



# **Vedanta Limited**

(formerly known as Sesa Sterlite Ltd.)

## Q3 FY2017 Results

14 February 2017

Results conference call details are on the last page of this document

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# **Strategic Update**

Tom Albanese
Chief Executive Officer

# Safety and Sustainability

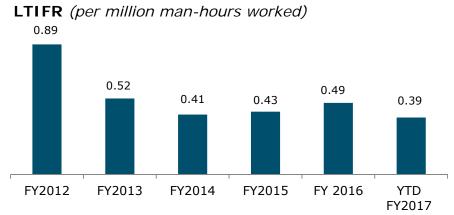


#### Health, Safety and Environment

- Building a Zero Harm Culture
  - Zero fatalities in Q3
  - Zero "higher category" (Cat# 4&5) environmental incidents
  - Line leadership coaching on "Making Better Risks Decisions"
  - Rolled out group-wide Incident Investigation technique and software
- Critical risk evaluation
  - Bow-Tie Risk Assessment to identify critical controls for significant environment and safety risk events
  - Tailing Dam/ Ash Pond risk evaluation completed for high priority structures across the business. Draft standards on management of Tailing dam developed.
- Resources efficiency, process innovation and technological interventions
  - "Eureka-Waste to Value": Group-wide initiative on promoting innovation, few innovative ideas are being implemented currently
  - Vedanta Carbon Forum constituted and operational, working towards reduction in carbon footprints

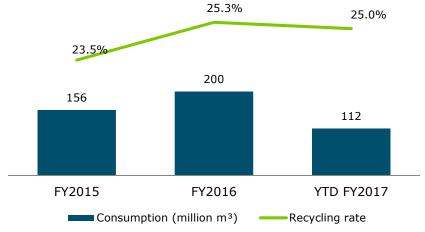
#### **Social Licence to Operate**

- International framework and best practices
  - Modern Slavery Act: under implementation across organization and various stakeholders
- 50 out of 100 Model *Anganwadi's* (childcare centers) completed in the last quarter were made operational



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

#### Water consumption and Recycling rate



## Q3 FY2017 Results Highlights



#### Operations: Continued ramp-up of production capacities

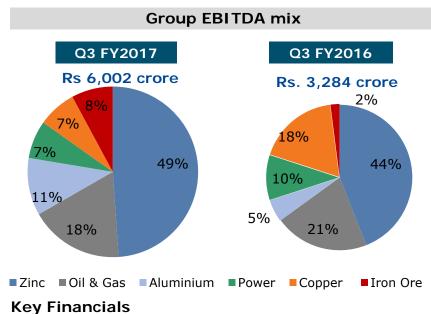
- Zinc India: Mined metal production up 44% q-o-q; environmental clearance received for Zawar and SK mine expansions
- Aluminium: Smelters continue to ramp-up, third line of 1.25mtpa Jharsuguda-II commenced ramp-up in December
- Power: 1980MW TSPL plant availability at 77%
- O&G: Mangala EOR production at 55kboepd; Rajasthan production impacted by planned shutdown
- Iron ore: Achieved annual production cap in January; received additional mining allocation in Goa for FY2017

#### Financial: EBITDA & PAT highest in last eight quarters

- Strong EBITDA and EBITDA margin, reflecting benefits from higher commodity prices and production volumes
- Delivered cumulative cost and marketing savings of \$545 mn over last seven quarters, ahead of plan to deliver \$1.3bn in four years
- Strong Free Cash Flow post capex of Rs. 1,801 crore
- Gross debt lower by Rs. 1,828 crore in Q3
- Attributable PAT at Rs. 1,866 crore, up 49% sequentially

#### Corporate

Merger with Cairn India approved by all sets of shareholders; expected to complete in O1 CY2017



In Rs. Crore	Q3 FY17	Q3 FY16	Q2 FY17
EBITDA	6,002	3,284	4,641
Attributable PAT <sup>1</sup>	1,866	412	1,252
EBITDA Margin <sup>2</sup>	39.3%	26.2%	38.7%
Divisional EBITDA			
Zinc - India	2,730	1,447	1,979
Zinc – Intl.	202	(16)	339
Oil & Gas	1,067	706	1,040
Iron Ore	471	65	105
Copper - India	448	592	370
Aluminium	652	156	401
Power	438	319	400
Others	(6)	15	7

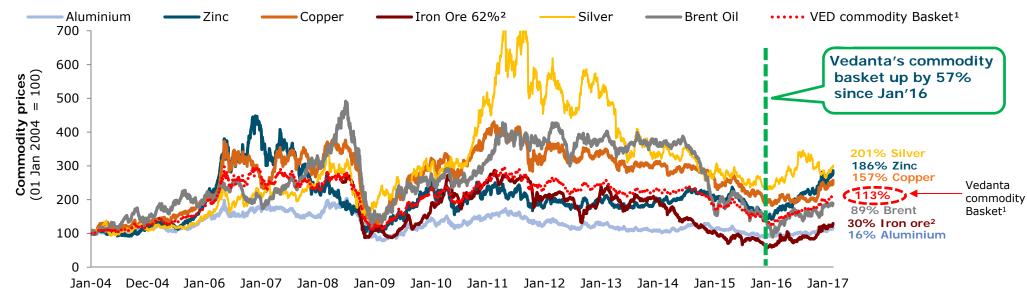
Notes: 1. Before exceptional items

2. Excludes custom smelting at Copper and Zinc India operations

# **Vedanta has an Attractive Commodity Mix**



#### Our commodity basket has captured commodity price upside, with low volatility

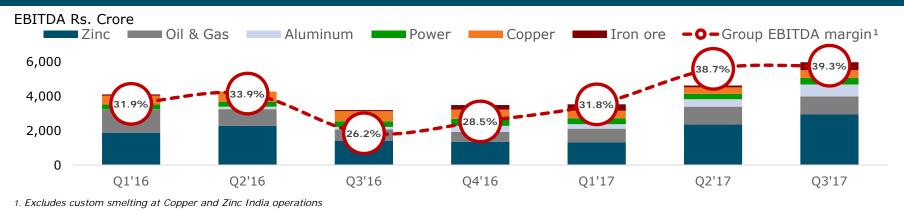


Source: Company filings, Bloomberg

1. Vedanta Limited Commodity Basket is a weighted average of commodity prices, weights are based on actual FY2016 revenue mix. Copper India revenues based on realized Tc/Rc's.

Iron ore price is available since May 2008, prior to that iron ore was traded contractually

#### Attractive commodity mix and quality assets have enabled us to deliver strong margins through market volatility

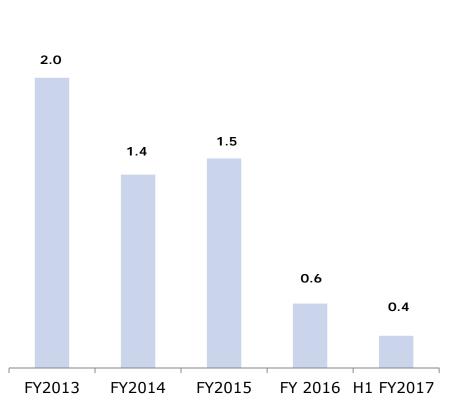


# Well-invested assets driving production growth

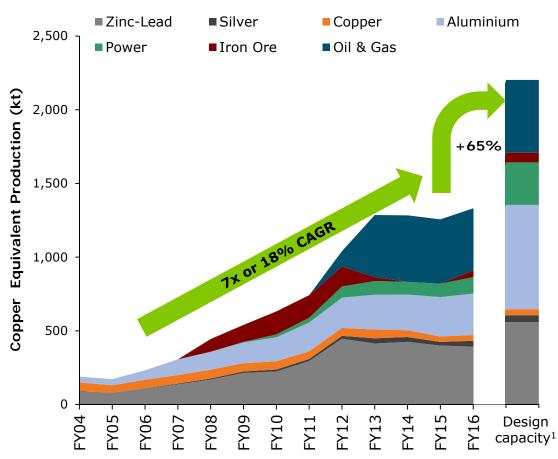


Significant capex already spent, ready to reap benefits from incremental production with low remaining capex

## Capex Spent (US\$bn)



## **Total Production (copper equivalent kt)**

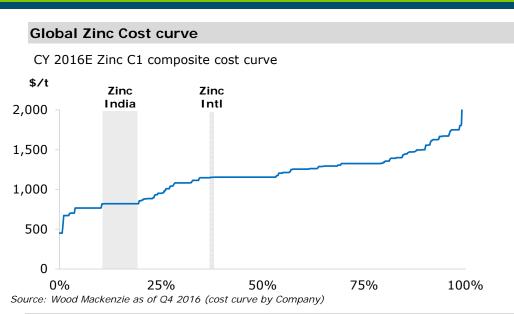


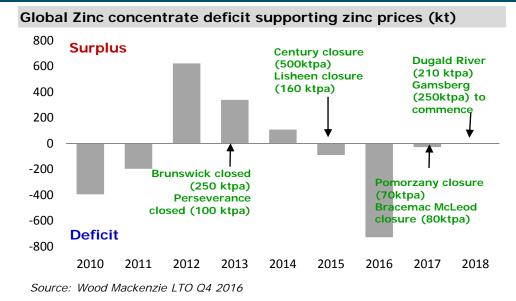
All commodity and power capacities rebased to copper equivalent capacity (defined as production x commodity price / copper price) using average commodity prices for FY16. Power rebased using FY16 realisations, copper custom smelting production rebased at TC/RC for FY16, iron ore volumes refers to sales with prices rebased at average 58% FOB prices for FY16.

1. Iron ore assumed at current EC capacity of 7.8mt

# Zinc: Fundamentals supporting price



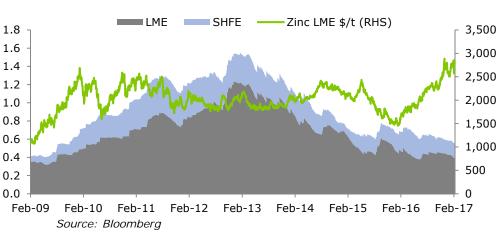




Decade low TCs reflect the tightness in the concentrate market



Refined Zinc inventory (mt) at 6 year low

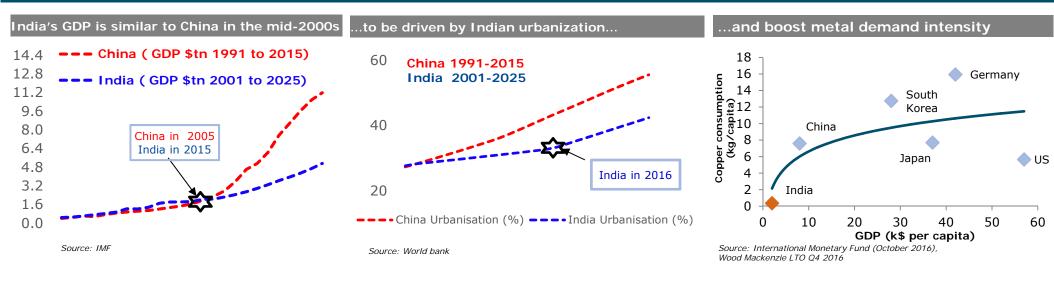


Delivering growth through the Zinc deficit

# The India Story is Compelling



## **Strong Potential for Demand Growth in India**



#### India can harness its huge mineral reserves



Survey, Mineral Commodity Summaries, January 2016 (Zinc, Iron Ore and

#### Recent positive steps in the Govt's FY 2018 Budget

- Allocation for infrastructure development at \$35bn for transport sector, including rail, roads and shipping
- "Housing for All" spend US\$12bn over next three years, construct 30 mn houses in rural areas by 2022
- Housing loan interest subvention for 3 4% to boost affordable housing
- Affordable housing provided infrastructure status
- Government identified 300 mineral blocks to auction by FY2018, primarily in iron ore, limestone, bauxite and other minerals.
- Government has launched a portal to expedite the clearances of mining blocks, will also enhance transparency and accountability





# **Financial Update**

Arun Kumar Chief Financial Officer

# Q3 Financial Highlights: EBITDA and PAT highest in last eight quarters



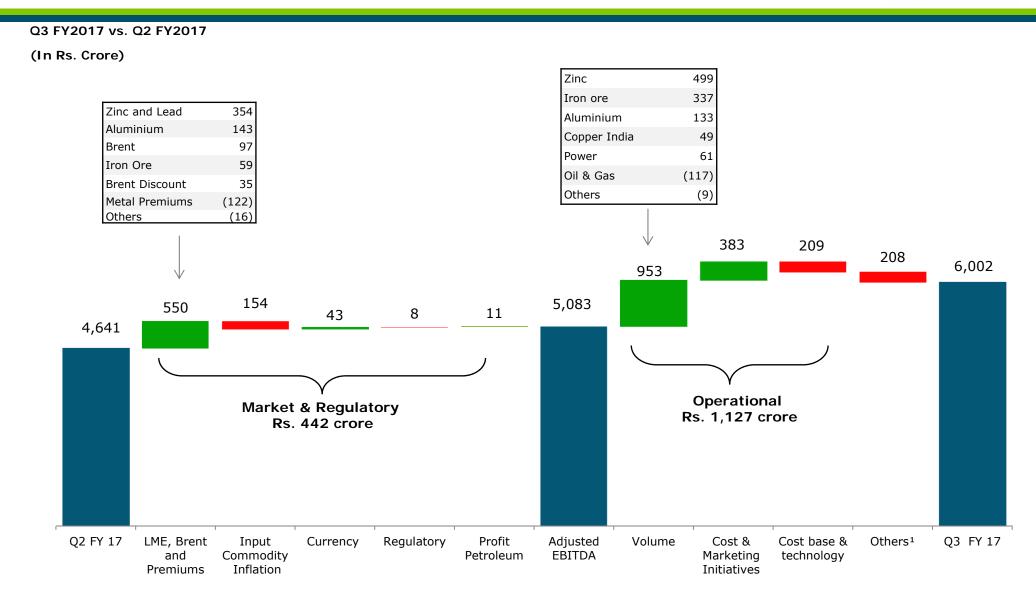
- EBITDA up 29% q-o-q and 83% y-o-y; strong EBITDA margin of 39%
  - Driven by production volumes, higher commodity prices and strong operating performance
  - PAT up significantly q-o-q and y-o-y
- Strong Free Cash Flow post capex of Rs. 1,801 crore in the quarter
- Continued deleveraging, Gross Debt lower by Rs. 1,828 crore

Rs. Crore or as stated	Q3 FY2017	Q3 FY2016	Change	Q2 FY2017	Change
EBITDA	6,002	3,284	83%	4,641	29%
EBITDA margin¹	39.3%	26.2%	-	38.7%	-
Attributable PAT	1,866	412	-	1,252	49%
EPS (Rs./share)	6.29	1.39	-	4.22	49%
Gross Debt	64,966	70,211	(7%)	66,794	(3%)
Cash	53,452	57,672	(7%)	54,833	(3%)
Net Debt	11,514	12,539	(8%)	11,961	(4%)
Net Debt/EBITDA (LTM)	0.7	0.8		0.8	
Net Gearing	12%	12%		13%	
Debt/Equity	0.8x	0.7x		0.8x	

Notes: 1. Excludes custom smelting at Copper India and Zinc-India operations Previous period figures have been re-grouped and re-arranged

# **EBITDA Bridge**





Note: 1. Includes one time provision reversal at Zinc India in Q2 FY 2017, one time change in the ore to waste ratio norm at Zinc India and lower EBITDA from ancillary business

# **Cost Savings and Marketing Initiatives**



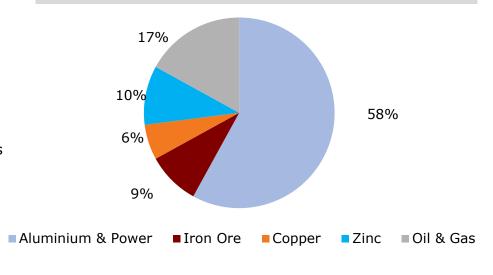
- Achieved cumulative savings of \$545 mn in the last 7 quarters
  - \$515 mn in Cost and Marketing savings
  - \$30 mn in capex savings
  - Program is ahead of original plan to deliver \$1.3bn cumulative savings by FY 2019
- Several initiatives across businesses being implemented
  - Logistics: continuous push on efficiency, innovation and technology
    - In-plant and mining logistics and material handling
    - Reverse auctions for road logistics
    - Higher backhaul and loadability of wagons
  - Techno-commercial
    - Replacement of furnace oil with clarified oil
    - Aluminium Flouride: Low bulk density instead of high bulk density
  - Plugging of quality leakages in supply chain
    - World class 3<sup>rd</sup> party quality agencies deployed at plants with end to end sampling & quality analysis responsibility
    - > Enhanced automation of sampling and analysis process at plants in order to avoid human intervention
  - Superior Sales & Operation Planning processes implemented across material sourcing and debtors collection
  - Vendor consolidation / optimization to drive further efficiencies and productivity across the group

# 1,300 295 545 250 FY'16 9 M FY17 Cum. Target: to date H1 FY2019

Cost and marketing savings program (\$mn)

Savings in each period is over cost base of FY2015

# Segment-wise contribution of savings (\$545mn)



Cumulative savings of US\$1.3 bn expected to be achieved by H1FY2019

#### **Income Statement**



#### Depreciation

- Lower q-o-q on account of lower volume at O&G; offset by capitalization of new capacities at Aluminium and Power
- Lower y-o-y on account of lower volume at O&G and closure of Lisheen mine in Dec 2015; offset by capitalization of new capacities at Aluminium and Power

#### Finance cost

- Higher q-o-q due to capitalization of new capacities at Aluminium and Power, partly offset by declining interest rates
- Higher y-o-y due to capitalization of new capacities at Aluminium and Power, offset by change in methodology of expensing interest for Jharsuguda-II smelter

#### Other income

- Lower q-o-q on account of lower of MTM gain on investments
- Higher y-o-y on account of higher MTM gain on investment, offset by lower corpus due to special dividend by HZL

#### Taxes

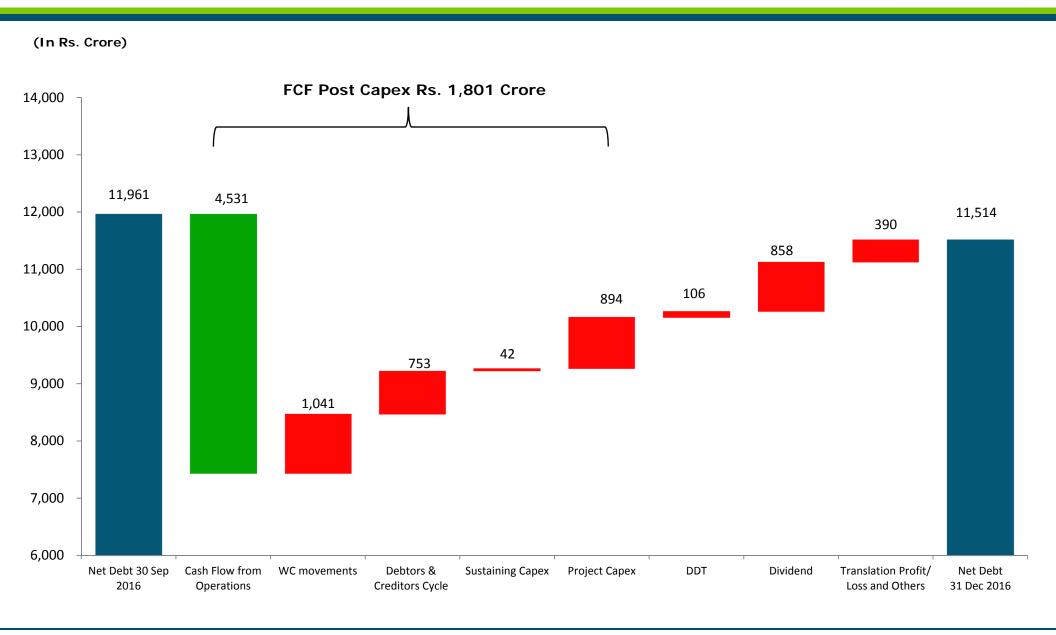
FY 2017 Tax rate excluding DDT is estimated at ~20%

In Rs. Crore	Q3 FY'17	Q3 FY'16	Q2 FY'17
EBITDA	6,002	3,284	4,641
Depreciation	(1,520)	(1,720)	(1,529)
Finance Cost	(1,508)	(1,397)	(1,450)
Other Income	1,033	1,001	1,252
Profit Before Taxes	3,884	1,120	2,940
Taxes (Excl. DDT)	(787)	9	(576)
Taxes - DDT	(110)	(58)	(86)
Profit After Taxes	2,987	1,063	2,278
Attributable PAT	1,866	409	1,252
Minorities %	37%	62%	45%

Note: Exceptional items in Q3FY 2017 & Q2FY 2017 were nil. Q3 FY 2016 numbers include exceptional items of Rs. (8) Crore.

## Net Debt for Q3 FY 2017



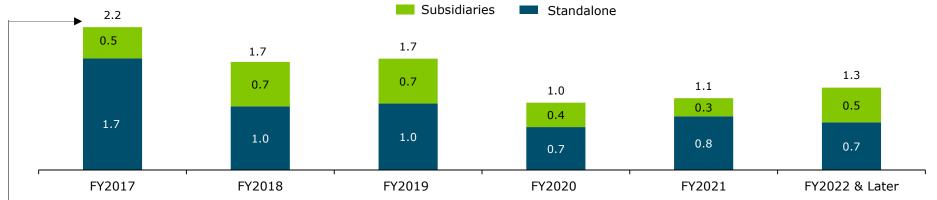


# **Balance Sheet and Maturity Profile**



#### Maturity Profile of Term Debt (\$9.0bn)

(as of 31st December 2016)



External term debt of \$9.0bn (\$6bn at Standalone and \$3bn at Subsidiaries)

Maturity profile shows external term debt at face value (excludes working capital of \$0.4bn, inter-company debt from Vedanta plc of \$0.1bn)

FY2017 maturities of \$2.2bn are a combination of short-term debt, and term debt:

- Focus on deleveraging the balance sheet during the year through internal accruals and working capital release
- Access to diversified sources of funds: c.\$0.23bn debt refinanced at reduced cost and for longer tenor through INR NCD's in Sept and Oct.
- Strong credit profile: CRISIL (subsidiary of S&P) credit rating at AA- with Stable outlook
- Repaid \$0.3bn of intercompany loan to Vedanta plc in Q3
- Strong liquidity: Cash and liquid investments of \$7.9bn and undrawn committed lines of \$0.5bn

Debt breakdown as of 31 Dec 2016	(in \$bn)
External term debt	9.0
Working capital	0.4
Inter company loan from Vedanta Plc <sup>1</sup>	0.1
Total consolidated debt	9.6

Cash and Liquid Investments	7.9
Net Debt	1.7

<sup>&</sup>lt;sup>1</sup> Further repaid \$0.1bn inter-company loan in Jan2017 and there is no outstanding inter-company loan as on date.

# Financial Priorities focused on a strong Balance Sheet



Disciplined Capital
Allocation:
Optimising capex,
focus on FCF

- Ramp-ups at Aluminium, Power and Iron Ore are generating significant cash flows
- Continued optimization of Opex and Capex

Deleveraging; Strong Liquidity Focus

- Continued reduction in debt
- Strong Liquidity Focus: Cash and Liquid Investments of c.\$7.9bn and undrawn committed facilities of \$0.5bn
- Debt being refinanced at longer maturities and lower interest cost

**Cost Savings** 

- Delivering on savings program
- Cost in 1<sup>st</sup>/2<sup>nd</sup> quartile of cost curve across all businesses

Long Term Shareholder Value

- Group Simplification: Vedanta Ltd Cairn India merger to complete in Q1 CY 2017
- Dividend policy expected to be announced following completion of merger with Cairn India





# **Business Review**

Tom Albanese
Chief Executive Officer

#### Zinc India



#### Q3 Results

- Metal in concentrate(MIC) production at 276kt, 44% higher q-o-q as per the mine plans
- Refined zinc and lead production at 205kt and 39kt, respectively
- Q3 CoP at \$861/t, higher mainly on one-time change in the ore to waste ratio norm over life of mine
- Maintained 1st quartile position on global cost curve

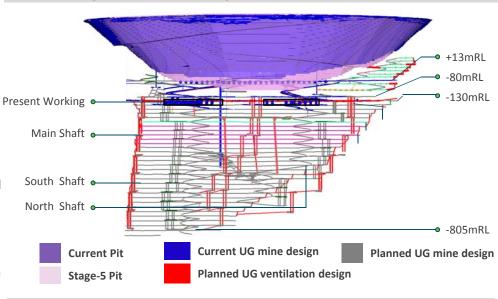
#### **Projects**

- RAM U/G main shaft reached its ultimate depth of 955 meters. Installation of production & service winders completed and shaft equipping work commenced during the quarter
  - SK mine: Achieved highest-ever mine development during the quarter at 5,534 metres, on track to expand mine from 3.75 to 4.5mtpa
    - Received environmental clearance of 4.5 mtpa ore production and 5 mtpa mill
    - Casting of shaft collar and head gear foundation was completed; head gear erection to be completed in Q4
    - SK mill expansion by 1.5 mtpa completed ahead of schedule
- Zawar: Environmental clearance of 4 mtpa ore production and beneficiation plant received in January
  - Expansion of Zawar mill advancing well, to be completed by the end of financial year

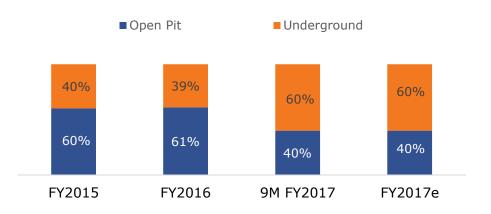
#### FY 2017 Outlook

- Mined metal production expected to be higher than FY2016
- Integrated Zinc metal production expected to be lower than FY2016
  - Silver production to be higher than FY 2016 production
- CoP to be marginal higher than FY2016

#### Rampura Agucha Mine - Longitude Vertical Section



#### Proportion of Underground Production increasing (% of MIC)



#### Zinc International



#### Skorpion and Black Mountain

#### Results

- Q3 production of 33kt
  - Skorpion: metal production lower q-o-q at 17kt, impacted by wetter than anticipated ore
  - BMM: Stable production q-o-q at 15kt
- CoP at \$1615, higher due to lower production volumes at Skorpion

#### Outlook

- Skorpion pit extension: Expected to commence in Q1 FY2018, potential to increase mine life by 2 years
- FY2017 volume expected at 160kt; Q4 CoP estimated at \$1200-\$1250/t
- Continued focus on cost savings with an expected annualized saving of \$10 mn



Gamsberg pre-start mining in progress (Dec 2016)

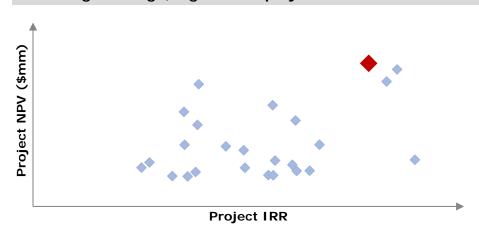
#### 250kt Gamsberg Project: First ore production by mid-CY2018

#### Full **Feasibility** Construction Ramp-up production Study Capex estimated at Full capacity First ore DFS Completed in \$400mn vs original production of production in mid Sept 2014 \$630m 250kt by end-2018

- All regulatory approvals received
- First Blast Jul 2015, 13mt of waste excavated (2mt in Q3)
- Orders for mining and concentrator plant placed in Q3; c.75% of project capex is committed
- Balance orders to be placed in Q4

- 9 to 12 months to ramp-up to full production
- FY2019
- CoP expected at \$1,000-1150/t

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



Source: Wood Mackenzie; Zinc/lead projects with an NPV > \$400m (10% WACC)

## Oil & Gas



#### Results

- Mangala EOR, world's largest polymer program
  - EOR production reached 55 kboepd, 5% higher q-o-q
  - Rajasthan production at 154 kboepd in Q3, given planned shutdown
- RJ water-flood cost at \$4.3/boe; blended cost at \$6.3/boe. Opex higher due to lower overall production.

#### RDG Gas: Phased ramp-up

- Phase-1: All 15 wells now online, post completion of the hydro-frac campaign
  - Q3 production of 21 mmscfd, impacted by a technical issue between the transporter and customers
  - 40-45 mmscfd by Q2 FY2018
- Phase-2: Tendering for new gas processing terminal and rig underway
  - Gas production of 100 mmscfd and condensate production of 5kboed by H1 CY2019

#### Progress on key oil projects

- Aishwariya EOR: FDP for 15 mmbbls; polymer injectivity test planned for Q4 FY 17
- Bhagyam EOR: Initial results of multi-well polymer injectivity test are encouraging, revised FDP to be submitted to JV in Q4 FY2017
- Aishwarya Barmer Hill: 25% reduction in capex to \$220mn for EUR of 30 mmbbls, production from Phase-1 expected by Q1 FY2018

#### **Exploration**

 Palar-Pennar Block: Exploratory drilling underway and expected to be completed in April 2017

#### Outlook

 FY 2018 net capex estimated at \$100m with optionality of additional \$150mn for key projects



Rajasthan: Polymer Storage Silos



Rajasthan: Mangala Processing Terminal and EOR

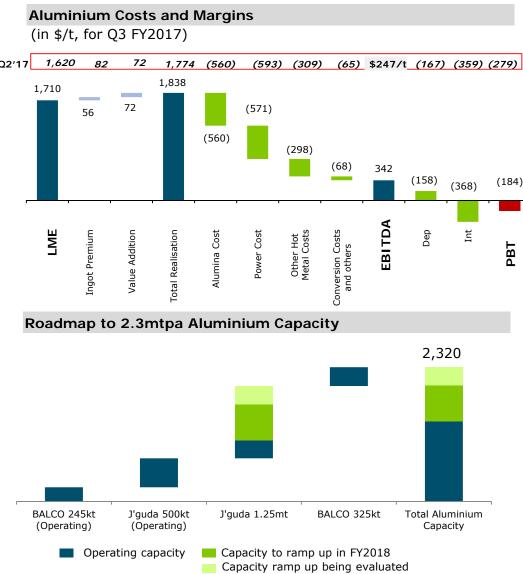
#### **Aluminium**



- Aluminium volumes ramping up, quarterly production at 319kt
- Ramp-up at Jharsuguda-II:
  - 1<sup>st</sup> line impacted by transformer failure in mid-Jan, rectification Q2'17 in progress, 80 pots operational, full ramp up by Q1 FY2018
  - 2<sup>nd</sup> line has fully ramped up, 84 pots capitalized till Dec 2016, balance to be capitalized in Q4 FY2017
  - 3<sup>rd</sup> line commenced ramp up in Dec, 42 pots operational, full ramp up by Q2 FY2018
  - 4<sup>th</sup> line under evaluation
- BALCO-II: 257 pots currently operational, full ramp up by Q1 FY2018
- Jharsuguda 1,800MW: no sales due to weak power market
- Lanjigarh refinery: debottlenecked capacity of 1.7-2.0mtpa, production of 1.3mt in FY2017 to offset high alumina import price
- Aluminium Q3 CoP at \$1,429, lower q-o-q due to lower power and other costs, offset by higher alumina import prices
  - Alumina CoP \$265/t with BALCO and purchased bauxite, vs. \$304/t for imported alumina
- MJP Ingot premium remained low in Q3 at \$75; premiums improved to c.\$98 in Jan 2017

#### Outlook

- FY 2017 production of 1 to 1.1mn tonnes (excl. trial run)
- CoP estimated at \$1450-1475/t for Q4 FY2017, impacted by high import prices for alumina
- Bauxite mines at BALCO to exit FY2017 with run rate of 2mtpa
- Working with the State Government on allocation of bauxite and commencement of laterite mining



#### Power



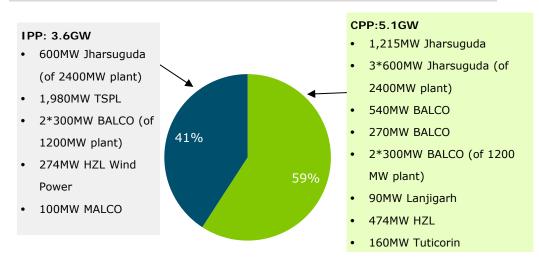
#### Results

- TSPL: All 3 units operational, with plant availability of 77% in Q3
  - Targeting availability of over 80% in Q4 FY2017
- BALCO 600MW IPP: 55% PLF in Q3, impacted by weak power market
- Jharsuguda 600MW:
  - PLF of 72% in Q3
- MALCO 100MW: PLF remained low for the quarter due to lower demand

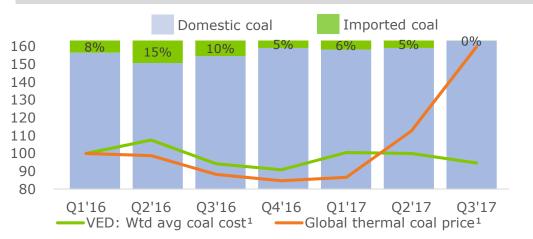
#### Coal outlook

- Higher production by Coal India has resulted in a reduced reliance on imports
- E-auction prices lower 10% YTD and 3% q-o-q due to increased availability of domestic coal

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



#### Increased availability of domestic coal has enabled lower coal costs



Note: Above data is for CPP's and IPP's at Jharsuguda and BALCO 1. Indexed to 100, Mix is at normalized GCV

# **Iron Ore and Copper India**



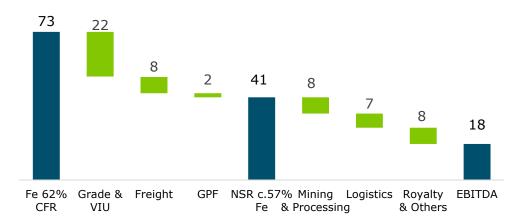
#### **Iron Ore**

- Sales of 3.7mt and production of 2.6mt in Q3
- Achieved full year production cap in January at Goa (5.5mt) and Karnataka (2.3mt)
- Received further allocation of 3mt in Goa for FY2017; engaged with Karnataka government for additional allocation
- Maintained low cost of operations
- Pig iron: Strong production of 154kt, 5% higher y-o-y
  - Margins lower due to market prices

#### Copper India

- Production stable at 102kt in Q3
- Lower net cost of conversion due to stable acid prices
- TcRc realization for CY 2017 expected ~5% lower at c.USc21/lb
- Tuticorin Power Plant:
  - PLF remained low due to weak offtake
  - Compensated at the rate of 20% of the realization for off-take below 85% of contracted quantity

#### Goa iron ore costs and margin (Q3 FY2017, US\$/t)





**Tuticorin: Copper Smelter** 

# **Strategic priorities**





#### Production growth and asset optimisation

• Disciplined approach towards ramp up



#### De-levering the balance sheet

- Reduce gross debt
- Continued optimisation of opex and capex
- Continued discipline around working capital



#### Simplifying the Group structure

• Complete Vedanta Limited - Cairn India merger



#### Creating sustainable value for all stakeholders

- Achieve zero harm
- Obtain local consent prior to accessing resources



#### Identify next generation resources

- Disciplined approach to exploration
- Continue to enhance exploration capabilities





**Appendix** 

# Vedanta Ltd.- Cairn India merger



## **Key completed events**

BSE, NSE and SEBI approvals sought

 $\checkmark$ 

BSE, NSE and SEBI approvals



Application to National Company Law Tribunal in India



Vedanta plc posting of UK Circular



Vedanta plc EGM



Vedanta Limited shareholder meeting



Cairn India Limited shareholder meeting



## **Pending approvals**

Reserve Bank of India approval

National Company Law Tribunal Approval

MoPNG approval

# **Entity Wise Cash and Debt**



(in Rs. Crore)

	31 December 2016			30 5	September 2	016	30 June 2016		
Company	Debt	Cash & LI	Net Debt	Debt	Cash & LI	Net Debt	Debt	Cash & LI	Net Debt
Vedanta Limited Standalone	43,168	1,247	41,921	41,285	2,114	39,171	35729	1,216	34,513
Zinc India	0	25,373	(25,373)	1,928	27,186	(25,258)	3,911	26,839	(22,928)
Zinc International	0	678	(678)	0	909	(909)	0	600	(600)
Cairn India	0	25,975	(25,975)	0	24,339	(24,339)	0	23,565	(23,565)
BALCO	5.513	12	5,501	5,521	22	5,499	4,897	12	4,885
Talwandi Sabo	7,824	97	7,727	7,643	56	7,587	7,419	23	7,396
Twin Star Mauritius Holdings Limited <sup>1</sup> and Others <sup>2</sup>	8,461	69	8,392	10,417	207	10,210	14,563	44	14,519
Vedanta Limited Consolidated	64,966	53,452	11,514	66,794	54,833	11,961	66,519	52,299	14,220

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

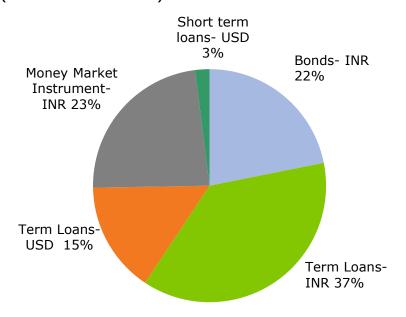
Gross Debt excludes operational buyer's credit (Rs. 11,256 Crore at 31 Dec 2016, Rs. 10,276 Crore at 30 Sep 2016, Rs. 10,434 Crore at 30 Jun 2016), now classified as Trade Payables under Ind AS (inline with IFRS).

- 1. As on 31 December 2016, debt at TSMHL comprised Rs.7,060 crore of bank debt and Rs. 623 crore of debt from Vedanta Resources Plc
- 2. Others includes MALCO Energy, CMT, VGCB, Sesa Resources, Fujairah Gold, and Vedanta Limited's investment companies.

# **Debt Breakdown & Funding Sources**



# **Diversified Funding Sources for Term Debt of \$9.0 bn** (as of 31 Dec 2016)



 External term debt of \$ 6 bn at Standalone and \$3 bn at Subsidiaries, total consolidated \$9 bn

INR debt: 82%, USD debt:18%

## **Debt Breakdown**

(as of 31 Dec 2016)

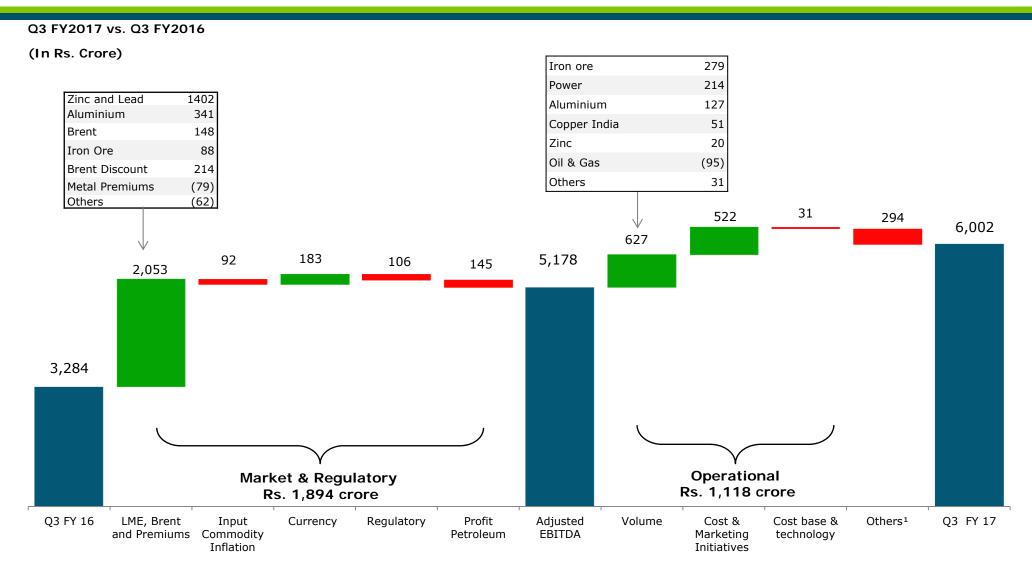
Debt breakdown as of 31 Dec 2016	(in \$bn)
External term debt	9.0
Working capital	0.4
Inter company loan from Vedanta Plc <sup>1</sup>	0.1
Total consolidated debt	9.6
Cash and Liquid Investments	7.9
Net Debt	1.7

<sup>&</sup>lt;sup>1</sup> Further repaid \$0.1bn inter-company loan in Jan2017 and there is no outstanding inter-company loan as on date.

Note: USD-INR: Rs. 67.95 at 31 December, 2016

# **EBITDA Bridge**





Note: 1. Others include one time receipt under Target Plus scheme in Copper India, Zinc India and lower EBITDA from ancillary business

# Segment Summary – Oil & Gas



		Q3		Q2		9M	
OIL AND GAS (boepd)	FY2017	FY2016	% change YoY	FY2017	FY2017	FY2016	% change YoY
Average Daily Total Gross Operated Production $(boepd)^1$	191,230	211,843	-10%	206,230	201,286	214,663	-6%
Average Daily Gross Operated Production (boepd)	181,818	202,668	-10%	196,399	191,674	205,909	-7%
Rajasthan	154,272	170,444	-9%	167,699	162,957	170,258	-4%
Ravva	18,172	21,703	-16%	18,823	18,874	25,430	-26%
Cambay	9,375	10,521	-11%	9,877	9,843	10,221	-4%
Average Daily Working Interest Production (boepd)	115,829	128,402	-10%	125,575	122,254	128,991	-5%
Rajasthan	107,990	119,311	-9%	117,390	114,070	119,180	-4%
Ravva	4,089	4,883	-16%	4,235	4,247	5,722	-26%
Cambay	3,750	4,208	-11%	3,951	3,937	4,089	-4%
Total Oil and Gas (million boe)							
Oil & Gas- Gross	16.73	18.65	-10%	18.07	52.71	56.62	-7%
Oil & Gas-Working Interest	10.66	11.81	-10%	11.55	33.62	35.47	-5%
Financials (In Rs. crore, except as stated)							
Revenue	2,149	2,040	5%	2,039	6,073	6,909	-12%
EBITDA	1,067	706	51%	1040	2,887	3,032	-5%
Average Oil Price Realization (\$ / bbl)	46.0	35.2	31%	41.8	41.9	45	-7%
Brent Price (\$/bbl)	49.33	44	13%	46	47	52	-10%

Note: 1 Including internal gas consumption

# **Segment Summary – Zinc India**



		Q3		Q2	9M		
Production (in '000 tonnes, or as stated)	FY2017	FY2016	% change YoY	FY2017	FY2017	FY2016	% change YoY
Mined metal content	276	228	21%	192	595	700	-15%
Refined Zinc - Total	205	206	0%	150	457	605	-24%
Refined Zinc – Integrated	205	206	0%	149	456	605	-25%
Refined Zinc – Custom	-	-	-	1	1	-	-
Refined Lead - Total <sup>1</sup>	39	35	10%	31	94	107	-13%
Refined Lead - Integrated	39	35	10%	31	94	102	-9%
Refined Lead – Custom	-	-	-	0	-	5	
Refined Saleable Silver - Total (in tonnes) <sup>2</sup>	118	116	2%	107	314	303	4%
Refined Saleable Silver - Integrated (in tonnes)	118	116	2%	107	314	300	5%
Refined Saleable Silver - Custom (in tonnes)	-	-	-	0	-	3	-100%
Financials (In Rs. crore, except as stated)							
Revenue	4,924	3,359	47%	3,400	10,766	10,749	-
EBITDA	2,730	1,447	89%	1,979	5,784	5,215	11%
Zinc CoP without Royalty (Rs. /MT) <sup>3</sup>	58,100	52,400	11%	54,200	57,200	51,100	12%
Zinc CoP without Royalty (\$/MT) <sup>3</sup>	861	796	8%	809	852	789	8%
Zinc CoP with Royalty (\$/MT) <sup>3</sup>	1,198	1,009	19%	1,106	1,159	1,036	12%
Zinc LME Price (\$/MT)	2,517	1,613	56%	2,255	2,230	1,878	19%
Lead LME Price (\$/MT)	2,149	1,681	28%	1,873	1,913	1,776	8%
Silver LBMA Price (\$/oz)	17.2	14.8	16%	19.6	17.9	15.3	17%

<sup>1.</sup> Excludes Captive consumption of 1,731 tonnes in Q3 FY 2017 vs 2,051 tonnes in Q3 FY 2016, 837 tonnes in Q2 FY 16 and 3,652 tonnes in nine months period in FY 17 vs 5,749 tonnes in FY 16

<sup>2.</sup> Excludes captive consumption of 14.3 MT in Q3 FY 2017 vs 10.7 MT in Q3 FY 16, 4.3 MT in Q2 FY 2017 and 18.6 MT in nine months period in FY 2017 vs 29.7 MT in ninemonths period in 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. 50,277 (\$745/t) without royalty in Q3 FY 2017 and Rs 59,740 (\$890) in nine months FY 2017

# **Segment Summary – Zinc International**



Production (in'000 tonnes, or as stated)		Q3			9M		
	FY2017	FY2016	% change YoY	FY2017	FY2017	FY2016	% change YoY
Refined Zinc - Skorpion	17	13	34%	23	64	55	16%
Mined metal content- BMM	15	17	-11%	16	51	48	5%
Mined metal content- Lisheen	-	21	-	0	-	81	-%
Total	33	51	-35%	39	115	184	-38%
Financials (In Rs. Crore, except as stated)							
Revenue	587	431	36%	685	1,726	2,001	-14%
EBITDA	202	-16		339	790	390	-
CoP - (\$/MT)	1,615	1,579	2%	1,446	1,412	1,475	-4%
Zinc LME Price (\$/MT)	2,517	1,613	56%	2,255	2,230	1,878	19%
Lead LME Price (\$/MT)	2,149	1,681	28%	1,873	1,913	1,776	8%

# **Segment Summary – Aluminium**



Particulars (in/000 towns or as stated)	Q3			Q2	9M		
Particulars (in'000 tonnes, or as stated)	FY2017	FY2016	% change YoY	FY2017	FY2017	FY2016	% change YoY
Alumina – Lanjigarh	328	218	50%	292	895	760	18%
Total Aluminum Production	319	234	37%	296	860	697	23%
Jharsuguda-I	132	131	1%	132	393	392	0%
Jharsuguda-II <sup>1</sup>	84	19	343%	48	161	57	181%
245kt Korba-I	65	65	1%	63	192	192	0%
325kt Korba-II <sup>2</sup>	38	19	102%	52	115	56	106%
Jharsuguda 1800 MW (MU) <sup>3</sup>	-			156	511	-	-
Financials (In Rs. crore, except as stated)							
Revenue	3,584	2,761	30%	3,027	9,369	8,230	14%
EBITDA- Aluminium segment	652	156	-	400	1,318	305	-
EBITDA - BALCO	177	-7		103	344	-188	
EBITDA – Vedanta Aluminium	475	163	-	297	974	493	98%
Alumina CoP – Lanjigarh (\$/MT)	265	293	-9%	260	273	320	-15%
Alumina CoP – Lanjigarh (Rs. /MT)	17,900	19,300	-8%	17,400	18,300	20,800	-12%
Aluminium CoP - (\$/MT)	1,429	1,528	-7%	1,462	1,452	1,620	-10%
Aluminium CoP - (Rs./MT)	96,400	100,700	-4%	97,800	97,500	105,000	-7%
Aluminium CoP – Jharsuguda (\$/MT)	1,388	1,485	-7%	1,412	1,418	1,559	-9%
Aluminium CoP – Jharsuguda (Rs./MT)	93,600	97,900	-4%	94,600	95,200	101,000	-6%
Aluminum CoP - BALCO (\$/MT)	1,499	1,599	-6%	1,545	1,513	1,719	-12%
Aluminium CoP – BALCO (Rs./MT)	101,100	105,400	-4%	103,500	101,500	111,300	-9%
Aluminum LME Price (\$/MT)	1,710	1,495	14%	1,620	1,634	1,615	1%

Including trial run production of 36Kt in Q3 FY 2017, 12Kt in Q3 FY 2016, 19Kt in Q2 FY17 and 67 Kt in nine months ended FY 2017 and 51 Kt in nine months ended FY 2016
 Including trial run production of 270t in Q3 FY2017, Nil in Q3 FY16 and 28 Kt in nine months ended FY 2017 and Nil Kt in nine months ended FY 2016

<sup>3.</sup> Jharsuguda 1,800 MW and BALCO 270 MW have been moved from Power to the Aluminium segment from 1st April,2016 and prior year sales and EBITDA numbers continued to be reported in Power Segment.

# **Segment Summary – Power**



		Q3			9М		
Particulars (in million units)	FY2017	FY2016	% change YoY	FY2017	FY2017	FY2016	% change YoY
Total Power Sales	3,413	2,934	16%	3,030	9,453	8728	8%
Jharsuguda 600 MW(FY 2016 nos are 2400 MW) <sup>1</sup>	879	1,593	-45%	605	2,376	5413	-56%
BALCO 270 MW <sup>2</sup>		41		0		169	
BALCO 600 MW	660	368	79%	549	1,817	526	245%
MALCO	29	26	12%	25	144	345	-58%
HZL Wind Power	53	67	-22%	172	373	353	6%
TSPL	1,792	839	114%	1679	4,743	1922	147%
Financials (in Rs. crore except as stated)							
Revenue	1,532	1145	34%	1,385	4,100	3,345	23%
EBITDA	438	319	37%	400	1,180	892	32%
Average Cost of Generation(Rs. /unit) <sup>3</sup>	2.10	2.21	-5%	2.09	2.04	2.22	-8%
Average Realization (Rs. /unit) <sup>3</sup>	2.77	2.88	-4%	3.09	2.87	3.05	-6%
Jharsuguda Cost of Generation (Rs. /unit)	2.02	2.15	-6%	2.23	1.98	2.16	-9%
Jharsuguda Average Realization (Rs. /unit)	2.46	2.6	-5%	2.45	2.40	2.76	-13%

#### Notes

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

<sup>2.</sup> BALCO 270 MW has been moved from Power to the Aluminium segment from 1st April, 2016 and prior year sales and EBITDA numbers continued to be reported in Power segment

<sup>3</sup> Average excludes TSPL

# **Segment Summary – Copper India**



		Q3			9М		
Production (in '000 tonnes, or as stated)	FY2017	FY2016	% change YoY	FY2017	FY2017	FY2016	% change YoY
Copper - Mined metal content	-	-	-	-	1	-	-
Copper - Cathodes	102	89	15%	97	300	282	6%
Tuticorin power sales (million units)	46	40	15%	30	136	334	-59%
Financials (In Rs. crore, except as stated)							
Revenue	5,186	4,544	14%	4,686	14,526	15,441	-6%
EBITDA	448	592	-24%	370	1,259	1,669	-25%
Net CoP – cathode (US¢/lb)	3.9	4.4	-12%	5.3	5.0	3.1	59%
Tc/Rc (US¢/lb)	22.23	23.5	-6%	20.5	21.9	23.9	-8%
Copper LME Price (\$/MT)	5,277	4,892	8%	4,772	4,924	5,387	-9%

# **Segment Summary – Iron Ore**



	Q3			Q2	9M		
Particulars (in million dry metric tonnes, or as stated)		FY2016	% change YoY	FY2017	FY2017	FY2016	% change YoY
Sales	3.7	1.5	ı	0.8	7.1	2.7	ı
Goa <sup>1</sup>	2.6	0.6	1	0.3	5.1	0.6	
Karnataka	1.0	0.9	4%	0.5	2.0	2.1	-6%
Production of Saleable Ore	2.6	1.4	86%	1.5	7.3	2.4	ı
Goa	2.3	0.3	ı	0.5	5.2	0.3	ı
Karnataka	0.4	1.1	-66%	0.9	2.1	2.1	3%
Production ('000 tonnes)							
Pig Iron	154	146	5%	192	526	466	13%
Financials (In Rs. crore, except as stated)							
Revenue	1,405	538	161%	490	2,865	1,422	-
EBITDA	471	65		105	949	138	_

Note: 1 Includes auction sales of 0.54mt in Q3 FY2016

# **Sales Summary**



Sales Volume	Q3 FY2017	9M FY2017	Q3 FY2016	9M FY2016	Q2 FY2017
Zinc-India Sales					
Refined Zinc (kt)	211	479	204	602	148
Refined Lead (kt)	36	91	35	104	32
Zinc Concentrate (DMT)	-	-	-	-	0
Lead Concentrate (DMT)	-	1	-	-	0
Total Zinc (Refined+Conc) (kt)	211	479	204	602	148
Total Lead (Refined+Conc) (kt)	36	91	35	104	32
Total Zinc-Lead (kt)	248	570	239	706	179
Silver (moz)	3.8	10.1	3.7	9.8	3.5
Zinc-International Sales					
Zinc Refined (kt)	20	64	11	59	27
Zinc Concentrate (MIC)	6	19	24	94	7
Total Zinc (Refined+Conc)	26	83	35	153	33
Lead Concentrate (MIC)	9	30	13	36	11
Total Zinc-Lead (kt)	34	112	47	189	44
Aluminium Sales					
Sales - Wire rods (kt)	74	233	98	264	74
Sales - Rolled products (kt)	6	10	1	20	4
Sales - Busbar and Billets (kt)	43	104	32	78	34
Total Value added products (kt)	123	348	131	362	112
Sales - Ingots (kt)	199	491	102	331	173
Total Aluminium sales (kt)	322	838	233	693	284

# **Sales Summary**



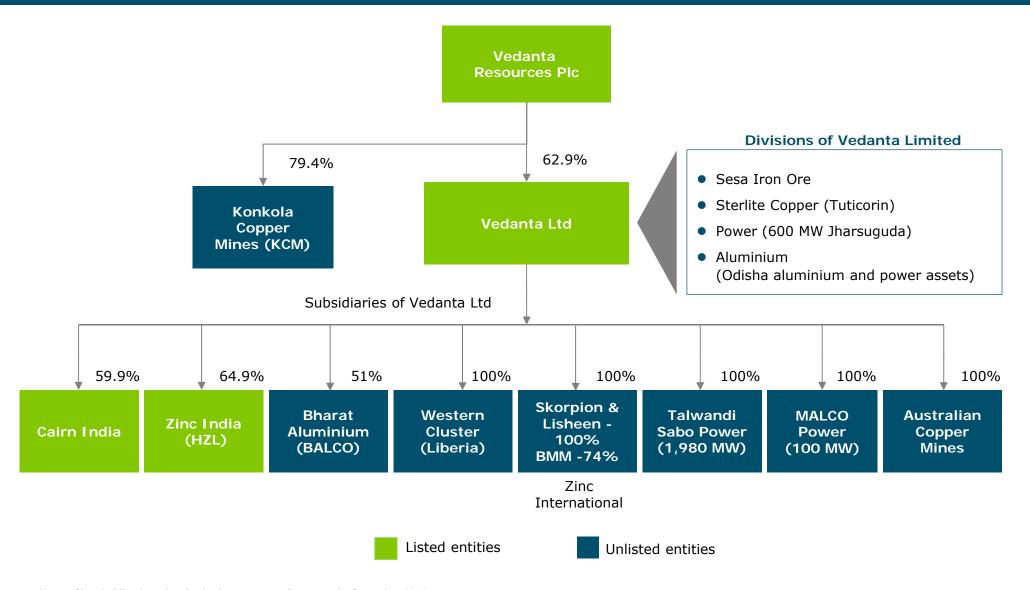
Sales Volume	Q3 FY2017	9M FY2017	Q3 FY2016	9M FY2016	Q2 FY2017
Iron-Ore Sales					
Goa (mn DMT)	2.7	5.1	0.6	0.6	0.3
Karnataka (mn DMT) <sup>1</sup>	1.0	2.0	0.9	2.1	0.5
Total (mn DMT)	3.7	7.1	1.5	2.7	0.8
Pig Iron (kt)	141	511	146	449	201
Copper-India Sales					
Copper Cathodes (kt)	53	139	37	123	43
Copper Rods (kt)	48	156	50	152	53
Sulphuric Acid (kt)	116	386	135	364	103
Phosphoric Acid (kt)	51	146	50	148	53

Sales Volume Power Sales (mu)	Q3 FY2017	9M FY2017	Q3 FY2016	9M FY 2016	Q2 FY2017
Jharsuguda 2,400 MW	879	2,376	1,593	5,413	605
TSPL	1,792	4,743	839	1,922	1,679
BALCO 270 MW			41	169	0
BALCO 600 MW	660	1,817	368	526	549
MALCO	29	144	26	345	25
HZL Wind power	53	373	67	353	172
Total Sales	3,413	9,453	2,934	8,728	3,030
Power Realisations (INR/kWh)					
Jharsuguda 2,400 MW	2.46	2.40	2.6	2.76	2.45
TSPL <sup>1</sup>	5.82	5.44	5.46	5.43	5.21
BALCO 270 MW			3.28	3.26	-
BALCO 600 MW	2.96	2.98	3.26	3.28	3.14
MALCO	6.75	5.75	11.89	6.17	7.89
HZL Wind power	3.39	4.24	3.81	3.97	4.44
Average Realisations <sup>1</sup>	2.77	2.87	2.88	3.05	3.09
Power Costs (INR/kWh)					
Jharsuguda 2,400 MW	2.02	1.98	2.15	2.16	2.23
TSPL	4.10	3.86	3.62	3.84	3.72
BALCO 270 MW			4.07	3.89	=
BALCO 600 MW	2.11	2.23	2.35	2.58	2.31
MALCO	5.51	4.35	6.51	4.11	5.35
HZL Wind power	1.47	0.62	0.12	-0.14	0.45
Average costs <sup>2</sup>	2.10	2.04	2.21	2.22	2.09

<sup>1.</sup> TSPL – NSR calculated based on PLF 2. Average excludes TSPL

# **Group Structure**





Notes: Shareholding based on basic shares outstanding as on 31 December 2016

## **Results Conference Call Details**



Results conference call is scheduled at 6:00 PM (IST) on Tuesday, 14 February 2017. The dial-in numbers for the call are given below:

Event		Telephone Number
Earnings conference call on February 14, 2017	India – 6:00 PM (IST)	Mumbai main access +91 22 3938 1017 Toll Free number 1 800 120 1221 1 800 200 1221
	Singapore – 8:30 PM (Singapore Time)	Toll free number 800 101 2045
	Hong Kong – 8:30 PM (Hong Kong Time)	Toll free number 800 964 448
	UK - 12:30 PM (UK Time)	Toll free number 0 808 101 1573
	US - 7:30 AM (Eastern Time)	Toll free number 1 866 746 2133
For online registration	http://services.choruscall.in/diamondpasmber=0059860	ss/registration?confirmationNu
Replay of Conference Call (14 Feb 2017 to 20 Feb 2017)		Mumbai +91 22 3065 2322 +91 22 6181 3322 Passcode: 79138#