Vedanta Ltd Form 6-K December 18, 2017 Table of Contents

# **UNITED STATES**

## SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

**Report of Foreign Private Issuer** 

Pursuant to Rule 13a-16 or 15d-16

of the Securities Exchange Act of 1934

For the six month period ended September 30, 2017

Commission File 001 33175

Vedanta Limited

(Exact name of registrant as specified in the charter)

1<sup>st</sup> Floor, C wing, Unit 103

**Corporate Avenue, Atul Projects,** 

Chakala, Andheri (East),

# Mumbai 400 093, Maharashtra, India

# (Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

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# CONVENTIONS USED IN THIS FORM

In this report, we refer to information regarding the zinc, oil and gas, iron ore, copper, aluminium and power industries and our competitors from market research reports, analyst reports and other publicly available sources. Although we believe that this information is reliable, we have not independently verified the accuracy and completeness of the information. We caution you not to place undue reliance on this data.

On February 25, 2012, Vedanta Resources Plc (Vedanta), the parent company of Sterlite Industries (India) Limited (Sterlite or SIIL), Sesa Goa Limited (Sesa Goa), Vedanta Aluminium Limited (Vedanta Aluminium), Sterlite Energy Limited (Sterlite Energy), Cairn India Limited (erstwhile Cairn India Limited) and The Madras Aluminium Company Limited (MALCO) announced an all-share merger of majority owned subsidiaries, Sesa Goa and SIIL, to create Sesa Sterlite Limited (Sesa Sterlite or SSL) and a consolidation of various subsidiaries held by Vedanta to effect the consolidation and simplification of Vedanta s corporate structure through two series of transactions (together the Re-organization Transactions consisting of the Amalgamation and Re-organization Scheme and the Cairn India Consolidation). The Re-organization transactions were completed during fiscal year 2014 and the name of the merged entity was changed to Sesa Sterlite Limited with effect from September 18, 2013. The name of Sesa Sterlite Limited with effect from April 21, 2015. Cairn India Limited has merged into Vedanta Limited way of a scheme of arrangement and the Board of Directors of both the companies made the merger operative on April 11, 2017.

Unless otherwise indicated, the unaudited condensed consolidated interim financial information for the six months period ended September 30, 2016 and 2017 and for the fiscal year ended March 31, 2017 for our Company included in this report has been prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board, (IASB). References to a particular fiscal year are to our fiscal year ended March 31 of that year. Our fiscal quarters end on June 30, September 30 and December 31. References to a year other than a fiscal year are to the calendar year ended December 31.

Our consolidated financial statements are reported in Indian Rupees or Rs. . Unless otherwise specified, translation of amounts for the convenience of the reader has been made in this report from Indian Rupees to US dollars at the rate of Rs. 65.30 per \$ 1.00 based on the exchange rate quoted by the Federal Reserve Bank of New York as at September 29, 2017. No representation is made that the Indian Rupee amounts represent US dollar amounts or have been, could have been or could be converted into US dollars at such rates or any other rate.

In this Report, references to US or the United States are to the United States of America, its territories and its possessions. References to UK are to the United Kingdom. References to India are to the Republic of India. References to Namibia are to the Republic of Namibia. References to South Africa are to the Republic of South Africa. References to Ireland are to the Republic of Ireland. References to Sri Lanka are to the Democratic Socialist Republic of Sri Lanka. References to UAE are to the United Arab Emirates. References to \$, dollars or US dollars to the legal currency of the United States. References to Rs. or Indian Rupees are to the legal currency of the Republic of India. References to NAD or Namibian dollars are to the legal currency of Namibia. References to ZAR or RAND are to legal currency of the Republic of South Africa. References to ¢ are to US cents. References to RMB , Renminbi , CN or Chinese Yuan are to the legal currency of the Republic of China.

References to lb are to the imperial pounds (mass) equivalent to 0.4536 kilograms, references to mt or tons are to metric tons, references to mmt are to million metric tons, references to tpd are to tons per day, references to tpa are to tons per annum, a unit of mass equivalent to 1,000 kilograms or 2,204.6 lb, references to mtpa are to million tons per annum, mmtpa are to million metric tons per annum, references to wmt are to wet metric tons, references to dmt are to dry metric tons, references to oz are to ounces, with one kilogram being equivalent to 32.1507 oz and one ton equivalent to 32,151 oz, references to mm are to millimeters, references to ha are to hectares, references to kms are to kilometers, a unit of area equal to 10,000 square meters or 107,639 square feet, references to GW are to giga watts, references to kt are to kilo tons, references to bbls are to barrels, references to blpd are to barrels of liquid per day, references to mmboe are to million barrels of oil equivalent, references to bboe are to billion barrels of oil equivalent, references to mmbopd are to million barrels of oil per day, references to kbopd are to kilo barrels of oil per day, references to bopd are to barrels of oil per day, references to boepd are to barrels of oil equivalent per day, references to tcm are to trillion cubic meters, references to mmscmd are to million metric standard cubic meter per day, references to mscf are to thousand standard cubic feet, references to mmscf are to million metric standard cubic feet, references to mmscfd are to million metric standard cubic feet per day, references to bcf are to billion cubic feet, references to PPA are to power purchase agreement and references to TcRc are to treatment and refining charges. References to net oil and gas production are to the entitlement interest production of Cairn India Limited and its subsidiaries, in which the Ravva royalty is not netted off.

We conduct our businesses both directly and through a consolidated group of companies that we have ownership interests in. Unless otherwise stated in this Report or unless the context otherwise requires, references in this Report to we, us, our, Vedanta Limited, Sesa Sterlite Limited (SSL), Sesa Sterlite, our Company, the Company o consolidated group of companies mean Vedanta Limited, its consolidated subsidiaries and its predecessors, collectively, including Cairn India Limited and its subsidiaries ( Cairn India ), Monte Cello BV ( Monte Cello ), Copper Mines of Tasmania Proprietary Limited ( CMT ), Thalanga Copper Mines Proprietary Limited, Bharat Aluminium Company Limited ( BALCO ), Hindustan Zinc Limited ( HZL ), Fujairah Gold FZC, Sterlite (USA), Inc., ( Sterlite USA ), Talwandi Sabo Power Limited ( TSPL ), THL Zinc Ventures Limited, THL Zinc Limited, THL Zinc Holding B.V., THL Zinc Namibia Holdings (Proprietary) Limited (Skorpion), Skorpion Zinc (Proprietary) Limited, Skorpion Mining Company (Proprietary) Limited, Namzinc (Proprietary) Limited, Amica Guesthouse (Proprietary) Limited, Rosh Pinah Health Care (Proprietary) Limited, Black Mountain Mining (Proprietary) Limited ( BMM ), Vedanta Lisheen Holdings Limited ( Lisheen ), Vedanta Lisheen Mining Limited, Killoran Lisheen Mining Limited, Killoran Lisheen Finance Limited, Lisheen Milling Limited, Vedanta Exploration Ireland Limited, Lisheen Mine Partnership, Sterlite Ports Limited, Vizag General Cargo Berth Private Limited, Paradip Multi Cargo Berth Private Limited, Lakomasko B.V., MALCO Energy Limited ( MALCO Energy ) (formerly known as Vedanta Aluminium), Sesa Resources Limited, Sesa Mining Corporation Limited, Bloom Fountain Limited (BFL), Goa Sea Port Private Limited, Twin Star Energy Holdings Limited ( TEHL ), Twin Star Mauritius Holdings Limited ( TMHL ), Western Cluster Limited ( WCL ), Maritime Ventures Private Limited, Sesa Sterlite Mauritius Holdings Limited and Twinstar Energy Holding Limited.

Our consolidated financial information does not include our controlling shareholder Vedanta, its shareholders and various companies owned directly or indirectly by it (other than us and our consolidated group of companies described above), including without limitations, Vedanta Resources Holdings Limited (VRHL), Konkola Copper Mines Plc, Twin Star Holdings Limited (Twin Star), Welter Trading Limited (Welter Trading), the Anil Agarwal Discretionary Trust (Trust), Conclave PTC Limited (Conclave), Sterlite Technologies Limited, Monte Cello Corporation NV, Valliant (Jersey) Limited, Vedanta Resources Jersey II Limited, Vedanta Resources Finance Limited, Vedanta Resources Cyprus Limited, Richter Holding Limited (Richter), Westglobe Limited (Westglobe), Finsider International Company Limited (Finsider), Vedanta Resources Jersey Limited, Vedanta Finance (Jersey) Limited, Vedanta Jersey Investments Limited, Vedanta Finance UK Limited, and Sterlite Grid Limited. References to the Group is to Vedanta Limited and its subsidiaries on a consolidated basis and references to the Vedanta Group is to Vedanta and its

subsidiaries on a consolidated basis.

In this Report, references to The London Metal Exchange Limited (LME) price of zinc, copper, aluminium are to the cash seller and settlement price on the LME for copper, zinc or aluminium for the period indicated. References to primary market share in this Report are to the market that includes sales by producers of metal from copper concentrate or alumina, as applicable, and do not include sales by producers of recycled metal or imports.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This form contains forward-looking statements as defined in the safe harbor provisions of the US Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on our current expectations, assumptions, estimates and projections about our company and our industry. These forward-looking statements are subject to various risks and uncertainties. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as anticipate, believe, estimate, expect. intend, will, project. seek. similar expressions. These forward-looking statements include, among other things, the discussions of our business strategy and expectations concerning our market position, future operations, margins, profitability, liquidity and capital resources. We caution you that reliance on any forward-looking statement involves risks and uncertainties, and that, although we believe that the assumptions on which our forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate and, as a result, the forward-looking statements based on those assumptions could be materially incorrect. Factors which could cause these assumptions to be incorrect include, but are not limited to:

a decline or volatility in the demand for zinc, oil and gas, iron ore, copper, aluminium or power or increase in supply of zinc, oil and gas, iron ore, copper, aluminium or power;

events that could cause a decrease in our production and higher cost of production for zinc, oil and gas, iron ore, copper, aluminium or power;

unavailability or increased costs of raw materials for our products;

dependence on obtaining and maintaining mining leases for our mining sites and approvals from regulatory authorities for increasing oil and gas production;

general risks related to Vedanta Limited s commercial power business and challenges in operationalization of investment in aluminium and power business;

fluctuations in metal prices on LME, ore prices, oil and gas prices or power prices;

fluctuations in currency exchange rates;

interruptions in the availability of exploration, production or supply equipment or infrastructure and/or increased costs;

construction of pipeline and terminal may take longer than planned, may not work as intended and the cost of construction may be greater than forecast;

our actual economically recoverable lead-zinc ore, copper ore or bauxite reserves being lower than we have estimated;

our ability to expand our business, effectively manage our growth or implement our strategy;

our ability to retain our senior management team and hire and retain sufficiently skilled labor to support our operations;

regulatory, legislative and judicial developments and future regulatory actions and conditions in our operating areas;

increasing competition in the zinc, oil and gas, iron ore, copper, aluminium or power industries;

political or economic instability in and around India or around the regions in which we operate;

worldwide economic and business conditions;

reliance on third party contractors and providers of equipment which may not be readily available and whose costs may increase;

compliance with extensive environmental and health and safety regulations;

our ability to successfully consummate strategic acquisitions;

our ability to simplify our group structure and reduction in non-controlling stake in group companies;

the outcome of outstanding litigation in which we are involved;

our ability to maintain good relations with the respective local communities and our trade unions and avoid strikes and lock-outs;

any actions of our controlling shareholder, Vedanta;

the future capital requirements of our business and the availability of financing on favorable terms;

the continuation of tax holidays, exemptions and deferred tax schemes we currently enjoy;

changes in tariffs, royalties, customs duties and government assistance;

terrorist attacks and other acts of violence, natural disasters, increasing impact of climate change and other environmental conditions and outbreaks of infectious diseases and other public health concerns in India, Asia and elsewhere; and

failure of digital infrastructures and cyber security attacks due to negligence or IT security failures;

our ability to discover new reserves, enhance existing reserves or develop new operations in sufficient quantities to maintain or grow the current level of our reserves;

transitioning of zinc and lead mining operations from open pit to underground mining. In light of these and other uncertainties, you should not conclude that we will necessarily achieve any plans, objectives or projected financial results referred to in any of the forward-looking statements. Except as required by law, we do not undertake to release revisions to any of these forward-looking statements to reflect future events or circumstances.

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## VEDANTA LIMITED AND SUBSIDIARIES

# UNAUDITED CONDENSED CONSOLIDATED INTERIM STATEMENTS OF PROFIT OR LOSS

(Indian Rupees in million except share or per share amounts unless otherwise stated)

For the six months ended September 30,		2016	2017	2017 (US dollars in	
		(Rs. in million)	(Rs. in million)	million) (Note 2)	
Revenue		300,286	397,240	6,083	
Cost of sales		(235,527)	(303,457)	(4,647)	
Gross profit		64,759	93,783	1,436	
Other operating income		2,488	1,583	24	
Distribution expenses		(6,335)	(7,200)	(110)	
Administration expenses		(9,464)	(10,267)	(157)	
Operating profit		51,448	77,899	1,193	
Investment and other income	4	27,094	17,796	272	
Finance and other costs	5	(30,427)	(31,235)	(478)	
Profit before tax		48,115	64,460	987	
Income tax expense	6	(12,940)	(18,089)	(277)	
Profit for the period		35,175	46,371	710	
Profit attributable to:					
Equity holders of the parent		18,691	30,078	461	
Non-controlling interests		16,484	16,293	249	
Earnings per share	12				
Basic		6.30	8.35	0.1	
Diluted		6.30	8.34	0.1	
Weighted average number of equity shares used in					
computing earnings per share					
Basic		2,965,004,871	3,600,553,535		
Diluted		2,965,004,871	3,605,937,510		

The accompanying notes are an integral part of these unaudited condensed consolidated interim financial statements.

## VEDANTA LIMITED AND SUBSIDIARIES

# UNAUDITED CONDENSED CONSOLIDATED INTERIM STATEMENTS OF COMPREHENSIVE INCOME

(Indian Rupees in million except share or per share amounts unless otherwise stated)

For the six months ended September 30,	2016	2017	2017 (US dollars in
	(Rs. in million)	(Rs. in million)	million) (Note 2)
Profit for the period	35,175	46,371	710
Other comprehensive income, net of income tax:			
Items that will not be reclassified subsequently to profit or loss:			
Remeasurement of defined benefit obligation*	(133)	(69)	(1)
Items that will be reclassified subsequently to profit or loss:			
Exchange differences on translation of foreign operations*	1,537	992	15
Gain on available-for-sale financial investments	43	477	7
Cash flow hedges*	(326)	(1,330)	(20)
Total other comprehensive income for the period, net of income tax	1,121	70	1
Total comprehensive income	36,296	46,441	711
Total comprehensive income attributable to:			
Equity holders of the parent	18,904	30,401	465
Non-controlling interests	17,392	16,040	246
	36,296	46,441	711

\* Refer to Note 6(b) for tax related to each component of other comprehensive income/ (loss)

The accompanying notes are an integral part of these unaudited condensed consolidated interim financial statements.

# VEDANTA LIMITED AND SUBSIDIARIES

# UNAUDITED CONDENSED CONSOLIDATED INTERIM STATEMENTS OF FINANCIAL POSITION

(Indian Rupees in million except share or per share amounts unless otherwise stated)

As at	Notes	March 31, 2017 (Rs. in million)	September 30, 2017 (Rs. in million)	September 30, 2017 (US dollars in million) (Note 2)
ASSETS				
Non-current assets				
Property, plant and equipment		877,127	871,248	13,342
Exploration and evaluation assets		98,852	97,902	1,499
Other intangible assets		6,378	6,026	92
Leasehold land		3,594	3,640	56
Deferred tax assets		77,582	69,130	1,059
Financial assets investments		695	1,172	18
Derivative financial assets		38	37	1
Current tax asset		28,176	29,140	446
Other non-current assets	15	35,016	39,516	605
Total non-current assets		1,127,458	1,117,811	17,118
Current assets				
Inventories		97,266	117,391	1,798
Current tax asset		136	39	1
Trade and other receivables		60,276	72,926	1,117
Short-term investments		524,685	383,639	5,875
Derivative financial assets		91	1,988	30
Restricted cash and cash equivalents	7	11,747	752	12
Cash and cash equivalents	8	97,202	16,255	249
Total current assets		791,403	592,990	9,082
Total assets		1,918,861	1,710,801	26,200
LIABILITIES				
Current liabilities				
Short-term borrowings	9	413,126	254,824	3,902
Acceptances	,	113,304	134,207	2,055
Trade and other payables		285,794	203,572	3,117
Derivative financial liabilities		8,216	2,585	40
Retirement benefits		503	895	14

Provisions		1,131	1,278	20
Current tax liabilities		2,028	5,325	82
Total current liabilities		824,102	602,686	9,230
Net current assets / (liabilities)		(32,699)	(9,696)	(148)
Non-current liabilities				
Long-term borrowings	9	332,654	303,156	4,643
Deferred tax liabilities		24,015	20,065	306
Retirement benefits		1,390	1,431	22
Provisions		19,233	19,724	302
Derivative financial liabilities		557	964	15
Other non-current liabilities		3,122	4,344	67
Total non-current liabilities		380,971	349,684	5,355
Total non-current liabilities Total liabilities		380,971 1,205,073	349,684 952,370	5,355 14,585
		,	,	,
Total liabilities Net assets		1,205,073	952,370	14,585
Total liabilities	11	1,205,073	952,370	14,585
Total liabilities Net assets EQUITY Share capital	11	1,205,073 713,788	952,370 758,431	14,585 11,615
Total liabilities Net assets EQUITY	11	<b>1,205,073</b> <b>713,788</b> 3,718	<b>952,370</b> <b>758,431</b> 3,718	14,585 11,615 57
Total liabilities Net assets EQUITY Share capital Securities premium	11	<b>1,205,073</b> <b>713,788</b> 3,718 190,452	<b>952,370</b> <b>758,431</b> 3,718 190,452	<b>14,585</b> <b>11,615</b> 57 2,917
Total liabilities Net assets EQUITY Share capital Securities premium Treasury shares	11	<b>1,205,073</b> <b>713,788</b> 3,718 190,452 (1,034)	<b>952,370</b> <b>758,431</b> 3,718 190,452 (2,893)	<b>14,585</b> <b>11,615</b> 57 2,917 (44)
Total liabilities Net assets EQUITY Share capital Securities premium Treasury shares Share based payment reserve	11	<b>1,205,073</b> <b>713,788</b> 3,718 190,452 (1,034) 1,548	<b>952,370</b> <b>758,431</b> 3,718 190,452 (2,893) 1,574	<b>14,585</b> <b>11,615</b> 57 2,917 (44) 24
Total liabilities Net assets EQUITY Share capital Securities premium Treasury shares Share based payment reserve Other components of equity	11	<b>1,205,073</b> <b>713,788</b> 3,718 190,452 (1,034) 1,548 12,464	<b>952,370</b> <b>758,431</b> 3,718 190,452 (2,893) 1,574 12,823	14,585 11,615 57 2,917 (44) 24 197
Total liabilities Net assets EQUITY Share capital Securities premium Treasury shares Share based payment reserve Other components of equity Retained earnings	11	<b>1,205,073</b> <b>713,788</b> 3,718 190,452 (1,034) 1,548 12,464 369,390	<b>952,370</b> <b>758,431</b> 3,718 190,452 (2,893) 1,574 12,823 399,467	<b>14,585</b> <b>11,615</b> <b>57</b> 2,917 (44) 24 197 6,117

The accompanying notes are an integral part of these unaudited condensed consolidated interim financial statements.

## VEDANTA LIMITED AND SUBSIDIARIES

# UNAUDITED CONDENSED CONSOLIDATED INTERIM STATEMENTS OF CASH FLOWS

(Indian Rupees in million except share or per share amounts unless otherwise stated)

For the six months ended September 30,	2016 (Rs. in million)	2017 (Rs. in million)	2017 (US dollars in million)
Cash flows from operating activities	)	,	
Profit for the period	35,175	46,371	710
Adjustments to reconcile profit to net cash provided by operating activities:			
Income tax expense recognised in profit or loss	12,940	18,089	277
Depreciation and amortization	30,405	30,652	469
Impairment of Exploration and Evaluation assets		1,090	17
Unsuccessful exploration costs written off	29	11	
Fair value gain on financial assets held for trading	(21,069)	(11,766)	(180)
Share based payment expense		107	2
(Profit)/ loss on sale of property, plant and equipment, net	(50)	24	
Exchange loss, net	2,454	752	12
Inventory written off/ Provision for inventory		2,137	33
Interest and dividend income	(6,025)	(5,870)	(90)
Interest expense	29,114	30,323	464
Changes in assets and liabilities:			
(Increase)/decrease in trade and other receivables	(11,494)	(13,606)	(208)
(Increase)/Decrease in inventories	(10,474)	(22,158)	(339)
(Increase)/decrease in other current and non-current assets	(1,066)	(9,292)	(142)
Increase/(decrease) in trade and other payable	(48,738)	(11,322)	(173)
(Decrease)/ Increase in other current and non-current liabilities	44,693	(3,559)	(55)
Proceeds from short-term investments	547,689	556,297	8,519
Purchases of short-term investments	(467,727)	(420,720)	(6,443)
Cash generated from operations	135,856	187,560	2,873
Interest paid	(34,227)	(30,308)	(464)
Interest received	6,004	6,811	104
Dividend received	5	4	104
Income tax paid	(21,006)	(10,619)	(163)
	(21,000)	(10,017)	(105)
Net cash from operating activities	86,632	153,448	2,350
Cash flows from investing activities			
Purchases of property, plant and equipment and intangible assets	(19,338)	(21,462)	(329)
Proceeds from sale of property, plant and equipment	445	116	2
Exploration and evaluation assets	(4)	(488)	(7)

Proceeds from short-term deposits	7,801	47,027	720
Purchases of short-term deposits	(21,590)	(30,378)	(465)
Net changes in restricted cash and cash equivalents	(331)	4,530	69
Net cash (used) in investing activities	(33,017)	(655)	(10)
Cash flows from financing activities			
Proceeds from/(repayment of) working capital loan, net	30,558	(21,797)	(334)
Proceeds from acceptances	83,499	114,214	1,749
Repayment of acceptances	(80,236)	(93,882)	(1,438)
Proceeds from other short-term borrowings	252,422	132,402	2,028
Repayment of other short-term borrowings	(189,664)	(320,619)	(4,910)
Proceeds from long-term borrowings	13,824	75,927	1,163
Repayment of long-term borrowings	(21,214)	(52,203)	(799)
Loans repaid to related party	(98,808)		
Payment of dividends to equity holders of the parent, including dividend			
distribution tax		(65,729)	(1,007)
Payment of dividends to non-controlling interest, including dividend			
distribution tax	(45,529)	(6,441)	(99)
Purchase of treasury shares		(2,022)	(31)
Proceeds from exercise of Stock Options		117	2
Net cash (used) in financing activities	(55,148)	(240,033)	(3,676)
Effect of exchange rate changes on cash and cash equivalents	475	(148)	(2)
Net (decrease)/ increase in cash and cash equivalents	(1,058)	(87,388)	(1,338)
Cash and cash equivalents at the beginning of the year	20,870	103,643	1,587
Cash and cash equivalents at the end of the period	19,812	16,255	249
	,012	,	,
Supplementary disclosure of non-cash investing activities:			
Payables for purchase of property, plant and equipment including exploration			
and evaluation assets	29,272	24,011	368

## VEDANTA LIMITED AND SUBSIDIARIES

# UNAUDITED CONDENSED CONSOLIDATED INTERIM STATEMENTS OF CHANGES IN EQUITY

(Indian Rupees in million except share or per share amounts unless otherwise stated)

(a) For the six months ended September 30, 2016:

Balance as at       April 1, 2016       2,965       200,010       12,870       369       (36)       194,982       411,160       365,098       776,2         Profit for the period       18,691       18,691       16,484       35,3         Exchange       differences on       translation of       18,691       18,691       16,484       35,3	175
Profit for the period 18,691 18,691 16,484 35, Exchange differences on	175
Exchange differences on	
differences on	
translation of	
forzign operations	
foreign operations, net of tax* 559 559 978 1.4	11
Movement in	537
available for sale	
financial	
investments 43 43	43
Re- measurement of	
defined benefit	
obligation, net of	
	133)
Net movement in	
fair value of cash	
flow hedges, net of (204) (204) (202)	22()
$\tan^*$ (304) (304) (22) (3	326)
Total	
comprehensive	
(loss)/income for	
the period 559 43 (304) 18,606 18,904 17,392 36,2	296
Other change in	
equity (103) (103) 103	
Dividend paid	
including tax on	716)
dividend (2,716) (2,7	716)
2,965 200,010 13,429 412 (340) 213,485 429,961 379,877 809,8	

Balance as at September 30, 2016

\* Refer to Note 6(b) for tax related to each component of other comprehensive income / (loss)

(b) For the six months ended September 30, 2017:

		Securities premium	-	are base	0	e financi	aflow	Retained earnings	Total	Non controlling interests	Total
Balance as at April 1, 2017 Profit for the	3,718	190,452	(1,034)	1,548	11,789	632	43	369,390	576,538	137,250	713,788
period								30,078	30,078	16,293	46,371
Exchange differences on translation of foreign operations, net of tax*					1.019				1.010	(26)	002
Movement in available for sale financial					1,018				1,018	(26)	992
investments						477			477		477
Re- measurement of defined benefit obligation, net of tax*								(36)	(36)	(33)	(69)
Net movement in fair value of cash flow hedges, net of tax*							(1,136)		(1,136)	(194)	(1,330)
Total comprehensive (loss)/income for the period					1,018	477	(1,136)	30,042	30,401	16,040	46,441
_					_,		(_,)				
Purchase of treasury shares			(2,022)						(2,022)		(2,022)
Recognition of share based payment			(_,)	107					107		107
Exercise of				107					107		107
share options			163	(81)				35	117		117
Balance as at September 30, 2017	3,718	190,452	(2,893)	1,574	12,807	1,109	(1,093)	399,467	605,141	153,290	758,431

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Balance as at September 30, 2017 (in US dollars in											
million)	57	2,917	(44)	24	197	17	(17)	6,117	9,268	2,347	11,615

\* Refer to Note 6(b) for tax related to each component of other comprehensive income / (loss)

# VEDANTA LIMITED AND SUBSIDIARIES

## NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS

## 1. Business Overview

Vedanta Limited and its consolidated subsidiaries is a diversified natural resource company engaged in exploring, extracting and processing minerals and oil and gas. The Group engages in the exploration, production and sale of zinc, lead, silver, copper, aluminium, iron ore and oil and gas and have a presence across India, South Africa, Namibia, Ireland, Australia, Liberia and UAE. The Group is also in the business of commercial power generation and port operations in India.

Vedanta Limited is majority owned by Twin Star Holdings Limited ( Twin Star ), Finsider International Company Limited ( Finsider ), West Globe Limited ( West Globe ) and Welter Trading Limited ( Welter ) which are in turn wholly-owned subsidiaries of Vedanta Resources PLC ( Vedanta ), a public limited company incorporated in the United Kingdom and listed on the London Stock Exchange. Twin Star, Finsider, West Globe and Welter held 37.2%, 10.8%, 1.2% and 1.0% respectively of Vedanta Limited equity as at September 30, 2017.

The Group s zinc India business is owned and operated by Hindustan Zinc Limited (HZL) in which it has a 64.9% interest as at September 30, 2017. HZL s operations include five lead-zinc mines, one rock phosphate mine, four hydrometallurgical zinc smelters, two lead smelters, one pyro metallurgical lead-zinc smelter, six sulphuric acid plants, a silver refinery and six captive power plants in the State of Rajasthan in Northwest India and one zinc ingot processing and refining plant at Haridwar and one silver refinery, one zinc ingot melting and casting plant at Pantnagar in the State of Uttarakhand in North India.

The Group s zinc international business is comprised of Skorpion mine and refinery in Namibia operated through THL Zinc Namibia Holdings (Proprietary) Limited (Skorpion), Lisheen mine in Ireland operated through Vedanta Lisheen Holdings Limited (Lisheen) and Black Mountain Mining (Proprietary) Limited (BMM), whose assets include the operational Black Mountain mine and the Gamsberg mine project located in South Africa. The Group has 100% interest in Skorpion, 74% interest in BMM and 100% interest in Lisheen (which owns the Lisheen mine in Ireland that ceased operations in December 2015) as at September 30, 2017.

The Group s oil and gas business is owned and operated by the Company and its subsidiaries Cairn Energy Hydrocarbons Limited and Cairn South Africa Proprietary Limited. The Group has a diversified asset base with seven blocks, one in state of Rajasthan in India, one on the west coast of India, four on the east coast of India and one in South Africa. On October 15, 2015, at the expiry of second phase extension, the Group has relinquished the block in Sri Lanka and is in the process of closing down the Sri Lankan operations.

The Group s iron ore business is owned by Vedanta Limited and by two wholly owned subsidiaries, Sesa Resources Limited and Sesa Mining Corporation Private Limited, and consists of exploration, mining and processing of iron ore, pig iron and metallurgical coke and generation of power. The mining operations are carried out at Codli group, Bicholim mine, Surla mine and the Sonshi group of mines in state of Goa and Narrain mines situated at state of Karnataka in India. The business also has a metallurgical coke and pig iron plant in state of Goa in India. Iron ore business also has a power plant in state of Goa in India for captive use. The Group s iron ore business includes Western Cluster Limited (WCL) in Liberia which has iron ore assets and is a wholly owned subsidiary of the Group. WCL s assets include development rights to western cluster and a network of iron ore deposits in West Africa.

The Group s copper business is owned and operated by Vedanta Limited, Copper Mines of Tasmania Pty Ltd (CMT) and Fujairah Gold FZC and is principally one of custom smelting and includes a copper smelter, a refinery, a phosphoric acid plant, a sulphuric acid plant, a copper rod plant and three captive power plants at Tuticorin in Southern India, and a refinery and two copper rod plants at Silvassa in Western India. In addition, the Group owns the Mt. Lyell copper mine in Tasmania, Australia through its subsidiary, CMT and a precious metal refinery and copper rod plant in Fujairah through its subsidiary Fujairah Gold FZC in the UAE. The operations of Mt Lyell copper mine was suspended in January 2014 following a mud slide incident and the operations at Mt Lyell copper mine have been put into care and maintenance since July 9, 2014 following a rock fall incident in June 2014.

The Group s aluminium business is owned and operated by Vedanta Limited and by Bharat Aluminium Company Limited (BALCO) in which it has a 51% interest as at September 30, 2017. The aluminium operations include a refinery and a 75 MW captive power plant at Lanjigarh and a smelter and 3015 MW captive power plants at Jharsuguda both situated in the State of Orissa in India. The pots are in the stage of commissioning in the 1.25 mtpa Jharsuguda-II Aluminium smelter with 635 pots having been commissioned by September 30, 2017. Refinery expansion project being set up at Lanjigarh was on hold since October 20, 2010, as the MoEF had directed the Company to hold from further expansion. However, environmental clearance (EC) for the Lanjigarh expansion project has been received in the quarter ending December 31, 2015. BALCO s partially integrated aluminium operations are comprised of two bauxite mines, 1410 MW power plant, smelting and fabrication facilities in central India. The BALCO-II smelter was commissioned, with all 336 pots operational in May 2017.

The Group s power business is owned and operated by Vedanta Limited, BALCO, HZL, MEL and Talwandi Sabo Power Limited (TSPL), which are engaged in the power generation business in India. Vedanta Limited power operations include 600 MW thermal coal-based commercial power facility at Jharsuguda in the State of Orissa in Eastern India. BALCO has thermal coal based power plant with total capacity of 600MW, two units of 300 MW each, at Korba and are referred to as Independent power plant (IPP) 600 MW. The first 300 MW unit of the IPP 600MW was capitalized on August 1, 2015 after the successful completion of trial runs. The second unit has been commissioned and started commercial production from May 1, 2016. TSPL had signed a power purchase agreement (PPA) with the Punjab State Power Corporation Limited (PSPCL) for the establishment of 1,980 MW (three units of 660 MW each) thermal coal-based commercial power facilities and the first 660 MW unit of the Talwandi Sabo power plant (TSPL) was capitalized in financial year 2015, second 660MW unit was capitalized on December 1, 2015 and the third 660MW unit at TSPL was capitalized on September 1, 2016. The Power business also includes 274 MW of wind power plants commissioned by HZL and 106.5 MW power plant at MALCO Energy Limited (MEL) situated near Mettur Dam in the State of Tamil Nadu in southern India (presently under care and maintenance).

The Group s other activities include Vizag General Cargo Berth Private Limited (VGCB) and Maritime Ventures Private Limited (MVPL) in which the Group owns a 100% interest. Vizag port project includes mechanisation of coal handling facilities and upgradation of general cargo berth for handling coal at the outer harbor of Visakhapatnam port on the east coast of India. MVPL is engaged in the business of rendering logistics and other allied services inter alia rendering stevedoring, and other allied services in ports and other allied sectors. VGCB commenced operations in the fourth quarter of fiscal year 2013.

These unaudited condensed consolidated interim financial statements of the Group were authorized for issuance by Vedanta Limited s board of directors on December 16, 2017.

# 2. Basis of preparation of financial statements

## a. Basis of preparation

These unaudited condensed consolidated interim financial statements have been prepared in accordance with International Accounting Standard 34 Interim Financial Reporting, as issued by International Accounting Standards Board (IASB).

These unaudited condensed consolidated interim financial statements have been prepared using the same accounting policies as applied in the audited consolidated financial statements as of March 31, 2017, except for those mentioned below.

Certain comparative figures appearing in these unaudited condensed consolidated interim financial statements have been regrouped and/or reclassified to conform with current period s presentation.

## b. Basis of measurement

The unaudited condensed consolidated interim financial statements have been prepared on the historical cost convention and on an accrual cost basis, except for derivative financial instruments, short-term investments and available-for-sale financial investments which are remeasured at fair values at the end of each reporting period.

## c. Going concern

The unaudited condensed consolidated interim financial statements have been prepared in accordance with the going concern basis of accounting.

## d. Convenience translation

The unaudited condensed consolidated interim financial statements are presented in Indian Rupee, the presentation currency of the Company. Solely for the convenience of readers, the unaudited condensed consolidated interim financial statements as at and for the period ended September 30, 2017 have been translated into US dollars (\$) at the noon buying rate of \$1.00 = Rs. 65.30 in the City of New York for cable transfers of Indian Rupee as certified for customs purposes by the Federal Reserve Bank of New York on September 29, 2017. No representation is made that the Indian Rupee amounts represent US dollar amounts or have been, could have been or could be converted into US dollars at such a rate or any other rate.

## 3. Application of new and revised standards

The Group has adopted, with effect from April 1, 2017, 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.

IAS 7 Statement of Cash Flows: Narrow-scope amendments: The amendments introduce an additional disclosure that will enable users of financial statements to evaluate changes in liabilities arising from financing activities. The Group will provide information on movements in gross liabilities arising from financing activities in the annual financial statements.

Amendments to IAS 12: Recognition of Deferred Tax Assets for Unrealised Losses. These amendments on the recognition of deferred tax assets for unrealised losses clarify how to account for deferred tax assets related to debt instruments measured at fair value.

At the date of authorization of these interim condensed consolidated financial statements, the following Standards and Interpretations which have not been applied in these financial statements were in issue but not yet effective:

## **IFRS 9** Financial Instruments

In July 2014, the International Accounting Standards Board issued the final version of IFRS 9, Financial Instruments. The standard reduces the complexity of the current rules on financial instruments as mandated in IAS 39. IFRS 9 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. The effective date for the adoption of IFRS 9 is annual periods beginning on or after January 1, 2018, though early adoption is permitted. Except for hedge accounting, retrospective application is required but providing comparative information is not compulsory. For hedge accounting, the requirements are generally applied prospectively, with some limited exceptions.

The Group has substantially completed its assessment of the effects of transition to IFRS 9. The areas impacted on adopting IFRS 9 on the Group are detailed below. The Group does not expect any additional material effects being identified later in the implementation process.

**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 fair value changes of some of the Group s financial assets may get recorded in the statement of other comprehensive income leading to changes in the profit after tax with consequent changes to the other comprehensive income.

**Impairment:** Based on the Group s assessment, under expected credit loss method, the impairment of financial assets held at amortised cost is not expected to 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 adoption of the new standard would not materially change the amounts recognised in relation to existing hedging arrangements.

# IFRS 15 Revenue from Contracts with Customers

IFRS 15 Revenue from contracts with Customers outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. The standard replaces most current revenue recognition guidance. The core principle of the new standard is for companies to recognize revenue to depict the transfer of goods or services to customers in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. The new standard also will result in enhanced disclosures about revenue, provide guidance for transactions that were not previously addressed comprehensively including service revenues and contract modifications and improve guidance for multiple-element arrangements. The new Standard will come into effect for the annual reporting periods beginning on or after January 1, 2018 with early application permitted.

The indicative areas of impact in implementing IFRS 15 on the Group results are detailed below. The work is ongoing and additional impacts may be identified as we progress further in the implementation process.

In order to identify the potential impact of the standard on the Group s consolidated financial statements, the Group is analysing contracts of the relevant revenue streams of the group. Work to date has focused on evaluating the contractual arrangements across the Group s principal revenue streams, particularly key terms and conditions which may impact revenue recognition.

Additional analysis has begun on the key areas identified, in order to estimate the effect of the application of the new standard. On the basis of the analysis conducted as of the date of approval of the half year financial report which would continue in 2nd half of the year, the company is evaluating whether: i) provisional pricing would have impact on measurement of revenue recognition (ii) freight services should be considered a separate performance obligation (iii) transfer of control coincides with transfer of significant risk and rewards in relation to ownership of goods.

The Group continues to further review individual contracts in order to assess the possible impact of the application of IFRS 15 and to identify the approaches for representing the effects upon first time adoption of the new standard, taking due account of available options and ongoing evolution of guidance concerning their adoption.

## IFRS 16 Leases

IFRS 16 - Leases, specifies recognition, measurement and disclosure criteria for leases. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a 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. The new Standard will come into effect for annual reporting periods beginning on or after January 1, 2019. Earlier application is permitted if IFRS 15 Revenue from Contracts with Customers has also been applied.

The Group is currently in the process of determining the potential impact of adopting the above standard.

Amendments resulting from Annual Improvements to IFRSs 2014-2016 Cycle: The amendments, comprising of changes in IFRS 1, IFRS 12 and IAS 28 are effective for annual periods beginning on or after January 1, 2018, although entities are permitted to apply them earlier.

**IFRIC 22: Foreign Currency Transactions and Advance Consideration:** The Interpretation, which was issued on December 8, 2016, addresses how to determine the date of a transaction for the purpose of determining the exchange rate to use on initial recognition of an asset, expense or income (or part of it) when a related non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration in a foreign currency is derecognised. The amendments are effective for annual periods beginning on or after January 1, 2018, although entities are permitted to apply them earlier.

**IAS 40 Investment Property:** Paragraph 57 has been amended to state that an entity shall transfer a property to, or from, investment property when, and only when, there is evidence of a change in use. A change of use occurs if property meets, or ceases to meet, the definition of investment property. A change in management s intentions for the use of a property by itself does not constitute evidence of a change in use. The list of evidence in paragraph 57(a) (d) was designated as non-exhaustive list of examples instead of the previous exhaustive list. The amendments are effective for periods beginning on or after January 1, 2018. Earlier application is permitted.

**IFRS 2 Share-based Payment:** Amendments have been issued to clarify the classification and measurement of share-based payment transactions. The amendments are effective for annual periods beginning on or after January 1, 2018. Earlier application is permitted. The amendments are to be applied prospectively. However, retrospective application is allowed if this is possible without the use of hindsight.

**IFRS 4 Insurance Contracts:** Amendments regarding the interaction of IFRS 4 and IFRS 9 has been issued. An entity choosing to apply overlay approach retrospectively to qualifying financial assets does so when it first applies IFRS 9. An entity choosing to apply the deferral approach does so for annual periods beginning on or after January 1, 2018.

**IAS 28 Investments in Associates and Joint Ventures:** Clarify that an entity applies IFRS 9 to long-term interests in associates or joint ventures that form part of the net investment where the equity method is not applied. The amendments are effective for periods beginning on or after January 1, 2019.

**IFRIC 23 Uncertainty over Income Tax Treatments:** Clarify the application of recognition and measurement requirements in IAS 12 Income Taxes when there is uncertainty over income tax treatments. The Interpretation is effective for annual reporting periods beginning on or after January 1, 2019, but certain transition reliefs are available.

**IFRS 17 Insurance Contracts:** Clarify the measurement and recognition, presentation and disclosure of insurance contracts that will significantly increase the comparability of financial statements. IFRS 17 will become effective for annual reporting periods beginning on or after January 1, 2021; early application is permitted.

The Group is evaluating the requirements of these standards, improvements and amendments and has not yet determined the impact on the interim condensed consolidated financial statements.

## 4. Investment and other income

For the six months ended September 30,	2016 (Rs. in million)	2017 (Rs. in million)	2017 (US dollars in million)
Fair value gain on financial assets held for trading	21,069	11,766	180
Interest income:			
Interest income on financial assets held for trading	3,183	3,828	59
Interest income on bank deposits at amortized cost	927	701	11
Interest income on loans and receivables at amortized cost	2,151	1,328	20
Dividend income:			
Dividend income on available for sale investments	5	4	0
Dividend income on financial assets held for trading		9	0
Foreign exchange gain/(loss) (Net)	(241)	160	2
	27,094	17,796	272

## 5. Finance and other costs

For the six months ended September 30,	2016 (Rs. in million)	2017 (Rs. in million)	2017 (US dollars in million)
Interest on borrowings <sup>(1)</sup>	27,708	26,356	404
Unwinding of discount on provisions	337	393	6
Net foreign exchange loss on foreign currency borrowings	1,411	912	14
Bank charges	339	453	7
Others	5,001	4,983	76
Capitalisation of borrowing costs	(4,369)	(1,862)	(29)
	30,427	31,235	478

## Notes:

(1) Represent cost in respect of financial liabilities which are carried at amortised cost using the effective interest rate method.

## 6. Income tax expense

The major components of income tax expense for the six months ended September 30, 2016 and 2017 are indicated below:

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# (a) Unaudited condensed consolidated interim statements of income

For the six months ended September 30,	2016 (Rs. in million)	2017 (Rs. in million)	2017 (US dollars in million)
Current tax:			
Current tax on profit for the period	10,463	12,895	197
Charge/ (credit) in respect of current tax for earlier			
years			
Total current tax	10,463	12,895	197
Deferred tax:			
Origination and reversal of temporary differences	2,477	5,194	80
Total deferred tax	2,477	5,194	80
Tax expense for the period	12,940	18,089	277
Effective income tax rate (%)	26.9%	28.1%	

# (b) Consolidated statements of comprehensive income

For the six months ended September 30,	2016	2017	2017 (US dollars
	(Rs. in million)	(Rs. in million)	in million)
Deferred tax (credit) / charge on:			
Cash flow hedges	(43)	(712)	(11)
Reclassification adjustments on cash flow hedges	(91)	(74)	(1)
Remeasurement of defined benefit obligation	(38)	(104)	(2)
Exchange differences on translation of foreign			
operations		23	1
	(172)	(867)	(13)

## 7. Restricted cash and cash equivalents

Restricted cash and cash equivalents consist of the following:

		As at March 31,		
	March 31, 2017 (Rs. in million)	September 30, 2017 (Rs. in million)	September 30, 2017 (US dollars in million)	
Cash at banks	10,118	419	6	
Short-term deposits	1,629	333	6	
	11,747	752	12	

Cash at banks is restricted in use as it relates to unclaimed dividends of Rs. 3,677 million and Rs. 419 million (\$ 6 million) as at March 31, 2017 and September 30, 2017, respectively. Further, it includes Rs. 6,441 million as at March 31, 2017 representing unpaid dividend amount which is required to be remitted to minority shareholders within 30 days from the date of declaration of dividend. The said amount of unpaid dividend has been classified as cash and cash equivalent for the purpose of Statement of Cash Flows.

Short term deposits include bank deposits on lien with banks and deposits held as collateral in respect of closure cost.

## 8. Cash and cash equivalents

Cash and cash equivalents consist of the following:

	March 31, 2017 (Rs. in	As at September 30, 2017 (Rs. in	September 30, 2017 (US dollars
	million)	million)	in million)
Cash at banks and in hand	85,631	8,072	124
Short-term deposits	11,571	8,183	125
_			
	97,202	16,255	249

Short-term deposits are made for periods of between one day and three months, depending on the immediate cash requirements of the Company, and earn interest at the respective short-term deposit rates.

## 9. Borrowings

Short-term borrowings represent borrowings with an original maturity of less than one year and current portion of long-term borrowings. Long-term borrowings represent borrowings with an original maturity of greater than one year.

Short-term borrowings consist of:

	March 31, 2017 (Rs. in million)	September 30, 2017 (Rs. in million)	September 30, 2017 (US dollars in million)
Banks and financial institutions	322,436	158,609	2,429
Current portion of long-term borrowings	90,690	96,215	1,473
Short-term and current portion of			
long-term borrowings	413,126	254,824	3,902

Long-term borrowings consist of:

	March 31, 2017 (Rs. in million)	September 30, 2017 (Rs. in million)	September 30, 2017 (US dollars in million)
Banks and financial institutions	255,557	220,631	3,379
Non-convertible debentures	136,751	147,714	2,262
Redeemable preference shares	30,100	30,100	461
Other	936	926	14
Long-term borrowings	423,344	399,371	6,116
Less: Current portion of long-term borrowings	(90,690)	(96,215)	(1,473)
Long-term borrowings, net of current portion	332,654	303,156	4,643

## Debt securities issued / repaid during the period-

In August 2017, TSPL issued NCDs of Rs. 5,000 million (\$ 77 million) with an interest rate of 7.85% per annum. These NCDs are secured by a first pari passu charge on the assets of TSPL both present and future with a minimum asset cover of 1 times during the tenure of the NCDs (including the debt service reserve account) and an unconditional and irrevocable corporate guarantee by Vedanta Limited. The NCDs are due for repayment in August 2020. As at September 30, 2017, the carrying value is Rs. 5,000 million.

In August 2017, BALCO issued NCDs of Rs. 2,000 million (\$ 31 million) and Rs. 3,000 million (\$ 46 million) at an interest rate of 8.00% per annum and 7.90% per annum respectively. These NCDs are secured and have a first pari passu charge on the fixed assets of BALCO. NCDs of US\$31 million have a put and call option in March 2020. The NCDs are due for repayment in June 2020 and July 2020 respectively. As at September 30, 2017, the carrying value is Rs. 4,993 million.

In May 2017, Vedanta Limited issued NCDs of Rs. 3,500 million (\$ 54 million) at an interest rate of 7.60% per annum. These NCDs are secured by way of first pari passu charge on the movable property, plant and equipment of Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project of Vedanta Limited. Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of the company along with 90 MW power plant in Lanjigarh and all its related expansions. The NCDs are due for repayment in May 2019. As at September 30, 2017, the carrying value is Rs. 3,494 million.

In May 2017, VGCB issued NCDs of Rs. 4,250 million (\$ 65 million) at an interest rate of 8.25% per annum. These NCDs are secured by way of first pari passu charge on the specific 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 September 2020. As at September 30, 2017, the carrying value is Rs. 4,250 million.

In September 2014, TSPL issued NCDs of Rs. 1,800 million (\$ 28 million) with an interest rate of 9.70% per annum. These NCDs are secured by a first pari passu charge on the assets of TSPL both present and future with a minimum

asset cover of 1.1 times during the tenure of NCDs (including the debt service reserve account) and an unconditional and irrevocable corporate guarantee by Vedanta Limited. The NCDs have been repaid in September 2017.

In August 2014, BALCO issued NCDs of Rs. 5,000 million (\$ 77 million) at an interest rate of 10.25% per annum. These NCDs are secured and have a first pari passu charge on the property, plant and equipment of BALCO. The NCDs have been repaid in August 2017.

## **10. Financial instruments**

This section gives an overview of the significance of financial instruments for the Company and provides additional information on the unaudited condensed consolidated interim statements of financial position.

### Financial assets and liabilities:

The following tables present the carrying value and fair value of each category of financial assets and liabilities as at September 30, 2017 and March 31, 2017.

# As at September 30, 2017

			(Rs. in Available	million)				dollar illion)
	Held		for sale	Derivatives	Total		Total	
	for	Loans and			carrying	Total fair	carrying	Total fair
Financial assets	trading	receivables	assets	hedging	value	value	value	value
Financial assets investments								
at fair value			1,172		1,172	1,172	18	18
Other non current assets		22,180			22,180	22,180	340	340
Trade and other receivable		38,910			38,910	38,910	596	596
Short-term investments								
Bank deposits		38,030			38,030	38,030	582	582
Other investments	345,609				345,609	345,609	5,293	5,293
Derivative financial assets				2,025	2,025	2,025	31	31
Cash and cash equivalents		16,255			16,255	16,255	249	249
Restricted Cash and cash								
equivalents		752			752	752	12	12
_								
	345,609	116,127	1,172	2,025	464,933	464,933	7,121	7,121

As at September 30, 2017:

	Rs. in million Derivatives					dollar illion)
	used for	Amortised	Total carrying	Total fair	Total carrying	
Financial liabilities	hedging		value	value	value	value
Borrowings		557,980	557,980	559,525	8,545	8,569
Acceptances		134,207	134,207	134,207	2,055	2,055
Trade and other payables*		158,680	158,680	158,680	2,430	2,430
Derivative financial liabilities	3,549		3,549	3,549	55	55
Total	3,549	850,867	854,416	855,961	13,085	13,109

# \* Includes other non-current liabilities

As at March 31, 2017:

	Held		(Rs. in ) Available for sale		Total	
Financial assets	for trading	Loans and receivables	financial assets	used for hedging	carrying value	Total fair value
Financial assets investments	C C			0 0		
at fair value			695		695	695
Other non current assets		19,300			19,300	19,300
Trade and other receivable		33,222			33,222	33,222
Short-term investments						
Bank deposits		55,790			55,790	55,790
Other investments	468,895				468,895	468,895
Derivative financial assets				129	129	129
Cash and cash equivalents		97,202			97,202	97,202
Restricted Cash and cash equivalents		11,747			11,747	11,747
	468,895	217,261	695	129	686,980	686,980

# As at March 31, 2017:

	(Rs. in million)					
	Derivatives	6				
	used		Total			
	for	Amortised	carrying	Total fair		
Financial liabilities	hedging	cost	value	value		
Borrowings		745,780	745,780	747,693		
Acceptances		113,304	113,304	113,304		
Trade and other payables*		217,993	217,993	217,993		
Derivative financial liabilities	8,773		8,773	8,773		
Total	8,773	1,077,077	1,085,850	1,087,763		

### \* Includes other non-current liabilities 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 summarize the categories of financial assets and liabilities as at September 30, 2017 and March 31, 2017 measured at fair value:

As at September 30, 2017	(Level 1) (Rs	(Level 2) s. in million)	· /	• • • •	(Level 2) (L ollars in milli	,
Financial assets						
At fair value through profit or loss						
Held for trading	134,270	211,339		2,056	3,236	
Derivative financial assets		2,025			31	
Available-for-sale investments						
Financial asset investments held at fair value	1,065		107	16		2
	135,335	213,364	107	2,072	3,267	2

As at September 30, 2017	(Level 1) (Level 2) (Level 3	<b>B)</b> (Level 1) (Level 2) (Level 3)
	(Rs. in million)	(US dollars in million)
Financial liabilities		
At fair value through profit or loss		
Derivative financial liabilities	3,549	55
	3,549	55
	3,549	55

As at March 31, 2017	(Level 1) (R	(Level 2) s. in million	(Level 3)
Financial assets			
At fair value through profit or loss			
Held for trading	194,086	274,809	
Derivative financial assets		129	
Available-for-sale investments			
Financial asset investments held at fair value	600		95
	194,686	274,938	95
Financial liabilities			
At fair value through profit or loss			
Derivative financial liabilities		8,773	
		8,773	

The fair value of the financial assets and liabilities are at the amount that would be received to sell an asset and paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The following methods and assumptions were used to estimate the fair values:

Investments traded in active markets are determined by reference to quotes from the financial institutions; for example: Net asset value (NAV) for investments in mutual funds declared by mutual fund house. For other listed securities traded in markets which are not active, the quoted price is used wherever the pricing mechanism is same as for other marketable securities traded in active markets. Other current investments 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 (excluding non-financial assets), cash and cash equivalents (including restricted cash and cash equivalents), bank deposits, trade and other payables (excluding non-financial liabilities) 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.

Quoted available-for-sale financial assets 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, principally financial institutions with investment grade credit ratings. 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 credit quality of counterparties, 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 (U.K.).

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 September 30, 2017 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/ year end.

There were no transfers between Level 1 and Level 2 during the period.

### 11. Shareholders equity

As at September 30, 2017 the authorised share capital of Vedanta Limited comprised 44,020,100,000 equity shares with a par value of Re 1 each.

The Company has one class of equity shares having a par value of Re 1 per share. Each shareholder is eligible for one vote per share held and dividend as and when declared by the Company.

# Issued, subscribed and fully paid up share capital:

Vedanta Limited s issued equity share capital was Rs. 3,718 million and Rs. 3,718 million (\$ 57 million) as at March 31, 2017 and September 30, 2017, respectively, consisting of 3,717,504,871 equity shares.

Equity share capital of Rs. 3,718 million (\$ 57 million) as at March 31, 2017 also includes 752.5 million shares issued during the six months period ended September 30, 2017 pursuant to the scheme of Merger.

Retained earnings includes amongst others, general reserve, debenture redemption reserve, capital reserve and preference share redemption reserve.

### General reserves

Under the erstwhile Indian Companies Act 1956, a general reserve was created through an annual transfer of net income at a specified percentage in accordance with applicable regulations. The purpose of these transfers was to ensure that if a dividend distribution in a given year is more than 10.0% of the paid-up capital of the Company for that year, then the total dividend distribution is less than the total distributable results for that year. Consequent to introduction of Companies Act 2013, the requirement to mandatory transfer a specified percentage of the net profit to general reserve has been withdrawn. The balances in general reserves, as determined in accordance with applicable regulations, was Rs. 191,052 million (\$ 2,926 million) as at September 30, 2017. (Also refer to the dividend section below).

### Debenture redemption reserve

The Indian Companies Act requires companies that issue debentures to create a debenture redemption reserve from annual profits until such debentures are redeemed. Companies are required to maintain 25% as a reserve of outstanding redeemable debentures. The amounts credited to the debenture redemption reserve may not be utilized except to redeem debentures. Retained earnings include Rs. 20,690 million (\$ 317 million) of debenture redemption reserve as at September 30, 2017.

### Preference share redemption reserve

The Indian Companies Act provides that companies that issue preference shares may redeem those shares from profits of the Company which otherwise would be available for dividends, or from proceeds of a new issue of shares made for the purpose of redemption of the preference shares. If there is a premium payable on redemption, the premium must be provided, either by reducing the additional paid in capital (securities premium account) or out of profits, before the shares are redeemed.

If profits are used to redeem preference shares, the value of the nominal amount of shares redeemed should be transferred from profits (retained earnings) to the preference share redemption reserve account. This amount should then be utilised for the purpose of redemption of redeemable preference shares. This reserve can be used to issue fully paid-up bonus shares to the shareholders of Vedanta Limited. Retained earnings include Rs. 769 million (\$ 12 million) of preference share redemption reserve as at September 30, 2017.

# Capital reserve

The balance in capital reserve as of September 30, 2017 is Rs. 190,186 million (\$ 2,912 million). The said balance has mainly arisen pursuant to extinguishment of non-controlling interests of erstwhile Cairn India Limited.

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# Dividends

Each equity shareholder is entitled to dividends as and when Vedanta Limited declares and pays dividends after obtaining shareholder approval / board approval in case of an interim dividend. Dividends are paid in Indian Rupees. Remittance of dividends outside India is governed by Indian law on foreign exchange and is subject to applicable taxes.

On March 30, 2017 the board of directors of Vedanta Limited declared an interim dividend of Rs. 17.70 (\$0.27) per equity share for the year ended March 31, 2017. The dividend amounting to Rs. 65,729 million (net of dividend on treasury shares) has been paid during the period ended September 30, 2017.

If profits for a year are insufficient to declare dividends, dividends for that year may be declared and paid out from accumulated profits on the following conditions:

The rate of dividend declared shall not exceed the average of the rates at which dividend was declared by the company in the three years immediately preceding that year;

The total amount to be drawn from such accumulated profits shall not exceed one-tenth of the sum of the company s paid-up share capital and free reserves as appearing in the latest audited financial statement;

The amount so drawn shall first be utilised to set off the losses incurred in the financial year in which dividend is declared before any dividend in respect of equity shares is declared; and

The balance of reserves after such withdrawal shall not fall below fifteen per cent of the company s paid up share capital as appearing in the latest audited financial statement.

### 12. Earnings per share ( EPS )

The following reflects the income and share data used in the basic and diluted earnings per share computations:

#### Computation of weighted average number of shares

For the period ended September 30,	2016	2017
Weighted average number of ordinary shares for		
basic and diluted earnings per share	2,965,004,871	3,600,553,535
Effect of dilution:		
Potential ordinary shares relating to share option		
awards		5,383,975
Adjusted weighted average number of ordinary		
shares for diluted earnings per share	2,965,004,871	3,605,937,510

### Computation of basic and diluted earnings per share

....

#### **Basic earnings per share:**

	except EPS data)	except EPS data)	1
	(Rs. in million	(Rs in million	in million except EPS
			(US dollars
September 30,	2016	2017	2017
For the six months ended			

Profit for the period attributable to			
equity holders of the parent	18,691	30,078	461
Weighted average number of			
ordinary shares for basic earnings per	2 0 ( 5 0 0 4 0 7 1	2 (00 552 525	
share	2,965,004,871	3,600,553,535	
Earnings per share	6.30	8.35	0.1
earnings per share:			
For the size months and a			
For the six months ended September 30,	2016	2017	2017
September 50,	2010	2017	2017
			(US dollars in
	(Rs. in million	(Rs. in million	(US dollars in million except EPS
	(Rs. in million except EPS data)	(Rs. in million except EPS data)	in million except EPS
Profit for the period attributable to		•	in million except EPS
Profit for the period attributable to equity holders of the parent		•	in million except EPS
equity holders of the parent Weighted average number of	except EPS data)	except EPS data)	in million except EPS data)
equity holders of the parent Weighted average number of ordinary shares for basic earnings per	except EPS data)	except EPS data)	in million except EPS data)
equity holders of the parent	except EPS data) 18,691	except EPS data) 30,078	in million except EPS data)

### 13. Options to acquire subsidiary s shares

### a. Call option HZL

Pursuant to the Government of India s policy of divestment, the Company in April 2002 acquired 26% equity interest in HZL from the Government of India. Under the terms of the Shareholder s Agreement (SHA), the Company had two call options to purchase all of the Government of India s shares in HZL at fair market value. The Company exercised the first call option on 29 August 2003 and acquired an additional 18.9% of HZL s issued share capital. The Company 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 Company 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 Company exercised the second call option on July 21, 2009. The Government of India disputed the validity of the call option and has refused to act upon the second call option. Consequently the Company invoked arbitration which is in the early stages. The next date of hearing is scheduled for April 21, 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, in January 2016 the Supreme Court has 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 Company in March 2001 acquired 51% equity interest in BALCO from the Government of India. Under the terms of the SHA, the Company has a call option to purchase the Government of India s remaining ownership interest in BALCO at any point from March 2, 2004. The Company exercised this option on March 19, 2004. However, the Government of India has contested the valuation and validity of the option and contended that the clauses of the SHA violate the (Indian) Companies Act, 1956 by restricting the rights of the Government of India to transfer its shares and that as a result such provisions of the SHA were null and void. In the arbitration filed by the Company, the arbitral tribunal by a majority award rejected the claims of the Company 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 Company 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 January 9, 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.

On January 9, 2012, the Group offered to acquire the Government of India s interests in HZL and BALCO for Rs. 154,920 million (\$2,372 million) and Rs. 17,820 million (\$273 million) respectively. This offer was separate from the contested exercise of the call options, and Group proposed to withdraw the ongoing litigations in relation to the contested exercise of the options should the offer be accepted. To date, the offer has not been accepted by the Government of India and therefore, there is no certainty that the acquisition will proceed.

The Group continues to include the shareholding in the two companies HZL and BALCO, in respect of which the Group has a call option as non-controlling interest.

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 Company 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. Commitments, contingencies, and guarantees

### A. Capital commitments

Contractual commitments to acquire fixed assets were Rs. 74,290 million and Rs. 79,985 million (\$1,224 million) at March 31, 2017 and September 30, 2017 respectively.

### **B.** Guarantees

The Group has given guarantees in the normal course of business as stated below:

Guarantees on the issuance of customs and excise duty bonds amounting to Rs. 4,391 million and Rs. 4,645 million (\$ 71 million) for the import of goods as at March 31, 2017 and September 30, 2017 respectively.

Performance bank guarantees amounting to Rs. 4,355 million and Rs. 5,167 million (\$ 79 million) as at March 31, 2017 and September 30, 2017 respectively. These guarantees are issued in the normal course of business while bidding for supply contracts or in lieu of advances received from customers. These are contractual guarantees and are enforceable if the terms and conditions of the contracts are not met and the maximum liability on these contracts is the amount mentioned above. The Group does not anticipate any liability on these guarantees.

Bank guarantees for securing supplies of materials and services in the normal course of business. The value of these guarantees as at March 31, 2017 and September 30, 2017 was Rs. 3,574 million and Rs. 4,138 million (\$ 63 million) respectively. The Group has also given bank guarantees in the normal course of business for an aggregate value of Rs. 2,823 million and Rs. 3,107 million (\$48 million) for litigation, against provisional valuation of custom duty and for other liabilities as at March 31, 2017 and September 30,2017 respectively. The Group does not anticipate any liability on these guarantees.

Bank guarantee of Rs. 1,150 million (\$18 million) as at March 31, 2017 and September 30, 2017 respectively has been provided by the Group on behalf of Volcan Investments Limited to Income tax department, India as a collateral in respect of certain tax disputes.

Other guarantees including corporate guarantees issued to various agencies, suppliers and government authorities is Rs. 6,298 million and Rs. 6,245 million (\$96 million) as at March 31, 2017 and September 30, 2017 respectively.

# **C. Export Obligations**

The Indian entities of the Group have export obligations of Rs. 171,647 million and Rs. 175,934 million (\$2,694 million) as at March 31, 2017 and September 30, 2017 respectively 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 Rs.16,965 million and Rs.14,347 million (\$219 million) as at March 31, 2017 and September 30, 2017 respectively reduced in proportion to actual exports, plus applicable interest.

### **D.** Contingencies

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

# **Cairn: Income Tax**

In March 2014, Cairn India Limited received a show cause notice from the Indian Tax Authorities (Tax Authorities) for not deducting withholding tax on the payments made to Cairn UK Holdings Limited (CUHL), for acquiring shares of Cairn India Holdings Limited (CIHL), as part of their internal reorganisation. 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 Limited, in the financial year 2006-2007, on which tax should have been withheld by the Company. Pursuant to this various replies were filed with the tax authorities.

After hearings, the Income Tax Authority, during March 2015, issued an order by holding Cairn India Limited as assessee in default and asked for payment, such demand totaling Rs. 204,947 million(\$3,138 million)(including interest of Rs. 1,02,474 million (\$1,569 million)). Cairn India Limited had filed appeal before the Appellate Authority Commissioner of Income Tax (Appeals) which via order dated July 3, 2017 confirmed the tax demand against Cairn India Limited. Cairn India Limited challenged the Commissioner of Income Tax (Appeals) order before Income Tax Appellate Tribunal (ITAT). Separately, Cairn India Limited had also filed a fresh appeal (writ petition) before Delhi High Court wherein it raised several points for assailing the aforementioned Income tax Authority s order. The matter is listed for hearing on January 18, 2018 before Delhi High Court.

Vedanta Resources Plc. (holding company), had filed a Notice of Claim against the Government of India (GOI) under the UK India Bilateral Investment Treaty (the BIT). Matters were heard before the Arbitration Tribunal on 25th -26th May 2017 on the jurisdictional issue and now the tribunal s order is awaited.

# Vedanta Limited: Contractor claim

Shenzhen Shandong Nuclear Power Construction Co. Limited (SSNP) subsequent to terminating the EPC contract invoked arbitration as per the contract alleging non-payment of their dues towards construction of a 210 MW co-generation power plant for the 6 MTPA expansion project, and filed a claim of Rs. 14,971 million(\$229 million). Based on the assessment, the Company has booked a liability of Rs.1,997 million (\$31 million). SSNP also filed a petition under Section 9 of the Arbitration and Conciliation Act, 1996 before the Bombay High Court requesting for interim relief. The Bombay High Court initially dismissed their petition, but on a further appeal by SSNP, the Division Bench of the Bombay High Court directed the Company to deposit a bank guarantee for an amount of Rs 1,870 million(\$28 million) as a security, being a prima facie representation of the claim, until arbitration award has been pronounced, wherein the Tribunal has awarded an aggregate amount of Rs.2,207 million (\$34 million) to SSNP along with interest at the rate of 9% from the date of filing of claim before Arbitration and Conciliation Act, 1996.

# Ravva Joint Venture arbitration proceedings: ONGC Carry

Cairn India Limited is involved in a dispute against the Government of India relating to the recovery of contractual costs in terms of calculation of payments that the contractor party were required to make in connection with the Ravva field.

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 whereas four other issues were decided in favour of GOI in October 2004 (Partial Award ). However, the Arbitral Tribunal retained the jurisdiction for determination of remaining issues between the parties, including costs quantification.

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 which adjudicated the matter on October 11, 2011, upheld the Partial Award. Per the decision of the Arbitral Tribunal, the contractor parties and GOI were required to arrive at a quantification of the sums relatable to each of the issues under the Partial Award.

Pursuant to the decision of the Federal Court, the contractor parties approached the Ministry of Petroleum and Natural Gas ( MoPNG ) to implement the Partial Award while reconciling the statement of accounts as outlined in the Partial Award.

However, MoPNG on July 10, 2014 proceeded to issue a Show Cause Notice alleging that since the partial award has not been enforced, the profit petroleum share of GOI has been short-paid. MoPNG threatened to recover the amount from the sale proceeds payable by the oil marketing companies to the contractor parties.

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 Limited s favour. GOI has challenged the Final Award in the Malaysian courts. The matter is scheduled for continued oral hearing on December 13, 2017. Further, the Company has also filed for the enforcement of the Partial Award and Final Award with Delhi High Court which is scheduled to be heard on March 13, 2018. While Cairn India Limited does not believe the GOI will be successful in its challenge, if the Arbitral Award is reversed and such reversal is binding, Cairn India Limited could be liable for approximately US\$64 million (approximately Rs 4,200 million) plus interest.

# Proceedings related to the Imposition of Entry Tax

The Company and other group companies 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 states from outside and other notifications, as being in violation of certain provisions of the Indian Constitution. Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. The Supreme Court in its order rejected the compensatory nature of tax as a ground for challenge and left all other issues open for adjudication by regular benches hearing the matter. The total claims against Vedanta Limited and its subsidiaries are Rs 11,274 million and Rs 12,512 million (\$191 million) as at March 31, 2017 and September 30, 2017 respectively.

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 from other States to the respective High Courts for final determination but retained the issue of jurisdiction on levy on imported goods, for determination by regular bench of Supreme Court. Following the order of the Supreme Court, we filed a writ petition in the High Court of Rajasthan and Odisha. Hindustan Zinc Limited and BALCO have also filed writ petitions in the High Court of Rajasthan and High Court of Chhattisgarh respectively.

On October 9, 2017, the Supreme Court held that States have the jurisdiction to levy entry tax on imported goods. With this Supreme Court judgement, imported goods will rank pari passu with domestic goods for the purpose of levy of Entry tax. The company and its subsidiaries are in the process of amending their appeals (writ petitions) in Orissa and Chattisgarh 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 of discrimination has been remanded back to the High Courts for final adjudication. In a related matter, the issue pertaining to the levy of entry tax on the movement of goods into a Special Economic Zone (SEZ) remains pending before the High Court of Odisha. Meanwhile, 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.

# **TSPL:** Proceedings related to claim for Liquidated Damages

TSPL entered into a long-term PPA with PSPCL for the supply of power. Due to delays in the fulfilment of certain obligations by PSPCL as per the PPA and force majeure events, there was a delay in completion of the project as per the PPA timelines. TSPL has received notices of claims from PSPCL seeking payment of Liquidated damages (LD) for delay in commissioning of Unit I, II and III totaling to Rs 9,529 million (\$ 146 million).

Subsequently, PSPCL invoked the Bank Guarantee of Rs 1,500 million (\$23.0 million) to recover the LD on account of delay in completion of the commissioning of unit I. PSERC allowed the stay on encashment of the bank guarantee which was upheld by APTEL as well. APTEL disposed the appeal by directing that the matter will be adjudicated by an arbitral tribunal. The arbitral proceedings have concluded and the award was pronounced dismissing all claims raised by PSPCL. The said claim of Rs 9,529 million(\$ 146 million) was part of contingent liability as at March 31, 2017 however pursuant to the order passed, the claim has been considered to be resolved with no exposure remaining for the company.

# 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, totaling to Rs 3,339 million(\$51 million). These notices alleged unlawful occupation and unauthorised mining of associated minerals other than zinc and lead at HZL s Rampura Agucha, Rajpura Dariba and Zawar mines in Rajasthan during the period from July 1968 to March 2006. HZL believes that the likelihood of this claim being successful is not probable 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 and had obtained a stay in respect of these demands. The High Court restrained the Department of Mines and Geology from undertaking any coercive measures to recover the penalty. In January 2007, the High Court issued another order granting the Department of Mines and Geology additional time to file their reply and also ordered the Department of Mines and Geology not to issue any orders cancelling the lease.

# BALCO: Challenge against imposition of Energy Development Cess

BALCO challenged the imposition of Energy Development Cess levied on generators and distributors of electrical energy at 10 paise per unit on the electrical energy sold or supplied before the High Court on the grounds that the Cess is effectively levied on production and not on consumption or sale since the figures of consumption are not taken into account and the Cess is discriminatory since CPPs are required to pay at 10 paise while the State Electricity Board is required to pay at 5 paise. The High Court of Chhattisgarh, by an order dated December 15, 2006, declared the provisions imposing ED Cess on CPPs as discriminatory and therefore ultra vires the Constitution. The Company has sought a refund of ED Cess paid up until March 2006 amounting to Rs. 345 million (\$5 million).

The State of Chhattisgarh moved a special leave petition in the Supreme Court and whilst issuing notice has withheld the refund of the Cess already deposited. The matter is to be heard by a larger bench of the Supreme Court and will be listed in due course for final hearing. In case the Supreme Court overturns the decision of the High Court, BALCO would be liable to pay an additional amount of Rs.6,185 million (\$94 million) and the Company may have to bear a charge of Rs 6,530 million (\$100.0 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 (Rs 6,536 million) for a work program including 3D and 2D seismic studies and at least one exploration well. The group has spent approximately US\$37 million (Rs 2,464 million) towards exploration expenditure and a minimum carry of approximately US\$63 million (Rs.4,072 million) (including drilling one well) was outstanding at the end of the initial exploration period. Considering the prevailing situation the Company has sought an extension for entry into the second renewal phase of the exploration period. However, after assessing past judicial precedents supported by independent legal advice, the Group has provided for the requisite damages and an obligation for the aforesaid carry cost has been assessed as possible and disclosed as a contingency.

# Ravva Joint Venture arbitration proceedings: Base Development Cost:

In case of Cairn, 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 \$ 129.0 million for an alleged underpayment of profit petroleum to the Indian Government, out of which, Group s share will be \$29.0 million (approximately Rs 1,881 million) and \$29.0 million (approximately Rs 1,895 million) plus potential interest at applicable rate (LIBOR plus 2% as per PSC) as at March 31, 2017 and September 30, 2017 respectively. This claim relates to the Indian Government s allegation that the Ravva JV had recovered costs in excess of the Base Development Costs ( BDC ) cap imposed in the PSC and that the Ravva JV had also allowed these excess costs in the calculation of the Post Tax Rate of Return (PTRR). Joint venture partners initiated the arbitration proceedings and Arbitration Tribunal published the Award on January 18, 2011 at Kuala Lumpur, allowing Claimants (including the Group) to recover the development costs spent to the tune of \$ 278.0 million and disallowed over run of \$ 22.3 million spent in respect of BDC along with 50% legal costs reimbursable to the Joint venture partners. High Court of Kuala Lumpur dismissed Government of India s (GOI) application of setting aside the part of the Award on August 30, 2012 with costs. GOI appealed before the Court of Appeal against the High Court s order and the Court of Appeal dismissed the GOI s appeal on June 27, 2014. However, GOI still preferred to challenge the same before the Federal Court, Kuala Lumpur which was dismissed by the Federal Court on May 17, 2016. GOI has also issued Show Cause Notice on this matter which Cairn has replied to and also filed an application for enforcement of Award before Delhi High Court as an abundant caution. Furthermore, GOI is yet to agree on quantum of arbitration costs and expenses (legal fee and expenses) for reimbursing to Cairn as per the award. Therefore, Cairn has approached the Tribunal to quantify the costs. The GOI has obtained a stay order from Hon ble High Court of Delhi, on August 14, 2015, against the Tribunal proceedings on quantum of arbitration costs on the grounds of Tribunal being functus officio. Cairn has filed an appeal before the Hon ble High Court of Delhi against the aforesaid stay order granted by the Hon ble High Court of Delhi against the Tribunal proceedings on determination of costs . The suit is listed for February 27, 2018. The division bench allowed the appeal and dismissed single bench order. The GOI has filed a Special Leave Petition in Supreme Court against the above Division Bench Order on costs, the next date for the matter will be made available by Court. The enforcement application has been filed in High Court of Delhi, but with delay of 268 days and the Company has requested for condonation of delay in filing for enforcement. The pleadings are complete in the matter and it is listed on January 8, 2018.

# Cairn India: Tax Holiday

In case of Cairn India, Section 80-IB (9) of the Income Tax Act, 1961 allows the deduction of 100% of profits from the commercial production or refining of mineral oil. The term mineral oil is not defined but has always been understood to refer to both oil and gas, either separately or collectively. The 2008 Indian Finance Bill appeared to remove this deduction by stating (without amending section 80-IB (9)) that for the purpose of section 80-IB (9), the term mineral oil does not include petroleum and natural gas, unlike in other sections of the Act . Subsequent announcements by the Finance Minister and the Ministry of Petroleum and Natural Gas have confirmed that a tax holiday would be available on production of crude oil but have continued to exclude gas. Cairn India Limited filed an appeal (writ petition) to the Gujarat High Court in December 2008 challenging the restriction of section 80-IB to the production of oil. Gujarat High Court did not admit the appeal (writ petition) on the ground that the matter needs to be first decided by lower tax authorities. A Special Leave Petition has been filed before the Supreme Court against the decision of the Gujarat High court. However in a similar case, the Gujarat High Court has held that the tax holiday benefit would extend to the production of gas. In the event this challenge is unsuccessful, the potential liability for tax and related interest on the tax holiday claimed on gas is Rs 3,490 million(\$53 million).

# Scheme of Amalgamation

The Scheme of Amalgamation and Arrangement amongst Sterlite Energy Limited (SEL), Sterlite Industries (India) Limited (Sterlite), Vedanta Aluminium Limited (VAL), Ekaterina Limited (Ekaterina), Madras Aluminium Company Limited (Malco) and the Company (the Scheme) had been sanctioned by the Honourable High Court of Madras and the Honourable High Court of Judicature of Bombay at Goa and was given effect to in the year ended March 31, 2014.

Subsequent to the effectiveness of the Amalgamation and Re-organization Scheme, special leave petitions challenging the orders of the High Court of Bombay at Goa were filed before the Supreme Court of India by the Commissioner of Income Tax, Goa and the Ministry of Corporate Affairs in July 2013 and in April 2014, respectively which have now been admitted and the next date of hearing is scheduled on March 5, 2018. Further, a creditor and a shareholder have challenged the Amalgamation and Re-organization Scheme in the High Court of Madras in September 2013.

# **TNPCB**

In an appeal filed by the Group against the closure order of the Tuticorin Copper smelter by Tamil Nadu Pollution Control Board ( TNPCB ), the appellate authority National Green Tribunal ( NGT ) passed an interim order on May 31, 2013 allowing the copper smelter to recommence operations and appointed an Expert Committee to submit a report on the plant operations. Post the interim order, the plant recommenced operations on June 23, 2013. Based on Expert Committee s report on the operations of the plant stating that the plant s emission were within prescribed standards and based on this report, NGT ruled on July 15, 2013 that the Copper smelter could continue its operations and recommendations made by the Expert Committee be implemented in a time bound manner. The Group has implemented all of the recommendations. TNPCB has filed an appeal against the order of the NGT before the Supreme Court of India, which is yet to be listed for hearing.

# **Income Tax Disputes**

The Group is involved in various tax disputes amounting to Rs.61,656 million and Rs 47,815 million (\$732 million) as at March 31, 2017 and September 30, 2017 respectively relating to Income tax out of which Rs 1,508 million and Rs 1,487 million(\$ 23 million) is included as a provision in the Statement of financial position as at March 31,2017 and September 30, 2017 respectively.

These mainly relates 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.

# Miscellaneous disputes Vedanta Limited, HZL, MEL, BALCO and other subsidiaries

The Group is subject to various claims and exposures which arise in the ordinary course of conducting and financing its business from the 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 against the Group companies excluding claims shown above total Rs. 42,988 million and Rs. 40,790 million (\$625 million) as at March 31, 2017 and September 30, 2017 respectively of which Rs. 8,122 million and Rs. 5,170 million (\$79 million) is included as a provision in the Statement of financial position as at

March 31, 2017 and September 30, 2017 respectively.

During the period ended September 30, 2017, the Group has recognised the reversal of provisions of Rs. 2,954 million (\$ 45 million) relating to contribution to the District Mineral Foundation. Effective January 12, 2015. The Mines and Minerals Development and Regulation Act, 1957 prescribed the establishment of the District Mineral Foundation (DMF) in any district affected by mining related operations. The provisions required contribution of an amount equivalent to a percentage of royalty not exceeding one-third thereof, as may be prescribed by the Central Government of India. The rates were prescribed on September 17, 2015 for minerals other than coal, lignite and sand and on October 20, 2015 for coal, lignite and sand as amended on August 31, 2016. The Supreme Court order dated October 13, 2017 has determined the prospective applicability of the contributions from the date of the notification fixing such rate of contribution and hence DMF would be effective;

a) For minerals other than coal, lignite and sand from the date when the rates were prescribed by the Central Government; and;

b) For coal, lignite and sand, DMF would be effective from the date when the rates were prescribed by the Central Government of India or from the date on which the DMF was established by the State Government by a notification, whichever is later.

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

Certain amendments have been made to previously reported Export Obligations and Miscellaneous disputes amounts.

**15.** In July 2017, the Appellate Tribunal for Electricity dismissed the appeal(s) filed by one of the Company s subsidiaries, Talwandi Sabo Power Limited (TSPL), engaged in power generation, in respect of certain disputes with its customer relating to (a) the interpretation of how calorific value of coal and costs associated with it should be determined; and (b) whether there has been a change in law following the execution of the PPA. Both these matters effect the computation of the tariff to be charged by TSPL to its customer and TSPL has filed appeals before the Honourable Supreme Court to seek relief. The outstanding trade receivables in relation to these disputes were Rs 7,493 million and Rs 8,890 million (\$ 136 million) as at March 31, 2017 and as at September 30, 2017 respectively. The Company, based on external legal opinions 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, Rs 5,510 million and Rs 5,510 million (\$84 million) as at March 31, 2017 and September 30, 2017 respectively were outstanding on account of certain disputes with another customer relating to computation of tariffs and differential revenues recognised with respect to tariffs pending finalization by the state regulatory commission.

These amounts are included under other non-current assets as at March 31, 2017 and September 30, 2017.

# 16. Segment information

The Group is a diversified natural resource group engaged in exploring, extracting and processing minerals and oil and gas. The Group produces zinc, lead, silver, copper, aluminium, iron ore, oil and gas and commercial power and has a presence across India, South Africa, U.A.E, Namibia, Ireland, Australia and Liberia. The Group has seven reportable segments: copper, aluminum, iron ore, power, Zinc India (comprises of zinc and lead India), Zinc international, oil and gas and other. The management of the Group is organized by its main products: copper, zinc (comprises of zinc and lead India, silver India and zinc international), aluminum, iron ore, oil and gas and power. Each of the reportable segments derives its revenues from these main products and hence these have been identified as reportable segments by the Group s chief operating decision maker (CODM).

# Copper

The Group s copper business is owned and operated by Vedanta Limited, Copper Mines of Tasmania Pty Ltd (CMT) and Fujairah Gold FZC and principally one of custom smelting and includes a copper smelter, a refinery, a phosphoric acid plant, a sulphuric acid plant, a copper rod plant and three captive power plants at Tuticorin in Southern India, and a refinery and two copper rod plants at Silvassa in Western India. In addition, the Group owns and operates the Mt. Lyell copper mine in Tasmania, Australia through its subsidiary, CMT, which provides a small percentage of the copper concentrate requirements (presently under care and maintenance), and a precious metal refinery and copper rod

plant in Fujairah through its subsidiary Fujairah Gold FZC in the UAE.

# Zinc India

The Group s zinc India business is owned and operated by Hindustan Zinc Limited (HZL) in which it has a 64.92% interest as at September 30, 2016, March 31, 2017 and September 30, 2017. HZL s operations include five lead-zinc mines, one rock phosphate mine, four hydrometallurgical zinc smelters, two lead smelters, one pyro metallurgical lead-zinc smelter, six sulphuric acid plants, a silver refinery and six captive power plants in State of Rajasthan in Northwest India and one zinc ingot processing and refining plant at Haridwar and one silver refinery, one zinc ingot processing and refining plant at Pantnagar in the State of Uttarakhand in North India.

# Zinc International

The Group s zinc international business comprises Skorpion mine and refinery in Namibia operated through THL Zinc Namibia Holdings (Proprietary) Limited (Skorpion), Lisheen mine in Ireland operated through Vedanta Lisheen Holdings Limited (Lisheen) and Black Mountain Mining (Proprietary) Limited (BMM), whose assets include the Black Mountain mine and the Gamsberg mine project which is in development stage, located in South Africa. The Group has 100% interest in Skorpion, 74.00% interest in BMM and 100% interest in Lisheen (which owns the Lisheen mine in Ireland which has ceased operations in December 2015).

### Aluminum

The Group s aluminium business is owned and operated by Vedanta Limited and Bharat Aluminium Company Limited (BALCO) in which it has a 51% interest as at September 30, 2016, March 31, 2017 and September 30, 2017. Vedanta Limited s Aluminium operations include a refinery and a captive power plant at Lanjigarh and a smelter, a thermal coal based captive power facility at Jharsuguda both situated in the State of Odisha in India. The pots are in the stage of commissioning in the 1.25 mtpa Jharsuguda-II Aluminium smelter with 635 pots having been commissioned by September 30, 2017. BALCO s partially integrated aluminium operations are comprised of two bauxite mines, captive power plants, smelting and fabrication facilities in central India. The BALCO-II smelter was commissioned, with all 336 pots operational in May 2017.

### Power

The Group s power business is owned and operated by Vedanta Limited, BALCO, HZL, MEL and Talwandi Sabo Power Limited (TSPL), which are engaged in the power generation business in India. Vedanta Limited s power operations include a thermal coal-based commercial power facility of 600MW at Jharsuguda in the State of Odisha in Eastern India. BALCO power operations include 600MW (two units of 300MW each) thermal coal based power plant at Korba. The first 300 MW unit of the IPP 600MW was capitalized on August 1, 2015. The second unit was commissioned and started commercial production from May 1, 2016. TSPL had signed a PPA with the Punjab State Power Corporation Limited (PSPCL) for the establishment of 1,980 MW (three units of 660MW each) thermal coal-based commercial power facilities. The first 660MW unit of the Talwandi Sabo power plant (TSPL) was capitalized in financial year 2015 and second 660MW unit was capitalized on December 1, 2015. The third 660MW unit at TSPL was capitalized on September 1, 2016. Power business also includes 274MW of wind power plants commissioned by HZL and 106.5 MW power plant at MALCO Energy Limited (MEL) situated near Mettur Dam in the State of Tamil Nadu in southern India (presently under care and maintenance).

### Iron ore

The Group s iron ore business is owned by Vedanta Limited and by two wholly owned subsidiaries, Sesa Resources Limited and Sesa Mining Corporation Limited and consists of exploration, mining and processing of iron ore, pig iron and metallurgical coke. The mining operations are carried out at Codli group, Bicholim mine, Surla mine and the Sonshi group of mines in state of Goa and Narrain mine, situated at state of Karnataka in India, a metallurgical coke and pig iron plant in state of Goa in India and also has a power plant in state of Goa in India for captive use. Group s iron ore business also comprises Western Cluster Limited (WCL) in Liberia which has iron ore assets and is wholly owned subsidiary of the Group. WCL s assets include development rights to western cluster and a network of iron ore deposits in West Africa. WCL s assets were fully impaired in the year ended March 31, 2016.

# Oil and gas

The Group s oil and gas business is owned and operated by the Company and its subsidiary Cairn Energy Hydrocarbon Limited and engaged in business of exploration and development and production of oil and gas. The Group has a diversified asset base with seven blocks, one in state of Rajasthan in India, one on the west coast of India, four on the east coast of India and one in South Africa.

# Other

The Group s other activities include Vizag General Cargo Berth Private Limited (VGCB) and Maritime Ventures Private Limited (MVPL) in which the Group owns a 100% interest. Vizag port project includes mechanisation of coal handling facilities and up gradation of general cargo berth for handling coal at the outer harbor of Vishakhapatnam port on the east coast of India. MVPL is engaged in the business of rendering logistics and other allied services inter alia rendering stevedoring, and other allied services in Ports and other allied sectors.

Segment Revenue, Result, Assets and Liabilities include the respective amounts identifiable to each of the segments and amount allocated on a reasonable basis. Unallocated expenditure consists of common expenditure incurred for all the segments and expenses incurred at corporate level. The assets and liabilities that cannot be allocated between the segments are shown as unallocated assets and unallocated liabilities respectively.

The accounting policies of the reportable segments are the same as the Group s accounting policies. The operating segments reported are the segments of the Group for which separate financial information is available. Earnings before interest, depreciation and amortization and tax (Segment profit) are evaluated regularly by the CODM in deciding how to allocate resources and in assessing performance. Other item being exceptional in nature are excluded from segment profit in order to enhance the comparability of the measure from period-to-period and provide clarity to the underlying performance of the Group s operations. CODM monitors exceptional items separately. The Group s financing (including finance costs and finance income) and income taxes are reviewed on an overall basis and are not allocated to operating segments. Transfer prices between operating segments are on an arm s length basis in a manner similar to transactions with third parties except from power segment sales amounting to Rs. 248 million and Rs. 413 million (\$6 million) which is at cost for the period ended September 30, 2016 and September 30, 2017 respectively.

The following table presents revenue and profit information for the period ended September 30, 2016 and September 30, 2017 and certain assets and liabilities information regarding the Group s business segments as at March 31, 2017 and September 30, 2017.

a. For the six months ended September 30, 2016

#### Zinc

	Copper	Zinc Indila	nternationa	Aluminum	Power	Iron Ore(	Dil and Gas	s Other E	liminatioi (Rs.	n Total
	(Rs. in million)	in	(Rs. in million)							
Revenue										
Sales <sup>1</sup>	93,271	58,331	11,382	57,799	25,140	14,534	39,225	604		300,286
Inter-segment				~ ~					(0.0.0)	
sales	129	86		53	533	68		70	(939)	
Segment revenue	93,400	58,417	11,382	57,852	25 672	14,602	39,225	674	(939)	300,286
Cost of sales	95,400	56,417	11,382	57,052	25,673	14,002	39,225	0/4	(939)	500,280
and expenses	(84,939)	(27,880)	(5,437)	(50,608)	(17,921)	(9,794)	(21,406)	(1,387)	939	(218,433)
Segment	(0.,,,,))	(27,000)	(0, 107)	(00,000)	(1,,,,_1)	(,,,,,,)	(21,100)	(1,007)	,,,,	(210,100)
profit	8,461	30,537	5,945	7,244	7,752	4,808	17,819	(713)		81,853
Depreciation and										
amortization	(998)	(3,535)	(999)	(4,772)	(2,403)	(1,868)	(15,677)	(153)		(30,405)
Operating profit / (loss)	7,463	27,002	4,946	2,472	5,349	2,940	2,142	(866)		51,448
Finance and other costs	1,100		1,2 10	_,	0,015	<b>_</b> ,> 10	2,112	(000)		(30,427)
Investment and other										
income										27,094
Profit before										40 115
tax										48,115
b. As at March 31, 2017										
Assets and liabilities										
Assets										
Segment										
assets <sup>2</sup> Financial	77,864	156,661	35,950	460,532	178,762	91,323	165,262	5,318		1,171,672
assets										
investments										695
										77,582

Deferred tax	
asset	
Short-term	
investments	524,685
Cash and	
cash	
equivalents	
(including	
restricted	
cash and cash	
equivalents)	108,949
Loan to	
related	
parties	692
Current tax	
asset	28,312
Others	6,274
Total assets	1,918,861
Liabilities	

Liabilities									
Segment liabilities <sup>2</sup>	110,783	40,424	11,268	102,290	14,858	14,508	46,542	302	340,975
Short-term	110,785	40,424	11,200	102,290	14,030	14,306	40,342	302	540,975
borrowings									413,126
Current tax									
liabilities									2,028
Long-term									222 (54
borrowings Deferred tax									332,654
liabilities									24,015
Others									92,275
Total									
liabilities									1,205,073

<sup>1</sup> Includes sale to external customers and export incentives.

<sup>2</sup> Three units of 600MW each at Jharsuguda and 1 unit of 270 MW at BALCO, Korba were converted from commercial power plant to captive power plant, pursuant to an order of Orissa Electricity Regulatory Authority and increased in-house demand respectively. Accordingly, the revenue, results, segment assets and segment liabilities of these plant have been disclosed as part of Aluminium segment effective April 1, 2016.

c. For the six months ended September 30, 2017

#### Zinc

	Copper	Zinc Indi <b>l</b> a	iternation	Alluminium	Power	Iron Ore (	<b>Jil and Ga</b>	as OthersE (Rs.	Elimination		Total (US dolla
	(Rs. in million)	(Rs. in million)	(Rs. in million)	(Rs. in million)	(Rs. in million)	(Rs. in million)	(Rs. in million)	in	(Rs. in million)	(Rs. in million)	in million)
evenue		26 740	16 8 4 1	21.044		10.000	10 544	154			5.005
iles <sup>1</sup> ter-segment les	112,856	96,740	16,541	94,364 123	20,325 1,319	12,206 82	43,744	464	(1,524)	397,240	6,083
egment	110 856	96 740	16 5/1	04 487	<b>21</b> 644	17 788	<b>13 7</b> 44	164	(1 524)	207 740	- <u>6 08</u> 2
<b>venue</b> ost of Sales	112,856	96,740	16,541	94,487	21,644	12,288	43,744	464	(1,524)	397,240	6,083
d expenses	(106,844)	) (43,059)	(9,450)	(84,646)	(16,876)	(12,470)	(18,262)	) (470)	1,524	(290,553)	6) (4,449
egment rofit	6,012	53,681	7,091	9,841	4,768	(182)	25,482	(6)	l.	106,687	1,633
epreciation	~,	,		- )-	,	, ,				,	,
nortization ther item <sup>2</sup>	(798)	) (4,681) 2,913	(840)	(6,008) 41	(2,401)	(2,237)	(13,537)	) (150)		(30,652) 2,954	,
npairment							(1,090)	)		(1,090)	
perating :ofit / (loss)	5,214	51,913	6,251	3,874	2,367	(2,419)	10,855	(156)		77,899	1,193
nance and	•,==:	· _ ,	0,=+ =	<i>c</i> , <i>c</i> .	<b>-</b> y	(=, ,	10,000	()			<b>-</b> , ·
her costs										(31,235)	6) (478
vestment id other come										17,796	272
rofit before x										64,460	987
x ssets and abilities										07,700	
ssets											
egment sets	97,065	162,999	41,103	469,617	176,554	91,884	155,654	5,288		1,200,164	- 18,379
nancial sets											
vestments										1,172	2 18
eferred tax set										69,130	1,059

nort-term		
vestments	383,639	5,875
ash and		
sh		
uivalents		
ncluding		
stricted		
sh and cash		
uivalents)	17,007	261
ban to		
ated		
rties	698	11
irrent tax		
set	29,179	447
thers	9,812	150
otal assets	1,710,801	26,200
abilities		

egment										
bilities	122,396	31,040	8,307	116,348	17,044	16,085	44,694	372	356,286	5,456
nort-term										
orrowings									254,824	3,902
urrent tax										
bilities									5,325	82
ong-term										
orrowings									303,156	4,643
eferred tax										
bilities									20,065	306
thers									12,714	196
otal										

abilities

<sup>1</sup> Includes sale to external customers and export incentives.

<sup>2</sup> Other item represents reversal of provision for contribution to District Mineral Foundation (DMF)

F-31

952,370

14,585

# 17. Related party transactions

# Ultimate controlling party

As at September 30, 2017, the Group is majority owned by Twin Star Holdings Limited, Finsider International Company Limited, West Globe Limited and Welter Trading Limited which are in turn wholly-owned subsidiaries of Vedanta Resources Plc (Intermediate Holding Company). The ultimate controlling party of the Group is Volcan Investments Limited (Volcan), which is controlled by persons related to the Chairman Emeritus, Mr. Anil Agarwal. Volcan Investment Limited, Twin Star Holdings Limited, Finsider International Company Limited, West Globe Limited and Welter Trading Limited for produce Group financial statements.

# List of related parties and relationships

The Group enters into transactions in the normal course of business with its related parties, including its parent Vedanta, and the companies over which it has significant influence. A summary of significant related party transactions for the six months ended September 30, 2016 and 2017 and closing balances as at March 31, 2017 and September 30, 2017 are noted below.

The significant transactions relate to the normal sale and purchase of goods and loans and investments. All inter-company transactions and balances are eliminated on consolidation.

# A) Entities Controlling the Company (Holding Companies)

Volcan Investments Limited ( Volcan ) Intermediate Holding Companies

Vedanta Resources Plc. ( Vedanta )

Vedanta Resources Holdings Limited ( VRHL )

Twin Star Holdings Limited ( TSHL )

Finsider International Company Limited ( Finsider )

Westglobe Limited ( Westglobe )

Welter Trading Limited ( Welter )

Richter Holdings Limited ( Richter )

Vedanta Resources Finance Limited

Vedanta Resources Cyprus Limited

# **B)** Fellow subsidiaries

Konkola Copper Mines ( KCM )

Vedanta Resources Jersey II Limited ( VRJ2 )

Vedanta Resources Jersey Limited ( VRJL )

Vedanta Jersey Investments Limited ( VJIL )

Sterlite Technologies Limited ( STL )

Sterlite Power Transmission Limited ( SPTL )

Sterlite Iron and Steel Company Limited ( SISCOL )

# C) Other Related Parties

Sesa Community Development Foundation

Vedanta Medical Research Foundation ( VMRF )

Vedanta Foundation

India Grid Trust

	For the Six months ended Sep 30, 2016 2017 2017			
	(Rs. in million)		(US dollars in million	
Sales	· · · · ·			
STL	2,751	731	11	
SPTL	1,917	4,086	63	
Total	4,668	4,817	74	
Purchases of goods/services				
KCM	1,479	1,699	26	
STL	98	9	0	
SPTL	28	62	1	
Total	1,605	1,770	27	
Interest income / (Finance costs)				
VRJ2	(1,895)			
Vedanta	203			
SISCOL	2	2	0	
KCM	_	11	0	
STL	13			
SPTL	3			
TSHL	7	7	0	
Total	(1,667)	20	0	
Dividend Income				
STL	5	4	0	
	5	4	0	
Fees incurred				
Vedanta	180	1,765	27	
Total	180	1,765	27	
Service Income				
Vedanta	16	25	0	
Total	16	25	0	
Long-Term Incentive Plan				
Expenses Vedanta	363	351	5	
	505	551	5	

363	351	5
(98,808)		
(98,808)		
10	16	0
4	50	1
159	338	5
173	404	6
	(98,808) ( <b>98,808</b> ) 10 4 159	(98,808) ( <b>98,808</b> ) 10 16 4 50 159 338

The significant receivables from and payables to related parties as at March 31, 2017 and September 30, 2017 are set out below:

	As at March 31, 2017 (Rs. in	As at September 30, 201′ (Rs. in	As at 7 September 30, 2017 (US dollars
	million)	million)	in million)
Receivable from:		, , , , , , , , , , , , , , , , , , ,	
STL	263	87	1
SPTL	1	95	1
KCM	1,475	2,069	32
Vedanta	68	2,389	37
SISCOL	122	125	2
Volcan	23	23	0
TSHL	19	26	0
Total	1,971	4,814	73
Loans to:			
SISCOL	44	44	1
TSHL	648	654	10
Total	692	698	11
Payable to:			
Vedanta	223	658	10
KCM	79	171	3
STL	147	1/1	5
Twin Star Holdings Limited	24,415		
Finsider International Company	21,113		
Limited	7,106		
Westglobe Limited	785		
Welter Trading Limited	677		
Total	33,432	829	13
Investment in Equity Shares/ Units - Quoted			
STL	600	1,065	16
India Grid Trust <sup>1</sup>	000	1,005	10
mula offu ffust.		1,233	19
Total	600	2,300	35

Investment in Equity Shares -			
Unquoted			
SPTL	95	107	2
	0.5	405	-
Total	95	107	2
Guarantees outstanding			
given/(taken)			
Vedanta <sup>2</sup>	(391,806)		
Volcan Investments Limited <sup>3</sup>	1,150	1,150	18
Total	(390,656)	1,150	18
Investment in Vedanta Bonds <sup>4</sup>	4,854	3,856	59
Total	4,854	3,856	59

<sup>1</sup> 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

<sup>2</sup> During the six months ended September 30, 2017 guarantee worth Rs. 282,048 million has been withdrawn by Vedanta and the guarantees worth Rs. 68,081 million is extinguished as the underlying external loan has been repaid.

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- <sup>3</sup> Bank guarantee given by the Company on behalf of Volcan in favour of Income tax department, India as collateral in respect of certain tax disputes of Volcan.
- <sup>4</sup> The carrying value of these bonds including interest accrued is Rs. 5,246 million and Rs. 4,238 million (\$65 million) as at March 31, 2017 and September 30, 2017 respectively.

# **18. Subsequent Events**

There have been no material events other than disclosed in the unaudited condensed consolidated interim financial statement after reporting date which would require disclosure or adjustments to the financial statements for the six months ended September 30, 2017.

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# MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion in conjunction with our unaudited condensed consolidated financial statements and the related notes included elsewhere in this report. We urge you to carefully review and consider the various disclosures made by us in this report and in our other SEC filings, including our annual report on Form 20-F for fiscal year 2017. Some of the statements in the following discussion are forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth elsewhere in this report and those set forth below.

#### Overview

We are a globally diversified natural resource company engaged in exploring, extracting and processing minerals and oil and gas. We produce zinc, lead, silver, oil and gas, copper, aluminium, iron ore and commercial power and have a presence across India, Ireland, Liberia, Namibia, South Africa, Australia and United Arab Emirates. We have experienced significant growth through various expansion projects, acquisition of our zinc and aluminium businesses in 2002 and 2001 respectively, through the GoI s disinvestment programs, the acquisition of the zinc business of Anglo American Plc in Namibia, South Africa and Ireland in fiscal year 2011 and by successfully growing our acquired businesses. We have further strengthened our presence across commodities through an all share merger with Sesa Goa in August 2013 through the Re-organization Transactions. For more information refer our Annual Report on Form 20-F for the fiscal year ended March 31, 2017 filed with the SEC on August 15, 2017. The merger of Vedanta Limited and Cairn India Limited ( Cairn India ) pursuant to the Scheme of Arrangement became effective with effect from 11 April 2017. We believe our experience in operating and expanding our business in India will allow us to capitalize on attractive growth opportunities arising from India s large mineral reserves, relatively low cost of operations, inexpensive labor and large talent pools.

The following table is derived from our unaudited consolidated financial data and sets forth:

the revenue from external customers for each of our business segments as a percentage of our revenue on a consolidated basis;

the operating profit for each of our business segments as a percentage of our operating profit on a consolidated basis; and

the segment profit, calculated by adjusting operating profit for depreciation and amortization and other exceptional items, as applicable for each of our business segments, as a percentage of our segment profit on a consolidated basis.

For the Six Months Ended September 30, 2016 2017 (in percentages)

**Revenue:** 

Zinc India	19.4	24.4
Zinc International	3.8	4.2
Oil and gas	13.1	11.0
Iron ore	4.8	3.1
Copper	31.1	28.4
Aluminium	19.2	23.7
Power	8.4	5.1
Corporate and others	0.2	0.1
Total	100.0	100.0
Operating Profit:		
Zinc India	52.6	66.7
Zinc International	9.6	8.0
Oil and gas	4.2	13.9
Iron ore	5.7	(3.1)
Copper	14.5	6.7
Aluminium	4.8	5.0
Power	10.4	3.0
Corporate and others	(1.9)	(0.2)
Total	100.0	100.0

Segment Profit <sup>(1)</sup> :		
Zinc India	37.4	50.3
Zinc International	7.3	6.7
Oil and gas	21.8	23.9
Iron ore	5.9	(0.2)
Copper	10.3	5.6
Aluminium	8.9	9.2
Power	9.5	4.5
Corporate and others	(1.0)	0.0
Total	100.0	100.0

Note:

(1) Segment profit is presented as required by IFRS 8 and is calculated by adjusting depreciation, amortization, other exceptional item and impairment from operating profit. Our segment profit may not be comparable to similarly titled measures reported by other companies due to potential inconsistencies in the method of calculation. We have included our segment profit because we believe it is an indicative measure of our operating performance and is used by investors and analysts to evaluate companies in our industry. Our segment profit should be considered in addition to, and not as a substitute for, other measures of financial performance and liquidity reported in accordance with IFRS as issued by the IASB. We believe that the inclusion of supplementary adjustments applied in our presentation of segment profit are appropriate because we believe it is an indicative measure of our baseline performance as it excludes certain charges that our management considers to be outside of our core operating results. In addition, our segment profit is among the primary indicators that our management uses as a basis for planning and forecasting of future periods.

The following table reconciles operating profit to segment profit for the periods presented:

	For the S 2016	Six Months Er 6 2 (in mill	2017	ber 30, 2017
Zinc India:				
Operating profit/(loss) Plus:	Rs. 27,	,002 Rs.	51,913	\$ 795
Depreciation and amortization	Rs. 3,	,535 Rs.	4,681	\$ 72
Other items		Rs.	(2,913)	\$ (45)
Segment profit	<b>Rs. 30</b> ,	,537 Rs.	53,681	\$ 822
Zinc International:				
Operating profit/(loss)	Rs. 4,	,946 Rs.	6,251	\$ 96
Plus:				
Depreciation and amortization	Rs.	999 Rs.	840	\$ 13
Segment profit	Rs. 5,	,945 Rs.	7,091	\$ 109
Oil and gas:				
Operating profit/(loss)	Rs. 2,	,142 Rs.	10,855	\$ 166
Plus:	itto: 2,	,112 105.	10,055	φ 100
Depreciation and amortization	Rs. 15,	,677 Rs.	14,627	\$ 224
Segment profit	Rs. 17,	,819 Rs.	25,482	\$ 390
Iron ore:				
Operating profit/(loss)	Rs. 2,	,940 Rs.	(2,419)	\$ (37)
Plus:				
Depreciation and amortization	Rs. 1,	,868 Rs.	2,237	\$ 34
Segment profit	Rs. 4,	,808 Rs.	(182)	\$ (3)
Copper:				
Operating profit/(loss)	Rs. 7,	,463 Rs.	5,214	\$ 80
Plus:	1.0. 7,	,100 100	5,211	φ 00
Depreciation and amortization	Rs.	998 Rs.	798	\$ 12
Segment profit	Rs. 8,	,461 Rs.	6,012	\$92
Aluminium:				
Operating profit/(loss)	Rs. 2,	,472 Rs.	3,874	\$ 59
Plus: Depreciation and amortization	Rs. 4,	77) Do	6,008	\$ 92
Other Items	KS. 4,	,772 Rs. Rs.		\$ 92 \$ (1)
		IX5.	(+1)	φ (1)

Segment profit	Rs.	7,244	Rs.	9,841	<b>\$</b> 2	151
Power:						
Operating profit/(loss)	Rs.	5,349	Rs.	2,367	\$	36
Plus:						
Depreciation and amortization	Rs.	2,403	Rs.	2,401	\$	37
Segment profit	Rs.	7,752	Rs.	4,768	\$	73
Corporate and Others:						
Operating profit/(loss)	Rs.	(866)	Rs.	(156)	\$	(2)
Plus:						
Depreciation and amortization	Rs.	153	Rs.	150	\$	2
Segment profit	Rs.	(713)	Rs.	(6)	\$	(0)

# **Our Business**

# Overview

We are a globally diversified natural resources company with low cost operations. Our business is principally located in India. We also have operations in Australia, United Arab Emirates, South Africa, Namibia and Ireland and have over 17,000 employees worldwide. We are primarily engaged in zinc, lead, silver, oil and gas, iron ore, copper, aluminium and commercial power generation businesses and are also developing and operating port operation businesses and infrastructure assets. We have experienced significant growth through our various expansion projects for our copper, zinc and aluminium businesses and through acquisition of the zinc international and oil and gas businesses. We believe our experience in operating and expanding our businesses in India will allow us to capitalize on attractive growth opportunities arising from India s large mineral reserves, relatively low cost of operations, large and inexpensive labor and talent pools. We believe we are also well-positioned to take advantage of the significant growth in industrial production and investments in infrastructure in India, China, Southeast Asia and the Middle East, which we expect will continue to generate strong demand for metals, oil and gas and power.

We are the leading and only integrated zinc producer with a 72.0% market share by sales volume of the Indian zinc market in fiscal year 2017, according to the ILZDA, and one of the four primary producers of aluminium with a 38.7% primary market share by production volume in India in fiscal year 2017, according to the Aluminium Association of India. Together with our joint operation partners, we account for approximately 26.0% of India s domestic crude oil production according to the Ministry of Petroleum and Natural Gas statistics of March 2017. We are one of the two custom copper smelters in India with a 36% primary market share by sales volume in fiscal year 2017, according to the International Copper Association (India).

# Zinc Business

Our fully-integrated zinc business is owned and operated by HZL. In 2017, HZL was one of the top three zinc-lead mining companies based on production volumes and in the lowest cost decile in terms of all zinc mining operations worldwide, according to Wood Mackenzie. In addition, HZL s Rampura Agucha mine was the largest zinc mine in the world on a production basis and its Chanderiya hydrometallurgical zinc smelter was the ninth largest smelter in the world on a production basis worldwide in 2017, according to Wood Mackenzie. We have a 64.9% ownership interest in HZL, with the remaining 29.5% owned by the GoI and 5.6% owned by institutional and public shareholders. We have exercised the second call option to acquire the GoI s remaining ownership interest in HZL although the exercise is currently subject to dispute. HZL s operations include five lead-zinc mines, one rock phosphate mine, four hydrometallurgical zinc smelters, two lead smelters, one pyro metallurgical lead-zinc smelter, six sulphuric acid plants, six captive power plants in northwest India, processing and refining facilities for zinc at Haridwar and processing and refining facilities for zinc and lead, as well as a silver refinery at Pantnagar, both in the state of Uttarakhand in northern India. HZL s mines supply almost all of its concentrate requirements and HZL also exports surplus zinc and lead concentrates.

Our Zinc International business comprises of:

(1) a 100.0% stake in Skorpion which owns the Skorpion mine and refinery in Namibia and

(2) a 74.0% stake in BMM, which includes the Black Mountain mine and the Gamsberg Project in South Africa;

# Oil and Gas Business

Pursuant to the Cairn India Merger which became operative on April 11, 2017, Cairn India Limited merged with Vedanta Limited. Our oil and gas business is primarily owned and operated by Cairn India. We are a significant contributor to India s domestic crude oil production, together with our joint operation partners contributing approximately 26% of the country s production according to the Ministry of Petroleum and Natural Gas statistics as at March 2017. Cairn has a diversified asset base with seven production and exploration blocks.

# Iron Ore Business

We are engaged in the exploration, mining and processing of iron ore in India. We owned or had the rights to reserves consisting of 181.7 million tons of iron ore at an average grade of 55.4%, as at March 31, 2017. In addition, we manufacture pig iron and metallurgical coke, and operate two waste heat recovery plants of 30 MW each in Goa.

Our mining operations are carried out in the states of Goa and Karnataka, both of which became subject to suspension of mining activities due to alleged environmental and other violations by miners, which has adversely impacted our production of iron ore since August 2011. The suspension was imposed by the state government of Goa and this suspension was upheld by the Supreme Court of India on the mining activities in the state of Goa from September 2012 to April 2014 and a suspension imposed by the state government of Karnataka until April 2013. Although we resumed operations in Karnataka after receiving the stage I forest clearance from the state government of Karnataka and a temporary working permission from the Ministry of Environment and Forests (MoEF), the temporary working permission expired on July 31, 2014. Karnataka operations were halted from August 1, 2014 to February 27, 2015. We resumed operations in Karnataka after all statutory clearances were in place from February 28, 2015. Following the Supreme Court of India s order in April 2014, High Court of Bombay at Goa in August 2014 has pronounced the order to renew mining leases in Goa. The MoEF and the state government have also revoked their suspension orders subject to limits imposed by the Supreme Court, for renewal of the leases and consent to operate from the Government of Goa. In August 2015, our mining operations resumed in our principal mines after completing necessary statutory formalities and fulfillment of conditions annexed by Supreme Court and the state government of Goa.

We also acquired the WCL iron ore project in Liberia, which comprises of three areas (Bomi hills, Bea mountain and Mano river). The exploration is under suspension from fiscal 2015 due to an ebola epidemic, low iron ore prices, geo political factors and no plans for any substantial expenditure.

# **Copper Business**

Our copper business is principally one of custom smelting. Our assets include a smelter, a refinery, a phosphoric acid plant, a sulphuric acid plant, a copper rod plant and three captive power plants at Tuticorin in Southern India, a refinery and two copper rod plants in Western India, a precious metal refinery that produces gold and silver, a doré anode plant and a copper rod plant at Fujairah in the UAE. According to Wood Mackenzie, our Tuticorin smelter was one of the world s top ten, in terms of production volumes in fiscal year 2017. We own the Mt. Lyell copper mine in Tasmania, Australia. The operation of Mt Lyell mine was suspended in January 2014, following a mud slide incident. Subsequently, the operations at Mt. Lyell copper mine has been placed under care and maintenance since July 9, 2014 following a rock falling on the ventilation shaft in June 2014.

# Aluminium Business

Our aluminium business is based out of Chhattisgarh and Odisha.

We operate the business in Chhattisgarh through BALCO, in which we have a 51.0% ownership interest, with the remainder owned by the GoI. BALCO, one of the four primary producers of aluminium in India, had a 20.7% primary market share by production volume in India in fiscal year 2017 according to the Aluminium Association of India. We have exercised our option to acquire the GoI s remaining 49.0% ownership interest, although the exercise is currently subject to dispute. BALCO s operations include two bauxite mines, 1410 MW power plants, an alumina refinery the operation of which have been suspended since 2009, a 245,000 TPA aluminium smelter and 325,000 TPA aluminium smelter and fabrication facilities in Central India. BALCO s operations benefit from relatively cost effective access to power, the most significant cost component in aluminium smelting due to the power-intensive nature of the process. This is to a considerable extent due to BALCO being an energy-integrated aluminium producer. During the period ended September 30, 2017, BALCO has completed the ramp up of the 325,000 TPA aluminium smelter.

Pursuant to re-auctioning of coal mines as per the Coal Mines (Special Provisions) Act, 2014, (now the Coal Mines (Special Provisions) Act, 2015 ) conducted by the Government of India (GoI) in February 2015, BALCO was successful in securing one coal mine, namely the Chotia coal block (Chotia).

Our aluminium operations in Odisha were previously operated through Vedanta Aluminium, which merged with Vedanta Limited pursuant to the Reorganization Transactions. The operations include a 2.0 million tpa alumina refinery at Lanjigarh with an associated 90 MW coal based captive power plant, a 0.5 million tpa aluminium smelter together with an associated 1,215 MW (nine units with a capacity of 135 MW each) and 1800 MW (three units of 600 MW) coal based captive power plant at Jharsuguda. The green field smelter project of a 0.5 million tpa at Jharsuguda was implemented in two phases of 250,000 tpa each. Phase 1 was completed on November 30, 2009 and Phase 2 was completed on March 1, 2010. We are currently in the process of ramping up our 1.25 million tpa smelter facilities in Jharsuguda. The commissioning of pots at the second line of the Jharsuguda II was completed in fiscal year 2017. The commissioning of previously damaged pots at the first line of 1.25 million tons per annum at Jharsuguda-II smelter is currently under way with 301 of 336 pots were restarted during the period ended September 30, 2017. Third line is currently running at 156 pots and ramp up of balance pots are under way.

The alumina refinery at Lanjigarh was commissioned in March 2010 and second stream was restarted in April 2016, increasing the alumina refinery total capacity to 1.4 million TPA. We also capitalized a debottlenecking project for an alumina refinery in March 2017 increasing the refinery s total capacity to 2 million TPA.

During April 2017, there was an incident at Jharsuguda I which resulted in outages of 228 pots, of which, 121 number of pots have been rectified during the period ended September 30, 2017 and rectification of balance pots are under way.

As a result of the ash dyke incident at Jharsuguda in August 2017, the State Pollution Control Board (SPCB) had temporarily shut down five units of the power plant (three units of 135 mw each of 1215 mw power plant and two units of 600 mw each out of 2400 mw power plant), out of which three units (two units of 135 mw each and one 600 mw) were subsequently restarted on 20th September 2017. The remaining two units (one 135MW and one 600 mw) was restarted in November 2017. The SPCB has allowed operation of all the units of 1215 MW and 2400 MW plants up to January 12, 2018 after which further extension of operation will be considered with a review of progress.

# **Power Business**

We operate multiple power plants across locations in India. Our power business comprises of a 600 MW thermal power plant in Odisha, IPP 600 MW thermal power plants in Chhattisgarh, 274 MW wind power plants across India, a 106.5 MW thermal power plant in Tamil Nadu and 1980 MW thermal power plant in Punjab.

We operated with the one 600 MW thermal coal-based commercial power facility at Jharsuguda through Sterlite Energy, which merged with Vedanta Limited pursuant to the Reorganization Transactions. In September 2006, Sterlite Energy entered into a power purchase agreement with Grid Corporation of Orissa Limited, a nominee of the state government of Orissa (GRIDCO).

In July 2008, Sterlite Energy succeeded in an international bid and was awarded the project for the construction of a 1980 MW (comprising three units of 660 MW each) coal-based commercial thermal power plant at Talwandi Sabo in the State of Punjab in India. The power plant is set up through Vedanta Limited s wholly owned subsidiary TSPL. The first 660 MW and second 660 MW unit of the Talwandi Sabo power plant were capitalized in fiscal year 2015 and 2016 respectively. The Commercial Operation Date (COD) for the third 660MW unit at TSPL was August 24, 2016 and the unit was capitalized on September 1, 2016. The Power Purchase Agreement with the Punjab State compensates Vedanta based on the availability of the plant. In April 2017, a fire incident occurred at TSPL due to which plant was under shutdown for 65 days during the period ended September 30, 2017. It was restarted in June 2017.

Our power business also includes a 274 MW wind power plants operated by HZL, and a 106.5 MW power plant at MALCO located at Mettur Dam in southern India. The MALCO plant has been put under care and maintenance from May 26, 2017.

In addition, Balco has constructed an IPP 600 MW coal based thermal power facility in the state of Chhattisgarh which had received approval to operate on January 14, 2015 from the regulatory authorities. One unit of 300 MW was commissioned during fiscal year 2016 and the second unit was commissioned and commenced commercial production on May 1, 2016.

# **Factors Affecting Results of Operations**

Our results of operations are primarily affected by global demand and supply, commodity prices, realization discount to Brent, our cost of production, our production output, government policies in India and exchange rates.

# Metal and Oil Prices, Copper TcRc and Power Tariff

#### Overview

Our results of operations are significantly affected by the commodity prices of natural resources that we produce, which are based on LME / London Bullion Market Association prices in our zinc and aluminium businesses, other benchmark prices in our oil, gas and iron ore businesses and by the Treatment charges and Refining charges (TcRc) of copper in our copper business. The TcRc of copper, the commodity prices of the metals that we produce and the benchmark price of oil, gas and iron ore can fluctuate significantly as a result of changes in the supply of and demand for zinc, lead, silver, oil, gas, iron ore, copper and aluminium among others. While natural resources producers are unable to influence the market rate of the TcRc or commodity prices directly, events such as changes in smelting or commodity production capacities, temporary price reductions or other attempts to capture market share by individual natural resources producers including our consolidated group of companies, may have an effect on market prices.

Moreover, the prices realized by us can, to some extent, be affected by the particular terms we are able to negotiate for the contractual arrangements we enter into with buyers. Price variations and market cycles, have historically influenced, and are expected to continue to influence our financial performance.

During the six months ended September 30, 2017, the commodity prices positively impacted our revenue and operating profit. During the first half of fiscal year 2018, average prices were up by 33% for zinc, 27% for copper, 25% for Lead, 23% for Aluminium, 11% for Brent which were partially offset by lower prices at Iron ore and silver by 50% and 7.0% respectively compared to the first half of fiscal year 2017.

# Zinc and Aluminium

The revenue of our zinc and aluminium businesses fluctuate based on the volume of our sales and the respective LME prices of zinc, lead and aluminium and the London Bullion Market Association price of silver. Our zinc business is fully integrated and its profitability is dependent upon the difference between the LME price of zinc and lead, London Bullion Market Association price of silver and our cost of production, which includes the costs of mining and smelting. For the portion of our aluminium business where the bauxite is sourced from BALCO s own bauxite mines, profitability is dependent upon the LME price of aluminium less our cost of production, which includes the costs of bauxite mining, transportation costs, the refining of bauxite into alumina and the smelting of alumina into aluminium. For the portion of our aluminium business where alumina is sourced from third parties, profitability is dependent upon the LME price of aluminia and our cost of production.

During the six months ended September 30, 2017, 69.7% of BALCO s alumina requirement and 58.1% of our Odisha Aluminium business alumina requirement were imported from third parties, with the rest supplied by our Lanjigarh alumina refinery. The following table sets forth the daily average zinc and Aluminium LME prices for the six months ended September 30, 2016 and 2017:

	For	For the Six Months Ended September 30,			
		2016 201			
	(ii	(in US dollars per ton)			
Zinc LME	\$	2,089	\$	2,784	
Lead LME	\$	1,797	\$	2,250	
Aluminium LME	\$	1,596	\$	1,962	
Silver LBMA*	\$	585	\$	547	

# \* Silver is denominated in \$/kg Crude oil and natural gas

Movements in the price of crude oil and discounts to oil prices based on quality parameters significantly affect Cairn India s results of operations and declines in crude oil prices may adversely affect our revenues and profits. Historically, international prices for oil have been volatile and have fluctuated widely due to many factors that are beyond our control, including, but not limited to overall economic conditions, supply and demand dynamics for crude oil and natural gas, political developments, the ability of petroleum producing nations to set and maintain production levels and prices, the price and availability of other energy sources and weather conditions. Lower oil prices may also reduce the economic viability of planned projects planned or those in early stages of development. In addition, a fall in the price of oil may result in the impairment of higher cost reserves and other assets which may result in decreased earnings or losses.

The following table sets out the average price of Brent, an international benchmark oil blend, according to US Energy Information Administration, for the six months ended September 30, 2016 and 2017:

	For the Six	For the Six Months Ended		
	Septe	mber 30,		
	2016	2017		
	(US dolla	r per barrel)		
European Brent	45.8	51.0		
Realization discount to Brent				

The prices of various crude oil are based upon the price of the key benchmark crude oil such as Dated Brent, West Texas Intermediate, and Dubai/Oman. The crude oil prices move based upon market factors such as demand and supply. The regional producers price their crude oil on a premium or discount over the benchmark crude oil based upon differences in quality and competitiveness of various grades. For Rajasthan and Cambay blocks, the crude oil is benchmarked to Bonny Light, a West African low sulphur crude oil that is frequently traded in the region, with appropriate adjustments for crude quality. Dated Brent reflects the values of North Sea cargo loading within the next 10-25 days; it incorporates the Brent, Forties, Oseberg and Ekofisk crude oil with the most competitive grade setting the price. European Brent spot prices and dated Brent prices are almost similar.

Ravva crude is benchmarked to Tapis and Minas crude grades (South Asian crudes). The crude oil price benchmarks are based on crude oil sales agreements. Movements in the discount range affect our revenue realization and any increase in quality differentials may adversely impact our revenues and profits.

#### Iron Ore

The revenue of the iron ore business fluctuates based on the volume of sales and the market price of iron ore. We sell iron ore under long-term contracts linked to spot index prices and on spot prices. The prices for iron ore are significantly dependent on the global and regional imbalances between the demand and supply of iron ore, worldwide steel-making capacity and transportation costs. The profitability of the iron ore business is dependent on its selling price, grade and cost of production which includes cost of extracting, processing iron ore and royalties. We currently operate a metallurgical coke plant with an installed capacity of 522,000 TPA and a pig iron plant with a rated capacity of 832,000 TPA. We manufacture pig iron through the blast furnace route. We have a patent for the technology for the manufacture of energy recovery based metallurgical coke.

The following table sets forth the daily average iron ore prices (62% iron) for the six months ended September 30, 2016 and 2017:

	For the Six Months Ended September 30,			
	2016 2017			2017
	(	US dolla	r per c	lmt)
China Imported Iron Ore Fines (62% iron, cost and freight				
Tianjin Port)	\$	56.5	\$	67.0

# Copper

The revenue of our copper business fluctuates based on the volume of our sales and the LME price of copper. However, as our copper business is primarily one of custom smelting and refining, the profitability of our copper business is significantly dependent upon the market rate of the TcRc. We purchase copper concentrate at the LME linked price for the relevant quotational period less a TcRc that we negotiate with our suppliers but which is influenced by the prevailing market rate for the TcRc. The market rate for the TcRc is significantly dependent upon the availability of copper concentrate, worldwide copper smelting capacity and transportation costs. The TcRc that we are able to negotiate is also substantially influenced by the TcRc terms established by certain large Japanese custom smelters. The profitability of our copper business as to the portion of our copper business where we source copper concentrate from third parties, which accounted for almost 100% of our copper concentrate requirements during the first half of fiscal year 2018, is thus dependent upon the amount by which the TcRc we are able to negotiate exceeds our smelting and refining costs. The profitability of our copper operations is also affected by the prices we receive upon the sale of by-products, such as sulphuric acid, gypsum and precious metals, which are generated during the copper smelting and refining process. The prices we receive for by-products can vary significantly, including as a result of changes in supply and demand and local market factors in the location the by-product is produced. The following table sets forth the average TcRc that we have realized for the six months ended September 30, 2016 and 2017:

	For the Six Mo	onths Ended
	Septemb	er 30,
	2016	2017
	(in US ce	nts per
	poun	d)
Copper TcRc	21.7¢/lb	21.2¢/lb

The LME price of copper affects our profitability as we source copper concentrate substantially from third parties, which accounted for 100 % of our copper concentrate requirements in fiscal year 2018. We do not expect to source any copper concentrate from our copper mine, Mt. Lyell in the near future, as the mine has been placed under care and maintenance since July 2014 due to a mud slide and an incident of a rock falling on the ventilation shaft. The following table sets forth the daily average copper LME price for the six months ended September 30, 2016 and 2017:

	For the Six N	For the Six Months Ended		
	Septen	September 30,		
	2016	2017		
	(in US doll	ars per ton)		
Copper LME	\$ 4.751	\$ 6.013		

#### Power

Under the Indian Electricity Act, the Central Electricity Regulatory Commission or the CERC determines tariffs for the supply of electricity by a generating company. In case of shortage of electricity supply, the CERC may fix the minimum and maximum tariff for sale or purchase of electricity, pursuant to an agreement entered into between a generating company and licensees, for up to one year. Under the guidelines issued by the Ministry of Power, the determination of the tariff for a particular project depends on the mode of participation in the project (i) through signing a memorandum of understanding, based on tariff principles prescribed by CERC (cost plus basis, comprising

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capacity charge, energy charge, unscheduled interchange charge and incentive payments) or (ii) competitive bidding, where tariff is market based.

Our tariffs are based on the memorandum of understanding route for contracted quantity. Tariff for supply of power from our Jharsuguda power plant to GRIDCO according to the power purchase agreement is determined on the basis of principles laid down under the tariff regulation notified by the CERC. In the case of our 1980 MW thermal power plant at Talwandi Sabo, the project was set up through a tariff based competitive bidding process and therefore the capacity charges and efficiency have been determined in line with the bidding process and in accordance with guidelines set out in the power purchase agreement with Punjab State Power Corporation Limited (PSPCL). Fuel cost subject to quoted efficiency will be a pass-through. Further, surplus power sold to multiple customers is based on the pricing determined by demand and supply of the power markets. The average power realization price (excluding TSPL) for the six months ended September 30, 2016 and September 30, 2017 was Rs. 2.92 and Rs. 2.77 per unit respectively due to the weaker power market. The average power realization price for TSPL for the six months ended September 30, 2017 was Rs 3.5 per unit and Rs 3.6 per unit respectively based on the Plant Availability Factor (PAF).

# India Market Premium

Generally, our products in India are sold at a premium to the LME market price due to a number of factors including the customs duties levied on imports by the GoI, the costs to transport metals to India and regional market conditions. See Government Policy in 20F March 31, 2017. As a result, we endeavor to sell large quantities of our products in India.

# Hedging

Our usual policy is to sell products at prevailing market prices and not to enter into price hedging arrangements. However, during the period ended September 30, 2017, Zinc India entered into a forward contract to sell 220,000 tons of zinc and 30,000 ton of lead at prices of US\$3,084 per ton and US\$2,418 per ton respectively, for the period from January 2018 to June 2018

# Cost of Production

Our results of operations are, to a significant degree, dependent upon our ability to efficiently run our operations and maintain low costs of production. Efficiencies relating to recovery of metal from the ore, oil and gas extraction, process improvements, by-product management and increasing productivity help drive our costs down. Costs associated with mining and metal production include energy costs, ore extraction and processing costs at our captive mines, labor costs and other manufacturing expenses. Cost of production also includes cost of alumina for our aluminium business.

The cost of production of our oil and gas business include expenditures incurred towards the production of crude oil and natural gas including statutory levies, such as cess, royalties (excluding the Rajasthan block) and production payments payable pursuant to the production sharing contracts. Cess forms a major component of the cost of production and any increase/decrease in the rate of the cess will impact adversely/positively the result of the operations.

The cost of production of copper for our custom smelting and refining operations consists of cost of converting copper concentrate into copper cathodes, but does not include the cost of copper concentrate. We purchase copper concentrate at the LME price for copper metal for the relevant quotational period less a TcRc that we negotiate with our suppliers, but which is influenced by the prevailing market rate for the TcRc. We attempt to make the LME prices a pass through for us as both the copper concentrate purchases and sales of finished copper products are based on LME prices. The profitability of the copper custom smelting and refining business is therefore dependent upon the amount by which the TcRc that we negotiate with our external suppliers exceeds our smelting and refining costs.

Energy cost is the most significant component of the cost of production in our metal production businesses. Most of our power requirements are met by captive power plants, which are primarily coal fueled. Thermal coal, diesel fuel and fuel oil, which are used to operate our power plants, and metallurgical coke, which is used in the zinc smelting process, are currently sourced from a combination of long term and spot contracts. Our iron ore business meets its most of the power requirement through its 60 MW captive power plant. Our aluminium business, which has high energy consumption due to the power intensive nature of aluminium smelting operation, sources its thermal coal requirement through linkage route from Mahanadi Coalfields Limited and South Eastern Coal Fields Limited, linkage auction coal secured in auctions held in fiscal year 2017 and fiscal year 2018, open market purchases and imports. During the fourth quarter of fiscal year 2015, BALCO was successful in securing one coal mine in coal block auctions conducted by the GoI, namely the Chotia coal block. The total reserves at the Chotia block are 17.5 million tons with the annual production capacity of one million tons. The production commenced at the Chotia mine during the fourth

quarter of fiscal year 2016.

HZL continues to import coal from third party suppliers. HZL s operations source their back-up power from liquid fuel-based captive power plants or from local power companies. The liquid fuel is sourced from third-party suppliers on yearly contracts.

For our zinc and iron ore business and the portions of our aluminium businesses where we source the ore from our own mines, ore extraction and processing costs affect our cost of production. In our iron ore businesses, the ore extraction and processing costs to produce concentrates are generally a small percentage of our overall cost of production of the finished metals. In our aluminium business the refining cost to produce alumina from bauxite ore including transportation costs represents approximately one-third of the cost of production of aluminium. In iron ore, logistics represents approximately 25 % to 30 % of the total cost of production in the case of exports. In addition, a significant cost of production in our zinc and iron ore business is the royalty that HZL pays on the lead-zinc ore that is mined, which royalty is a function of the LME prices of zinc and lead and the iron ore pays on extraction of iron ore at the rate declared by the Indian Bureau of Mines. See Government Policy Taxes, royalties and cess payments in 20F March 31, 2017.

In the commercial power generation business, production costs are mainly coal costs and the coal is largely sourced from the domestic market. Labor costs are principally a function of the number of employees and increases in compensation from time to time. Improvements in labor productivity in recent years have resulted in a decrease in the per unit labor costs. We outsource a majority of BALCO s mining operations; a substantial portion of HZL s and iron ore s mining operations, Cairn India s oil and gas operations and a limited number of functions at our copper, zinc and aluminium smelting operations to third party contractors. The operations and maintenance activities at the Jharsuguda 2,400 MW power facilities and three TSPL 660 MW power facilities are substantially outsourced to third party contractors.

Other manufacturing expenses include, among other things, additional materials and consumables that are used in the production processes and routine maintenance to sustain ongoing operations. None of these represent a significant portion of our costs of production.

The cost of production as reported for our metal products includes an offset for any amounts we receive upon the sale of the by-products from the refining or smelting processes. We present costs of production for our metal products on the following basis: (i) cost of production before by-product revenue, which represents the direct cash costs relating to production and conversion costs of metal (such as energy costs, ore extraction costs and processing costs at our captive mines, labor costs and other manufacturing expenses); excluding depreciation and finance costs, and (ii) cost of production net of by-product revenues which represents cost of production before by-product revenue offset by any amounts we receive upon sale of by-products from such operations. Offsetting by-product revenues is useful to the management and investors to compare our cost competitiveness with our peers in the industry as it is a common metric used by our peers in the industry. Cost of production before by-product revenue and net of by-product revenue is divided by the daily average exchange rate for the period to calculate US dollar cost of production per lb or per ton of metal as reported.

The following table sets forth our average realized TcRc and cost of production for each of our metals, power, oil and gas for the six months ended September 30, 2016 and 2017:

	For the Six Months Ended September 30, Unit of			
	Measurement	2016	2017	
	(in US dollars per to	on, except as	indicated)	
Treatment and Refining Charges (TcRc) <sup>(1)</sup>	¢/lb	21.7	21.2	
Cost of production before by-product revenue <sup>(2)</sup>				
Zinc India <sup>(3)</sup>	\$	1,217	1,401	
Zinc International <sup>(4)</sup>	\$	1,452	1,737	
Oil and Gas <sup>(5)</sup>	\$/boe	18.3	18.4	
Iron ore <sup>(6)</sup>	\$	15.6	26.1	
Copper smelting and refining <sup>(7)</sup>	¢/lb	14.3	16.4	
Aluminium <sup>(8)</sup>	\$	1,479	1,798	
Power Jharsuguda 600 MW plant	Rs./unit	2.0	2.2	
Cost of production net of by-product revenue <sup>(2)</sup>				
Zinc India <sup>(3)</sup>	\$	1,131	1,322	
Zinc International <sup>(4)</sup>	\$	1,331	1,564	
Oil and Gas <sup>(5)</sup>	\$/boe	18.3	18.4	

Iron ore <sup>(6)</sup>	\$	15.6	26.1
Copper smelting and refining <sup>(7)</sup>	¢/lb	5.6	6.3
Aluminium <sup>(8)</sup>	\$	1,473	1,798
Power Jharsuguda 600 MW plant	Rs./unit	2.0	2.2
TSPL (Availability basis)	Rs./unit	2.51	2.83

#### Notes:

- (1) Represents our average realized TcRc for the period.
- (2) Cost of production per unit is not a recognized measure under IFRS as issued by the IASB. We have included cost of production as it is a key performance indicator used by the management to assess the performance of our operations. We also believe it is a measure used by investors and analysts to evaluate companies in our industry. Our results of operations are, to a significant degree, dependent upon our ability to efficiently run our operations and maintain low costs of production. Efficiencies relating to recovery of metal from the ore, process improvements, by-product management and increasing productivity help drive our costs down. Our computation of cost of production should be considered in addition to, and not as a substitute for other measures of financial performance and liquidity reported in accordance with IFRS as issued by the IASB. Cost of production is a measure intended for monitoring the operating performance of our operations. This measure is presented by other metal companies, though our measure may not be comparable to similarly titled measures reported by other companies.

- (3) Cost of production of zinc before by-product revenue increased from Rs. 81,457 per ton for the six months ended September 30, 2016, to Rs. 90,158 per ton for the six months ended September 30, 2017. The increase was, primarily due to higher input raw material prices (primarily coal and metallurgical coke), higher mine development expenses and rupee appreciation partially offset by higher metal volume.
- (4) Cost of production before by-product credit increased from \$ 1,452 per ton for the six months ended September 30, 2016 to \$ 1,737 per ton for six months ended September 30, 2017, an increase of 20.0%. This was primarily driven by lower volume at Skorpion and local currency (ZAR) appreciation partially offset by better realized treatment and refinery charges.
- (5) Cost of production for oil and gas is \$ 18.4 per net boe for six months ended September 30, 2017 in comparison to \$18.3 per net boe for six months end September 30, 2016. The COP is almost flat on account of optimization of facility, well maintenance and work-over activities.
- (6) Cost of production for iron ore was at \$15.6 per ton for the six months ended September 30, 2016 compared to \$26.1 per ton in the six months ended September 30, 2017. This increase was primarily due to inventory valuation impact on Goa s ore stock. Global prices of iron ore have softened in the first half of fiscal 2018. In addition to that, discounts for low grade ore have widened leading to lower realizable value of the ore inventory.
- (7) Cost of production, when compared before offsetting the by-product and free copper revenue, increased from 14.3 ¢/lb for the six months ended September 30, 2016 to 16.4¢/lb for the six months ended September 30, 2017, mainly due to higher coal and fuel prices. When computing the net of by-product and free copper revenue, the cost increased from 5.6¢/lb for six months ended September 30, 2016 to 6.3¢/lb for six months ended September 30, 2017, mainly due to higher coal and fuel prices partially offset by higher byproduct credits. Sulphuric acid realization positively impacted with ADNOC prices increased from US\$84 per ton in the first half of fiscal year 2017 to US\$90 per ton in the first half of fiscal year 2018.
- (8) Cost of production before adjusting by-product revenue increased from Rs. 98,622 per ton in first half of fiscal year 2017 to Rs. 115,745 per ton in the first half of fiscal year 2018. The cost increase was mainly due to input commodity inflation, higher domestic coal cost due to temporary coal shortage and rupee appreciation. In addition, one offs includes cost of revival of 228 pots of Jharsuguda-I and temporary power import due to ash dyke breach at Jharsuguda.

We present below the cost of production for our metal products on the following basis:

(i) cost of production before by-product revenue, which represents the direct cash costs relating to production and conversion costs of metal (such as energy costs, ore extraction costs and processing costs at our captive mines, labor costs and other manufacturing expenses), excluding depreciation and finance costs, and

(ii) cost of production net of by-product revenues which represents cost of production before by-product revenue offset by any amounts we receive upon sale of by-products from such operations. Offsetting by-product revenues is useful to the management and investors to compare our cost competitiveness with our peers in the industry as it is a common metric used by our peers in the industry.

We explain the cost of production for each metal as set forth below:

In the case of Zinc India operations, where we have integrated operations from production of zinc ore to zinc metal, cost of production before by-product revenue is the cost of extracting ore and conversion of the ore into zinc metal ingots. Payment of royalty and provision towards contribution to DMF and NMET is included in determining the cost of production. Cost of production net of by-product revenue represents cost of production before by-product revenue earned from the by-product sulphuric acid, which is deducted from the cost of production consistent with the industry practice. The total cash cost before by-product revenue and

net of by-product revenue is divided by the total number of tons of zinc metal produced to calculate the cost of production before by-product revenue and net of by-product revenue per ton of zinc metal. Our Zinc India segment primarily consists of zinc ingot production and lead is only a co-product of zinc while silver is a by-product arising from lead smelting process. Accordingly, the cost of production presented for Zinc India operations is only for zinc ingot production and the cost of production of lead and silver are not presented.

Our Zinc International operations consist of the Skorpion mine and refinery in Namibia, Black Mountain mine in South Africa and the Lisheen mine in Ireland which ceased operations in December 2015. Skorpion produces special high grade zinc ingots. As a result, the cost of production before by-product revenue with respect to the Skorpion mine consists of the total direct cost of mining zinc ore and producing zinc in the refinery through a leaching, refining and electro-winning process. Skorpion mine does not produce any material by-products. Cost of production before by-product revenue of zinc at Black Mountain mine consists of direct mining costs, concentrate costs, TcRc and direct services cost. Cost of production net of by-product revenue represents cost of production before by-product revenue, net of revenue from copper consistent with the industry practice. At Black Mountain mine lead is only a co-product of zinc while silver is a by-product of lead. Accordingly, the cost of production presented for Black Mountain mine is only for zinc production and the cost of production of lead and silver are not presented. The Lisheen mine which ceased operations in December 2015, produced zinc and lead concentrate. Therefore, the cost of production before by-product revenue with respect to the Lisheen mine consisted of direct mining costs, mill processing costs, other overhead costs, treatment charges and other direct cash costs. Cost of production net of by-product revenue represents cost of production before by-product revenue, net of revenue from lead and silver consistent with the industry practice. Royalties paid are also included in the cost of production. The total cash cost before by-product revenue and net of by-product revenue is divided by the total number of tons of zinc metal produced or zinc metal-in-concentrate produced to calculate the cost of production before by-product revenue and net of by-product revenue per ton of zinc metal produced or zinc metal-in-concentrate produced.

The cost of production in our oil and gas business consists of expenditure incurred towards the production of crude oil and natural gas including statutory levies, such as cess, royalties (excluding the Rajasthan block) and production payments payable pursuant to the production sharing contracts as well as operational expenditures such as costs relating to manpower, repairs and maintenance of facilities, power generation and fuel for such facilities, water injection, insurance, and storage, transportation and freight of crude oil and natural gas, among others. The total production cost is divided by the entitlement interest quantity of oil and gas produced to determine the cost of production per barrel of oil equivalent.

In the case of iron ore, cost of production relates to the iron ore mining and processing cost. Payment of royalty fees and provision towards contribution to DMF and NMET are included in determining the cost of production at Goa, whereas at Karnataka iron ore business royalties are under the scope of the buyer. The total cost is divided by the total number of tons of iron ore produced to calculate the cost of production per ton of iron ore. Our iron ore segment also includes met coke and pig iron. However, the cost of production presented for iron ore operations does not include met coke and pig iron.

In the case of copper, cost of production before by-product and free copper revenue relates only to our custom smelting and refining operations (and not for our mining operations), and consists of the cost of converting copper concentrate into copper cathodes, including the cost of freight of copper anodes from Tuticorin to Silvassa. Cost of production net of by-product and free copper revenue represents cost of production before by-product and free copper revenue, net of revenue earned from the sale of by-product, sulphuric acid and copper metal recovered in excess of paid copper metal are deducted from the cash costs, in line with the cost reporting practice of custom smelters globally. The total cash costs before by-product and free copper revenue and net of by-product and free copper revenue are divided by the total number of pounds of copper metal produced to calculate the cost of production before by-product and free copper revenue per pound of copper metal produced.

Cost of production of aluminium includes the average cost of production in the BALCO and Odisha aluminium businesses. The cost of production before by-product revenue includes cost of purchased alumina, the cost of producing bauxite and conversion of bauxite/alumina into aluminium metal. Cost of production net of by-product revenue represents cost of production before by-product revenue, net of revenue earned from the sale of by-products, such as vanadium, which is consistent with the industry practice. The total cash cost before by-product revenue and net of by-product revenue is divided by the total quantity of hot metal produced to determine the cost of production before by-product revenue and net of by-product revenue per ton of aluminium hot metal produced. Hot metal production output is used instead of the cast metal production output disclosed elsewhere in this report in calculating this measure. This is because, the hot metal production, which excludes the value added cost of casting, is the measure generally used in the aluminium metal industry for calculating measures of cost of production.

Cost of production before by-product revenue and net of by-product revenue is divided by the daily average exchange rate for the period to calculate US dollar cost of production per lb or per ton of metal or per barrel of oil equivalent as reported.

Cost of production of power for Jharsuguda 600 MW power plant (excluding 274 MW HZL power plant), the TSPL 1,980 MW, IPP 600 MW BALCO power plant and the 106.5 MW MALCO s power plant includes the cost of coal and other liquid fuels used for generating power and other overhead costs such as operating, maintenance and manpower costs. The total cost is divided by the total net units generated to calculate the cost of production per unit of energy produced.

# **Production Volume and Mix**

Production volume has a substantial effect on our results of operations. We are generally able to sell all of the products we can produce, so our revenue generally fluctuates as a result of changes in our production volumes. Production volumes depend on our production capacities, which have increased in recent years across all our businesses. For our mining operations, production volumes also depend upon the quality and consistency of the ore. Per unit production costs are significantly affected by changes in production volumes in that, higher volumes of production generally reduce the per unit production costs. Therefore, our production volumes are a key factor in determining our overall cost competitiveness. The following table summarizes our production volumes for our primary products for the periods indicated:

		For the Six Months Ended September 30,	
Segment	Product	2016	2017
	(te	ons except where o	therwise stated
Zinc India	Zinc (1)	250,169	385,781
	Lead (2)	55,228	72,769
	Silver (Kilograms) (2)	195,794	255,141
Zinc International	-		
- Skorpion	Zinc	46,770	36,258
- BMM	Copper(3)	2,481	2,530
	Zinc(3)	13,207	14,577
	Lead(3)	22,080	23,656
Oil and Gas (on net			
basis)(4)	Crude Oil (mmbbls)	14.5	15.0
	Natural Gas (bscf)	2.0	2.6
Iron Ore	Saleable Ore Production (million dmt)	4.7	4.5
Copper	Copper cathode(5)	197,785	196,559
**	Copper rods	109,035	98,846
Aluminium	Ingots(6)	278,148	385,432
	Value Added Products(6)(7)	238,876	344,504
	Hot Metal	23,977	20,500
Power	Power (Million Units)	6,039	4,787

#### Notes:

- (1) Refers to zinc production excluding customs
- (2) Refers to production excluding captive consumption

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- (3) Refers to mined metal content in concentrate.
- (4) While computing EI production, Ravva royalty fees have not been netted off.
- (5) Copper cathode is used as a starting material for copper rods. Approximately one ton of copper cathode is required for the production of one ton of copper rods.
- (6) Includes production capitalized in first half of fiscal years 2017 and 2018 of 57kt and 50kt respectively.
- (7) Value added products of Aluminium include production of billets, rods and rolled products.

Periodically, our facilities are shut down for planned and unplanned repairs and maintenance which temporarily reduces our production volume. In addition, the mix of products we produce can have a substantial impact on our results of operations as we have different operating margins in each of our businesses, and within each business our operating margins vary between the lower margins of primary metals and the higher margins of value-added products such as copper rods and aluminium rolled products. For example, copper cathodes are converted in our copper rod plant into copper rods, a value-added product which has a higher margin than copper cathodes. As copper rods have higher margins, we endeavor to sell as large a percentage of copper rods as possible. As the production volume of our various products fluctuate primarily based on market demand and our production capacity for such products, the percentage of our revenue from those products will also fluctuate between higher and lower margin products, which will in turn cause our operating profit and operating margins to fluctuate.

# Profit Petroleum

The GoI is the owner of the hydrocarbons wherein it has assigned the responsibility to the joint operation (contractor) to explore, develop and produce the hydrocarbons. Contractor is entitled to recover out of petroleum produced, all the costs incurred according to the production sharing contracts in exploring, developing and producing the hydrocarbons, which is known as Cost Petroleum . Excess of revenue (value of hydrocarbons produced) over and above the cost incurred as above, is called Profit Petroleum , which is shared between the GoI and contractor parties as per procedure laid down in production sharing contracts.

Profit Petroleum sharing between the GoI and the contractor is determined by PTRR Method (Post Tax Rate of Return) in case of Ravva and CB-OS/2 and on the investment multiple method in case of Rajasthan block as defined in their respective production sharing contracts.

The share of Profit Petroleum, in any year, is calculated for the contract/development area on the basis of the post-tax rate of return investment multiple actually achieved by the companies at the end of the preceding year for the contract/development area.

The following table summarizes the current government share of Profit Petroleum for various development areas:

Block/Development Area	Government share of profit petroleum as at March 31		
	2015	2016	2017
Ravva	60%	60%	60%
Cambay Lakshmi	45%	45%	45%
Cambay Gauri	55%	55%	55%
Cambay CB-X	60%	60%	60%
Rajasthan DA1	40%	40%	40%
Rajasthan DA2	30%	40%	40%

With the increase in the operations and revenue in each block, the above mentioned percentage is subject to increase, leading to a higher government share of profit petroleum. This will have an adverse impact on our result of operations as it will lead to an increase in our share of profit petroleum expense to be paid to the GoI. The government share of Profit Petroleum as on September 30, 2017 is the same as March 31, 2017.

# **Government Policy**

#### India Customs Duties

We sell our products in India at a premium to the LME price, due in part to the customs duties payable on imported products. Our profitability is affected by the levels of customs duties as we price our products sold in India generally on an import-parity basis. We also pay a premium on certain raw materials that we import or which are sourced locally but which are priced on an import-parity basis as a result of customs duties, with copper concentrate, petroleum products, alumina, carbon and caustic soda being the primary examples. The following table sets forth the customs duties that were applicable for the periods indicated:

	August 13, 2013 to February 29, 2016	March 1, 2016 to Present
Copper	5.0%	5.0%
Copper concentrate	2.5%	2.5%
Zinc	5.0%	5.0%
Lead	5.0%	5.0%
Silver	10.0%	10.0%
Aluminium	5.0%	7.5%

We are also liable to pay an additional duty of customs, countervailing duty or CVD, of 12.5% (for the period from March 18, 2012 to February 28, 2015, the CVD was 12%) of the assessable value and basic custom duty, which is levied on imports in India. In addition, special additional duty is also levied @4% on imports in India.

The GoI may reduce or abolish customs duties on copper and aluminium in the future, although the timing and extent of such reductions cannot be predicted. As we sell the majority of the commodities we produce in India, any further reduction in Indian tariffs on imports will decrease the premiums we receive in respect of those sales. Our profitability is dependent to a small extent on the continuation of import duties and any reduction would have an adverse effect on our results of operations and financial condition.

The import duty at the rate of 2.5% is levied on copper concentrate and rock phosphate. Excise duty at the rate of 2.0% is also imposed on coal in the event cenvat credit is not availed. However, if cenvat credit is availed, then the excise duty rate on coal becomes 6%.Goods imported for the purposes of Petroleum operations are exempt from customs duty under Notification No 12/2012 - Customs dated March 17, 2012, Sr. No. 358 and 359, conditions no 42 and 43 respectively. Goods which are imported for purposes other than petroleum operations such as software, IT related goods or any other material required for office purposes are subject to customs duty as per the applicable rates in force ranging between approximately 24% to 27% depending upon the classification of goods as stated in the customs tariff 2016-17.

#### **Export Incentives**

The GoI provides a variety of export incentives to Indian companies. Exports of copper, aluminium and zinc from India receive assistance premiums from the GoI. Export incentives do not outweigh the Indian market price premiums. Accordingly, notwithstanding the export incentives, we endeavor to sell large quantities of our products domestically.

The following table sets forth the export assistance premiums, as a percentage of the F.O.B value of exports, on zinc concentrate, zinc ingots, lead concentrate and Lead Ingot for the periods indicated:

	October 9, 2086 to September 2092	ptember 21 <b>taN</b>	Øvember 14, 2	Member 15, 201 0150 Present (percentage
	(percentage of	(percentage of	of F.O.B	of F.O.B
	F.O.B value of	F.O.B value of	value of	value of
	exports)	exports)	exports)	exports)
Zinc concentrate	1.5%	1.3%	1.0%	
Zinc ingots	2.0%	1.7%	1.9%	1.5%
Lead concentrate	1.5%	1.3%	1.0%	
Lead Ingot	3.2%	2.6%	1.9%	2.4%

The following table sets forth the export assistance premiums, in the form of Market Linked focus Product Scheme as a percentage of the F.O.B. value of exports, on copper cathode and copper rods for the period indicated:

	October 1, 2011 to March 31, 2017 (percentage of F.O.B value of
	exports)
Copper Cathode	2.0%
Copper rods#	2.0%

# Applicable for export to Czech Republic only.

Further, with effect from April 1, 2015, the New Merchandise Exports from India Scheme was introduced in place of Market Linked Focus Product Scheme. In the new scheme, no export incentive has been notified for copper products.

The following table sets forth the export assistance premiums, as a percentage of the F.O.B value of exports, on aluminium ingots, aluminium rods and aluminium rolled products for the periods indicated:

	November 21, 2016/vemb	oer 14, 2016	Present
Aluminium ingots	1.70%	1.90%	1.00%
Aluminium rods	1.70%	1.90%	1.50%
Aluminium billets		1.90%	1.00%
Aluminium rolled product	1.90%	1.90%	1.50%

# April 1, 2014November 22, 2014 tomber 15, 2016 to

In the case of sales to specified markets (as defined herein), export assistance premiums for these products would extend to 2% of the F.O.B value of exports made to the countries specified under the Merchandise Export from India Scheme (MEIS). The MEIS was implemented under the Foreign Trade Policy of India in 2015-20. The purpose of this scheme is to provide Indian exporters certain incentives such as tax benefits, and thereby enhance India s export competitiveness in certain specified markets, including, but not limited to Argentina, Austria, Bulgaria, Cambodia, Chile, and New Zealand. The GoI may further reduce export incentives in the future, which would adversely affect our results of operations.

In fiscal year 2015, export assistance premiums on aluminium rolled products were eliminated and duty exemption scheme of duty free import authorization was introduced to enable duty free import of inputs required for export production pursuant to Chapter 4 of the foreign trade policy whereby advance authorization for inputs and exports items was given under the Standard Input Output Norm (SION) policy scheme.

# India export duties

The GoI levies duty on the export from India of certain products mentioned under the second schedule of the Customs Tariff Act 1975, including iron ore and concentrates, at a specified rate (ad valorem on the Free on Board value of exports). The GoI levied export duty on iron ore fines and lumps @20% on FOB value and further increased to 30% with effect from December 31, 2011. Effective from April 30, 2015, the export duty on iron ore fines with Fe content less than 58.0% is 10.0% and more than 58.0% Fe, duty rate is 30.0% and for iron ore fines it is 30.0%. Effective from March 01, 2016 the export duty on iron ore fines and lumps with Fe content less than 58.0% is nil and more than 58.0% Fe, duty rate is 30.0%.

# Taxes, royalties and cess payments

Income tax on Indian companies during fiscal year 2017 was charged at a statutory rate of 30.0% plus a surcharge of 12.0% on the tax and has an additional charge of 3.0% on the tax including surcharge, which results in an effective statutory tax rate of 34.6%. Non-resident companies was charged at statutory rate of 40.0% plus a surcharge of 5.0% on the tax and has an additional charge of 3.0% on the tax including surcharge, which results in an effective statutory tax rate of 43.3% during fiscal year 2017.

Profits of companies in India are subject to either regular income tax or Minimum Alternate Tax ( MAT ), whichever is greater. The effective MAT rate during fiscal year 2017 for Indian companies was 21.34% and for non-resident companies was 20.0% of the book profit as prepared under generally accepted accounting principles in India, or Indian GAAP. The excess of amounts paid as MAT over the regular income tax amount during the year may be carried forward and applied towards regular income taxes payable in any of the succeeding fifteen years (as amended by finance Act 2017) subject to certain conditions.

Previously Service tax is applicable at 14% with effect from June 1, 2015 until July 1, 2017. Further, an additional Swacch Bharat Cess at 0.5% with effect from November 14, 2015 and Krishi Kalyan Cess at 0.5% with effect from June 1, 2016 on the value of taxable services were applicable until July 1, 2017. Accordingly, the effective service tax rate until July 1, 2017 was payable at 15%.

We pay service tax as a service provider and service recipient.

As a service provider: we pay service tax as a service provider at a rate of 12.36% to 15% under the following categories:

business support services;

oil transfer service;

port service; and

management consultant service.

As a service recipient- we pay service tax as a service recipient under following categories:

foreign service providers: we are responsible to pay service tax directly to tax authorities in case of foreign service providers who are not having any permanent establishment in India. In case service providers having a permanent establishment in India, they are responsible to recover the applicable service taxes and pay to tax authorities. We are also paying service tax as recipient of services on the parent company overheads payable to ultimate parent company, Vedanta Resources Plc;

service tax on fees payable to directors of company: we are paying service tax on the fees payable to non-executive/independent directors. The fee includes director sitting fees and/or any commissions payable to the directors;

other services: in the case of services received from any goods transport agency and payments towards any sponsorship, we are responsible to pay service tax directly to tax authorities as per the applicable rates; and

domestic service providers: In the case of certain services received from non-company domestic service providers, liability of payment of service tax has been casted on the recipient of services with effect from July 1, 2012 under Notification No. 30/2012-Service Tax dated June 20, 2012 as per the applicable rates.
We currently pay an excise duty of 12.5% with effect from March 1, 2015 (for the period from March 17, 2012 to February 28, 2015, the excise duty was 12% and an additional charge of 3.0% on the excise duty based on all of our domestic production intended for domestic sale up to February 28, 2015). We charge the excise duty and additional charge to our domestic customers. We pay excise duty on metallurgical coke at the rate of 6.0% and on pig iron of 12.5%. HZL pays excise duty on silver at the rate of 8.5% effective from March 1, 2016 (8.0% prior to that) and an additional charge of 3.0% on the excise duty has been eliminated with effect from March 1, 2015. Goods procured for the purposes of Petroleum Operations and which are exempt from customs duty are also exempt from excise duty under notification 12 /2012-Central Excise dated March 17, 2012, Sr. No 336 provided conditions as provided have been satisfied, all goods supplied under international competitive bidding and are exempt from customs duty.

**Goods and Service Tax:** Effective from July 1, 2017, the new tax Goods and service tax has been implemented in India. The present indirect tax regime envisages levy of multiple federal and state taxes with respect to the operations undertaken by businesses. The transition from the previous regime to goods and service tax (GST) regime is a tax reform, which is aimed at addressing the existing anomalies and strengthening the concept of unified market. GST is a supply driven concept and would therefore apply on supply of goods and services. On the whole, most central and state levies (such as excise duty, service tax, CVD and special additional duty, central sales tax and value added tax have been subsumed into GST). Therefore, the existing taxable events have been replaced by a single taxable event of supply of goods and services under GST. Basic customs duty (BCD) and related customs cess continue to be applicable on import of goods.

Taxes under GST apply as follows:

Central goods and service tax and state goods and service tax are simultaneously levied on intra-state supply of goods and services.

Integrated goods and service tax are levied on imports and inter-state supply of goods and services.

In addition, GST compensation cess also applies on certain specified goods and services. The general rate of GST on our output supplies is 18.0%. However, supply of iron ore attracts GST at the rate of 5.0%, whereas silver attracts GST at 3.0%. Further, GST will be levied on crude oil and natural gas from the date to be notified by GST council and therefore, until the time GST council notifies inclusion of these products in GST, they would continue to attract existing indirect tax levies. Goods procured for the purposes of petroleum operations are

subject to integrated service tax at 5.0% as per Notification No. 50/2017-Customs, dated June 30, 2017, S.No- 404 condition no-48. BCD continues to be exempt. A similar exemption notification has also been issued to tax inter-state and intra-state supplies of goods for petroleum operations at an effective rate of 5.0%. Procurement of coal attracts GST compensation cess at Rs. 400 per ton in addition to the GST rate of 5.0%. Effective July 1, 2017, CVD and SAD has been subsumed in integrated goods and service tax which is applicable at the rates as mentioned in below table:

	Integrated Goods and Service Tax rate from July 1, 2017
Copper	18.0%
Copper concentrate	5.0%
Zinc	18.0%
Lead	18.0%
Silver	3.0%
Aluminium	18.0%
Iron ore	5.0%

We are also subject to government royalties. We pay royalties to the state governments of Chhattisgarh, Rajasthan, Goa and Karnataka in India based on extraction of bauxite, lead-zinc and iron ore. The most significant of these is the royalty that HZL is required to pay to the state government of Rajasthan, where all of HZL s mines are located at a rate of 10% with effect from September 1, 2014 (the rate was 8.4% from August 13, 2009 to August 31, 2014 and 6.6% prior to August 13, 2009), of the zinc LME price payable on the zinc metal contained in the concentrate produced, 14.5% (the rate was 12.7% from August 13, 2009 to August 31, 2014 and 5.0% prior to August 13, 2009) of the lead LME price payable on the lead metal contained in the concentrate produced and at a rate of 7.0% of silver LME price chargeable on silver-metal produced. In addition, a further amount of royalty effective from September 17, 2015, for DMF at 30% of base royalty and NMET at 2% of base royalty, has been notified. The royalties paid by BALCO on the extraction of bauxite are not material to our results of operations. The royalty payable for our iron ore business is at 15% of pit mouth value (PMV) declared by the Indian Bureau of Mines along with DMF at 30% of base royalty and NMET at 2% of base royalty as notified.

Royalty is also payable at Cairn India to the state government of Rajasthan, Andhra Pradesh and Gujarat for the extraction of crude oil and natural gas. We also pay cess to the GoI. Generally in respect of oil and gas operations, royalty and cess payments are made by the joint operation partners in proportion to their participating interest and are cost recoverable.

For the Rajasthan block, entire royalty payments are made by ONGC at the rate of 20% of well-head value for crude oil and 10% of well-head value for natural gas and are cost recoverable. Until February 2016, cess is paid at the rate of Rs. 4500/MT for crude oil; pursuant to amendments in the Finance Act 2016, cess is paid at the rate of 20% ad-valorem from March 2016 onwards. National Calamity Contingent Duty (NCCD) is paid at the rate of Rs. 50/MT; both NCCD and cess are cost recoverable. Sales tax payments are made at the rate of 2% (central sales tax) on sale of both crude oil and natural gas.

For the Ravva block, royalty is Rs. 481/MT and cess is fixed at Rs. 900/MT on crude oil and the same is cost recoverable. Royalty on natural gas is 10% of well-head value of gas. Sales tax payments stand at 2% (central sales tax) or 5% (value added tax) on crude oil and 14.5% value added tax on natural gas.

For the Cambay block, the entire royalty and cess payments are made by ONGC and are not cost recoverable. We only participate in the payment of NCCD at the rate of Rs. 50/MT. Sales tax payments (central sales tax) are made at a rate of 2% on crude oil and 15% (value added tax) on natural gas.

Our royalties in Zinc International business are as follows:

3.0% of sale value of the products for Skorpion; and

7.0% of turnover for BMM. The royalty rate applied on the turnover is 0.5% if the adjusted earnings before interest and tax ( adjusted EBIT ) is negative, and in the event the adjusted EBIT is positive, the royalty rate applied on the turnover is 0.5% plus the rate computed at 100/9 times the adjusted EBIT upon turnover. In any event, the maximum royalty rate is capped at 7.0%.

#### Tax Incentives

Certain businesses of the Group within India are eligible for specified tax incentives. Most of such tax exemptions are relevant for the companies operating in India. These are briefly described as under:

## The location based exemption

In order to boost industrial and economic development in undeveloped regions, provided certain conditions are met, profits of newly established undertakings located in certain areas in India may benefit from a tax holiday. Such a tax holiday works to exempt 100.0% of the profits for the first five years from the commencement of the tax holiday, and 30.0% of profits for the subsequent five years. This deduction is available only for units established up to March 31, 2012. However, such undertaking would continue to be subject to the Minimum Alternative tax (MAT). The Group has such types of undertakings at Haridwar and Pantnagar, which are part of HZL. In the current year, Haridwar and Pantnagar units are eligible for deduction at 30.0% of taxable profits.

## Sectoral Benefit Power Plants and Port Operations

To encourage the establishment of infrastructure certain power plants and ports have been offered income tax exemptions of up to 100.0% of profits and gains for any ten consecutive years within the 15 year period following commencement of operations subject to certain conditions. The Group currently has total operational capacity of 8.4 GW of thermal based power generation facilities and wind power capacity of 274 MW and port facilities. However, such undertakings would continue to be subject to MAT provisions. The Group has power plants which benefit from such deductions, at various locations of HZL (where such benefits has been drawn), Talwandi Sabo Power Limited, Vedanta Limited and Bharat Aluminium Company Limited (where no benefit has been drawn) and port facilities at Vizag General Cargo Berth Limited (where no benefit has been drawn).

## Sectoral benefit Oil and gas

Provided certain conditions are met, profits of newly constructed industrial undertakings engaged in the oil and gas sector may benefit from a deduction of 100% of the profits of the undertaking for a period of seven consecutive years. This deduction is only available to blocks licensed prior to March 31, 2011. However, such businesses would continue to be subject to the MAT provisions. In the Group, Cairn India Limited (now merged with Vedanta Limited) and Cairn Energy Hydrocarbons Limited benefited from such deductions till March 31, 2016.

## Special Economic Zone SEZ

Provided certain conditions are met, profits of newly established undertakings located in SEZ may benefit from a tax exemption. Such a tax exemptions works to 100.0% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for first 5 years, 50.0% for next 5 years thereafter and 50.0% of the ploughed back export profit for next 5 years.

## Investment Allowance under Section 32 AC of the Income Tax Act

Incentive for acquisition and installation of new high value plant or machinery to manufacturing companies by providing an additional deduction of 15.0% of the actual cost of plant or machinery acquired and installed during the year. The actual cost of the new plant or machinery should exceed Rs. 250 million to be eligible for this deduction. The deduction under section 32AC was available till March 31, 2017.

In addition, the subsidiaries incorporated in Mauritius are eligible for tax credit to the extent of 80.0% of the applicable tax rate on foreign source income.

## **Exchange** Rates

We sell commodities that are typically priced by reference to US dollar prices. However, a majority of our direct costs in our zinc, iron ore, aluminium and power businesses and our smelting and refining costs in our copper business are incurred in Indian Rupees and to a much lesser extent in Australian dollars, South African Rand and Namibian dollar. Also, all costs with respect to imported material for all our businesses are generally incurred in US dollars. As a result, an increase in the value of the US dollar compared to the Indian Rupee, and to a lesser extent the Australian dollar, South African Rand and Namibian dollar, is generally beneficial to our results of operations, except to the extent that the increase results in increased costs of copper concentrate, alumina and other imported materials for our businesses. A decrease in the value of the US dollar relative to the Indian Rupee, Australian dollar South African Rand and Namibian dollar has the opposite effect on our results of operations.

The following table sets forth the average value of the Indian Rupee against the US dollar, Namibian dollar against the US dollar and the South African Rand against the US dollar for the periods indicated:

		For the Six Months Ended September 30,		
	2016	2017		
	(per US	(per US Dollar)		
Indian Rupees	Rs. 66.95	Rs. 64.44		
Namibia Dollars	NAD 14.55	NAD 13.15		
South African Rand	ZAR 14.55	ZAR 13.15		

## Source: Reserve Bank of India, oanda.com

The average exchange rate of the Indian Rupee against the US dollar was Rs. 66.95 per US dollar during the six months ended September 30, 2016 and Rs. 64.44 per US dollar during the six months ended September 30, 2017, an appreciation of 4%.

## **Results of Operations**

## Overview

## Consolidated Statement of Income

The following table is derived from our unaudited condensed consolidated financial data and sets forth our operating results as a percentage of revenue for the six months ended September 30, 2016 and 2017:

		For the Six Months Ended September 30,	
	2016	2017	
	(in percer	(in percentages)	
<b>Consolidated Statement of Income:</b>			
Revenue	100.0	100.0	
Cost of sales	(78.4)	(76.4)	
Gross profit	21.6	23.6	
Other operating income	0.8	0.4	
Distribution cost	(2.1)	(1.8)	
Administration expenses	(3.2)	(2.6)	
Operating profit	17.1	19.6	
Investment income	9.0	4.5	
Finance costs	(10.1)	(7.9)	
Profit before taxes	16.0	16.2	
Tax expense	(4.3)	(4.6)	
Profit for the period	11.7	11.7	
Profit attributable to:			
Equity holders of the parent	6.2	7.6	
Non-controlling interest	5.5	4.1	

Comparison of the six months ended September 30, 2017 and September 30, 2016

Revenue, Other Operating Income and Operating Profit

## Consolidated

Revenue increased from Rs. 300,286 million during the six months ended September 30, 2016 to Rs. 397,240 million (\$ 6,083 million) during the six months ended September 30, 2017, an increase of Rs. 96,954 million, or 32.3%. The increase was primarily on account of higher volume at zinc India, volume ramp up at Aluminium and strong commodity prices which was partially offset by lower volume at Oil and Gas, Power and Iron ore business.

Other operating income decreased from Rs. 2,488 million during the six months ended September 30, 2016 to Rs. 1,583 million (\$24 million) during the six months ended September 30, 2017, a decrease of Rs. 905 million primarily on account of insurance claim settlement at zinc international during the period ended September 30, 2016 at zinc international.

Operating profit increased from Rs. 51,448 million during the six months ended September 30, 2016 to Rs. 77,899 million (\$1,193 million) during the six months ended September 30, 2017, an increase of Rs. 26,451 million, or 51.4%. The increase was largely due to higher volumes, strong commodity prices, rupee appreciation against the US dollar partially offset by higher cost of sales and lower volume at Oil and Gas, Iron ore and Power business. Operating profit margin increased from 17.1% during the six months ended September 30, 2016 to 19.6% during the six months ended September 30, 2017.

Factors contributing to the increase in the operating profit were as follows:

Cost of sales increased from Rs. 235,527 million during the six months ended September 30, 2016 to Rs. 303,457 million (\$4,647 million) during the six months ended September 30, 2017, an increase of Rs. 67,930 million, or 28.8%. Cost of sales increased primarily due to the increase in production volume in our aluminum and zinc India, higher imported coal consumption at power plant and imported alumina in comparison to prior period. However the cost of sales as a percentage of revenue decreased from 78.4%, during the six months ended September 30, 2017.

Distribution costs increased from Rs. 6,335 million during the six months ended September 30, 2016 to Rs. 7,200 million (\$110 million) during the six months ended September 30, 2017, an increase of Rs.865 million or 13.7%, primarily due to the higher production from Zinc and Aluminium business.

Administration expenses increased from Rs. 9,464 million in the six months September 30, 2016 to Rs. 10,267 million (\$157 million) during the six months ended September 30, 2017, an increase of Rs. 803 million, or 8.5%. As a percentage of revenue, administration expenses decreased from 3.2% for the six months ended September 30, 2016 to 2.6% during the six months ended September 30, 2017.

## Zinc India

Revenue from external customers in the Zinc India segment increased from Rs. 58,331 million during the six months ended September 30, 2016 to Rs. 96,740 million (\$1,482 million) during the six months ended September 30, 2017, an increase of Rs. 38,409 million, or 65.8%. The increase was primarily on account of higher volumes, improved zinc and lead price. Specifically:

zinc ingot production increased from 250,169 tons during the six months ended September 30, 2016 to 385,781 tons during the six months ended September 30, 2017, an increase of 54.2%. This increase was mainly due to higher mined metal production supported by enhanced smelter efficiencies. Zinc ingot sales also increased from 242,078 tons during the six months ended September 30, 2016 to 382,943 tons during the six months ended September 30, 2016 to 382,943 tons during the six months ended September 30, 2017, an increase of 58.2%, in line with production.

zinc ingot sales in the domestic market increased from 212,218 tons during the six months ended September 30, 2016 to 264,199 tons during the six months ended September 30, 2017, an increase of 24.5%. The export sales increased from 29,860 tons during the six months ended September 30, 2016 to 118,744 tons during the six months ended September 30, 2017, an increase of 297.7%. Our domestic sales as a percentage of total sales decreased from 87.7% during the six months ended September 30, 2016 to 69.0% during the six months ended September 30, 2017.

the daily average zinc cash settlement price on the LME increased from \$2,089 per ton during the six months ended September 30, 2016 to \$2,784 per ton during the six months ended September 30, 2017, an increase of 33.3%.

the daily average lead cash settlement price on the LME increased from \$1,797 per ton during the six months ended September 30, 2016 to \$2,250 per ton during the six months ended September 30, 2017, an increase of 25.2%.

lead ingot production increased from 55,228 tons during the six months ended September 30, 2016 to 72,769 tons during the six months ended September 30, 2017, an increase of 31.8% in line with mine plan. Lead ingots sales increased from 54,741 tons during the six months ended September 30, 2016 to 73,729 tons during the six months ended September 30, 2016 to 73,729 tons during the six months ended September 30, 2017, an increase of 34.7% in line with production.

Silver ingot production increased from 195,794 kg during the six months ended September 30, 2016 compared to 255,141 kg during the six months ended September 30, 2017. The daily average silver London Bullion Metal Association (LBMA) price decreased from \$585 per kg to \$547 per kg, a decrease of 6.5% during the six months ended September 30, 2017 as compared to the six months ended September 30, 2016. Sale of silver ingots increased from 196,358 kg during the six months ended September 30, 2016 to 256,611 kg during the six months ended September 30, 2017, an increase of 30.7%.

Operating profit in the Zinc India segment increased from Rs. 27,002 million during the six months ended September 30, 2016 to Rs. 51,913 million (\$795 million) during the six months ended September 30, 2017, an increase of Rs. 24,911 million, or 92.3%. The increase was on account of higher volumes, higher zinc and lead LME partially offset by higher cost of production. As a result, operating margin increased from 46.2% during the six months ended September 30, 2016 to 53.7% during the six months ended September 30, 2017.

# Zinc International

Revenue to external customers in the Zinc International segment increased from Rs. 11,382 million during the six months ended September 30, 2016 to Rs. 16,541 million (\$253 million) during the six months ended September 30, 2017, an increase of Rs. 5,159 million or 45.3% primarily due to improved price realizations and higher sales driven by the sell down of inventory levels at BMM. Sales at BMM was higher at 51,694 tons compared to 33,790 tons in corresponding prior period. Specifically:

production of refined zinc metal at Skorpion decreased from 46,770 tons during the six months ended September 30, 2016 to 36,258 tons during the six months ended September 30, 2017, a decrease of 10,512 tons or 22.5% mainly due to planned shutdown during the first quarter of the year which was partially offset by higher zinc output through ore blending and improved material handling. The planned shutdown has increased availability of SW and EW. Skorpion has made good progress to increase input zinc into leach (at 190tph) by screening their wet ore and low grade ore stockpile to mitigate material handling challenges.

production of zinc metal in concentrate (MIC) from the BMM mines increased from 13,207 tons during the six months ended September 30, 2016 to 14,577 tons during the six months ended September 30, 2017, an increase of 1,370 tons or 10.4% due to stronger grades from improved drilling accuracy, better equipment utilization and higher than planned recoveries from plant flotation optimization. This was in addition to the benefits from last year s shift in the mining methodology from cut and fill to the more cost effective long hole massive mining, which includes efficiency improvements on backfill, long-hole blasting and better availability of ore hoisting. Production of lead MIC also increased from 22,080 tons to 23,656 tons, an increase of 1,576 tons or 7.1%.

the daily average zinc cash settlement price on the LME increased from \$2,089 per ton during the six months ended September 30, 2016 to \$2,784 per ton during the six months ended September 30, 2017, an increase of 33.3%.

the daily average lead cash settlement price on the LME increased from \$1,797 per ton during the six months ended September 30, 2016 to \$2,250 per ton during the six months ended September 30, 2017, an increase of 25.2%.

Profitability in the Zinc International segment increased from an operating profit of Rs. 4,946 million during the six months ended September 30, 2016 to an operating profit of Rs. 6,251 million (\$96 million) during the six months ended September 30, 2017, an increase of Rs. 1,305 million or 26.4%. The increase is mainly driven by higher zinc and lead prices, higher sales and lower TcRc, partially offset by higher cost of production and exceptional item of insurance claim and royalty refund during first half of fiscal year 2017.

## Oil and Gas

Revenue from external customers in the oil and gas segment increased from Rs. 39,225 million during the six months ended September 30, 2016 to Rs. 43,744 million (\$670 million) during the six months ended September 30, 2017, an increase of Rs. 4,519 million, or 11.5%, primarily due to increase in oil price realizations and lower profit payouts to government towards profit petroleum at the Rajasthan block. Specifically:

Gross oil and gas production decreased from 36.0 mmboe during the six months ended September 30, 2016 to 33.7 mmboe during the six months ended September 30, 2017, a decrease of 6.8%. Working interest oil and gas production decreased from 23.0 mmboe during the six months ended September 30, 2016 to 21.5 mmboe during the six months ended September 30, 2017, a decrease of 7.0%.

Entitlement interest sales increased from 14.8 mmboe during the six months ended September 30, 2016 to 15.2 mmboe during the six months ended September 30, 2017, an increase of 0.4 mmboe or 2.6%.

the daily average oil and gas cash settlement price on the European Brent increased from \$45.8 per boe during the six months ended September 30, 2016 to \$51.0 per boe during the six months ended September 30, 2017, an increase of 11.4%.

Operating profit in the oil and gas segment increased from Rs. 2,142 million during the six months ended September 30, 2016 to Rs. 10,855 million (\$166 million) during the six months ended September 30, 2017, an

increase of Rs. 8,713 million, or 406.8%. The increase in operating profit for the period was mainly due to higher oil prices, lower profit payouts to government towards profit petroleum at Rajasthan block, lower production cost and depletion and decommissioning charges during six months ended September 30, 2017 which was partially offset by impairment charge on Exploration and Evaluation assets.

## Iron Ore

Revenue from external customers decreased from Rs. 14,534 million during the six months ended September 30, 2016 to Rs.12,206 million (\$187 million) during the six months ended September 30, 2017, a decrease of Rs. 2,328 million, or 16.0%. The decrease was mainly due to lower volume and lower price realization:

iron ore production decreased from 4.7 tons during the six months ended September 30, 2016 to 4.5 million tons during the six months ended September 30, 2017. The decrease was due to reduced mining activities during the monsoon season in fiscal 2018. In Karnataka, production was stable during the fiscal year 2018.

The production of pig iron was lower by 19.7% from 372,218 tons in six months ended September 30, 2016 to 298,843 tons in six months ended September 30, 2017. Metallurgical coke was also reduced from 239,327 tons to 208,267 tons, or by 13.0%. During the first half of the fiscal year 2018, production of pig iron was hampered due to lower metallurgical coke availability due to weather related supply disruptions in Australia and local strike which was resolved in mid-September 2017.

Operating profit in the iron ore segment decreased from Rs. 2,940 million during the six months ended September 30, 2016 to operating loss of Rs. 2,419 million (\$37 million) during the six months ended September 30, 2017, a decrease in the profit by Rs.5,359 million. The decrease in profit was on account of lower price realizations and lower sales volume.

## Copper

Revenue from external customers in the copper segment increased from Rs. 93,271 million for the six months ended September 30, 2016 to Rs.112,856 million (\$1,728 million) for the six months ended September 30, 2017, an increase of Rs. 19,585 million, or 21.0%. The increase was primarily due to improved copper LME prices partly offset by lower sales volume. During the period ended September 30, 2017 production was affected by 11 days planned shutdown and 4 days unplanned shutdown due to waste heat boiler leakage in comparison to corresponding period ended September 30, 2016 unplanned shutdown of 13 days due to boiler leakage. Treatment and refining charge realized was 21.7 US cents per pound for the six months ended September 30, 2016 to 21.2 US cents per pound for the six months ended September 30, 2017, a decrease of 2.0%. Specifically:

copper cathode production decreased from 197,785 tons during the six months ended September 30, 2016 to 196,559 tons during the six months ended September 30, 2017, a decrease of 1,226 tons, or 0.6%. Copper cathode sales was increased from 86,339 tons during the six months ended September 30, 2016 to 97,380 tons during the six months ended September 30, 2017.

production of copper rods decreased from 109,035 tons during the six months ended September 30, 2016 to 98,846 tons during the six months ended September 30, 2017, a decrease of 9.3%. Copper rod sales decreased from 108,269 tons during the six months ended September 30, 2016 to 97,221 tons during the six months ended September 30, 2016 to 97,221 tons during the six months ended September 30, 2017, a decrease of 10.2%. The decrease in sales was in line of production.

sales of copper in the Indian market decreased from 118,102 tons during the six months ended September 30, 2016 to 98,888 tons during the six months ended September 30, 2017, a decrease of 16.3%, and our exports increased from 76,507 tons during the six months ended September 30, 2016 to 95,713 tons during the six months ended September 30, 2016 to 95,713 tons during the six months ended September 30, 2016 to 50.8% during the six months ended September 30, 2016 to 50.8% during the six months ended September 30, 2017. The daily average copper cash settlement price on the LME increased from \$4,751 per ton during the six months ended September 30, 2016 to \$6,013 per ton during the six months ended September 30, 2017, an increase of 26.6%.

net conversion costs increased from 5.6 US cents per pound during the six months ended September 30, 2016 to 6.3 US cents per pound during the six months ended September 30, 2017, due to higher coal and fuel prices, partially offset by higher by-product acid credit.

Operating profit in the copper segment decreased from Rs. 7,463 million during the six months ended September 30, 2016 to Rs. 5,214 million (\$80 million) during the six months ended September 30, 2017, a decrease of Rs. 2,249 million, or 30.1%. The decrease in operating profit was primarily due to lower TCs/RCs, lower Premia, and higher cost of production.

## Aluminium

Revenue from external customers in the aluminium segment increased from Rs. 57,799 million during the six months ended September 30, 2016 to Rs. 94,364 million (\$1,445 million) during the six months ended September 30, 2017, an increase of Rs. 36,565 million, or 63.3%, primarily driven by volume ramp up and increased aluminum prices. Specifically:

aluminium production increased from 541,002 tons during the six months ended September 30, 2016 to 750,436 tons during the six months ended September 30, 2017, an increase of 38.7%. We achieved a record half-yearly production of 750,436 tons of aluminium in six month ended September 30, 2017, with an exit run-rate of 1.6 million tons per annum (excluding trial run production) in September 2017. The commissioning of the 228 pots damaged in April 2017 at Jharsuguda I smelter in under way. Out of 228 pots, 121 pots are operational by September 2017 and balance pots are under ramp up. The commissioning of previously damaged pots at the first line of 1.25 million tons per annum Jharsuguda-II Aluminium smelter is currently under way, with 301 of 336 pots restarted by end of September 2017. The second line is fully complete with 336 pots operational. The ramp up of third line is progressing well and currently 156 pots are operational. The rolled product facility at BALCO, which was temporarily shut down in the second quarter of fiscal year 2016, has recommenced operations during the second quarter of fiscal year 2017, and produced 14,530 tons during the six months ended September 30, 2017. Jharsuguda 1800 MW and BALCO 270 MW have been moved from the power segment to aluminium segment from April 1, 2016 onwards.

aluminium sales increased from 516,331 tons during the six months ended September 30, 2016 to 731,846 tons during the six months ended September 30, 2017, an increase of 41.7% in line with the increase in production from Balco and Jharsuguda. Sales of aluminium ingots increased from 267,464 tons during the six months ended September 30, 2016 to 401,075 tons during the six months ended September 30, 2017, an increase of 50.0%. Rolled product sales increased from 4,061 tons during the six months ended September 30, 2016 to 12,619 tons during the six months ended September 30, 2016 to 12,619 tons during the six months ended September 30, 2017, an increase of from 159,626 tons during the six months ended September 30, 2017, an increase of 8.3%.

aluminum sales in the domestic market increased from 314,160 tons during the six months ended September 30, 2016 to 383,663 tons during the six months ended September 30, 2017, an increase of 22.1%. Our Aluminium exports increased from 202,171 tons during the six months ended September 30, 2016 to 348,184 tons during the six months ended September 30, 2017. Our domestic sales as a percentage of total sales decreased from 60.8% during the six months ended September 30, 2016 to 52.4% during the six months ended September 30, 2017.

the daily average aluminium cash settlement price on the LME increased from \$1,596 per ton during the six months ended September 30, 2016 to \$1,962 per ton during the six months ended September 30, 2017, an increase of 22.9%.

the benchmark Japanese premium increased by \$12 per ton during the six months ended September 30, 2017 as compared to the six months ended September 30, 2016.

Operating profit in the aluminium segment increased from Rs. 2,472 million during the six months ended September 30, 2016 to Rs. 3,874 million (\$59 million) during the six months ended September 30, 2017, an increase of Rs. 1,402 million or 56.7%. This increase was primarily due to volume ramp up, higher aluminium prices partly offset by higher cost of production and increased depreciation from Rs. 4,772 million in six months ended September 30, 2016 to Rs. 6,008 million in six months ended September 30, 2017 due to commissioning of capacities at Jharsuguda and Balco.

#### Power

Revenue from external customers in the power segment decreased from Rs. 25,140 million during the six months ended September 30, 2016 to Rs. 20,325 million (\$311 million) during the six months ended September 30, 2017, a decrease of Rs. 4,815 million or 19.2%, on account of temporary coal shortage and weaker power demand. Specifically:

Power sold decreased from 6,039 million units (MU) during the six months ended September 30, 2016 to 4,787 MU during the six months ended September 30, 2017. Jharsuguda 1800 MW and BALCO 270 MW have been moved from the power to Aluminium segment from April 1, 2016 onwards. The Jharsuguda 600MW power plant operated at a lower Plant Load Factor (PLF) of 26% in the six months ended September 30, 2017 (PLF 62% in the six months ended September 30, 2016) due to temporary coal shortage. At the Talwandi Sabo power plant, Power sales were higher to 3,145 MU during the six months ended September 30, 2017 in comparison to 2,951 MU during the six months ended September 30, 2016. In second quarter for fiscal year 2018, all three units operated at an availability of 87% in comparison to last year availability of 77% during the six months ended September 30, 2016. (Considering the start of third unit from September 1, 2016). The Power Purchase Agreement with the Punjab State compensates Vedanta based on the availability of the plant. The 600 MW BALCO IPP units (2x300MW) operated at lower PLF of 47% during the six months ended September 30, 2017 (59% during the six months ended September 30, 2016), due to temporary coal shortage. The MALCO power plant is under care and maintenance since 26<sup>th</sup> May 2017 due to lower offtake from Telangana State Electricity Board (TSEB).

The average power realization price (excluding TSPL) for the six months ended September 30, 2016 and September 30, 2017 was Rs. 2.92 and Rs. 2.77 per unit respectively due to the weaker power market. The average power realization price for TSPL for the six months ended September 30, 2017 was Rs 3.6 per unit based on the Plant Availability Factor (PAF).

The average power generation cost (excluding TSPL) for the six months ended September 30, 2016 and September 30, 2017 was Rs. 2.03 and Rs. 1.93 per unit respectively. The average power generation cost for TSPL for the six months ended September 30, 2016 and September 30, 2017 was Rs 2.51 and Rs. 2.83 per unit based on the Plant Availability Factor (PAF).

Operating profit in the power segment decreased from Rs. 5,349 million during the six months ended September 30, 2016 to Rs. 2,367 million (\$36 million) during the six months ended September 30, 2017, a decrease of Rs. 2,982 million or 55.7%. The decrease was primarily due to temporary coal shortage, power outage at TSPL due to fire incident in first quarter of fiscal year 2018 and lower power demand.

## Investment Revenue

Investment revenue decreased from Rs. 27,094 million during the six months ended September 30, 2016 to Rs.17,796 million (\$273 million) during the six months ended September 30, 2017, a decrease of Rs. 9,298 million, or 34.3 %, mainly driven by lower cash and liquid investment due to special dividend payout and de-leveraging during the period ended 30 September 2017. The income was also reduced due to falling returns on investments and lower mark to market (MTM) gain.

## Finance costs

Finance costs increased from Rs. 30,427 million during the six months ended September 30, 2016 to Rs. 31,235 million (\$478 million) during the six months ended September 30, 2017, an increase of Rs. 808 million or 2.7%. This was due to interest cost on temporary borrowing at Zinc India and interest on preference shares issued to the shareholders of Cairn India pursuant to merger partially offset by lower interest cost on account of lower debt level due to deleveraging during six months ended September 30, 2017.

## Tax expense

Tax expense was increased from Rs. 12,940 million during the six months ended September 30, 2016 to Rs. 18,089 million (\$277 million) during the six months ended September 30, 2017. Our effective income tax rate, calculated as tax expense owed divided by our profit before taxes was 27% during the six months ended September 30, 2016 and 28% during the six months ended September 30, 2017.

## Non-controlling interest

Profit attributable to non-controlling interest decreased from Rs. 16,484 million during the six months ended September 30, 2016 to Rs. 16,293 million (\$249 million) during the six months ended September 30, 2017, a decrease of Rs. 191 million, or 1.2 %. Non-controlling interest as a percentage of profit was at 35.1% for six months ended September 30, 2017.

## Liquidity and Capital

As of September 30, 2017, we had cash and short-term investments and deposits (excluding restricted cash) totaling Rs. 399,894 million (\$6,124 million), short term borrowings of Rs. 254,824 million (\$3,902.0 million) and long term borrowings of Rs. 303,156 million (\$4,643 million). On a standalone basis, Vedanta Limited had cash and short-term investments totaling Rs. 123,216 million (\$1,887 million) and borrowings of Rs. 382,315 million (\$5,855 million). The cash flow summary of net cash provided or used for the period indicated:

	For the Six Months Ended September 30,		
	2016 (Rs. in million)	2017 (Rs. in million)	2017 (US Dollars in million)
Net cash provided by/ (used in):			
Operating activities	86,632	153,448	2,350
Investing activities	(33,017)	(655)	(10)
Financing activities Net Cash Provided by Operating Activities	(55,148)	(240,033)	(3,676)

Net cash from continuing operating activities was Rs. 153,448 million (\$2,350 million) during the six months ended September 30, 2017 as compared to net cash from continuing operating activities of Rs. 86,632 million during the six months ended September 30, 2016. Net increase in cash flows from operating activities was mainly due to following reasons:

Net proceeds from short term investments of Rs.135,577 million (\$2,076 million) in the six months ended September 30, 2017 compared to net proceeds of short term investments of Rs. 79,962 million in the six months ended September 30, 2016.

Cash used in operating assets and liabilities (working capital) in the six months ended September 30, 2017 was Rs.59,937 million (\$917 million) compared to cash use of Rs. 27,079 million in the six months ended September 30, 2016.

Interest received of Rs. 6,811 million (\$104 million) in the six months ended September 30, 2017 compared to Rs. 6,004 million in the six months ended September 30, 2016.

Income tax paid of Rs. 10,619 million (\$163 million) in the six months ended September 30, 2017 compared to Rs. 21,006 million in the six months ended September 30, 2016.

Interest paid of Rs. 30,308 million (\$464 million) in the six months ended September 30, 2017 compared to Rs. 34,227 million in the six months ended September 2016.

## Net Cash Used in Investing Activities

Net cash used in investing activities was Rs. 655 million (\$10 million) during the six months ended September 30, 2017 as compared to net cash used in investing activities of Rs. 33,017 million during the six months ended September 30, 2016. Decrease in net cash used in investing activities was due to:

Net cash inflow from short term deposits of Rs. 16,649 million (\$255 million) in the six months ended September 30, 2017 as compared to net cash outflow of Rs. 13,789 million during the six months ended September 30, 2016.

Increase in cash used in our expansion projects and in exploration to Rs.21,950 million (\$336 million) in the six months ended September 30, 2017 as compared to Rs. 19,342 million in the six months ended September 30, 2016.

Decrease in net restricted cash and cash equivalents by Rs. 4,530 million (\$69 million) in the six months ended September 30, 2017 as compared to increase of Rs. 331 million in the six months ended September 30, 2016. *Net Cash used in Financing Activities* 

Net cash used in financing activities was Rs. 240,033 million (\$3,676 million) during the six months ended September 30, 2017 compared to net cash used in financing activities of Rs. 55,148 million in the six months ended September 30, 2016 primarily on account of :

Net cash used on account of repayment of long term and short term debts (other than working capital, acceptances and related party debt) of Rs. 164,493 million (\$2,518 million) in the six months ended September 30, 2017 as compared net cash inflow of Rs. 55,368 million in the six months ended September 30, 2016.

Net cash used on account of repayment of working capital loan and acceptances of Rs. 1,465 million (\$23 million) in the six months ended September 30, 2017 as compared net cash inflow of Rs. 33,821 million in the six months ended September 30, 2016.

Net cash outflow towards loan repaid to related party of Rs. nil million (\$Nil million) in the six months ended September 30, 2017 as compared net cash outflow towards loan to related party of Rs. 98,808 million in the six months ended September 30, 2015.

Payment of dividends of Rs.72,170 million (\$1,106 million) in the six months ended September 30, 2017 as compared to Rs. 45,529 million in the six months ended September 30, 2016.

Net cash flow on account of purchase of treasury shares of Rs 1,905 million (\$ 29 million) in the six months ended September 30, 2017 as compared to Rs. Nil in the six months ended September 30, 2016. We tap both the domestic and offshore markets for our long-term funding needs. Since we have sizeable imports and exports, we access both import and export credits, based on cost effectiveness, both in the Indian Rupee and in foreign currencies, to finance our short-term working capital requirements. We have in place both secured and unsecured borrowings, with our secured borrowings being generally Indian Rupee denominated bonds. See Note 9 to our unaudited condensed consolidated financial statements for more information on our loans and borrowings.

We have tapped different segments of borrowing resources, including banks and capital markets, both in India and overseas. We have credit ratings of above investment grade from the local rating agencies such as CRISIL Limited and India Ratings and Research Private Limited. We therefore have not had, and do not believe that we will have, difficulty in gaining access to short-term and long-term financing sufficient to meet our current requirements.

## **Off-Balance Sheet Arrangements**

See Note 14 of Notes to the consolidated financial statements

## Legal Proceedings

## Forest development tax levied by the Government of Karnataka

In October 2008, we filed a writ petition in the High Court of Karnataka against the Government of Karnataka and others, challenging the imposition of a forest development tax at a rate of 8.0% (a subsequent demand was made for the payment of tax at the rate of 12.0%) on the value of iron ore sold by us from the mining leases in the forest area, pursuant to the notification by the Government of Karnataka and the memorandum/common order issued by the Deputy Conservator of Forests. In August 2009, the High Court of Karnataka permitted the Government of Karnataka to levy the forest development tax and ordered that the demand be restricted to 50.0% of the forest development tax as an interim arrangement pending disposal of the writ petition.

We filed an application before the High Court of Karnataka, seeking modification of the order in August 2009. However, the application was not taken up for hearing. Subsequently, we filed a special leave petition before the Supreme Court of India against the High Court s order. In November 2009, the Supreme Court of India ordered the High Court of Karnataka to dispose the application for modification of the order given in August 2009 and ordered us to furnish a bank guarantee towards payment of the forest development tax. In April 2010, we were ordered by the High Court of Karnataka to pay 25.0% of the demand in cash and furnish a bank guarantee for the remaining 25.0%. On January 3, 2016, the High Court of Karnataka passed its final order quashing the forest development tax notification, holding that the rate of forest development tax levied to be 8% and directing a refund of the amounts collected from mining lessees other than state government owned companies. The state government of Karnataka appealed against the order before the Supreme Court of India, and another mining lessee also filed a counter appeal in the matter. The matter is pending before the Supreme Court and in the interim, the Supreme Court has stayed the refund of the forest development tax amount as ordered by the High Court.

Meanwhile, the Government of Karnataka amended the Karnataka Forest Act, 1963 (Amendment Act) to validate the earlier law making certain amendments with retroactive effect. The Amendment Act has also changed the

nomenclature of Forest Development Tax to Forest Development fee with retroactive effect, since the court had previously declared that FDT was a tax and not a fee, as claimed by Government of Karnataka. We challenged the validity of the Amendment Act by way of a writ petition before the Karnataka High Court. The Karnataka High Court has now struck down the Amendment Act and has directed refund of the amounts collected.

## Proceedings related to the Imposition of Entry Tax

The Company and other group companies 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 states from outside and other notifications, as being in violation of certain provisions of the Indian Constitution. Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. The Supreme Court in its order rejected the compensatory nature of tax as a ground for challenge and left all other issues open for adjudication by regular benches hearing the matter.

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 from other States to the respective High Courts for final determination but retained the issue of jurisdiction on levy on imported goods, for determination by regular bench of the Supreme Court. Following the order of the Supreme Court, we filed a writ petition in the High Court of Rajasthan and Odisha. Hindustan Zinc Limited and BALCO have also filed writ petitions in the High Court of Rajasthan and High Court of Chhattisgarh respectively.

On October 9, 2017, the Supreme Court held that States have the jurisdiction to levy entry tax on imported goods. With this Supreme Court judgement, imported goods will rank pari passu with domestic goods for the purpose of levy of Entry tax. The company and its subsidiaries are in the process of amending their appeals (writ petitions) in Orissa and Chattisgarh 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 of discrimination has been remanded back to the High Courts for final adjudication.

In a related matter, the issue pertaining to levy of entry tax on movement of goods into a Special Economic Zone (SEZ) remains pending before the High Court of Odisha. Meanwhile, the Government of Odisha further through its SEZ Policy 2015 and the operational guidelines for administration of this policy dated August 22, 2016, exempted entry tax levy on SEZ operations.

## Shenzhen Shandong Nuclear Power Construction Co. Limited has commenced arbitration proceedings against us

On February 19, 2012, Shenzhen Shandong Nuclear Power Construction Co. Limited (SSNP) filed a petition before the Bombay High Court under section 9 of the Arbitration and Conciliation Act, 1996, alleging non-payment of their dues towards construction of a 210 MW co-generation power plant for a refinery expansion project at Lanjigarh, and filed a claim of Rs. 16,686 million (\$257 million). This was subsequent to SSNP s notice for termination of the contract dated February 25, 2011 and legal notice dated February 23, 2012 for recovery of its alleged dues. SSNP also made a request for interim relief. Under the petition, SSNP sought for a restraining order on encashment of the advance bank guarantee, injunction from disposing or creating third party right over plant and machinery at the project site and security for the amount due under the contract. On April 25, 2012, the High Court of Bombay dismissed SSNP s petition. SSNP appealed against this order and the High Court of Bombay by its order of December 12, 2012 ordered us to deposit a bank guarantee for an amount of Rs. 1,870 million (\$29 million) until completion of the arbitration proceedings.

On April 9, 2013, we also filed a counterclaim for delays in operations caused for which we argued that SSNP was responsible. Subsequently SSNP filed an application for an interim award of Rs. 2,020 million (\$ 31 million) before the arbitral tribunal, which was not allowed.

The arbitration award has been pronounced, wherein the Tribunal has awarded an aggregate amount of Rs.2,207 million (\$34 million) to SSNP along with interest at the rate of 9% from the date of filing of claim before Arbitral Tribunal. The Company is evaluating various options including challenging of the award u/s 34 of the Arbitration and Conciliation Act, 1996.

## Proceedings against TSPL relating to its delay in commissioning various units of the power plant

TSPL entered into a long term power purchase agreement with the Punjab State Power Corporation Limited (PSPCL) for supply of power. TSPL has a contractual obligation to complete the commissioning of various units of the power plant according to the scheduled timelines agreed in terms of the agreement. According to the terms of the agreement, there are obligations and performances to be met by both PSPCL and TSPL. PSPCL was obligated to fulfill certain

conditions including procuring interconnection and transmission facilities, arranging supply of adequate quantity of fuel for the project etc. However, due to the delay in fulfilment of certain obligations and other force majeure reasons, there were delays in implementing the project as compared to the scheduled timelines under the agreement. TSPL received letter from PSPCL, seeking payment of liquidated damages of Rs.3,176 million (\$ 50 million) for each delay in commissioning of Units I, II and III totaling Rs. 9,529 million (\$ 147 million).

Subsequently, PSPCL invoked the bank guarantee of Rs. 1,500 million (\$ 23 million) towards payment of the liquidated damages on account of delay in completion of the commissioning of Unit I. TSPL filed a petition with the Punjab State Electricity Regulatory Commission (PSERC) for quashing of the wrongful claim of liquidated damages and grant of extension of time to complete the commissioning of various units of the power plant. On October 22, 2014, PSERC ordered the matter to be settled through arbitration and allowed the stay on encashment of the bank guarantee until the matter is finally adjudged by Arbitrator. PSPCL submitted an appeal in Appellate Tribunal for Electricity (APTEL) against the PSERC order and on May 12, 2015, APTEL disposed the appeal by directing that the matter will be adjudicated by an arbitral tribunal. The arbitral proceedings have concluded and the award was pronounced, dismissing all claims raised by PSPCL.

## TSPL: Dispute related to Coal GCV measurement and coal washing

Upon PSPCL s refusal to pay energy charges to TSPL as per the provisions of a PPA between PSPCL and TSPL dated September 1, 2008. TSPL filed a petition on May 22, 2014, in PSERC against PSPCL claiming charges for washing, unloading, surface transportation, transit loss, finance charges, Gross Calorific Value (GCV) loss related to the procurement of coal. PSPCL s contention was that fuel charges should only include charges billed by the fuel supply company namely Mahanadi Coalfields Limited, whereas TSPL contended that all costs of fuel procurement are to be considered by PSPCL under the PPA, since the obligation to supply fuel for the project is that of PSPCL under Case II Scenario IV bidding procedure of Ministry of Power. PSPCL s obligation of signing fuel supply agreement with Mahanadi Coalfields Limited and to supply fuel for project was later upheld by APTEL in another case between TSPL and PSPCL and that judgement is subsisting since its operation has not been disturbed in PSPCL s appeal to Supreme Court of India.

PSERC issued the final order on November 23, 2015 denying all the claims made by TSPL. TSPL filed an appeal before APTEL challenging the order of PSERC. On July 3, 2017, APTEL partially allowed the appeal awarding unloading and shunting charges to TSPL although it ruled against TSPL on other claims. TSPL filed an appeal before Supreme Court. In a similar matter before Supreme Court, substantial relief has been granted by Supreme Court, allowing washing and road transportation costs besides directing measurement of GCV at plant site. TSPL s appeal is tagged with the other matter and the matter is listed for hearing on March 2, 2018. A cross appeal has also been filed by PSPCL. The claim amount involved is Rs. 6,751 million (\$103 million).

## Claim against HZL for contributions towards the District Mineral Foundation

The District Mineral Foundation was introduced by MMDRA Amendment Act, whereby all the mining lease holder have been made liable to pay contribution towards District Mineral Foundation, which shall be such percentage of royalty as prescribed by the Central Government. The Section 9B of the MMDRA Amendment Act, providing this levy was introduced and made effective from January 12, 2015. In September 2015, a notification was issued by the Ministry of Mines prescribing the rate for the District Mineral Foundation contribution. In October 2015, another notification was issued by the Ministry of Coal whereby rates were prescribed for minerals like coal and lignite, however a separate provision was inserted applying such rates from the date of the said notification or the respective state rules, whichever comes earlier. Subsequently, state rules were formulated for Rajasthan with effect from May 2016 and demand notices were received by HZL for deposit of the District Mineral Foundation contribution contribution from January 12, 2015. The High Court of Rajasthan in its order dated August 8, 2016 stayed the said demand retrospectively for the period under challenge.

The Federation of Indian Mineral Industries (FIMI) had also filed a writ petition before the High Court of Delhi, obtaining an order for no coercive action, which petition was subsequently transferred to the Supreme Court. The Supreme Court passed the final order in this matter and directed the contribution to DMF in case of minerals other

than coal shall be w.e.f 17 September 2015 and in the case of coal w.e.f. 20 Oct 2015 or from the date on which the DMF was established by the state, whichever is later.

Parallely, Vedanta Limited and Balco s challenges against notifications for liability on account of fuel are pending before the High Court of Delhi. Balco s challenge against liability on account of non-fuel has been decided on the basis of the Supreme Court order.

# Proceedings against us challenging environmental consents received for our expansion project of pig iron, metallurgical coke, sinter plants and power plant in Goa

On March 6, 2012, the High Court of Bombay dismissed a public interest litigation filed by Mr. Ramachandra Vaman Naik and others for quashing an approval issued by the MoEF and the Goa State Pollution Control Board for the expansion project of a pig iron plant, sinter plant, metallurgical coke plant and power plant in Goa. On July 26, 2012, Mr. Naik challenged this order by filing a special leave petition before the Supreme Court for an interim stay of the order and for a stay on the construction and operation of the plants in Goa. No stay has been granted in these matters and all respondents have filed their counter affidavits. The Supreme Court, on November 7, 2016, transferred the matter to the National Green Tribunal, New Delhi for a de novo hearing and disposal. The Supreme Court also set aside the order passed by the High Court without expressing any opinion on the merits of the case. The matter before the National Green Tribunal, New Delhi was heard on December 4, 2017 and the Tribunal has disposed the matter with directions to the MoEF to examine, if any, additional conditions are to be added to the environmental clearance. Applicants were given liberty to submit suggestions, if any, to MoEF within 2 weeks and MOEF was directed to pass orders expeditiously thereafter.

## The Amalgamation and Re-organization Scheme has been challenged by the Indian tax authorities and others

Subsequent to the effectiveness of the Amalgamation and Re-organization Scheme, special leave petitions challenging the orders of the High Court of Bombay at Goa were filed before the Supreme Court of India by the Commissioner of Income Tax, Goa and the Ministry of Corporate Affairs in July 2013 and in April 2014, respectively which have now been admitted and the next date of hearing is scheduled on March 5, 2018. Further, a creditor and a shareholder have challenged the Amalgamation and Re-organization Scheme in the High Court of Madras in September 2013.

# SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunder duly authorized.

Date: December 18, 2017

## **VEDANTA LIMITED**

By: /s/ G.R. Arun Kumar Name: G.R. Arun Kumar Title: Chief Financial Officer