textit{Including trial run production of nil kt in H1 FY2019 vs. 16 kt in FY2018}$ 

## BALCO I & II smelters

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

## Coal linkages

Continued demand-supply imbalance in domestic coal resulted in coal price increase and disruptions in domestic coal availability for the captive power plants. This resulted in power import in the Aluminium segment. Coal procurement continues to be a key focus area for the management. We are engaging with Coal India to improve e-auction coal availability and materialisation of existing linkages. Recently, 3.2 mt of additional linkage was secured from the Tranche IV coal auction, with materialisation expected from Q4 FY2019. Further, mining at our Chotia coal mine delivered first coal in end-October. These will help improve coal availability and therefore help to drive costs down.

#### **Prices**

	H1 FY2019	H1 FY2018	% Change	FY 2018
Average LME cash settlement prices (US\$ per tonne)	2,156	1,962	10%	2,046

Average LME prices for aluminium in H1 FY2019 stood at US\$2,156 per tonne, an increase of 10% y-o-y. During the first half, aluminium prices extended gains as US sanctions fuelled concerns over supply. However, escalating trade tensions between China and US caused a price movement from July onwards.

#### **Unit costs**

				(US\$ per tonne)
	H1 FY2019	H1 FY2018	% Change	FY 2018
Alumina cost (ex-Lanjigarh)	349	324	8%	326
Aluminium hot metal production cost	1,978	1,798	10%	1,887
Jharsuguda CoP	1,981	1,781	11%	1,867
BALCO CoP	1,973	1,825	8%	1,923

During H1 FY2019, the cost of alumina at Lanjigarh refinery was 8% up y-o-y at US\$349 per tonne, mainly due to input commodity inflation and a change in the bauxite source-mix, partially offset by currency depreciation. In H1 FY2019, the total bauxite requirement was met from Odisha (13%), Chhattisgarh (9%), other domestic sources (30%) and imports (48%). In comparison, our H1 FY2018 bauxite requirement was met through Chhattisgarh (32%), domestic sources (45%) and imports (23%).

The CoP of hot metal at Jharsuguda was US\$1,981 per tonne, up from US\$1,781 in H1 FY2018. The CoP at BALCO increased to US\$1,973 per tonne from US\$1,825 in H1 FY2018. The increases for both smelters were primarily due to higher imported alumina and carbon prices, and higher power costs. The latter was driven by disruptions in the domestic coal supply from Coal India, resulting in procurement of coal and power from alternative sources at higher prices. This was partially offset by rupee depreciation.

# Financial performance

 $(US\$\ million,\ unless\ stated)$ 

	H1 FY2019	H1 FY2018	% Change	FY 2018
Revenue	2,231	1,468	52%	3,588
EBITDA	242	153	58%	452
EBITDA margin	11%	10%		13%
Depreciation and amortisation	107	87	23%	257
Operating profit before special items	135	66	-	195
Share in group EBITDA (%)	14%	9%		11%
Capital expenditure	85	77	10%	218
Sustaining	42	11	-	105
Growth	43	66	(35%)	113

EBITDA was higher at US\$242 million (H1 FY2019: US\$153 million), driven mainly by volume ramp-up and increased LME prices. This was partially offset by the increase in the cost of production.

## Outlook

As input commodity supply and prices continue to be volatile, we continuously look at ways to create supply sources that will help achieve a structural cost reduction, while also increasing the price realisation in order to improve profitability in a sustainable way.

On coal, we are targeting to improve coal security through additional linkages from future auctions, better linkage materialisation and ramp-up of our captive Chotia mine. We are working towards improved local bauxite sourcing to feed the alumina refinery, with the OMC bauxite targeting 250kt per month exit rate in Q3 FY2019. Lanjigarh refinery ramp-up, currently in advanced planning stages, will improve captive alumina production. We are also focusing on reducing coal quality losses as well as improvements in logistics and plant operating parameters, which should help reduce non-coal costs. We expect the full year cost of production to be in the range of \$1,950-2,000/tonne as we make progress on some of these initiatives in the second half of the year. Aluminium and alumina production guidance for the year remain unchanged at c. 2 mt and 1.5-1.6 mt respectively.

## **POWER**

# Safety

In H1 FY2019, we were pleased to achieve zero-LTIs. In line with our zero-harm vision, our priority was to implement the Vedanta Safety Standards and embed the safety culture with particular focus on working at height, confined space, vehicle safety, and crane & lifting safety.

#### **Environment**

TSPL delivered a robust environmental performance in H1 FY2019. Our CTO was renewed for five years by the State Pollution Control Board. In line with the vision of zero waste, we have increased the fly ash utilisation from 73% in H1 FY2018 to 92% H1 FY2019.

We have planted 30,000 saplings in nearby cities and villages to support the Chief Minister of Punjab's "Mission Tandrust Punjab" project to improve the ambient air quality and to increase the green cover in Punjab. We were recognised by the Punjab Pollution Control Board for exemplary contribution towards environmental activities in FY2018 on the occasion of World Environment Day 2018.

## **Production performance**

	H1 FY2019	H1 FY2018	% Change	FY 2018
Total power sales (MU)	6,830	4,787	43%	11,041
- Jharsuguda 600 MW	289	657	(56%)	1,172
- BALCO 600 MW	1,137	682	67%	1,536
- MALCO*	-	4	-	4
- HZL wind power	324	299	8%	414
- TSPL	5,081	3,145	62%	7,915
- TSPL – availability	93%	54%		74%

<sup>\*</sup>Continues to be under care and maintenance since 26 May 2017

## **Operations**

Power sales from TSPL were 5,081 million units, 62% up y-o-y, mainly on account of TSPL plant shutdown due to a fire incident in the coal conveyor in Q1 FY2018, which resulted in 65 days of shutdown. The power purchase agreement with the Punjab state compensates us based on the availability of the plant. Average availability for the period was 93%.

The Jharsuguda 600MW power plant operated at a lower plant load factor (PLF) of 3.5% in H1 FY2019 (Q1 FY19: 5%, Q2 FY19: 2%, H1 FY18: 26%). Power sales in this period were also met through third-party power purchases.

The 600MW BALCO IPP operated at a PLF of 51% in H1 FY2019 (Q1 FY19: 57%, Q2 FY19: 45%, H1 FY18: 47%), primarily due to coal shortages.

#### Unit sales and costs

	H1 FY2019	H1 FY2018	% Change	FY 2018
Sales realisation ex TSPL (US cent/kWh) <sup>1</sup>	5.1	4.3	19%	4.5
Cost of production ex TSPL (US cent/kWh) <sup>1</sup>	4.0	3.0	34%	3.6
TSPL sales realisation (US cent/kWh)2	6.0	5.6	7%	5.4
TSPL cost of production (US cent/kWh) <sup>2</sup>	4.2	4.4	(4)%	3.9

<sup>1</sup> Power generation excluding TSPL

Average power sales prices, excluding TSPL, increased by 19% y-o-y. The rise in realisation was on account of increase in costs due to disruptions in coal supply due to which the COP was higher by 34% y-o-y.

TSPL's average sales price was higher at US cents 6.0 per kWh compared with US cents 5.6 per kWh in H1 FY2018, due to higher plant availability. Power generation cost was lower at US cents

<sup>2</sup> TSPL sales realisation and cost of production is considered above based on availability declared during the respective period

4.2 per kWh compared with US cents 4.4 per kWh in the previous year, driven mainly by increased coal prices offset by rupee depreciation.

# Financial performance

(US\$ million, unless stated)

	H1 FY2019	H1 FY2018	% change	FY 2018
Revenue	483	336	44%	877
EBITDA	117	74	58%	259
EBITDA margin	24%	22%	-	25%*
Depreciation and amortisation	44	38	17%	75
Operating profit before special items	73	36	-	184
Share in group EBITDA%	7%	4%	-	6%
Capital expenditure	1	1	-	2
Sustaining	1	1	-	2
Project	-	-	-	-

<sup>\*</sup>Excluding one-offs

EBITDA for the year was 58% higher y-o-y at US\$117 million due to higher power sales at TSPL.

# Outlook

We will remain focused on maintaining the 80% plant availability of TSPL and achieving higher plant load factors at the Balco and Jharsuguda IPP.

#### **STEEL**

# Safety

We reported five lost time injuries in H1 FY2019. Our LTIFR was 0.49, compared to 0.17 in FY2018.

We have started a thorough review of our safety practices and more focus is being given on standard operating procedures (SOPs), risk assessment for critical hazards, and the implementation of eight standards of safety in next six months.

#### **Environment**

During H1, we commissioned eight opacity meters at stacks to monitor dust emission, with the data uploaded online to the Pollution Board's servers. To control the dust emission from roads, permanent water sprinklers have been provided throughout the stretch of the haul road, and water tankers are being used at other places.

Adequate dust suppression systems have been introduced at all transfer points of conveyor systems.

A green belt development project has been taken up to increase the green cover.

# **Production performance**

Particulars	FY 2019 (June 2018 and Q2)	H1 FY2019	H1 FY2018	% Change
STEEL	guite 2010 unu Q2)	111 1 1 2017	111 1 12010	70 Change
Production	356	527	485	9%
Pig iron	48	59	80	(26%)
Billet	5	7	23	(70%)
TMT bar	131	196	144	36%
Wire rod	139	208	182	14%
Ductile iron pipes	33	57	57	0%

June 2018 was the first full month post Vedanta Limited's 90% acquisition of ESL. Previous period numbers are memorandum information for the purpose of performance evaluation of the Company

## **Operations**

Vedanta Limited completed the acquisition of 90% of the share capital of Electrosteel Steels Limited (ESL) on 4 June 2018, following which we are consolidating the financials of ESL for a 10-month period in FY2019.

ESL is an integrated steel plant (ISP) and has steelmaking design capacity of 2.5mtpa in Bokaro, Jharkhand with basic-oxygen-furnace (BoF) technology. Current operating capacity is 1.5mt with a diversified product mix of wire rod, rebar, DI pipe and pig iron. It is strategically situated at Bokaro in the vicinity of the raw material production area.

Total production for the first half was 527,000 tonnes, 9% higher y-o-y as a result of various factors including the improved availability of raw material; the restarting of the 0.4mt Blast Furnace-3 from August 2018; and improved plant availability and utilisation. In line with our stated priorities to stabilise production and ramp up to 1.5mtpa, we exited at a monthly run-rate of 1.3mtpa.

Consent to Operate (CTO) for our steel plant at Bokaro, which was valid until December 2017, was not renewed by 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 date of hearing which is due on 11 December 2018.

## Financial performance

(US\$ million, unless stated)

	H1 FY2019*
Revenue	207
EBITDA	30
EBITDA margin	14%
Depreciation	11
Operating (loss)/profit before special items	19
Share in group EBITDA %	2%

<sup>\*</sup> Financial number are for a period of 4 months from June 2018

Since its acquisition with effect from 1 June 2018 by Vedanta, ESL has generated EBITDA of \$30 million at a margin of ~\$94/t, driven by improved volume and realisations.

Considering the time involved in the valuation and complexities involved in the acquired business, the Group is still in the process of finalizing the fair valuation, which is expected to be finalized by the year end. As a result, the effects of the same have been accounted for on a provisional basis, as permitted by IFRS 3.

## **PORT BUSINESS**

# Vizag General Cargo Berth (VGCB)

During FY2018, VGCB operations showed an increase of 19% in discharge and 21% in dispatch compared to H1 FY2018. This was due to restrictions in handling road-bound cargo, imposed by a High Court order in April 2017. However, these restrictions were removed in September 2017.

#### **SUSTAINABILITY**

Our Sustainable Development Model comprises four pillars: Responsible Stewardship, Building Strong Relationships, Adding and Sharing Value, and Strategic Communications. These pillars form a sound base from which we can build a successful future for our business, while we strive for our strategic goals of growth, long-term value and sustainable development.

During H1, we undertook a significant exercise to define the HSE & Sustainability agenda for the business. HSE and SBU leaders from across the business took part in a three-day workshop to define 21 priorities across Health, Safety, Environment, Social Performance and Sustainability. The priorities are being tracked on a monthly basis and we expect these to deliver significant improvements in the overall HSE & sustainability performance of the company in the next three years.

## Responsible stewardship

Our Sustainable Development Model encapsulates Vedanta's approach to managing risk and how we conduct our business ethically. It also guides us in ensuring the health and safety of our workforce and minimising our environmental footprint. Recent safety-related incidents have challenged our systems, however, we remain committed to complying with our Sustainable Development Model and are working towards improved performance

## Health & safety

The loss of life across our businesses is unacceptable to us and we have been deeply saddened by the ten fatalities that have occurred in first half of the year. Detailed internal investigations have been undertaken for all these accidents and the lessons learned have been shared across all businesses. Safeguarding the well-being of our workforce is of paramount importance. We fiercely advocate a zero-harm culture at Vedanta. In response we have increased emphasis on the monitoring of our safety practices and our leaders have taken strong steps to prevent a repeat of these unacceptable incidents. Our focus on implementing the group-wide key Safety Performance Standards continues and we have trained over 240 of our senior managers in the adoption and implementation of these standards in their respective businesses. 86% leaders have been trained on "Making Better Risk Decisions" against a target of 100% by the end of FY19. We will continue to review and enhance performance related to: leadership tours, area-safety managers, housekeeping, safety standard compliance, and identification of critical risk controls. We strongly believe that following this process will help us prevent such accidents from occurring in the future.

During H1 FY2019, our LTIFR (lost time injury frequency rate) was 0.48 (FY2018: 0.33).

#### Environmental Management

Environmental management is a material issue for the Vedanta companies because some of our processes and operational hazards can result in high-impact environmental incidents.

Water availability and quality is a significant area of focus for us. Most of our operations lie in India and Africa and certain parts of these continents are expected to experience significant water stress in the future. Last year we initiated water risk assessment studies at 30 locations. This year we have begun the process of developing business-specific mitigation plans to manage the risks. Our water recycling rate is similar to the previous year, at 27%.

We have also made significant progress on the management of our tailings dams. We have hired a third-party expert agency to provide engineering advice in developing and implementing effective tailings dam management systems at all our businesses.

We continue to work on advancing our zero waste philosophy. Several of our businesses are increasing their fly ash utilisation; indeed, we are currently utilising more than 95% of our high-volume, low-toxicity wastes such as fly-ash, slag, jarosite, and red mud.

#### **Building strong relationships**

Identifying and actively managing our stakeholder relationships – including those with our employees, our host communities and our shareholders and lenders – is vital if we are to maintain our licence to operate. Our subsidiary businesses across the Group formally record all stakeholder expectations and outcomes through multiple levels of engagements. During H1 FY2019, we drafted performance standards on stakeholder engagement and grievance mechanisms to mirror those already in place on safety and environment, and to guide our businesses in the application of this critical area. A performance standard and guidance note on Free, Prior, Informed, and Consent (FPIC) is also being prepared.

## Adding and sharing value

We believe Vedanta's role is to create value for all stakeholders, and that the communities in and around where we operate should share in that value. Only by working in partnership with communities will our business grow. Together with shared financial, economic and social values, this will help us maintain our licence to operate. Vedanta makes significant contributions to partner with local governments and to help them achieve their developmental goals; to strengthen national and local economies; and to build infrastructure and facilities for local education and healthcare.

Our flagship CSR initiative, 'Project Nand Ghar' is on track with 154 Nand Ghars built so far and 250 under construction in FY2019. These act as a catalyst for all-round social development, with the centres providing interactive learning facilities for children and entrepreneurial training for women.

#### RISK AND UNCERTAINTIES SECTION

Vedanta is a globally diversified natural resources company with low cost operations. Vedanta operates across the value chain, undertaking exploration, asset development, extraction, processing and value addition.

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 help the organization meet its objectives through alignment of operating controls to the mission and vision of the group.

Our risk management framework is designed to be simple, consistent and clear for managing and reporting risks. We have a multi-layered risk management framework aimed at effectively mitigating the various risks which our businesses are exposed to in the course of their operations as well as in their strategic actions. We identify risk at the individual business level for existing operations as well as for projects through a consistently applied methodology.

Formal discussion on risk management take place at the business level review meetings periodically. The respective businesses review the risks, change in the nature and extent of the major risks since the last assessment, control measures established for the risk and further action plans. These meetings are attended by business CXOs, senior management and concerned functional heads. Risk officers have been formally nominated at all operating businesses as well as Group level whose role is to create awareness on risks at senior management level and to develop and nurture a risk management culture within the businesses.

Together, our management systems, organizational 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.

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

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

- Finance Standing Committee which has an oversight on treasury related risks. This committee comprises Director Finance, Group CFO. Invitees comprise business CFOs, Group Head Treasury and BU Treasury Heads. In addition to this, Investment Committee reviews the investment related risks.
- Board Level Sustainability Committee which reviews sustainability related risks.
- Group 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 who work towards identifying various risks in the group and work towards mitigating them.

Principal risks and uncertainties and detailed information on the impact of these risks as well as the identification and mitigation measures adopted by management have been documented in Vedanta's Annual Report.

## Listing of risks:

- Challenges in aluminium and power business raw material security, infrastructure bottlenecks, etc.
- Fluctuation in commodity prices (including oil) and currency exchange rates
- Health, safety and environment (HSE) & impact of climate change
- Operational turnaround at KCM
- Discovery risk
- Major project delivery
- Extension of Production Sharing Contract of Cairn at less favourable terms
- Managing relationship with stakeholders
- Regulatory and legal risk
- Tailings dam stability
- Tax related matters
- Access to capital
- Breaches in IT / cybersecurity
- Loss of assets or profit due to natural calamities

It may be noted that the order in which these risks appear does not necessarily reflect the likelihood of their occurrence or the relative magnitude of their impact on our business.

## RESPONSIBILITY STATEMENT

We confirm that to the best of our knowledge:

■ The condensed set of financial statements has been prepared in accordance with IAS 34, Interim Financial Reporting.

By order of the Board

Srinivasan Venkatakrishnan Chief Executive Officer 12 November 2018

# CONDENSED CONSOLIDATED INCOME STATEMENT

# For the six months ended 30 September 2018

(US\$ million except as stated)

		Ct 41	1 1000	*** *\			except as statea)
			ended 30 September 2018 (U	naudited)		d 30 September 2017 (Una	idited)
		Before			Before		
	Note	Special items	Special items	Total	Special items	Special items	Total
Revenue		7,057.8	-	7,057.8	6,766.9	-	6,766.9
Cost of sales		(5,719.2)	-	(5,719.2)	(5,308.9)	45.9	(5,263.0)
Gross profit		1,338.6	-	1,338.6	1,458.0	45.9	1,503.9
Other operating income		47.3	-	47.3	27.7	-	27.7
Distribution costs		(143.4)	-	(143.4)	(129.8)	-	(129.8)
Administrative expenses		(264.1)	=	(264.1)	(188.4)	=	(188.4)
Impairment reversal/ (charge)	5	-	38.1	38.1	-	(16.9)	(16.9)
Operating profit / (loss)		978.4	38.1	1,016.5	1,167.5	29.0	1,196.5
Investment revenue		118.5	=	118.5	276.0	=	276.0
Finance costs	5	(680.4)	8.6	(671.8)	(689.3)	(90.6)	(779.9)
Other gains and (losses) [net]	6	(70.1)	=	(70.1)	(17.3)	=	(17.3)
Profit / (loss) before taxation (a)		346.4	46.7	393.1	736.9	(61.6)	675.3
Net tax expense (b)	7	(547.8)	(16.3)	(564.1)	(255.8)	(9.8)	(265.6)
(Loss)/ profit for the period from continuing operations (a+b)		(201.4)	30.4	(171.0)	481.1	(71.4)	409.7
Attributable to:							
Equity holders of the parent		(342.3)	15.3	(327.0)	20.6	(86.3)	(65.7)
Non-controlling interests		140.9	15.1	156.0	460.5	14.9	475.4
(Loss)/ profit for the period from continuing operations (a+b)		(201.4)	30.4	(171.0)	481.1	(71.4)	409.7

# CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

# For the six months ended 30 September 2018

		(US\$ million)
	Six months ended 30 September 2018	Six months ended 30 September 2017
	(Unaudited)	(Unaudited)
(Loss)/ profit for the period from operations	(171.0)	409.7
Items that will not be reclassified subsequently to income statement:		
Remeasurement of net defined benefit plans	(3.7)	(2.7)
Tax effects on net defined benefit plans	2.8	1.6
Loss on fair value of financial asset investment	(1.3)	-
Total (a)	(2.2)	(1.1)
Items that may be reclassified subsequently to income statement:		
Exchange differences arising on translation of foreign operations	(926.6)	(80.0)
Gain on fair value of available-for-sale financial assets	-	7.4
Cumulative Losses of cash flow hedges	(46.2)	(29.5)
Tax effects arising on cash flow hedges	14.2	11.1
Loss/(Gain) on cash flow hedges recycled to income statement	6.3	(3.3)
Tax effects arising on cash flow hedges recycled to income statement	(2.2)	1.1
Total (b)	(954.5)	(93.2)
Other comprehensive loss for the period (a+b)	(956.7)	(94.3)
Total comprehensive (loss)/ income for the period	(1,127.7)	315.4
Attributable to:		
Equity holders of the parent	(669.2)	(97.5)
Non-controlling interests	(458.5)	412.9
Total comprehensive (loss)/ income for the period	(1,127.7)	315.4

# CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

			(US\$ million)
		As at 30 September 2018	As at 31 March 2018
	Note	(Unaudited)	(Audited)
Assets			
Non-current assets			
Goodwill		12.2	12.2
Intangible assets		107.1	123.1
Property, plant and equipment		17,052.1	17,727.3
Leasehold land		50.5	57.0
Financial asset investment		20.8	24.5
Non-current tax assets		476.3	521.1
Other non-current assets		883.5	659.2
Deferred tax assets		649.1	916.7
		19,251.6	20,041.1
Current assets			
Inventories		2,024.7	2,037.7
Trade and other receivables		1,406.5	1,526.9
Financial instruments (derivatives)		56.0	24.0
Current tax assets		1.3	2.2
Liquid investments	10	5,023.5	4,807.8
Cash and cash equivalents	10	468.4	798.7
		8,980.4	9,197.3
Total assets		28,232.0	29,238.4
Liabilities			
Current liabilities			
Short-term borrowings	10	(4,707.5)	(5,460.3)
Trade and other payables		(5,586.1)	(6,077.5)
Financial instruments (derivatives)		(33.0)	(22.1)
Retirement benefits		(22.3)	(18.0)
Provisions		(15.6)	(22.1)
Current tax liabilities		(81.5)	(53.9)
		(10,446.0)	(11,653.9)
Net current liabilities		(1,465.6)	(2,456.6)
Non-current liabilities			
Medium and long-term borrowings	10	(10,979.3)	(9,733.5)
Trade and other payables		(82.7)	(118.0)
Financial instruments (derivatives)		(5.4)	(18.1)
Deferred tax liabilities		(941.4)	(748.5)
Retirement benefits		(60.9)	(62.4)
Provisions		(347.5)	(351.8)
Non-equity non-controlling interests		(11.9)	(11.9)
1 7 0		(12,429.1)	(11,044.2)
Total liabilities		(22,875.1)	(22,698.1)
Net assets		5,356.9	6,540.3
Equity		-,	-,-
Share capital	15	30.7	30.4
Share premium		201.5	201.5
Treasury shares		(490.6)	(558.3)
Share-based payment reserve		0.9	13.3
Hedging reserve		(106.9)	(92.5)
Other reserves		(212.7)	155.2
Retained earnings		(514.6)	(78.8)
Equity attributable to equity holders of the parent		(1,091.7)	(329.2)
Non-controlling interests		6,448.6	6,869.5
Total equity		5,356.9	6,540.3

The interim condensed consolidated financial statements of Vedanta Resources Limited (formerly Vedanta Resources plc) were approved by the Board of Directors on 12 November 2018 and signed on their behalf by:

Srinivasan Venkatakrishnan Chief Executive Officer

#### CONDENSED CONSOLIDATED CASH FLOW STATEMENT

## For the six months ended 30 September 2018

(US\$ million) Six months ended 30 Six months ended 30 September 2018 September 2017 Note (Unaudited) (Unaudited) Operating activities Profit before taxation 393.1 675.3 Adjustments for: Depreciation and amortisation 732.0 526.3 (118.5)Investment revenues (276.0)Finance costs 671.8 779.9 Other gains and losses [net] 6 70.1 17.3 Loss on disposal of PP&E 6.3 0.4 0.3 Write-off of unsuccessful exploration costs 0.2 10.3 7.4 Share-based payment charge Impairment (reversal)/charge (net) (38.1)16.9 Other non-cash items (0.4)Operating cash flows before movements in working capital 1,726.9 1,747.7 Increase in inventories (59.0)(327.7)(282.4)Increase in receivables (271.1)(Decrease)/Increase in payables (263.0)108.5 Cash generated from operations 1,133.8 1,246.1 Dividend received 2.5 0.1 Interest income received 50.4 108.1 Interest paid (692.0)(801.4)Income taxes paid (150.0)(173.2)(112.9)Dividends paid (96.9)Net cash inflow from operating activities 231.8 282.8 Cash flows from investing activities Purchases of property, plant and equipment and intangibles (624.2)(351.8)Proceeds from disposal of property, plant and equipment 1.1 1.8 Proceeds from redemption of liquid investments 10 4,810.7 9,444.1 (5,311.0) Purchases of liquid investments 10 (7,091.3)Acquisition through business combination (788.3)Net cash (used in)/ from investing activities 2,002.8 (1,911.7)Cash flows from financing activities 0.3 Issue of ordinary shares Purchase of shares under DSBP scheme (2.4)Dividends paid to non-controlling interests of subsidiaries (20.5)(609.8)Acquisition of additional interests in subsidiary/ share purchase by subsidiary (31.4)Sale of treasury shares 18.6 1.8 Exercise of stock options in subsidiary 0.6 (Repayment of)/proceeds from working capital loan (net) (483.1)(359.7)Proceeds from other short-term borrowings 333.6 2,076.1 Repayment of other short-term borrowings (819.4)(5,589.1)Buyback of non-convertible bond (1,128.5)Proceeds from medium and long-term borrowings 2,551.0 3,020.6 Repayment of medium and long-term borrowings (179.6)(1,080.9)Net cash from/(used in) financing activities 1,401.5 (3,703.3)Net decrease in cash and cash equivalents (278.4)(1,417.7)Effect of foreign exchange rate changes (51.9)5.9 798.7 1,682.2 Cash and cash equivalents at beginning of period 468.4 Cash and cash equivalents at end of period 270.4

# CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the six months ended 30 September 2018 (Unaudited)

										(usp munon)
			Attribut	able to equity ho	olders of the Co	mpany				
				Share-based					Non-	
	Share	Share	Treasury	payment	Hedging	Other	Retained		controlling	
	capital	premium	Shares	reserves	reserve	reserves <sup>1</sup>	earnings	Total	Interests	Total equity
At 1 April 2018	30.4	201.5	(558.3)	13.3	(92.5)	155.2	(78.8)	(329.2)	6,869.5	6,540.3
Profit / (loss) for the period	-	-	-	-	-	-	(327.0)	(327.0)	156.0	(171.0)
Other comprehensive loss for the period	-	-	-	-	(14.4)	(327.8)	-	(342.2)	(614.5)	(956.7)
Total comprehensive income / (loss) for the period	-	-	-	-	(14.4)	(327.8)	(327.0)	(669.2)	(458.5)	(1,127.7)
Transfers	-	-	-	-	-	(40.1)	40.1	-	-	-
Dividends paid (Note 9)	-	-	-	-	-	-	(112.9)	(112.9)	-	(112.9)
Sale of treasury shares	-	-	66.3	-	-	-	(47.7)	18.6	-	18.6
Exercise of stock options	0.3	-	1.4	(17.9)	-	-	16.5	0.3	-	0.3
Recognition of share based payment	-	-	-	5.5	-	-	-	5.5	-	5.5
Non-controlling interest on business combination (Note 4a)	-	-	-	-	-	-	-	-	29.1	29.1
Change in fair value of put option liability/conversion option asset/ derecognition of non controlling interest	-	-	-	-	-	-	(5.1)	(5.1)	3.4	(1.7)
Other changes in non-controlling interests*	-	-	-	-	-	-	0.3	0.3	5.1	5.4
At 30 September 2018 (Unaudited)	30.7	201.5	(490.6)	0.9	(106.9)	(212.7)	(514.6)	(1,091.7)	6,448.6	5,356.9

Includes transfer 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 (Audited)

			Attribu	table to equity ho	olders of the Cor	npany				
	Share capital (Note 15)	Share premium	Treasury Shares	Share-based payment reserves	Hedging reserve	Other reserves	Retained earnings	Total	Non- controlling Interests	
At 1 April 2017	30.1	201.5	(557.9)	28.2	(90.9)	140.5	(160.0)	(408.5)	6,423.1	6,014.6
Profit/(loss) for the year	-	-	-	-	-	-	238.6	238.6	1,236.2	1,474.8
Other comprehensive income/(loss) for the year	-	-	-	-	(1.6)	34.0	-	32.4	39.5	71.9
Total comprehensive income/(loss) for the year	-	-	-	-	(1.6)	34.0	238.6	271.0	1,275.7	1,546.7
Acquisition of shares under DSBP scheme	-	-	(0.9)	-	-	-	(1.5)	(2.4)	-	(2.4)
Transfers	-	-	-	-	-	(19.3)	19.3	-	-	-
Dividends paid/ payable (Note 9)	-	-	-	-	-	-	(164.4)	(164.4)	(828.3)	(992.7)
Exercise of stock options	0.3	-	0.5	(27.0)	-	-	26.5	0.3	-	0.3
Recognition of share-based payment	-	-	-	12.1	-	-	-	12.1	-	12.1
Non-controlling interest on business combination (Note 4b)	-	-	-	-	-	-	-	-	17.1	17.1
Recognition of put option liability/derecognition of non controlling interest	-	-	-	-	-	-	(15.0)	(15.0)	(21.6)	(36.6)
Other changes in non-controlling interests*	-	-	-	-	-	-	(22.3)	(22.3)	3.5	(18.8)
At 31 March 2018	30.4	201.5	(558.3)	13.3	(92.5)	155.2	(78.8)	(329.2)	6,869.5	6,540.3

<sup>\*</sup> Includes purchase of shares by Vedanta Limited through ESOP trust for its stock options and share based payment charge by subsidiaries.

# For the six months ended 30 September 2017 (Unaudited)

										(Creq minimen
			Attribut	able to equity ho	lders of the Co	mpany				
•				Share-based					Non-	
	Share	Share	Treasury	payment	Hedging	Other	Retained		controlling	
	capital	premium	Shares	reserves	reserve	reserves <sup>1</sup>	earnings	Total	Interests	Total equity
At 1 April 2017	30.1	201.5	(557.9)	28.2	(90.9)	140.5	(160.0)	(408.5)	6,423.1	6,014.6
Profit / (loss) for the period	-	-	-	-	-	-	(65.7)	(65.7)	475.4	409.7
Other comprehensive loss for the period	-	-	-	-	(7.6)	(24.2)	-	(31.8)	(62.5)	(94.3)
Total comprehensive income / (loss) for the period	-	-	-	-	(7.6)	(24.2)	(65.7)	(97.5)	412.9	315.4
Acquisition of shares under DSBP scheme	-	-	(0.9)	=	-	-	(1.5)	(2.4)	-	(2.4)
Transfers	-	-	-	-	-	26.8	(26.8)	-	-	-
Dividends paid (Note 9)	-	-	-	-	-	-	(96.9)	(96.9)	-	(96.9)
Exercise of stock options	-	-	0.4	(0.8)	-	-	0.4	-	-	-
Recognition of share-based payment	-	-	=	7.4	-	-	=	7.4	-	7.4
Other changes in non-controlling interests*	-	-	-	-	-	-	(20.0)	(20.0)	(8.2)	(28.2)
At 30 September 2017 (Unaudited)	30.1	201.5	(558.4)	34.8	(98.5)	143.1	(370.5)	(617.9)	6,827.8	6,209.9

Other reserves comprise the currency translation reserve, merger reserve, investment revaluation reserve, debenture redemption reserve, capital redemption reserve and the general reserves established in the statutory accounts of the Group's subsidiaries.

<sup>\*</sup> Includes purchase of shares by Vedanta Limited through ESOP trust for its stock options and share based payment charge by subsidiaries.

#### NOTES TO THE FINANCIAL INFORMATION

#### 1. Presentation of Financial Statements

#### **General Information**

Vedanta Resources Limited (formerly Vedanta Resources Plc) is a company incorporated and domiciled in the United Kingdom and is a diversified global natural resources major.

## Buy back and delisting of Vedanta Resources plc shares:

On 31 July 2018, the Independent Committee of the Board of Vedanta and Volcan announced that they had reached agreement on the terms of a recommended cash offer for Vedanta Resources plc pursuant to which Volcan would acquire the remaining issued and to be issued share capital of Vedanta not currently owned or controlled by Volcan. Under the terms of the Volcan Offer, Vedanta's shareholders received \$10.89 per share in cash for each Vedanta's share. The offer price implied an equivalent value of 825 pence per Vedanta's share based on the exchange rate of £:US\$ of 1.3203 as at 29 June 2018. In addition, Vedanta's shareholders were entitled to receive the dividend of \$0.41 per Vedanta's share in respect of the year 31 March 2018.

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.

On 27 September 2018, Volcan announced that it had received valid acceptances in respect of 86,487,585 Vedanta shares, representing approximately 91.61 % in value and in voting rights of the Vedanta shares to which the Offer relates. Consequently, Volcan was able to implement the procedure under Chapter 3 of Part 28 of the Companies Act 2006 to compulsorily acquire all of the outstanding Vedanta shares which it does not already hold or has not already acquired, contracted to acquire or in respect of which it has not already received valid acceptances (the "Compulsory Acquisition"). The transfer of Vedanta shares in accordance with the Compulsory Acquisition completed on 9 November 2018.

In addition, at the General Meeting of Vedanta shareholders held on 1 October 2018, the resolution put to shareholders in relation to the re-registration of Vedanta to a private limited company was duly passed on a poll. Re-registration of Vedanta as a private limited company became effective on 29 October 2018 pursuant to which the name has been changed to Vedanta Resources Limited.

#### **Basis of Preparation**

The interim condensed financial statements for the six months ended 30 September 2018 have been prepared in accordance with International Accounting Standard (IAS) 34 Interim Financial Reporting as adopted by the European Union ('EU').

The interim condensed consolidated financial statements do not include all of the information and disclosures required in the annual financial statements, and should be read in conjunction with the Group's annual financial statements for the year ended 31 March 2018, which were prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU. The interim condensed consolidated financial statements do not constitute statutory accounts as defined in section 434 of the Companies Act 2006. The financial information for the full year is based on the statutory accounts for the financial year ended 31 March 2018. A copy of the statutory accounts for that year has been delivered to the Registrar of Companies. The auditor's report on those accounts was unqualified, did not include a reference to any matters to which the auditor drew attention by way of an emphasis of matter and did not contain a statement under sections 498 (2) or (3) of the Companies Act 2006.

The set of condensed consolidated financial statements included in the interim financial report has been prepared using the going concern basis of accounting.

Certain comparative figures appearing in these interim condensed consolidated financial statements have been regrouped and/or reclassified to better reflect the nature of those items.

#### 2(a). Accounting policies

The interim condensed consolidated financial statements are prepared using the same accounting policies as applied in the audited 31 March 2018 financial statements except for those mentioned below.

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

The Group has adopted, with effect from 01 April 2018, the following new and revised standards and interpretations. Their adoption has not had any significant impact on the amounts reported in the interim condensed consolidated financial statements.

## 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 recognize revenue when the control of the goods and services is transferred to the customer as against the transfer of risk and rewards. As per 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 company 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 recognized 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 Consolidated revenue on the face of the 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.

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 Group's financial statements and no transitional adjustment is recognised in retained earnings at 1 April, 2018.

#### 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 recognized 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.

For transition, the Group has elected to apply the limited exemption 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

IFRS 9 establishes a principle based approach for classification of financial assets based on cash flow characteristics of the asset and the business model in which an asset is held. 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.

**IAS 23: Borrowings Costs:** The amendment clarifies that in computing the capitalisation rate for funds borrowed generally, an entity should exclude borrowing costs applicable to borrowings made specifically for obtaining a qualifying asset, only until the asset is ready for its intended use or sale. Borrowing costs related to specific borrowings that remain outstanding after the related qualifying asset is ready for intended use or for sale would subsequently be considered as part of the general borrowing costs of the entity.

The said amendment has been endorsed by the European Financial Reporting Advisory Group (EFRAG) on 24 April 2018 and has been voted upon by the Accounting Regulatory Committee (ARC) on 31 August 2018. However, European Union (EU) is yet to endorse the same. The International Accounting Standards Board (IASB) amendment to IAS 23 is effective from 1 January 2019 with early adoption permitted.

Since the amendment clarifies the requirements of paragraph 14 of IAS 23, the Group has early adopted the amendment to borrowing costs incurred on or after 1 April 2018.

The above amendment has resulted in a positive impact on profit before tax of US\$ 5.5 million for the six months ended 30 September 2018.

IFRIC 22: Foreign Currency Transactions and Advance Consideration: The Interpretation clarifies that, in determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-

monetary liability relating to advance consideration, the date of the transaction is the date on which an entity initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. This Interpretation does not have any impact on the Group's consolidated financial statements as the Group applies the same accounting practice.

IFRS 2 Share-based Payment: The IASB issued amendments to IFRS 2 "Share-based Payment" that address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding tax obligations; and accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash settled to equity settled. These amendments do not have any impact on the Group's consolidated financial statements.

Standards issued but not yet effective

#### IFRS 16 - Leases

IFRS 16 establishes principles for the recognition, measurement and disclosure criteria for leases. The standard introduces a single lessee accounting model, requiring lessees to recognise a right of use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments and give an option to lessee to exclude below types of leases:

- Short term leases with lease term of 12 months or less containing no purchase option; and
- Leases where the underlying asset is of low value.

Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17.

A contract contains a lease if it provides the customer the right to direct the use of an identified asset and to obtain substantially all the economic benefits from that use. However, where a supplier has a substantive right of substitution i.e. practical ability to substitute alternative assets throughout the period of use and getting economic benefit from substitution, the customer does not have the right to use an identified asset and accordingly does not contain a lease as per this standard.

The new Standard will come into effect for annual reporting periods beginning on or after 01 January 2019. The accounting treatment for existing finance lease will remain same and changes would have to be reflected for operating leases wherever applicable. The Group is currently in the process of evaluating the contracts to determine the potential impact of adopting the standard and expects to implement the applicable accounting changes from 01 April 2019.

#### 2.(c) Foreign Exchange Rate

The following exchange rate to US dollar (\$) has been applied:

	Average rate for six	Average rate for six		
	months ended	months ended	As at	As at
	30 September 2018	30 September 2017	30 September 2018	31 March 2018
Indian rupee	68.51	64.37	72.55	65.04

#### 3. Segment Information

The Group is a diversified natural resources Group engaged in exploring, extracting and processing minerals and oil and gas. We produce 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 and 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\$ 4.1 million for the six months ended 30 September 2018 (30 September 2017: US\$ 17.8 million), which were at cost.

The following tables present revenue and profit information for the six months ended 30 September 2018 and 30 September 2017 and certain asset and liability information regarding the Group's reportable segments as at 30 September 2018 and year ended 31 March 2018. Items after operating profit are not allocated by segment.

# (a) Reportable segments

Six months ended 30 September 2018

											(US\$ million)
	Zinc-India	Zinc- Inter national	Oil and gas	Iron Ore	Copper- India/ Australia	Copper- Zambia	Aluminium	Power	Others	Elimination	Total operations
REVENUE											•
Sales to external customers	1,440.4	162.5	977.7	204.4	755.0	545.4	2,229.0	478.8	264.6	-	7,057.8
Inter-segment sales	_	-	-	0.5	0.0	34.3	1.5	4.1	3.6	(44.0)	-
Segment revenue	1,440.4	162.5	977.7	204.9	755.0	579.7	2,230.5	482.9	268.2	(44.0)	7,057.8
Segment Result											
EBITDA <sup>1</sup>	727.4	14.7	571.8	45.2	(12.3)	(41.4)	242.2	117.2	45.6	-	1,710.4
Depreciation and amortisation <sup>2</sup>	(122.2)	(21.6)	(327.8)	(18.1)	(11.0)	(53.4)	(106.8)	(44.4)	(26.7)	-	(732.0)
Operating profit/(loss) before special items	605.2	(6.9)	244.0	27.1	(23.3)	(94.8)	135.4	72.8	18.9	-	978.4
Investment revenue											118.5
Finance costs											(680.4)
Other gains and (losses) [net]											(70.1)
Special items											46.7
PROFIT BEFORE TAXATION										•	393.1
Segments assets	2,440.7	825.0	3,897.4	514.0	1,187.7	1,918.4	6,779.9	2,667.4	1,219.4	-	21,449.9
Financial asset investments											20.8
Deferred tax assets											649.1
Liquid investments											5,023.5
Cash and cash equivalents											468.4
Tax assets											477.6
Others											142.7
TOTAL ASSETS										•	28,232.0
Segment liabilities	(576.1)	(157.7)	(1,253.9)	(140.4)	(579.6)	(676.7)	(2,077.7)	(264.8)	(174.4)	-	(5,901.3)
Short-term borrowings											(4,707.5)
Current tax liabilities											(81.5)
Medium and long-term borrowings											(10,979.3)
Deferred tax liabilities											(941.4)
Others											(264.1)
TOTAL LIABILITIES										·	(22,875.1)
Other segment information											
Additions to property, plant and equipment including intangible assets**	256.7	121.0	192.9	2.0	26.5	18.7	127.1	1.0	714.1	-	1,460.0
Impairment reversal/ (losses)3	-	-	38.1	-	-	-	-	-	-	-	38.1

# Six months ended 30 September 2017

-											(US\$ million
	Zinc-India	Zinc- Inter national	Oil and gas	Iron Ore	Copper- India/ Australia	Copper- Zambia	Aluminium	Power	Others	Elimination	Total operations
REVENUE											
Sales to external customers	1,502.8	257.0	679.5	189.6	1,753.1	596.1	1,465.9	315.7	7.2	_	6,766.9
Inter-segment sales	-	-	-	1.3	0.0	26.3	1.9	20.5	-	(50.0)	-
Segment revenue	1,502.8	257.0	679.5	190.9	1,753.1	622.4	1,467.8	336.2	7.2	(50.0)	6,766.9
Segment Result	,				,		,		<u> </u>	()	
EBITDA <sup>1</sup>	833.9	110.2	400.8	(2.8)	93.4	17.6	153.0	74.1	13.6	-	1,693.8
Depreciation and amortisation <sup>2</sup>	(72.7)	(13.1)	(210.3)	(34.8)	(12.4)	(55.9)	(87.0)	(37.8)	(2.3)	_	(526.3)
Operating profit/(loss) before special items Investment revenue	761.2	97.1	190.5	(37.6)	81.0	(38.3)	66.0	36.3	11.3	-	<b>1,167.5</b> 276.0
Finance costs											(689.3)
Other gains and (losses) [net]											(17.3)
Special items											(61.6)
PROFIT BEFORE TAXATION										•	675.3
Other segment information											
Additions to property, plant and equipment											
including intangible assets	160.9	91.4	20.7	7.2	10.7	10.6	79.5	0.8	0.2	-	382.0
Impairment reversal/ (losses) 3	-	-	(16.9)	-	-	-	-	-	-	-	(16.9)
As at 31 March 2018											
Segments assets	2,575.2	862.0	3,706.0	613.2	1,447.0	2,017.2	7,440.4	2,950.3	424.0	-	22,035.3
Financial asset investments											24.5
Deferred tax assets											916.7
Liquid investments											4,807.8
Cash and cash equivalents											798.7
Tax assets											523.3
Others											132.1
TOTAL ASSETS										•	29,238.4
Segment liabilities	(637.6)	(170.3)	(851.3)	(249.8)	(1,367.8)	(757.6)	(2,061.0)	(268.2)	(30.5)	-	(6,394.1)
Short-term borrowings	` /	` /	` /	` /	, ,	` /	, ,	` ,	` '		(5,460.3)
Current tax liabilities											(53.9)
Medium and long-term borrowings											(9,733.5)
Deferred tax liabilities											(748.5)
Others											(307.8)
TOTAL LIABILITIES										•	(22,698.1)

<sup>1</sup> EBITDA is a non-IFRS measure and represents earnings before special items, depreciation, amortisation, other gains and losses, interest and tax.

<sup>2</sup> Depreciation and amortisation is also provided to the chief operating decision maker on a regular basis.

<sup>3</sup> Included under special items (Note 5).

<sup>4</sup> The IFRS 15 disaggregation of revenue per product is not materially different to the disclosure included within the Segment reporting for the six months ended 30 September 2018.

<sup>\*\*</sup> Including acquisition through business combination.

#### 4. Business Combination

#### 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 Company'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 30 September 2018 have been included in the Consolidated Financial Statements of the Group.

Considering the time involved in the valuation and complexities involved in the acquired business, the Group is still in the process of finalizing the fair valuation, which is expected to be finalized by the year end. As a result, the effects of the same have been accounted for on a provisional basis, as permitted by IFRS 3.

The fair value of the identifiable assets and liabilities of ESL as at the date of the acquisition were provisionally estimated as below:

· · · · · · · · · · · · · · · · · · ·	(US\$ million)
Particulars	Provisional Fair Value
Property, Plant and Equipment	698.0
Intangible assets	0.1
Non-current tax assets	0.8
Other non-current assets	2.6
Non-current assets	701.5
Inventories	121.3
Trade and other receivables	43.4
Liquid investments	82.0
Cash and cash equivalents	0.4
Current Assets	247.1
Total Assets (A)	948.6
Liabilities	
Short-term borrowings	1.0
Trade and other payables	127.9
Provisions (Current)	0.4
Provisions (Non-current)	1.5
Total Liabilities (B)	130.8
Net Assets (C=A-B)	817.8
Satisfied by:	
Cash Consideration Paid for Debt acquired	527.0
Cash Consideration Paid for Equity acquired	261.7
Total Purchase Consideration (D)	788.7
Non-Controlling interest on acquisition (10% of net assets after adjustment	29.1
of borrowings from immediate parent of US\$ 527.0 million) (E)	
Bargain Gain/Goodwill (C-D-E)	-
Acquisition costs	(2.7)

Since the date of acquisition, ESL has contributed US\$ 206.8 million and US\$ 2.1 million to the Group revenue and profit before taxation respectively for the six months ended 30 September 2018. If ESL had been acquired at the beginning of the year, the Group revenue would have been US\$ 7,155.9 million and the profit before taxation of the Group would have been US\$ 386.7 million.

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 (\$ 150.8 million). Additionally, a loan of JPY 814.8 million (\$7.2 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 period.

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 period amounts have been restated accordingly.

(US\$ million) Provisional Fair Value Fair Value at **Particulars** Fair Value Adjustments Acquisition 242.2 Property, Plant and Equipment 242.2 32.1 32.1 Intangible assets 19.7 19.7 Deferred tax assets Other non-current assets 6.4 **Non-Current Assets** 300.4 300.4 Inventories 21.6 21.6 Trade and other receivables 36.0 36.0 Cash and cash equivalents 23.6 23.6 **Current Assets** 81.2 81.2 Total Assets (A) 381.6 381.6 Medium and long term borrowings (excluding borrowings 98.7 98.7 from immediate parent) Deferred tax liabilities 77.5 5.3 82.8 Trade and other payables 23.6 23.6 5.3 205.1 Total Liabilities (B) 199.8 Net Assets (C=A-B) 181.8 (5.3)176.5 Satisfied by: Cash Consideration Paid for 51.63% stake & Debt acquired 158.0 158.0 Less: Fair Value of Conversion option asset on debt acquired (16.8)(16.8)net of the fair value of Put option liability towards acquisition of Non-controlling interests Total Purchase Consideration (D) 158.0 (16.8)141.2 Non-Controlling interest on acquisition (48.37% of net assets 11.5 5.6 17.1 after adjustment of fair value of borrowings from immediate parent of US\$ 158.0 million) (E) Bargain Gain (C-D-E) 12.3 5.9 18.2 (7.0)(7.0)**Acquisition costs** 

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.

# 5. Special items

	Six mo	nths ended 30 September	2018	Six mo	nths ended 30 September	2017
_	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 <sup>1</sup>	-	-	-	45.9	(15.7)	30.2
Gross profit special items	-	-	-	45.9	(15.7)	30.2
Impairment (charge)/ reversal of oil and gas assets <sup>2</sup>	38.1	(13.3)	24.8	(16.9)	5.9	(11.0)
Operating special items	38.1	(13.3)	24.8	29.0	(9.8)	19.2
Financing special items <sup>3</sup>	8.6	(3.0)	5.6	(90.6)	=	(90.6)
	46.7			(61.6)	(9.8)	(71.4)
Special items		(16.3)	30.4			

- During the six months ended 30 September 2017, the Group had recognised the reversal of provisions of US\$ 45.9 million relating to contribution to the District Mineral Foundation pursuant to a favourable order by the Honourable Supreme Court of India.
- During the six months ended 30 September 2018, the Group has recognized an impairment reversal of US\$ 38.1 million following the start of commercial production in Krishna Godavari Onshore block.

  During the six months ended 30 September 2017, the Group had recognized an impairment charge of US\$16.9 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.
- 3 During the six months ended 30 September 2018, the Group has partly reversed the provision for interest of US\$ 8.6 million for dues towards SSNP pursuant to the Honourable Supreme Court of India order. During the six months ended 30 September 2017, the Group had recognised US\$ 90.6 million loss as financing special items arising on the bond buybacks completed during the period.

# 6. Other gains and (losses) [net]

(US\$ million)

		(435) 111111011
	Six months ended 30 September 2018	Six months ended 30 September 2017
Gross foreign exchange losses	(86.2)	(19.2)
Qualifying exchange losses capitalised	-	-
Net foreign exchange losses	(86.2)	(19.2)
Change in fair value of financial liabilities measured at fair value	(0.5)	(0.5)
Net gain/(loss) arising on qualifying hedges and non-qualifying hedges	16.6	2.4
	(70.1)	(17.3)

# 7. Income tax expense

(US\$ million)

	Six months ended 30 September 2018	Six months ended 30 September 2017
Current tax:	30 September 2010	30 September 2017
Current Tax on profit for the period	178.9	187.5
Charge / (credit) in respect of special items (Note 5)	-	15.7
Total current tax	178.9	203.2
Deferred tax:		
Origination and reversal of temporary differences*	368.9	68.3
Charge / (credit) in respect of Special items (Note 5)	16.3	(5.9)
Total deferred tax	385.2	62.4
Net tax expense	564.1	265.6
Profit before taxation	393.1	675.3
Effective tax rate	143.5%	39.3%

<sup>\*</sup> Deferred tax charge for the six months ended 30 September 2018 includes US\$ 121.0 million (30 September 2017: US\$ Nil million) representing reversal of deferred tax asset created on carry forward losses not expected to be utilised during the statutory permitted period. It also includes US\$ 161.1 million (30 September 2017: US\$ 25.9 million) tax on undistributed profits of a subsidiary. Effective tax rate excluding these items for the six months ended 30 September 2018 is 71.7% (30 September 2017: 35.5%).

## Tax expense

	Six months ended 30 September 2018	Six months ended 30 September 2017
Tax effect of special items (Note 5)	16.3	9.8
Tax expense – others	547.8	255.8
Net tax expense	564.1	265.6

## 8. Underlying Attributable Profit/(Loss) for the period

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 loss for the period after adding back special items, other losses/(gains) [net] (Note 6) and their resultant tax (including taxes classified as special items) and non-controlling interest effects. This is a non-GAAP measure.

			(US\$ million)
	Note	Six months ended 30 September 2018	Six months ended 30 September 2017
Loss for the period attributable to equity holders of		(327.0)	
the parent			(65.7)
Special items	5	(46.7)	61.6
Other gains/(losses) [net]	6	70.1	17.3
Tax and non-controlling interest effect of special items (including taxes classified as special items) and other			
gains/ (losses) [net]		(8.3)	13.0
Underlying attributable (loss)/ profit for the period		(311.9)	26.2

#### 9. Dividends

		(US\$ million)
	Six months ended 30 September 2018	Six months ended 30 September 2017
Amounts paid as distributions to equity holders:		
Equity dividends on ordinary shares:		
Final dividend for FY 2016-17: 35.0 US cents per share	-	96.9
Final dividend for FY 2017-18: 41.0 US cents per share	114.6	-
Total	114.6	96.9

The proposed interim dividend for the six months ended 30 September 2018 was Nil US cents per share (30 September 2017: 24 US cents).

#### 10. Movement in net debt1

At 30 September 2018

					(	US\$ million)
				Debt due within one year	Debt due after one year	
	Cash and cash equivalents <sup>2</sup>	Liquid Investments	Total cash and liquid investments	Debt carrying value	Debt carrying value	Total Net Debt
At 1 April 2018	798.7	4,807.8	5,606.5	(5,460.3)	(9,733.5)	(9,587.3)
Cash flow	(278.8)	500.3	221.5	968.9	(2,371.4)	(1,181.0)
Other non-cash changes <sup>4</sup>	-	65.5	65.5	(665.4)	639.1	39.2
Net debt on acquisition through business combination	0.4	82.0	82.4	(1.0)	-	81.4
Foreign exchange currency translation differences	(51.9)	(432.1)	(484.0)	450.3	486.5	452.8

5,491.9

(4,707.5)

5,023.5

(US\$ million)

(10,194.9)

				Debt due within	Debt due after	_
				one year	one year	
	Cash and		Total cash			
	cash	Liquid	and liquid	Debt carrying	Debt carrying	Total Net
	equivalents <sup>2</sup>	Investments	investments	value	value	Debt
At 1 April 2017	1,682.2	8,043.0	9,725.2	(7,658.5)	(10,570.2)	(8,503.5)
Cash flow	(1,417.7)	(2,352.8)	(3,770.5)	3,872.7	(811.2)	(709.0)
Other non-cash changes <sup>4</sup>	-	167.8	167.8	(1,027.4)	1,007.9	148.3
Foreign exchange currency						
translation differences	5.9	(25.3)	(19.4)	20.9	45.3	46.8
At 30 September 2017	270.4	5,832.7	6,103.1	(4,792.3)	(10,328.2)	(9,017.4)

<sup>1</sup> 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 and liquid investments.

#### Debt securities issued/repaid during the period

In April 2018, TSPL issued non-convertible debentures (NCDs) of US\$ 137.8 million at an interest rate of 8.55%. These NCDs are secured by way of first pari-passu charge on the movable and/or immovable property, plant and equipment, 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. The NCDs are due for repayment in April, 2021. As at 30 September 2018, the carrying value is US\$ 137.8 million.

In July 2018, TSPL issued NCDs of US\$ 137.8 million at an interest rate of 9.23%. These NCDs are secured by way of first pari-passu charge on the movable and/or immovable property, plant and equipment, 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. The NCDs are due for repayment in July, 2021. As at 30 September 2018, the carrying value is US\$ 137.7 million.

In March 2015, TSPL issued NCDs of US\$ 50.0 million at an interest rate of 8.91%. These NCDs were secured by way of first pari-passu charge on the movable and/or immovable property, plant and equipment, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1.1 time of the aggregate face value of debentures outstanding at any point of time. The NCDs have been fully repaid in April 2018.

In April 2015, TSPL issued NCDs of US\$ 103.8 million at an interest rate of 8.91%. These NCDs are secured by way of first pari-passu charge on the movable and/or immovable property, plant

<sup>2</sup> Other non-cash changes comprises 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\$65.6 million (30 September 2017: US\$130.7 million) of fair value movement in investments and accrued interest on investments.

and equipment, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1.1 time of the aggregate face value of debentures outstanding at any point of time. The NCDs have been fully repaid in April 2018.

In July 2013, Vedanta Limited issued NCDs of US\$ 115.3 million at an interest rate of 9.17%. These NCDs are secured by way of first pari-passu charge on the whole of the movable property, plant and equipments of the 1.6 MTPA Aluminium Smelter along with 1215 MW captive power plant in Jharsuguda and 1 MTPA alumina refinery along with 75 MW co-generation plant in Lanjigarh, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1.25 time of the aggregate face value of debentures outstanding at any point of time. The NCDs have been fully repaid in July 2018.

In July 2013, Vedanta Limited issued NCDs of US\$ 69.2 million at an interest rate of 9.17%. These NCDs are secured by way of first pari-passu charge on the whole of the movable property, plant and equipments of the 1.6 MTPA Aluminium Smelter along with 1215 MW captive power plant in Jharsuguda and 1 MTPA alumina refinery along with 75 MW co-generation plant in Lanjigarh, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1.25 time of the aggregate face value of debentures outstanding at any point of time. The NCDs have been fully repaid in July 2018.

In April 2018, Vedanta Limited issued NCDs of US\$ 227.4 million at an interest rate of 8.50%. These NCDs are 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. The NCDs are due for repayment in June 2021. As at 30 September 2018, the carrying value is US\$ 227.3 million.

In April 2018, Vedanta Limited issued NCDs of US\$ 323.9 million at an interest rate of 8.50%. These NCDs are 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. The NCDs are due for repayment in April 2021. As at September 30, 2018, the carrying value is US\$ 323.7 million.

In April 2018, Vedanta Limited issued NCDs of US\$ 137.8 million at an interest rate of 9.18%. These NCDs are 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. The NCDs are due for repayment in Jul 2021. As at 30 September 2018, the carrying value is US\$ 137.8 million.

In April 2013, Vedanta Limited issued NCDs of US\$ 384.4 million at an interest rate of 9.10%. These were secured by way of first pari-passu charge on the movable fixed assets both present and future of 2400 MW (600 MW\*4) Jharsuguda Power Plant. The same have been have fully repaid in April 2018.

## 11. Other disclosures

#### 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 30 September 2018	As at 31 March 2018
Capital commitments contracted but not provided	1,823.0	1,936.3

## Commitments primarily related to the expansion projects:

	As at	As at
	30 September 2018	31 March 2018
Oil & Gas sector		
Cairn India	824.0	668.3
Aluminium sector		
Lanjigarh Refinery (Phase II) 5.0 MTPA	194.3	205.2
Jharsuguda 1.25 MTPA smelter	71.5	75.5
Zinc sector		
Zinc India (mines expansion)	221.0	305.1
Gamsberg mining & milling project	58.4	162.5
Copper sector		
Tuticorin Smelter 400 KTPA	385.4	424.0
Others	68.4	95.7
Total	1,823.0	1,936.3

#### B. Guarantees

Companies within the Group provide guarantees within the normal course of business.

A summary of the most significant guarantees is set out below:

As at 30 September 2018, guarantees of US\$ 376.9 million were advanced to suppliers in the normal course of business (31 March 2018: US\$ 308.2 million). The Group has also entered into guarantees and bonds advanced to the customs authorities in India of US\$ 115.9 million relating to the export and payment of import duties on purchases of raw material and capital goods (31 March 2018: US\$ 107.3 million).

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').

Vedanta Limited has provided various other guarantees under the Cairn India Group's bank facilities for the Cairn India Group's share of minimum work programme commitments of US\$ 24.7 million included in the above outstanding as of 30 September 2018 (31 March 2018: US\$ 26.2 million).

#### C. Export Obligations

The Indian entities of the Group have export obligations of US\$ 487.6 million (31 March 2018: US\$ 1,904.2 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\$ 57.3 million (31 March 2018: US\$ 169.3 million) reduced in proportion to actual exports, plus applicable interest.

The Group has given bonds of US\$ 198.8 million (31 March 2018: US\$ 226.3 million) to custom authorities against these export obligations.

#### D. Contingencies

The Group discloses the following legal and tax cases as contingent liabilities.

HZL: 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\$ 46.0 million as at 30 September 2018 and 31 March 2018. 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) have 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\$ 120.7 million in the case of Richter and US\$ 80.5 million in the case of Westglobe, comprising tax and interest as at 30 September 2018 and 31 March 2018. 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\$ 70.3 million in the case of Richter and US\$ 46.9 million in the case of Westglobe.

Erstwhile Cairn India Limited: Income tax

In March 2014, Cairn India Limited (referred to as Cairn India) 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 Cairn India, in the financial year 2006–2007, on which tax should have been withheld by Cairn India. Pursuant to this various replies were filed with the Tax Authorities. Cairn India 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 next listed for hearing on 22 November 2018 before the Honourable Delhi High Court. After several hearings, the Income Tax Authority, in March 2015, issued an order holding Cairn India as 'assessee in default' and raised a demand totalling US\$ 2,825.0 million (including interest of US\$ 1,412.5 million). Cairn India had filed an appeal before the First Appellate Authority, Commissioner of Income Tax (Appeals) which vide order dated 3 July 2017 confirmed the tax demand against Cairn India. Cairn India has challenged the Commissioner of Income Tax's (Appeals) order before the Income Tax Appellate Tribunal (ITAT).

Separately CUHL, on whom the primary liability of tax lies, has received an Order from the ITAT 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\$ 1,412.5 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 now 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\$ 688.7 million along with interest is outstanding. Further, in the said notice, tax department has also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. Amount aggregating to US\$ 83.7 million has been paid to the TRO on the 26 October 2018 thus reducing the liability to US\$ 605.0 million. Accordingly, the Group has revised the contingent liability to US\$ 605.0 million. In the event, the case is finally decided against Cairn India, along with interest, the potential liability would be US\$ 2,825.0 million. Separately, but in connection with this litigation, Vedanta Resources Limited (formerly Vedanta Resources Plc) 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 recently passed a favourable order on jurisdiction and now the matter will be heard on merits - the hearing is scheduled in April-May 2019. The Government of India has challenged the jurisdiction order of Arbitration Tribunal before the High Court of Singapore.

Ravva Joint Venture arbitration proceedings: ONGC Carry

**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 Cairn India) 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 Arbitral 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 Cairn India'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 has now filed an appeal at Federal Court of Malaysia. Further, Cairn India has also filed for the enforcement of the Partial Award and Final Award with Delhi High Court.

## Base Development Cost

Ravva joint venture had received a claim from the Ministry of Petroleum and Natural Gas, Government of India (GOI) for the period from 2000-2005 for US\$ 129.0 million for an alleged underpayment of profit petroleum (by recovering higher Base Development Costs ("BDC") against the cap imposed in the PSC) to the Indian Government, out of which, Cairn India's share will be US\$ 29.0 million plus interest. Joint venture partners initiated the arbitration proceedings and Arbitration Tribunal published the Award allowing Claimants (incl. Cairn India) to recover the development costs spent to the tune of US\$ 278.0 million and disallowed over run of US\$ 22.3 million spent in respect of BDC along with 50% legal costs. High Court of Kuala Lumpur as well as Court of Appeal dismissed Government of India's (GOI) application of setting aside the part of the Award. GOI challenge to the same before the Federal Court, Kuala Lumpur was also dismissed by the Federal Court on 17 May 2016. Cairn has filed an application for enforcement of award before Delhi High Court.

In connection with the above two matters, Group has recently received an order dated 22 October 2018 from the Govt of India directing oil marketing companies (OMCs) who are the offtakers for Ravva to divert the sale proceeds to Government's account. GOI alleges that the Ravva JV has short paid profit petroleum of US\$ 314 million (Cairn share approximately - US\$ 92.9 million) on account of the two disputed issues of ONGC Carry and BDC matters, as these have not been enforced. Against an interim application, filed by Cairn and other joint venture partner, seeking stay of such action from GOI, before the Court, where enforcement applications are filed, the Court directed the OMCs to deposit above sums to the Court for both BDC and Carry matters. However, Cairn India (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 (BG) of commensurate value. The Interim Application is listed for hearing on 13 November 2018.

While Cairn India 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\$ 92.9 million plus interest.

*Proceedings related to the Imposition of Entry Tax* 

Vedanta Limited and other Group companies i.e. Bharat Aluminium Company Limited (BALCO) and Hindustan Zinc Limited (HZL) challenged the constitutional validity of the local statutes and related notifications in the states of Chhattisgarh, Odisha and Rajasthan pertaining to the levy of entry tax on the entry of goods brought into the respective states from outside.

Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. Post a detailed hearing, although the bench rejected the compensatory nature of tax as a ground of challenge, it maintained status quo with respect to all other issues which have been left open for adjudication by regular benches hearing the matters.

Following the order of the nine judge bench, the regular bench of the Supreme Court proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods bought from other States to the respective High Courts for final determination but retained the issue of jurisdiction for levy on imported goods, for determination by the regular bench of the Supreme Court. Following the order of the Supreme Court, the Group filed writ petitions in respective High Courts.

On 9 October 2017, the Supreme Court has held that states have the jurisdiction to levy entry tax on imported goods. With this Supreme Court 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\$ 178.5 million (31 March 2018: US\$ 203.0 million).

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. The Company has sought refund of ED Cess paid till March 2006 amounting to US\$ 4.8 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\$ 97.3 million (31 March 2018: US\$ 100.8 million) and the Company may have to bear a charge of US\$ 102.1 million (31 March 2017: US\$ 106.1 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\$ 100.0 million for a work programme including 3D and 2D seismic studies and at least one exploration well. The Group has spent US\$ 38.1 million towards exploration expenditure and a minimum carry of US\$ 61.9 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 Q2, FY 2018-19, Company 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 company along with Petro SA has filed the closure application on 19 September 2018. Pending disposal of Company's application the obligation for the aforesaid carry cost of US\$ 61.9 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 relates solely 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 Supreme Court is scheduled to hear the Jurisdiction Appeal in January 2019.

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\$ 926.1 million (31 March 2018: US\$ 1,074.6 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, disallowance under section 14A 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 other disputes

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\$ 554.7 million (31 March 2018: US\$ 571.9 million).

The Group considers that it can take steps such that the risks can be mitigated and that there will be no significant unprovided liabilities arising.

#### E. Other Matters

(i) 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. TSPL has filed the appeal before the Honourable Supreme Court, which by an order dated 7 March 2018 has decided the matter in favour of the Company. The outstanding trade receivables in relation to this dispute as at 30 September 2018 is US\$ 133.0 million (US\$ 123.3 million as at 31 March 2018).

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 has 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 30 September 2018 is US\$ 64.6 million (US\$ 59.3 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, at Vedanta Limited no amount as at 30 September 2018 (31 March 2018: US\$111.8 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 state regulatory commission.

The customer has however raised certain claims on the company in respect of short supply of power for which a Minutes of Meeting has been signed with the customer. Pending ratification by Odisha Electricity Regulatory Commission (OERC) and adjudication on certain issues related to the claim, the Company has provided US\$ 33.4 million based on best estimate by the management.

(ii) Vedanta Limited's application for renewal of Consent to Operate (CTO) for existing copper smelter was rejected by Tamil Nadu Pollution Control Board (TNPCB) in April 2018. Subsequently the Government of Tamil Nadu issued directions to seal the existing copper smelter plant permanently.

The Company has appealed before the National Green Tribunal (NGT), Principal Bench and the matter is presently sub judice. Further, 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. Ministry of Environment and Forests (MoEF) has delisted the expansion project since the matter is sub judice. However, in the meanwhile, SIPCOT cancelled the land allotted for the proposed Expansion Project and TNPCB issued order directing the withdrawal of the Consent to Establish (CTE) which was valid till 31 March 2023.

The Company has approached Madras High Court by way of writ petition challenging the cancellation of lease deeds by SIPCOT pursuant to which an interim stay has been granted. The Company has also filed Appeals before the TNPCB Appellate Authority challenging withdrawal of CTE by the TNPCB.

As per the Company's assessment, it is in compliance with the applicable regulations and hence does not expect any material adjustments to these financial results as a consequence of the above actions.

(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. Hon'ble High court in its hearing on 5 November 2018 has further extended the stay till 11 December 2018.

# 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:

		(US\$ million)
	As at	As at
Particulars	30 September 2018	31 March 2018
Within one year of the balance sheet date	0.5	0.6
Within two to five years from the balance sheet date	0.7	0.8
Total	1.2	1.4

Lease payments recognised as expenses during the period ended 30 September 2018, on non-cancellable leases, is US\$ 0.3 million (31 March 2018: US\$ 0.2 million).

(ii) TSPL has ascertained that the Power Purchase Agreement (PPA) entered with Punjab State Power Corporation Limited (PSPCL) qualifies to be an operating lease under IAS 17 'Leases'. Based on the assessment that the lease payments by PSPCL are subject to variations on account of various factors like availability of coal, water, etc., the management has determined the entire consideration receivable under the PPA relating to recovery of capacity charges towards capital cost to be contingent rent under IAS 17. The contingent rent recognised as revenue in the consolidated income statement during the period ended 30 September 2018 and 30 September 2017 is US\$ 95.5 million and US\$ 66.6 million respectively.

## 12. 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 30 September 2018 and 31 March 2018:

(US\$ million)

As at 30 September 2018	Fair value through profit or loss	Fair value through other comprehensive income	Amortised cost	Total carrying value	Total fair value
Financial Assets					,
Financial instruments (derivatives)	49.2	6.8	-	56.0	56.0
Financial asset investments held at fair value	-	20.8	-	20.8	20.8
Liquid investments					
- Bank deposits	-	-	704.0	704.0	704.0
- Other investments	4,319.5	-	-	4,319.5	4,319.5
Cash and cash equivalents	-	-	468.4	468.4	468.4
Trade and other receivables	-	-	809.2	809.2	809.2
Other non-current assets	-	-	606.9	606.9	606.9
Total	4,368.7	27.6	2,588.5	6,984.8	6,984.8

(US\$ million)

As at 30 September 2018	Fair value through profit or loss	Fair value through other comprehensive income	Amortised cost	Others*	Total carrying value	Total fair value
Financial Liabilities						_
Financial instruments (derivatives)	(30.1)	(8.3)	-	-	(38.4)	(38.4)
Trade and other payables		-	(4,330.6)	(21.2)	(4,351.8)	(4,351.8)
Borrowings	-	-	(15,686.8)	-	(15,686.8)	(15,595.2)
Total	(30.1)	(8.3)	(20,017.4)	(21.2)	(20,077.0)	(19,985.4)

					(U	S\$ million)
					Total	Total
A1 01 Marcal 2010	Held for	Loans and	Available	Destactions	carrying	fair
As at 31 March 2018	trading	receivables	for sale	Derivatives	value	value
Financial Assets						
Financial instruments (derivatives)	-	-	-	24.0	24.0	24.0
Financial asset investments held at fair value	-	-	24.5	-	24.5	24.5
Liquid investments						
- Bank deposits	-	482.5	-	-	482.5	482.5
- Other investments	4,325.3	-	-	-	4,325.3	4,325.3
Cash and cash equivalents	-	798.7	-	-	798.7	798.7
Trade and other receivables	-	829.7	-	-	829.7	829.7
Other non-current assets	-	371.5	-	-	371.5	371.5
Total	4,325.3	2,482.4	24.5	24.0	6,856.2	6,856.2

					(US\$ million)
	Amortized			Total carrying	Total fair
As at 31 March 2018	cost	Derivatives	Others*	value	value
Financial Liabilities					_
Financial instruments (derivatives)	-	(40.2)	-	(40.2)	(40.2)
Trade and other payables	(4,693.1)	-	(21.2)	(4,714.3)	(4,714.3)
Borrowings	(15,193.8)	-	-	(15,193.8)	(15,310.5)
Total	(19,886.9)	(40.2)	(21.2)	(19,948.3)	(20,065.0)

Represents put option liability accounted for at fair value - Refer Note 4(b)
Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

The below tables summarise the categories of financial assets and liabilities as at 30 September 2018 and 31 March 2018 measured at fair value:

(US\$ million) As at 30 September 2018 Level 1 Level 2 Level 3 Financial assets At fair value through profit or loss 1,457.8 2,847.1 - Liquid Investments 14.6 - Financial instruments (derivatives) 49.2 At fair value through other comprehensive income - Financial asset investments held at fair value 19.3 1.5 - Financial instruments (derivatives) 6.8 Total 1,477.1 2,903.1 16.1 Financial liabilities At fair value through profit or loss/ designated for hedging - Financial instruments (derivatives) 30.1 At fair value through other comprehensive income 8.3 - Financial instruments (derivatives) Trade and other payables- Put option liability with non controlling interest 21.2 (refer note 4b) Total 38.4 21.2

(US\$ million)

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	As at 31 March 2018		018
	Level 1	Level 2	Level 3
Financial assets			
At fair value through profit or loss			
- Held for trading	1,163.3	3,162.0	-
- Financial instruments (derivatives)	-	24.0	-
Available-for-sale investments			
- Financial asset investments held at fair value	22.9	-	1.6
Total	1,186.2	3,186.0	1.6
Financial liabilities			
At fair value through profit or loss/ designated for hedging			
- Financial instruments (derivatives)	-	40.2	-
Trade and other payables Put option liability with non controlling interest	-	-	21.2
(refer note 4b)			
Total	-	40.2	21.2

The below table summarizes the fair value of financial liabilities which are carried at amortised cost other than those where carrying value is determined to be the fair value as at September, 2018 and March, 2018:

		(US\$ million)
	As at 30 September 2018	As at 31 March 2018
	Level 2	Level 2
Financial Liabilities		
-Borrowings	10,887.7	9,850.2
Total	10,887.7	9,850.2

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 the same as for other marketable securities traded in active markets. Other current investments are valued on the basis of market trades, poll and primary issuances for securities issued by the same or similar issuer and for similar maturities or based on the applicable spread movement for the security derived based on the aforementioned factor(s).
- Trade and other receivables, cash and cash equivalents (including restricted cash and cash equivalents), bank deposits, 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: Fair value has been determined by the Group based on parameters such as interest rates, specific country risk factors, and the risk characteristics of the financed project. 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, 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 30 September 2018 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 period-end.

#### 13. Share Transactions

### Call Options

a. Hindustan Zinc Limited (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 scheduled for 24 November 2018. 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.

#### 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

22.9

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 19 November 2018. 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.

## 14. Related party transactions

Investment in equity Share

The information below sets out transactions and balances between the Group and various related parties in the normal course of business for the period ended 30 September 2018.

# Sterlite Technologies Limited ('STL')

		(US\$ million)
	Six months ended 30 September 2018	Six months ended 30 September 2017
Sales to STL	0.1	11.4
Purchases	-	0.1
Dividend income	-	0.1
		(US\$ million)
	As at	As at
	30 September 2018	31 March 2018
Net amounts receivable	-	0.8
Net amounts payable	0.0	-

Sterlite Technologies Limited is related by virtue of having the same controlling party as the Group, namely Volcan.

19.3

## Sterlite Power Transmission limited ('SPTL').

		(US\$ million)
	Six months ended 30 September 2018	Six months ended 30 September 2017
Sales to SPTL	88.2	63.5
Purchases	-	1.0
Reimbursement from SPTL	0.0	-
Net Interest Received	0.0	-

		(US\$ million)
	As at	As at
	30 September 2018	31 March 2018
Investment in equity Share	1.5	1.6
Net amounts receivable	10.8	0.8
Net amounts payable	0.0	0.5

Sterlite Power Transmission limited ('SPTL') is related by virtue of having the same controlling party as the Group, namely Volcan.

# Volcan Investments Limited ("Volcan")

		(US\$ million)
	Six months ended 30 September 2018	Six months ended 30 September 2017
Dividend paid	73.3	65.6
Recovery of expenses	0.1	-
Interest paid on bonds held by Volcan	0.7	3.7
Bonds redeemed during the period	-	82.1

		(US\$ million)
	As at	As at
	30 September 2018	31 March 2018
Net amount receivable	0.1	0.6
Value of bonds held by Volcan	21.0	21.0
Interest payable on bonds held	0.5	0.5

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\$ 15.9 million (30 September 2017: US\$ 17.6 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\$ 18.6 million as consideration towards the same.

# India Grid Trust

		(US\$ million)
	As at 30 September 2018	As at 31 March 2018
Investment in equity shares at period end	16.1	18.8

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.

## Vedanta Medical Research Foundation

		(US\$ million)
	Six months ended 30 September 2018	Six months ended 30 September 2017
Donation	10.9	5.2
Guarantees given during the period (net of relinquishment)	0.8	-
		(US\$ million)
	As at 30 September 2018	As at 31 March 2018
Guarantees given balance at period end	5.5	5.3

Vedanta Medical Research Foundation is a related party of the Group on the basis that key management personnel of the Group exercise significant influence.

## 15. Share capital

Share capital as at 30 September 2018 amounted to US\$30.7 million. During the six months ended 30 September 2018, 3,502,681 shares were issued to the employees pursuant to the Vedanta Performance Share Plan. As a result, the number of Ordinary shares in issue has increased from that at 31 March 2018 to 307,489,720 shares.

# 16. Subsequent events

There are no material adjusting or non-adjusting subsequent events, except as disclosed below:

## Acquisition of new hydrocarbon blocks

In August, 2018, Vedanta Limited has been 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\$ 551.0 million represents Vedanta Limited's total committed capital expenditure on the blocks for the committed work programme during the exploration phase.

Vedanta Limited has provided bank guarantees for minimum work programme commitments amounting to US\$ 308.7 million for the 41 exploration blocks.

## PSC Extension for the Rajasthan Block

On 27 October 2018, the Government of India, acting through the Directorate General of Hydrocarbons, Ministry of Petroleum and Natural Gas (the "GoI") has granted its approval for a ten-year extension of the PSC for the Rajasthan Block, RJ-ON-90/1 (the "RJ Block") with effect from 15 May 2020. Such extension has been granted by the GoI, pursuant to its policy dated 7 April 2017 for extension of Pre-New Exploration Licensing Policy ("Pre-NELP") Exploration Blocks PSCs signed by the GoI (the "Pre-NELP Extension Policy"), subject to certain conditions. The applicability of the Pre-NELP Extension Policy to the RJ Block PSC is currently sub judice.

# INDEPENDENT REVIEW REPORT TO VEDANTA RESOURCES LIMITED

### Introduction

We have been engaged by the Company to review the condensed set of financial statements in the interim results report for the six months ended 30 September 2018 which comprises the condensed consolidated income statement, the condensed consolidated statement of comprehensive income, the condensed consolidated statement of financial position, the condensed consolidated statement of cash flows, the condensed consolidated statement of changes in equity and the related notes 1 to 16. We have read the other information contained in the interim results report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

This report is made solely to the Company in accordance with guidance contained in International Standard on Review Engagements 2410 (UK and Ireland) "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Auditing Practices Board. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company, for our work, for this report, or for the conclusions we have formed.

## **Directors' Responsibilities**

The interim results report is the responsibility of, and has been approved by, the directors. The directors are responsible for preparing the interim results report in accordance with the accounting policies set out in note 2.

As disclosed in note 1, the annual financial statements of the group are prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. The condensed set of financial statements included in this interim results report has been prepared in accordance with those policies.

## Our Responsibility

Our responsibility is to express to the Company a conclusion on the condensed set of financial statements in the interim results report based on our review.

## Scope of Review

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Auditing Practices Board for use in the United Kingdom. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

# Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the interim results report for the six months ended 30 September 2018 is not prepared, in all material respects, in accordance with the accounting policies set out in note 1, which comply with IFRS as adopted by the European Union.

Ernst & Young LLP London

12 November 2018

## 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)
Underlying earnings per share	Basic earnings per share before special items	Underlying attributable profit/(loss) divided by weighted avg. no. of shares of the company in issue
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	Borrowings and debt related derivatives Less: cash and cash equivalents and liquid investment	No Adjustments
ROCE	No direct Equivalent	Not Applicable

<sup>\*</sup> Glossary and definition section includes further description as relevant.

ROCE for H1 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	Period ended 30 Sept 2018
Operating Profit Before Special Items (LTM Basis)	2,591
Less: Cash Tax Outflow	(475)
Return on Capital Employed (a)	2,117
Opening Capital Employed (b)	15,227
Closing Capital Employed (c)	15,552
Average Capital Employed (d)= (a+b)/2	15,390
ROCE (a)/(d)	13.8%

## **GLOSSARY AND DEFINITIONS**

## **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

## **Attributable Profit**

Profit for the financial year before dividends attributable to the equity shareholders of Vedanta Resources Limited (formerly Vedanta Resources plc).

### **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

#### CMT

Copper Mines of Tasmania Pty Limited, a company incorporated in Australia

## Company or Vedanta

Vedanta Resources Limited (formerly Vedanta Resources plc)

## Company financial statements

The condensed consolidated financial statements for the Company and the Group for the period ended 30 September 2018 as defined in the Independent Review Report to the members of Vedanta Resources Limited (formerly Vedanta Resources plc)

## **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 PLC, 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

#### CRISIL.

CRISIL Limited (A S&P Subsidiary) is a rating agency incorporated in India

#### CSR

Corporate social responsibility

#### CY

Calendar year

#### **DDT**

Dividend distribution tax

#### **DFS**

Detailed feasibility study

### **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

#### **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

# **Expansion Capital Expenditure**

Capital expenditure that increases the Group's operating capacity

# Financial Statements or Group financial statements

The condensed consolidated financial statements for the Company and the Group for the period ended 30 September 2018 as defined in the Independent Review Report to the members of Vedanta Resources Limited (formerly Vedanta Resources Plc)

### 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

## **Government or Indian Government**

The Government of the Republic of India

# Group

The Company and its subsidiary undertakings and, where appropriate, its associate undertaking

### Gross finance costs

Finance costs before capitalisation of borrowing costs

#### HIIP

Hydrocarbons initially-in place

#### **HSE**

Health, safety and environment

### **HZL**

Hindustan Zinc Limited, a company incorporated in India

# IAS

**International Accounting Standards** 

### **IFRIC**

**IFRS Interpretations Committee** 

#### **IFRS**

**International Financial Reporting Standards** 

### **INR**

**Indian Rupees** 

### **Interest cover**

EBITDA divided by gross finance costs (including capitalised interest) excluding accretive interest on convertible bonds, unwinding of discount on provisions, interest on defined benefit arrangements less investment revenue

### **IPP**

Independent power plant

### Iron Ore Sesa

Iron ore Division of Vedanta Limited, comprising of a 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 PLC, a company incorporated in Zambia

### **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 plc

## 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

## **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

## Net (Debt)/Cash

Total debt after fair value adjustments under IAS 32 and 39, cash and cash equivalents, liquid investments and debt related derivative

### **NGO**

Non-governmental organisation

### Oil & Gas business

Oil & Gas division of Vedanta Limited, is involved in the business of exploration, development and production of Oil & Gas.

## **ONGC**

Oil and Natural Gas Corporation Limited, a company incorporated in India

### **OPEC**

Organisation of the Petroleum Exporting Countries

# **PBT**

Profit before tax

## **PPE**

Property plant and equipment

### **Provident Fund**

A defined contribution pension arrangement providing pension benefits consistent with Indian market practices

## **PSC**

A "production sharing contract" by which the Government of India grants a license to a company or consortium of companies (the 'Contractor") to explore for and produce any hydrocarbons

found within a specified area and for a specified period, incorporating specified obligations in respect of such activities and a mechanism to ensure an appropriate sharing of the profits arising there from (if any) between the Government and the Contractor.

# Recycled water

Water released during mining or processing and then used in operational activities

# **Return on Capital Employed or ROCE**

Operating profit before special items net of tax outflow, as a ratio of average capital employed

#### RO

Reverse osmosis

### **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 (refer Note 2(A) (III) special items of accounting policies)

# **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

#### TSPI

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

# 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.

## **VGCB**

Vizag General Cargo Berth Private Limited, a company incorporated in India

### Volcan

Volcan Investments Limited, a company incorporated in the Bahamas

# **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

#### **ZRA**

Zambia Revenue Authority