



# Vedanta Ltd.

**Tom Albanese**Chief Executive Officer

August 2016

### **Cautionary Statement and Disclaimer**



The views expressed here may contain information derived from publicly available sources that have not been independently verified.

No representation or warranty is made as to the accuracy, completeness, reasonableness or reliability of this information. Any forward looking information in this presentation including, without limitation, any tables, charts and/or graphs, has been prepared on the basis of a number of assumptions which may prove to be incorrect. This presentation should not be relied upon as a recommendation or forecast by Vedanta Resources plc and Vedanta Limited (formerly known as Sesa Sterlite Ltd.) and any of their subsidiaries. Past performance of Vedanta Resources plc and Vedanta Limited (formerly known as Sesa Sterlite Ltd.) and any of their subsidiaries cannot be relied upon as a guide to future performance.

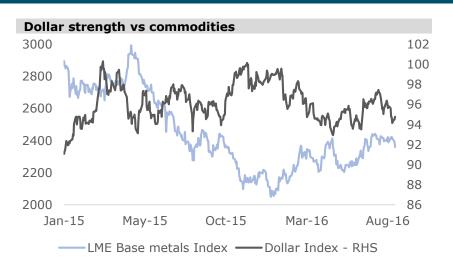
This presentation contains 'forward-looking statements' – that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as 'expects,' 'anticipates,' 'intends,' 'plans,'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

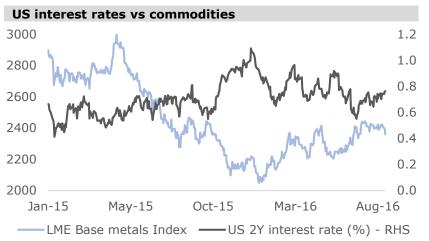
statements. We do not undertake to update our forward-looking statements. We caution you that reliance on any forward-looking statement involves risk and uncertainties, and that, although we believe that the assumption on which our forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate and, as a result, the forward-looking statement based on those assumptions could be materially incorrect.

This presentation is not intended, and does not, constitute or form part of any offer, invitation or the solicitation of an offer to purchase, otherwise acquire, subscribe for, sell or otherwise dispose of, any securities in Vedanta Resources plc and Vedanta Limited (formerly known as Sesa Sterlite Ltd.) and any of their subsidiaries or undertakings or any other invitation or inducement to engage in investment activities, nor shall this presentation (or any part of it) nor the fact of its distribution form the basis of, or be relied on in connection with, any contract or investment decision.

# Commodity prices have been driven by dollar strength, low interest rates and recovery in China







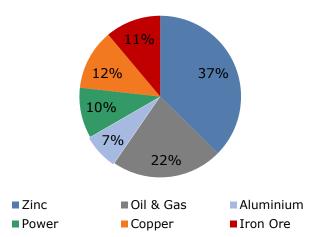


### **Vedanta: A Global Diversified Natural Resources Company**

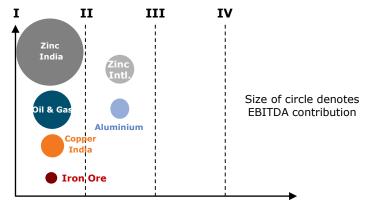


- Portfolio of large, structurally low-cost, long-life Tier-I assets, that delivered strong free cash flow
  - Significant ramp-up at Aluminium, Power and Iron ore progressing well with minimal incremental capex
  - Delivered consistent EBITDA margin of 32%¹ for Q1 FY2017 and 30%¹ for FY2016
  - Delivered cumulative cost and marketing savings of c.US\$ 340
     mn over last five quarters; on course to deliver US\$1.3 bn
  - Strong credit rating of AA- by CRISIL
  - Gross debt reduced by c. Rs. 2,300 crore in last 4 quarters to 30
     June 2016
- Positively contributing to India
  - Contribution of \$3.1bn to Indian Exchequer in FY2016
  - Direct and Indirect employment of c.70,000
  - Community investment of \$24mn benefiting 1.8mn people in India in FY2016
- Announced revised and final terms for the merger with Cairn India:
   Cairn's minority shareholders will receive 1 Equity share in Vedanta Ltd and 4 Redeemable Preference Shares of Rs.10 each





# >80% EBITDA from low cost assets providing resilience to market volatility



<sup>1</sup> Excludes custom smelting

### Large, low cost and diversified asset base

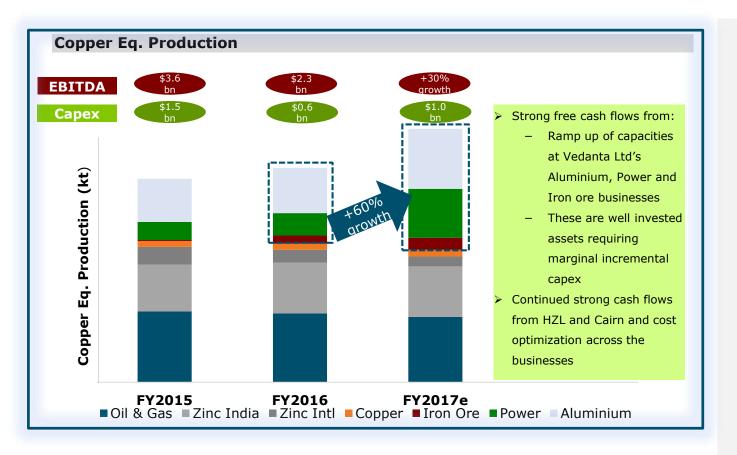


		R&R Life (years)	FY2 Production	2016 EBITDA Rs. Cr (\$mn)	Key highlights
<b>0&amp;G</b>	Oil & Gas	15+	46.9 mmboe <sup>1</sup>	3,504 (\$535mn)	<ul> <li>India's largest private-sector crude oil producer</li> <li>Strong FCF generation even at low oil prices with opex of \$6.5/bbl</li> </ul>
ZLS	Zinc – India	25+	Zn - 759kt <sup>2</sup> Ag - 14moz	6,484 (\$1,006mn)	<ul> <li>Positioned on the 1<sup>st</sup> decile of the cost curve</li> <li>Rampura Agucha is the largest zinc-lead mine globally; significant production of silver from SK mine</li> </ul>
ZLS	Zinc Intl.	20+	226kt <sup>3</sup>	380 (\$58mn)	<ul> <li>Gamsberg is one of the world's largest undeveloped zinc deposits</li> <li>Developing Gamsberg with a modular and flexible approach to maximise value</li> </ul>
Cu	Copper – India	NA	384kt	2,205 (\$337mn)	<ul> <li>One of the world's most efficient custom smelters, operating consistently above 90% utilisation rate</li> <li>Strongly positioned on the 1<sup>st</sup> quartile of the cost curve</li> </ul>
Fe	Iron Ore	20+	5.2dmt <sup>4</sup>	402 (\$61mn)	<ul> <li>Goa operation on 1<sup>st</sup> quartile of the cost curve</li> <li>Largest iron ore exporter in India pre-ban, significant ramp-up in FY2017</li> </ul>
Al	Aluminium	NA	923kt <sup>5</sup>	661 (\$101mn)	<ul> <li>Significant ramp up of capacities in FY 2017</li> <li>Integrated capacity with captive power</li> </ul>
Pwr	Power	NA	12,121MU <sup>6</sup>	1,299 (\$198mn)	<ul> <li>9,000 MW fully operational, of which 3,600 MW commercial power</li> <li>Poised to benefit from structural power shortage in India</li> </ul>

<sup>1.</sup> Vedanta Ltd working interest 2. Refined zinc total production (does not include 145kt refined lead) 3. Refined zinc from Skorpion (82kt) and mined metal from BMM and Lisheen (63kt and 81kt, respectively) 4. Production of saleable ore 5. Total aluminum production (does not include Lanjigarh 971kt of Alumina). 6. Total power sales

### Continued Focus on Strong FCF Generation Through Disciplined Ramp-up sevedanta





#### **Progress during Q1 FY2017**

- Ramp-up of BALCO-II smelter completed, rolled product facility re-started;
   Jharsuguda-II: 1st line ramp-up impacted by power outage, 3rd line start-up preponed from Q4 to Q2
  - Goa iron ore production scaled to 40% of allocated capacity in Q1
- Ramp-up of power volumes at BALCO and TSPL; 3<sup>rd</sup> unit of TSPL to be capitalized in Q2
- On track to deliver significant EBITDA growth in FY2017



### Ramp-up will generate higher free cash flow and enable de-leveraging

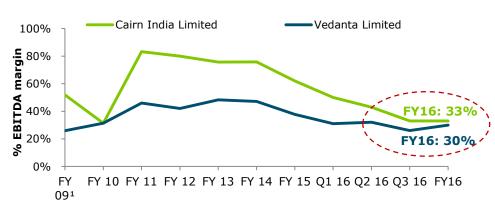
### **Vedanta Ltd-Cairn India Merger: Revised and Final Terms**



#### Revised and final terms

- Cairn India minority shareholders will receive for each equity share held, 1 Equity Share in Vedanta Ltd. and 4 Redeemable Preference Shares of Rs.10 each
- Implied premium of 20% to one month VWAP of Cairn India share price as on 21st July 2016
- Pro-forma ownership in Vedanta Ltd.:
  - Vedanta Resources 50.1%; Vedanta Ltd minority shareholders 29.8%; Cairn India minority shareholders 20.2%
- Conditional on shareholder approvals at each of Vedanta plc, Vedanta Ltd and Cairn India, as well as customary regulatory approvals

#### Diversified assets generate consistent margins...

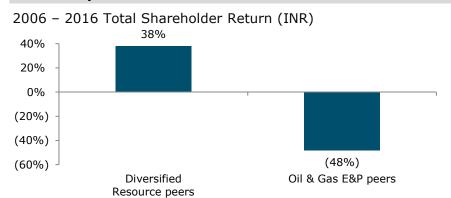


Source: Company filings, Bloomberg Note1: Excludes custom smelting. For Vedanta Limited: reported numbers considered for FY13 to current; Vedanta plc ex KCM used as proxy for FY12 and before

#### Strategic rationale for the merger

- Diversified portfolio de-risks earnings volatility and drives stable cash flows through the cycle
- Improved ability to allocate capital to highest return projects
- Greater financial flexibility to sustain strong dividend distribution
- Cost savings and greater capital efficiency, with potential re-rating to benefit all shareholders
- Stronger balance sheet lowers overall cost of capital
- Consistent with stated corporate strategy to simplify the Group structure

#### ... and superior shareholder returns



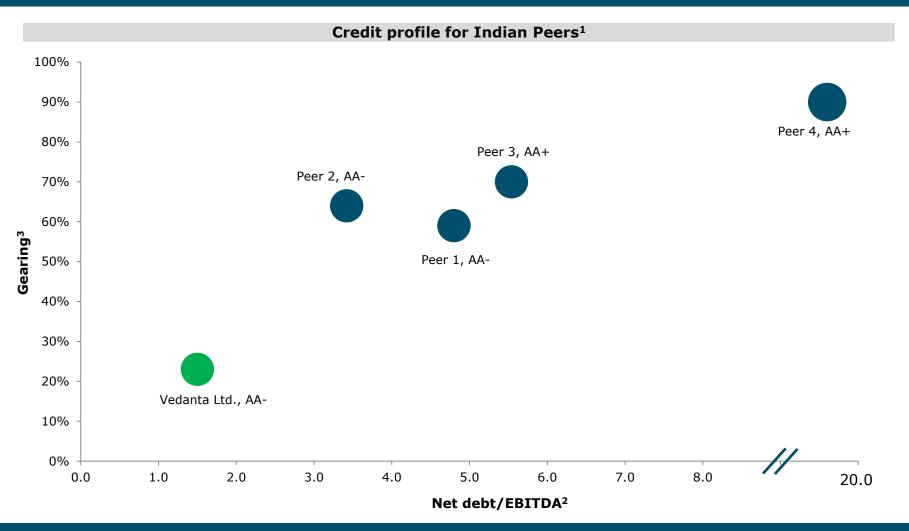
Source: Datastream as at 20 July 2016, shown on an INR basis

Diversified Resource peers include Anglo American, BHP Billiton, Freeport McMoran, Glencore, Rio Tinto, Teck Resources, Vedanta Resources plc

Oil & Gas E&P peers include mid-cap exploration and production companies with focus on production from emerging markets; includes DNO ASA, Genel Energy, Gulf Keystone Petroleum, Kosmos Energy, Maurel et Prom, Nostrum, Soco International and Tullow Oil

### **Vedanta Limited: Strong credit metrics**





#### Vedanta's credit metrics to further improve with production ramp-ups

Source: Bloomberg

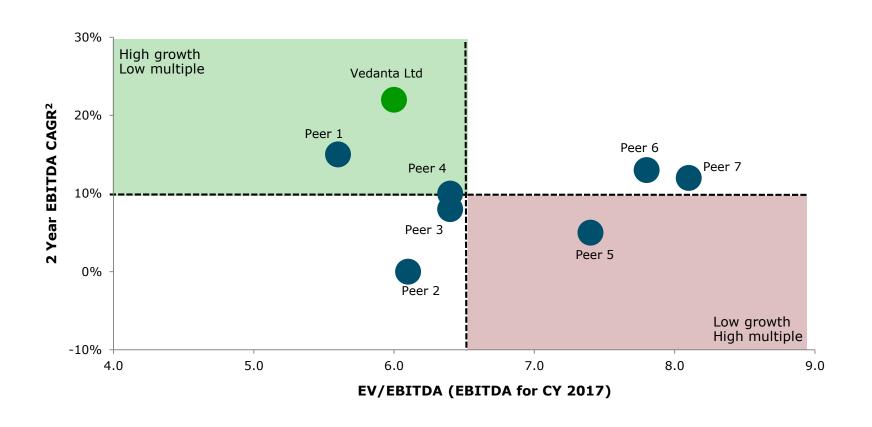
Note 1. Peer companies include Hindalco, Tata Steel, JSW Steel and SAIL. Credit rating as assigned by CRISIL or CARE rating

2. Net debt is current reported net debt, while EBITDA is Bloomberg estimates for FY2017

3. Gearing is calculated as Net debt divided by the sum of Net debt and Equity

### **Vedanta Limited: An attractive value proposition**





### Vedanta trades at lower multiple, while offering higher EBITDA growth

Source: Bloomberg

Note 1: Peers include BHP, Rio Tinto, Glencore, Anglo American, Teck, Freeport and South32. EBITDA has been calendarised for CY 2017.

2: Base year is taken as CY 2015 for December year-ending companies, while FY 2016 for BHP, South32 and Vedanta

### **Strategic Priorities Remain Unchanged**



#### **Strategic Priorities**



Production growth and asset optimisation



De-lever the balance sheet



Simplification of the group structure



Protect and preserve our license to operate



Identify next generation of resources

#### **Focus Areas for FY 2017**

- Disciplined ramp-up of new capacities in Aluminium, Power and Iron
  Ore
- Zinc: Ramp-up volumes at Rampura Agucha U/G and develop Gamsberg
- O&G: Enhance gas production; EOR at other fields
- Reduce gross debt
- Continued optimisation of opex and capex
- · Continued discipline around working capital
- Announced revised and final terms for the Vedanta Limited and Cairn India Merger
- Expect merger to be completed by Q1 CY2017
- Achieving Zero harm: reduce fatal, environment and social incidents
- To obtain local consent prior to accessing resources
- Resource Efficiency Improvement Water, Energy, Waste and Carbon
- Community need based development projects
- Disciplined approach to exploration
- Continue to enhance our exploration capabilities: Dedicated exploration cell formed

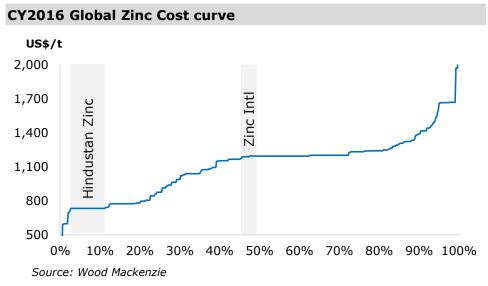


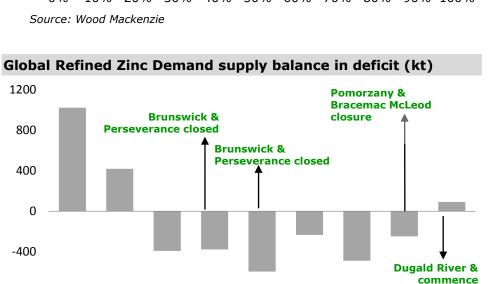


# **Business Update**

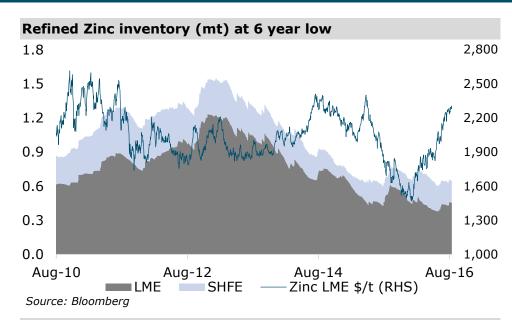
### Zinc and Silver: Fundamentals supporting performance

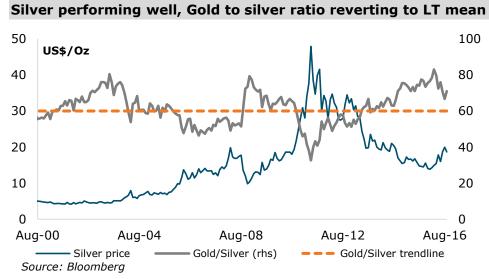






Gamsberg





-800

Source: Wood Mackenzie STO Q2 2016

### Zinc India Well-positioned to reap benefits of strong fundamentals



#### **Zinc India**

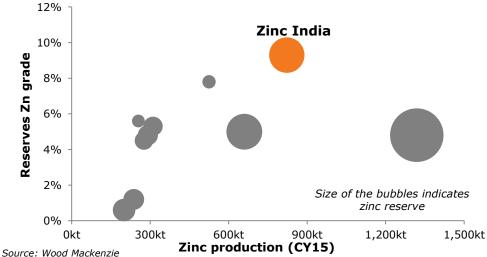
#### **Projects**

- RAM U/G main shaft crossed 900mtrs against the final depth of 950mtrs; winder erection work commenced during the quarter
- Extension of RAM open pit: Pre-stripping progressing as per plan
- SK mine: Off shaft development work continues to be ahead of schedule; further expanding mine from 3.75mtpa to 4.5mtpa
- Kayad mine: Project is nearing completion with capacity of 1mtpa

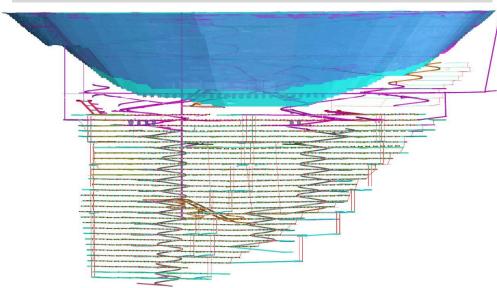
#### **Outlook**

- FY2017 mined metal production to be higher than previous year
- H2 to be substantially higher than H1; within H1, Q2 to be materially higher
- Zinc CoP for FY2017 to remain stable compared to last year

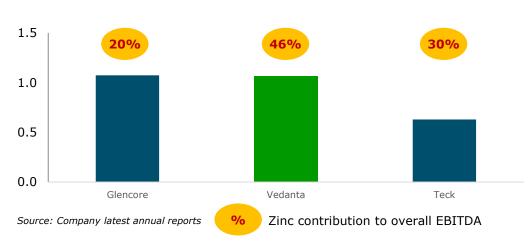
### 2015A top 10 zinc producers globally



#### Rampura Agucha Mine – Longitude Vertical Section



#### Zinc EBITDA and contribution to overall EBITDA of diversifieds



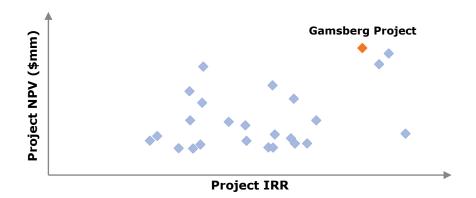
## Zinc International - First ore production in early CY 2018 at Gamsberg 📚 vedanta



#### **Gamsberg Project update**

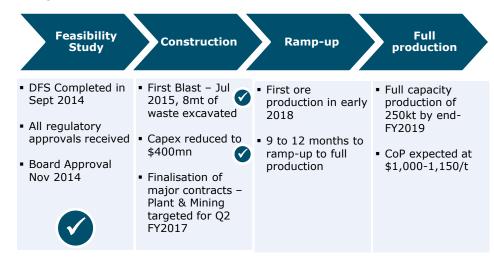
- Large, low-cost project with long mine life
  - Targeting zinc production of 250ktpa in Phase-1
  - Significant potential for further expansion at the Gamsberg North deposit
- Mining and milling capex reduced by \$200mn to c.\$400mn, mainly on engineering improvements and renegotiations
  - Significant boost to project returns
- Pre-stripping progressing in line with plan with 8mt of waste excavated
  - First ore production targeted by 2018 with 9-12 month ramp-up to full production
- Fundamentals of the zinc markets continue to be strong and supportive of the project

#### Gamsberg is a large, high return project...

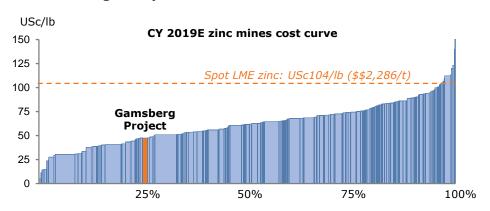


Source: Wood Mackenzie as of June 2016; zinc/lead projects with an NPV > \$400m (10% WACC)

#### **Project timeline**



#### ...with strong cost position on the cost curve



Source: Wood Mackenzie as of August 2016; C1 composite cost curve

### Oil & Gas: Low-cost producer with growth optionality



#### Q1 FY2017 Results

- Mangala EOR, world's largest polymer program yielding results
  - EOR production reached 42 kboepd, 31% higher q-o-q
  - Rajasthan production stable at 167 kboepd in Q1
- Rajasthan water flood opex further reduced to \$4.4/boe; blended cost at \$6.4/boe, better than earlier expectation of high single digits

#### **RDG Gas: Phased ramp-up**

- Phase-1: Successfully completed fraccing at 15 wells; 25% increase in estimated total recovery of gas till 2030
  - 40-45 mmscfd by H1 CY2017
- Phase-2: Tendering for new gas processing terminal and rig underway
  - 100 mmscfd by H1 CY2019

#### **Progress on key optionality projects**

- Improved economics of Bhagyam and Aishwairya EOR
  - Aishwariya EOR: Opex reduced by c.30%; FDP for 15 mmbbls to be submitted in current guarter
  - Bhagyam EOR: Reduced development and operating cost by c.25%; revised FDP for 45 mmbbls to be submitted to JV partner in H1 CY 2017
- Aishwarya Barmer Hill: Development in phases with total EUR of 20-30 mmbbls, production from Phase-1 expected in the current fiscal

#### **Outlook**

- Rajasthan FY2017 production expected broadly at FY2016 level
- Maintenance shutdown at MPT in Sept 2016
- FY2017 net capex of \$100m
  - 80% on Development including RDG and Mangala EOR projects
  - 20% on Exploration

Source: IEA, BP statistical review of world energy



Rajasthan: Crude Oil Processing Facility



**Rajasthan: Captive Power Plant - Steam Generation** 

### **Aluminium: Strong ramp-up underway**

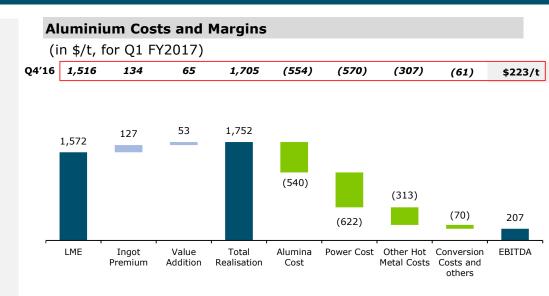


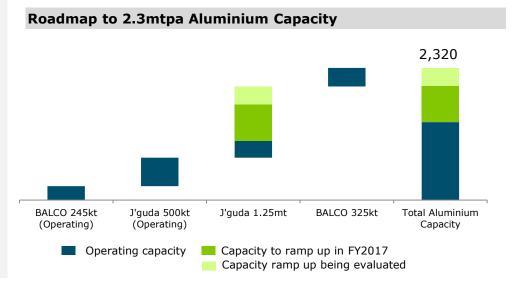
#### Q1 FY2017 Results

- Record quarterly production at 244kt
- Ramp-up at BALCO II 325kt smelter completed
- Jharsuguda-II: 1<sup>st</sup> line ramp-up impacted by a power outage in August; impact to be mitigated by start-up of 3<sup>rd</sup> line preponed from Q4 to Q2 FY 2017
- Lanjigarh refinery: 2<sup>nd</sup> stream recommenced operations, alumina production of 1.4mt for FY 2017
- Aluminium CoP at \$1,476, marginally higher q-o-q due to high power cost
- Auction of coal linkages by Coal India in August 2016: Secured c.6mtpa at a competitive price for CPP's

#### **Outlook**

- Current production run-rate at 1.0mtpa, progressing to achieve full year production of 1.2mt
- CoP estimated at below \$1,400 for FY 2017
  - Lanjigarh: Alumina CoP estimated at \$250/t
  - Laterite mining to commence production in Q3 FY2017





### **Power: 9GW portfolio operational**



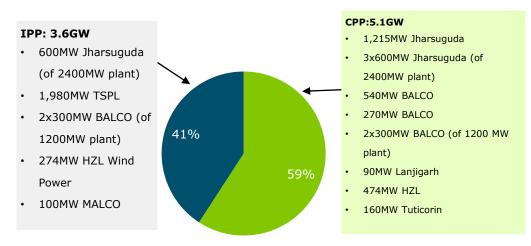
#### Q1 FY2017 Results

- 1980 MW TSPL: Unit-I and Unit-II operated at an availability of 72% in Q1
  - Unit-III put to commercial production in August and to be capitalised in Sept
- 600MW BALCO IPP: 2<sup>nd</sup> unit of 300MW capitalized in Q1

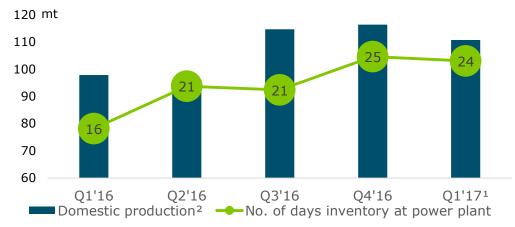
#### Outlook

- TSPL: Targeting availability of 80% post capitalization of all operating units
- 2400MW Jharsuguda plant: One unit will supply to Gridco, remaining 3 units will be utilized by smelter
- FY2017 coal requirement of 36mt for 9,000 MW power portfolio
- Higher production by Coal India has reduced reliance on imports
  - Coal India offering forward auctions and special auctions for CPP's and IPP's and spot auctions for all consumers

#### Power Generation Capacity - c. 9GW



#### Coal availability at power plants in India improving:



Source: Coal ministry

1. Q1 derived based on April and May actual numbers 2. Includes production from Coal India and Singrauli coal mine

### **Iron Ore and Copper: Strong cost positions**



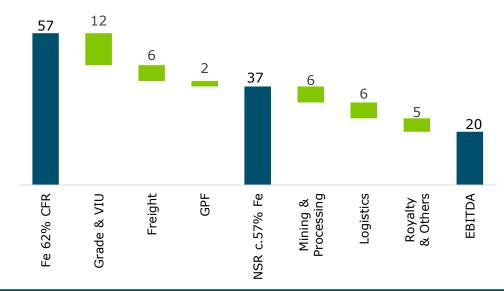
#### Iron ore: Steady production at Goa

- Goa production ramped up in Q1, run rate of 0.8 mt per month
- Karnataka 0.8 mt production
- Engaging with the respective state Government for higher volumes
- Maintained low cost of operations
- Pig iron:
  - Strong production of 181kt, EBITDA contribution of Rs.47 crore

#### **Outlook**

 Goa and Karnataka production expected at 5.5mt and 2.3mt respectively in FY2017, further mining allocation being pursued

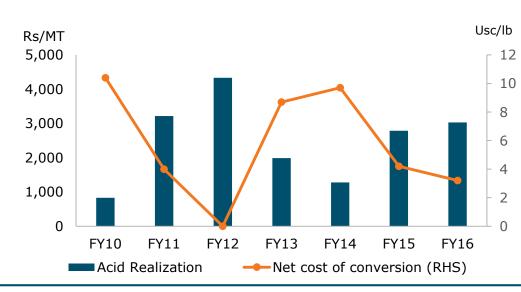
#### Goa iron ore costs and Margin (Q1 FY2017, US\$/t)



#### **Copper Cathodes:**

- Strong performance in Q1, spot Tc/Rc remains robust
- FY2017 expected production at 400kt
  - Planned maintenance shutdown for three days in Q2
- Tuticorin Power Plant:
  - PLF at 60% due to lower demand
  - Compensated at the rate of 20% of the realization for off-take below 85% of contracted quantity

#### Acid realization improves net cost of conversion



### **Strategic Priorities Remain Unchanged**



#### **Strategic Priorities**



Production growth and asset optimisation



De-lever the balance sheet



Simplification of the group structure



Protect and preserve our license to operate



Identify next generation of resources

#### **Focus Areas for FY 2017**

- Disciplined ramp-up of new capacities in Aluminium, Power and Iron
  Ore
- Zinc: Ramp-up volumes at Rampura Agucha U/G and develop Gamsberg
- O&G: Enhance gas production; EOR at other fields
- Reduce gross debt
- Continued optimisation of opex and capex
- · Continued discipline around working capital
- Announced revised and final terms for the Vedanta Limited and Cairn India Merger
- Expect merger to be completed by Q1 CY2017
- Achieving Zero harm: reduce fatal, environment and social incidents
- To obtain local consent prior to accessing resources
- Resource Efficiency Improvement Water, Energy, Waste and Carbon
- Community need based development projects
- Disciplined approach to exploration
- Continue to enhance our exploration capabilities: Dedicated exploration cell formed





**Appendix** 

## **Vedanta Ltd. – Cairn India merger: Transaction timetable**



Key Event	Expected date
BSE, NSE and SEBI approvals sought	Completed
BSE, NSE and SEBI approvals	Completed
Application to High Court in India	Completed
Vedanta plc posting of UK Circular	August 2016
Vedanta plc EGM	September 2016
Vedanta Limited shareholder meeting	8 <sup>th</sup> September 2016
Cairn India Limited shareholder meeting	12 <sup>th</sup> September 2016
Foreign Investment Promotion Board approval	Q4 CY 2016
High Court of India approval	Q1 CY 2017
MoPNG approval	Q1 CY 2017
Transaction completion	Q1 CY 2017

### Safety and Sustainability



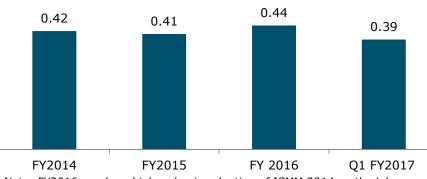
#### **Health, Safety and Environment**

- Building a Zero Harm Culture
  - HSE Charter launched, followed across the group
  - Business COO's Forum formed to avoid repeat high potential incidents
  - Leadership Coaching Programme "Making Better Risk Decisions" training programme in progress
  - Safety video launched to support implementation of safety standards
- Understanding and implementing control towards non routine and critical jobs
  - 1 fatality in Q1 FY 2017
  - Zero "higher category" (Cat# 4&5) environmental incidents
  - Tailings management: Internal review completed, independent expert to review the high priority facilities
- Resources efficiency, process innovation and technological interventions
  - Environment performance standards being developed
  - Formulation of Carbon Strategy in progress

#### **Social Licence to Operate**

- Hosted 2<sup>nd</sup> Sustainable Development Day in London
- International framework and best practices
  - Working towards implementation of the Sustainable Development Goals
  - Modern Slavery Act framework and statement to be released
  - Launched SD Report aligned to GRI G4 framework
- Flagship CSR project 100 Model Anganwadi's (childcare centers) completed
- WASH pledge: Extended awareness to communities regarding importance of safe water, sanitation and hygiene

#### LTIFR (per million man-hours worked)



Note: FY2016 numbers higher due to adoption of ICMM 2014 methodology



**Gamsberg : Research & Rehabilitation Centre nursery** 

### **Entity Wise Cash and Debt**



(in Rs. Crore)

	30 June2016			31 March 2016			30 June 2015		
Company	Debt	Cash & LI	Net Debt	Debt	Cash & LI	Net Debt	Debt	Cash & LI	Net Debt
Vedanta Limited Standalone	45,322	1,216	44,106	42,256	1,356	40,900	39,948	1,285	38,662
Zinc India	3,911	26,839	(22,928)	-	35,277	(35,277)	-	31,450	(31,450)
Zinc International	-	600	(600)	-	642	(642)	-	1,077	(1,077)
Cairn India	-	23,565	(23,565)	-	21,927	(21,927)	388	18,767	(18,379)
BALCO	5,676	12	5,664	5,795	12	5,783	5,742	66	5,676
Talwandi Sabo	7,453	23	7,430	7,289	40	7,249	6,684	12	6,672
Twin Star Mauritius Holdings Limited <sup>1</sup> and Others <sup>2</sup>	14,591	44	14,547	22,220	52	22,168	26,481	129	26,352
Vedanta Limited Consolidated	76,953	52,299	24,654	77,559	59,306	18,254	79,242	52,786	26,456

Notes: Debt numbers at Book Value and excludes inter-company eliminations.

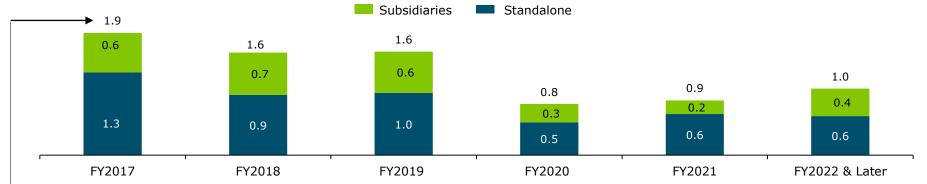
- 1. As on 31 March, debt at TSMHL comprised Rs.7,166 crore of bank debt and Rs. 6,647 crore of debt from Vedanta Resources Plc
- 2. Others includes MALCO Energy, CMT, VGCB, Sesa Resources, Fujairah Gold, and Vedanta Limited's investment companies.

### **Balance Sheet and Maturity Profile**



#### **Maturity Profile of Term Debt (\$7.8bn)**

(as of 30<sup>th</sup> June 2016)



External term debt of \$7.8bn (\$4.9bn at Standalone and \$2.9bn at Subsidiaries)

Maturity profile shows external term debt at face value (excludes working capital of \$2.0bn, inter-company debt from Vedanta plc of \$1.0bn¹ and short term borrowing of US0.6bn at HZL

FY2017 maturities of \$1.9bn are a combination of \$1.4bn of short-term debt, and \$0.5bn of term debt:

- > Focus on deleveraging the balance sheet during the year through internal accruals and working capital release
- > \$1.4bn of short-term debt is expected to be partly repaid out of internal accruals and balance to be rolled over or replaced with term debt
- > \$0.5bn of external term debt will be refinanced.
- Repaid \$0.9bn of Intercompany loan during the quarter through dividends received from HZL
- Strong liquidity: Cash and liquid investments of \$7.7bn and undrawn committed lines of \$1.0bn

Debt breakdown as of 30 June 2016	(in \$bn)
External term debt	7.8
Working capital	2.0
Short term borrowing at HZL	0.6
Inter company loan from Vedanta Plc <sup>1</sup>	1.0
Total consolidated debt	11.3

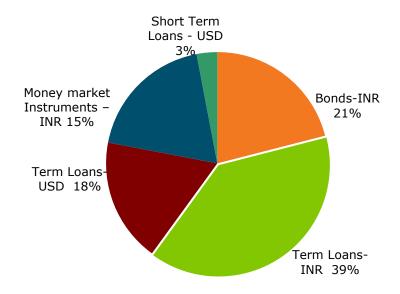
Cash and Liquid Investments	7.7
Net Debt	3.6

Notes: 1. Repaid further \$0.6bn inter company loan in July 2016 and the balance outstanding as of date is \$0.4bn

### **Debt Breakdown & Funding Sources**



# **Diversified Funding Sources for Term Debt of \$ 7.8bn** (as of 30<sup>th</sup> Jun 2016)



External term debt of \$4.9bn at Standalone and \$2.9bn at Subsidiaries, total consolidated \$7.8bn

INR debt: 63%, USD debt:37%

#### **Debt Breakdown**

**Net Debt** 

(as of 30<sup>th</sup> Jun 2016)

Debt breakdown as of 30 June 2016	(in \$bn)
External term debt	7.8
Working capital	2.0
Short term borrowing at HZL	0.6
Inter company loan from Vedanta Plc <sup>1</sup>	1.0
Total consolidated debt	11.3
Cash and Liquid Investments	7.7

Notes: 1. Repaid further \$0.6bn inter company loan in July 2016 and the balance outstanding as of date is \$0.4bn

Note: USD-INR: Rs. 67.62 at 30 June 2016

3.6

## **Segment Summary - Oil & Gas**



		Q1		Q4	Full Year
OIL AND GAS (boepd)	FY 2017	FY 2016	% change YoY	FY2016	FY 2016
Average Daily Total Gross Operated Production (boepd)*	206,455	217,935	-5%	206,170	212,552
Average Daily Gross Operated Production (boepd)	196,861	209,738	-6%	197,039	203,703
Rajasthan	166,943	172,224	-3%	167,650	169,609
Ravva	19,637	28,556	-31%	19,058	23,845
Cambay	10,281	8,958	15%	10,331	10,249
Average Daily Working Interest Production (boepd)	125,391	130,565	-4%	125,775	128,191
Rajasthan	116,860	120,557	-3%	117,355	118,726
Ravva	4,418	6,425	-31%	4,288	5,365
Cambay	4,113	3,583	15%	4,133	4,100
Total Oil and Gas (million boe)					
Oil & Gas- Gross	17.91	19.09	-6%	17.93	74.56
Oil & Gas-Working Interest	11.41	11.88	-4%	11.45	46.92
Financials (In Rs. crore, except as stated)					
Revenue	1,885	2,627	-28%	1,717	8,626
EBITDA	794	1,353	-41%	538	3,567
Average Oil Price Realization (\$ / bbl)	38.0	56.0	-32%	28.2	40.9
Brent Price (\$/bbl)	46	62	-26%	34	47

<sup>\*</sup> Including internal gas consumption

### **Segment Summary – Zinc India**



		Q1	Q4	Full Year	
Production (in '000 tonnes, or as stated)	FY 2017	FY 2016	% change YoY	FY2016	FY 2016
Mined metal content	127	232	-45%	188	889
Refined Zinc – Total	102	187	-45%	154	759
Refined Zinc – Integrated	101	187	-46%	154	759
Refined Zinc – Custom	1	-	-	-	-
Refined Lead - Total <sup>1</sup>	25	31	-20%	38	145
Refined Lead – Integrated	25	27	-11%	38	140
Refined Lead – Custom	-	3	-	0	5
Refined Saleable Silver - Total (in tonnes) <sup>2</sup>	89	75	18%	122	425
Refined Saleable Silver - Integrated (in tonnes)	89	74	20%	122	422
Refined Saleable Silver - Custom (in tonnes)	-	1	-	0	3
Financials (In Rs. crore, except as stated)					
Revenue	2,442	3,545	-31%	3,045	13,795
EBITDA	1,074	1,629	-34%	1,282	6,497
Zinc CoP without Royalty (Rs. /MT) <sup>3</sup>	62,100	51,000	22%	58,000	52,600
Zinc CoP without Royalty (\$/MT) <sup>3</sup>	928	802	16%	860	804
Zinc CoP with Royalty (\$/MT) <sup>3</sup>	1,178	1,170	1%	1,078	1,045
Zinc LME Price (\$/MT)	1,918	2,190	-12%	1,679	1,829
Lead LME Price (\$/MT)	1,719	1,942	-11%	1,744	1,768
Silver LBMA Price (\$/oz)	16.8	16.4	2%	14.9	15.2

<sup>1.</sup> Excludes captive consumption of tonnes in , 1084 Q1 FY 2017 vs 2,184 tonnes in Q1 FY 2016 & 908 tonnes in Q4 FY 2016

<sup>2.</sup> Excludes captive consumption of 5.5MT in Q1 FY 2017 and 11.3 MT in Q1 FY 2016 & 4.7 MT in Q4 FY 2016

<sup>3.</sup> The COP numbers are after adjusting for deferred mining expenses under Ind-AS. Without this adjustment, Zinc CoP per MT would have been Rs. 76,400 (\$1,142) as compared with Rs. 51,000 (\$802) in Q1 FY 2016 and Rs. 58,000 (\$860) in Q4 FY 2016

# **Segment Summary – Zinc International**



Duaduction (in/000 towns or as stated)		Q1		Q4	Full Year
Production (in'000 tonnes, or as stated)	FY 2017	FY 2016	% change YoY	FY2016	FY 2016
Refined Zinc – Skorpion	24	26	-8%	27	82
Mined metal content- BMM	19	15	28%	15	63
Mined metal content- Lisheen	-	29	-	-	81
Total	43	70	-39%	42	226
Financials (In Rs. Crore, except as stated)					
Revenue	453	890	-49%	562	2,563
EBITDA	249	257	-3%	83	473
CoP - (\$/MT)	1,226	1,409	-13%	1,242	1,431
Zinc LME Price (\$/MT)	1,918	2,190	-12%	1,679	1,829
Lead LME Price (\$/MT)	1,719	1,942	-11%	1,744	1,768

### **Segment Summary – Aluminium**



		Q1		Q4	Full Year
Particulars (in'000 tonnes, or as stated)	FY 2017	FY 2016	% change YoY	FY2016	FY 2016
Alumina – Lanjigarh	275	269	2%	211	971
Total Aluminum Production	244	232	6%	226	923
Jharsuguda-I	129	132	-2%	123	516
Jharsuguda-II <sup>1</sup>	28	20	46%	19	76
245kt Korba-I	63	62	2%	64	257
325kt Korba-II <sup>2</sup>	24	18	31%	19	75
BALCO 270 MW (MU) <sup>3</sup>	-	99	-	-	169
Jharsuguda 1800 MW (MU) <sup>4</sup>	355	-	-	-	-
Financials (In Rs. crore, except as stated)					
Revenue	2,758	2,733	1%	2,861	11,091
EBITDA - BALCO	64	-167	-138%	92	-96
EBITDA – Vedanta Aluminium	202	178	31%	268	761
Alumina CoP – Lanjigarh (\$/MT)	292	340	-14%	297	315
Alumina CoP – Lanjigarh (Rs. /MT)	19,600	21,600	-9%	20,100	20,600
Aluminium CoP - (\$/MT)	1,476	1,689	-13%	1,431	1,572
Aluminium CoP - (Rs. /MT)	98,800	107,200	-8%	96,600	102,900
Aluminium CoP – Jharsuguda (\$/MT)	1,459	1,597	-9%	1,397	1,519
Aluminium CoP – Jharsuguda(Rs. /MT)	97,700	101,400	-4%	94,300	99,400
Aluminum CoP – BALCO (\$/MT)	1,504	1,837	-18%	1,489	1,659
Aluminium CoP - BALCO (Rs. /MT)	100,700	116,700	-14%	100,500	108,600
Aluminum LME Price (\$/MT)	1,572	1,765	-11%	1,516	1,590

<sup>1.</sup> Including trial run production of 13kt in Q1 FY2017 and 20kt in Q1 FY2016

<sup>2.</sup> Including trial run production of 6kt in Q1 FY2017

<sup>3.</sup> BALCO 270 MW has been moved from Power to the Aluminium segment from 1st April 2016 and prior period sales and EBITDA numbers continued to be reported in Power segment

<sup>4.</sup> Jharsuguda 1,800 MW has been moved from Power to the Aluminium segment from 1<sup>st</sup> April 2016 and prior period sales and EBITDA numbers continued to be reported in Power segment. These are surplus power sales

### **Segment Summary – Power**



		Q1		Q4	Full Year
Particulars (in million units)	FY 2017	FY 2016	% change YoY	FY2016	FY 2016
Total Power Sales	3,010	3,070	-2%	3,391	12,121
Jharsuguda 600 MW(FY2016 nos are for 2400 MW) <sup>2</sup>	892	2,266	NM	1,906	7,319
BALCO 270 MW <sup>3</sup>	-	99	-100%	-	169
BALCO 600 MW <sup>1</sup>	607			499	1,025
MALCO	90	193	-53%	56	402
HZL Wind Power	148	127	17%	61	414
TSPL	1,272	384	231%	869	2,792
Financials (in Rs. crore except as stated)					
Revenue	1,182	1,086	9%	1,303	4,655
EBITDA	343	277	24%	407	1,299
Average Cost of Generation(Rs. /unit)*	2.02	2.20	-8%	1.95	2.15
Average Realization (Rs. /unit)*	2.79	3.03	-8%	2.55	2.91
Jharsuguda Cost of Generation (Rs. /unit)	1.92	2.09	-8%	1.87	2.09
Jharsuguda Average Realization (Rs. /unit)	2.29	2.75	-17%	2.27	2.63

<sup>\*</sup> Excluding TSPL

<sup>1. 87</sup> million units in Q1 FY2016 consumed captively

Jharsuguda 1,800 MW has been moved from Power to the Aluminium segment from 1st April 2016 and prior period sales and EBITDA numbers continued to be reported in Power segment
 BALCO 270 MW has been moved from Power to the Aluminium segment from 1st April 2016 and prior period sales and EBITDA numbers continued to be reported in Power segment

# **Segment Summary – Iron Ore**



Particulars (in million dry motris tonnos, or		Q1		Q4	Full Year
Particulars (in million dry metric tonnes, or as stated)	FY 2017	FY 2016	% change YoY	FY2016	FY 2016
Sales	2.6	0.5	NM	2.6	5.3
Goa	2.1	-	-	1.6	2.2
Karnataka	0.5	0.5	1%	1.0	3.1
Production of Saleable Ore	3.2	0.2	NM	2.8	5.2
Goa	2.4	•	-	1.9	2.2
Karnataka	0.8	0.2	NM	0.9	3.0
Production ('000 tonnes)					
Pig Iron	181	170	7%	188	654
Financials (In Rs. crore, except as stated)					
Revenue	970	479	102%	869	2,292
EBITDA	373	66	-	264	402

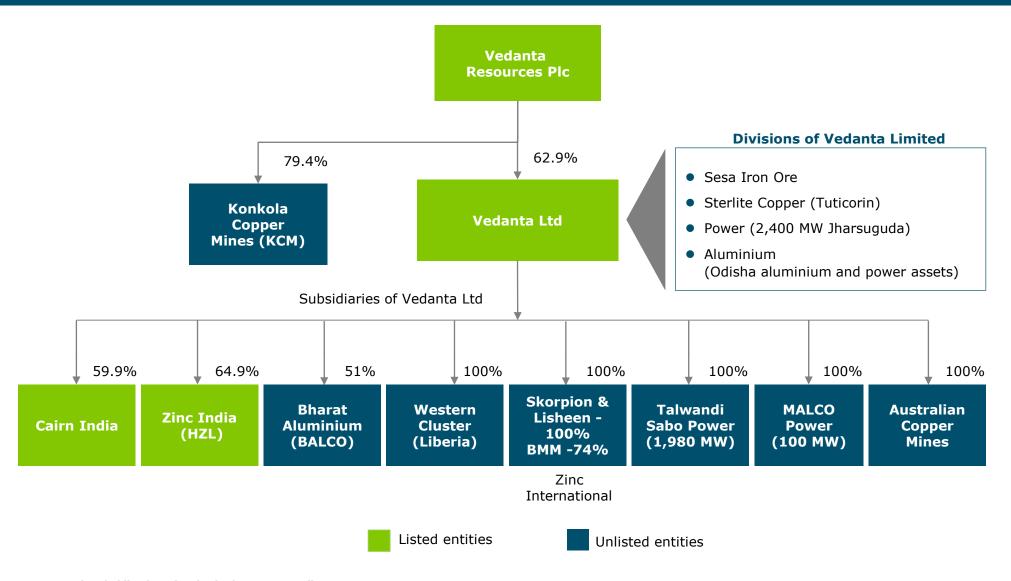
# **Segment Summary – Copper India**



Production (in '000 tonnes, or as stated)	Q1			Q4	Full Year
	FY 2017	FY 2016	% change YoY	FY2016	FY 2016
Copper - Mined metal content	•	-		1	-
Copper - Cathodes	100	98	2%	102	384
Tuticorin power sales (million units)	60	175	-66%	68	402
Financials (In Rs. crore, except as stated)					
Revenue	4,654	5,571	-16%	5,466	20,909
EBITDA	441	523	-16%	536	2,205
Net CoP – cathode (US¢/lb)	5.9	2.5	137%	3.4	3.2
Tc/Rc (US¢/lb)	22.9	22.9	0%	24.8	24.1
Copper LME Price (\$/MT)	4,729	6,043	-22%	4,672	5,211

### **Group Structure**





Notes: Shareholding based on basic shares outstanding as on 30 June 2016