

# **Vedanta Limited**Q3 FY2018 Results

31 January 2018





**Elements for a Sustainable Future** 

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31 January 2018



# **Strategic Update Kuldip Kaura**

**Chief Executive Officer** 





**Value Creation** 

### **Sustainable Development**



#### Safety

- Third party Safety Maturity Survey conducted
- Risk workshops will be conducted in Feb to validate and manage Critical Risks Controls
- Regrettably 4 fatalities occurred during Q3 each has been investigated and lessons learnt are being implemented at every business

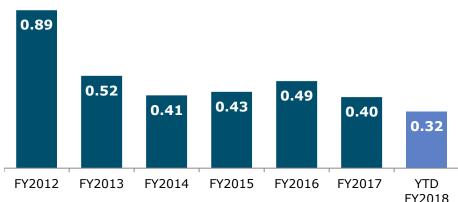
#### Environment

- Third party audit completed for tailing/ ash management practices across the group in India
- Water risk assessment to identify physical, social and economic risks for group completed and mitigation plan is being developed by the businesses
- Water and energy saving achievement at 75% and 163% YTD of annual targets respectively

#### Recognitions

- Sterlite Copper was placed first under the category of "Industrial Water Use Efficiency" organised by FICCI India
- Cairn Oil & Gas awarded the 'Golden Peacock Global Award for Sustainability' 2017 in London

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



Note: ICMM 2014 methodology adopted from FY2016 onwards



Drinking water initiative at Barmer, Cairn having 331 RO plants established to benefit 1 million people

### **Q3 FY2018 Results Highlights**



#### Operations: Robust production, and ramp-up on track

- Zinc India: Refined zinc-lead production of 245kt, up 7% q-o-q
- Zinc International: Strong production at BMM and Skorpion
- Aluminium: Continued ramp-up; production up 40% y-o-y with exit run-rate of 1.8mtpa
- TSPL: Record plant availability of 97%
- Iron ore: Granted additional mining allocation in Goa; increase in mining cap at Karnataka

#### **Progressing on growth projects**

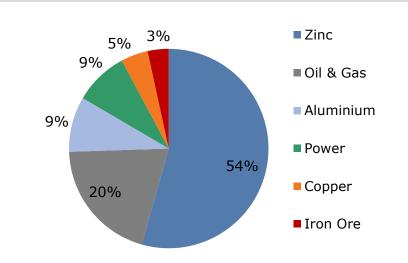
- ZI: Gamsberg on track to commence production in mid CY18
- O&G: Contracts awarded for growth projects announced in Nov 2017; rigs being mobilized at site
- Copper India 400kt smelter expansion: EPC contract awarded

#### **Financials:**

- EBITDA of Rs. 6,780 crore, up 13% y-o-y; robust margin of 35%<sup>1</sup>
- Attributable PAT<sup>2</sup> of Rs 2,173 crore
- Strong FCF generation of Rs 4,662 Cr and gross debt reduced by Rs. 11,450<sup>3</sup> Cr in 9M FY2018

#### Notes: 1. Excludes custom smelting at Copper and Zinc India operations

#### EBITDA mix (Q3 FY2018)



#### **Key Financials**

In Rs. Crore	Q3 FY18	Q3 FY17	Q2 FY18
EBITDA	6,780	5,976	5,776
EBITDA Margin <sup>1</sup>	35%	39%	35%
Attributable PAT <sup>2</sup>	2,173	2,148	2,036
Divisional EBITDA			
Zinc - India	3,238	2,729	3,001
Zinc – Intl.	446	203	389
Oil & Gas	1,359	1,051	1,176
Iron Ore	231	467	(4)
Copper - India	297	447	392
Aluminium	609	651	457
Power	595	435	366
Others	5	(7)	(1)

<sup>2.</sup> Before exceptional items and DDT

<sup>3.</sup> Excluding repayment of temporary borrowing by Zinc India & preference shares issued pursuant to the Cairn India merger in April





### **Consistent and successful strategy**

**Delivering profitable capacity growth in attractive commodities** 

Uniquely positioned to harness India's resources potential and demand growth

Clear priorities for capital allocation and shareholder returns



### Near Term Priority (FY18-20)

### Ramp up to Design Capacity

- Well-invested assets ramping up by FY2020 to deliver industry leading growth
- Continued focus on asset optimisation and cost efficiency

## Medium Term Priority (FY20+)

## Selectively pursue growth options

- High quality portfolio with attractive brownfield growth options
- Focused exploration strategy
- Participation in resource auctions in India with focus on returns

Deliver
superior
shareholders
returns with
continued
focus on
maintaining a
strong balance
sheet

### **Underpinned by**

- Disciplined capital allocation
- Opex and capex efficiency
- Sustainability

### **Near Term Priority: Ramp-up to Design Capacity**



		Near-term expansions	Total expanded capacity	Progress
D	Zinc India	<ul><li>Expansion to 1.2mt mined Zn-Pb metal</li><li>Silver to 750t</li></ul>	1.2mt Zn-Pb 750t Ag	
	Zinc Intl.	<ul> <li>Gamsberg project (250kt) and Skorpion pit extension</li> </ul>	400kt	
	Oil & Gas	<ul> <li>Various projects at Rajasthan - EOR, tight oil, Gas</li> </ul>	275-300 kboepd	
	Aluminium	Ramp-up of Jharsuguda II smelter	2.3mt aluminium	
	Copper India	<ul> <li>Smelter expansion from 400 to 800kt</li> </ul>	800kt	
	Iron ore	<ul> <li>Ramp-up to earlier permitted (pre-ban) capacity</li> </ul>	20.5mt	

### On track for ramp-up to expanded capacity

### **Medium Term Priority: Selectively Pursue Growth Options**



		Future growth options
.5	Zinc India	<ul> <li>Expansion of Zn-Pb to 1.5mtpa</li> <li>Silver production of 1,000t +</li> </ul>
	Zinc Intl.	<ul><li>Gamsberg Phase 2 &amp; 3 (350kt incremental)</li><li>Swartberg (75kt)</li></ul>
	Oil & Gas	<ul><li>300-500 kboepd</li><li>Accompanied by continued exploration</li></ul>
	Aluminium	Lanjigarh alumina refinery expansion (6mt)
	Iron ore	Jharkhand iron ore deposit (10mt)

31 January 2018



### **Financial Update**

#### **Arun Kumar**

Chief Financial Officer





**Empowering Growth** 

### **Q3 Financial Highlights**



- Higher EBITDA, driven by increased volumes and commodity prices, partially offset by input commodity inflation
- Gross debt reduced by Rs. 11,450<sup>4</sup> Cr YTD FY2018, partially offset by acquisition of AvanStrate Inc., Japan

Rs. crore or as stated	Q3 FY2018	Q3 FY2017	Change	Q2 FY2018	Change
EBITDA	6,780	5,976	13%	5,776	17%
EBITDA margin <sup>1</sup>	35%	39%	-	35%	-
Attributable PAT <sup>2</sup> (Before exceptional items & DDT)	2,173	2,148	1%	2,036	7%
EPS (Rs./share) (Before exceptional items & DDT)	5.86	7.24		5.49	
Gross Debt <sup>3</sup>	55,218	64,966		55,798	
Cash	38,923	53,452		40,206	
Net Debt	16,295	11,514		15,592	
Net Debt/EBITDA (LTM)	0.7	0.7		0.6	
Net Gearing	17%	12%		16%	

Notes: 1. Excludes custom smelting at Copper India and Zinc-India operations

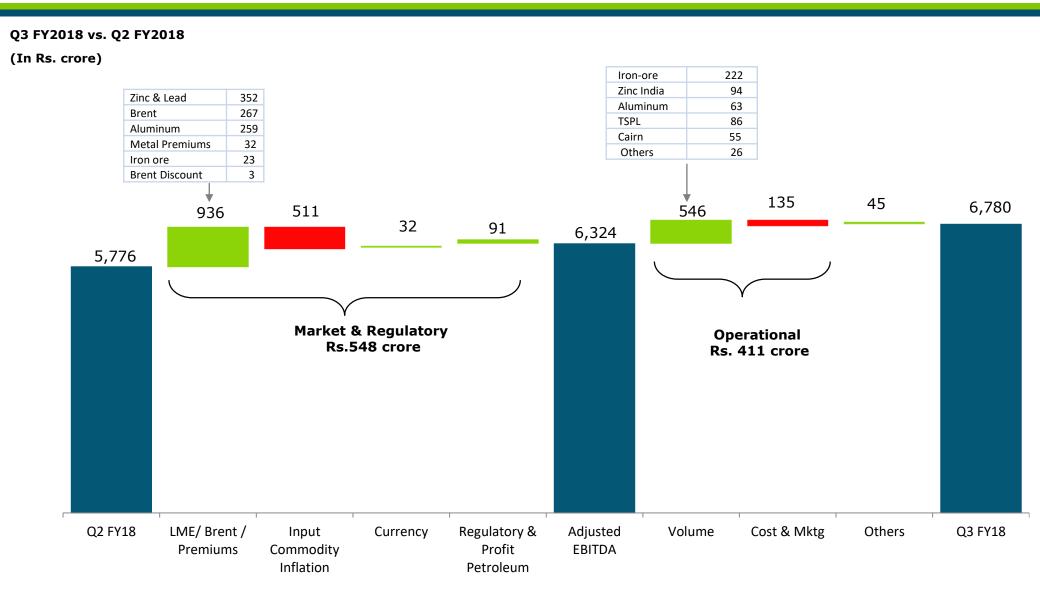
<sup>2.</sup> In view of clarification issued by Ind-AS Transition Facilitation Group, we have revised the accounting for dividend distribution tax (DDT) on profits of subsidiaries. Hence the previous periods have been restated to give effect of the same

<sup>3.</sup> Gross Debt of FY 2018 includes preference shares of Rs 3,010 crore issued pursuant to the Cairn India Merger in April and Rs. 946 crore pursuant to acquisition of AvanStrate Inc.

<sup>4.</sup> Excluding repayment of temporary borrowing by Zinc India & preference shares issued pursuant to the Cairn India merger in April

### EBITDA Bridge (Q3 FY2018 vs. Q2 FY2018)





#### **Income Statement**



#### Depreciation & Amortization

- Higher q-o-q on account of higher production at Zinc India, iron ore and capitalization of infill wells at Mangala in O&G business
- Lower y-o-y due to change in depreciation method in Oil & Gas business from 2P to 1P reserves based on guidance under Ind-AS w.e.f. 1<sup>st</sup> April 17; partly offset by capitalization of pots at Aluminum business

#### Finance cost

- Lower q-o-q on account of de-leveraging in Q2 FY18
- Lower y-o-y driven by de-leveraging and lower interest rates

#### Other income

 Lower q-o-q and y-o-y on account of lower investment corpus and MTM loss due to increase in G-Sec yields

#### Exceptional Items

 Relating to arbitration of historical vendor claim in the aluminum business and ASI acquisition related cost

In Rs. crore	Q3 FY'18	Q3 FY'17	Q2 FY'18
Revenue	24,361	20,391	21,590
EBITDA	6,780	5,976	5,776
Depreciation & amortization	(1,549)	(1,581)	(1,426)
Finance Cost	(1,306)	(1,508)	(1,427)
Other Income	573	1,014	919
Exceptional items - credit/(expense)	(158)	-	186
Taxes	(1,402)	(537)	(873)
Taxes - DDT	-	(15)	-
Taxes on exceptional items	38	-	(62)
Profit After Taxes (before exceptional items and DDT)	3,079	3,255	2,862
Profit After Taxes (before exceptional items)	3,079	3,240	2,862
Profit After Taxes	2,959	3,240	2,986
Attributable profit (before exceptional items and DDT) <sup>1</sup>	2,173	2,148	2,036
Attributable profit (before exceptional items) <sup>1</sup>	2,173	2,133	2,036
Attributable PAT	2,053	2,133	2,091
Minorities % (before exceptional items)	29%	34%	29%

Note 1. In view of clarification issued by Ind-AS Transition Facilitation Group, we have revised the accounting for dividend distribution tax (DDT) on profits of subsidiaries.

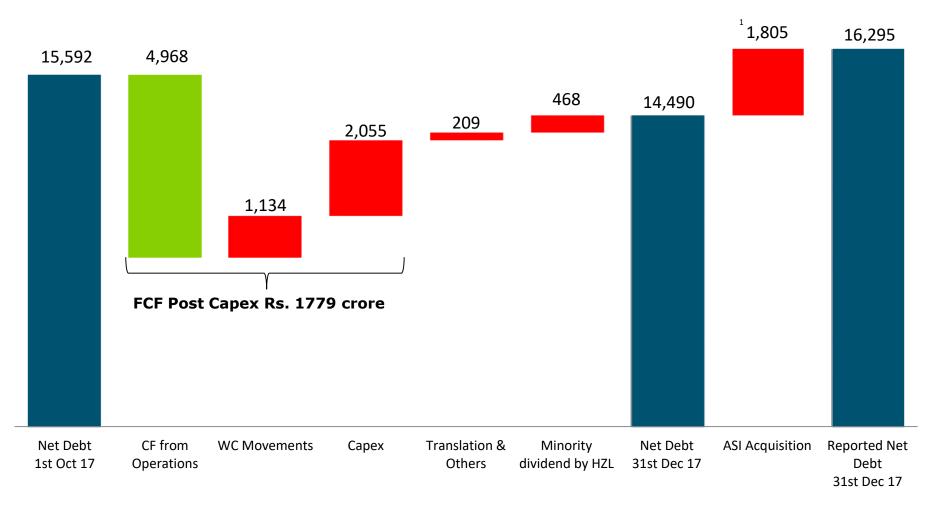
Hence the previous periods have been restated to give effect of the same

<sup>2.</sup> Previous period figures have been regrouped or re-arranged wherever necessary to conform to the current period's presentation

### **Net Debt for Q3 FY2018**



(In Rs. crore)



Note 1: Rs. 1,010 Cr is consideration paid, and Rs.795 Cr is consolidation of ASI's Net debt

## Financial Priorities: Maintain Strong Shareholder Returns and Balance Sheet



Disciplined Capital
Allocation;
Focus on FCF

- Continued focus on generating cash flows from ramp up of assets
- Further enhance credit rating to AA+

Deleveraging; Strong Liquidity Focus

- Continued reduction in gross debt
- Debt being refinanced at longer maturities and lower interest cost
- Strong liquidity focus

**Cost Savings** 

- Optimization of opex and 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

Dividend policy in place

31 January 2018



### **Business Review**

Kuldip Kaura, Chief Executive Officer

Sudhir Mathur, CEO – Cairn Oil & Gas





**Operational Excellence** 

#### **Zinc India**



#### Q3 FY2018 Results

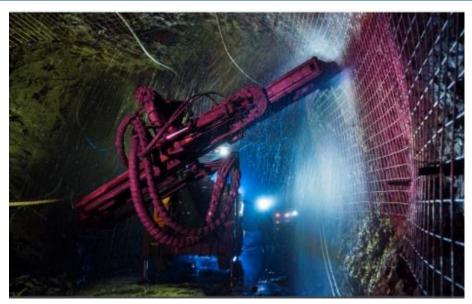
- MIC at 240kt; refined zinc-lead 245kt and refined silver at 132t
- CoP at \$1,022/t; impacted by high input commodity prices

#### Capacity expansion to 1.2mtpa MIC by FY2020 on track

- RAM U/G mine crossed ore production run-rate of 2mtpa; shaft to take total production capacity to 4.5mtpa in Q3 FY2019
- SK mine crossed ore production run-rate of 4.5mtpa; shaft to take total production capacity to 6mtpa in Q3 FY2019
  - New 1.5mtpa mill expected to commission in Q2 FY2019
- Site construction of new 2mtpa mill at Zawar commenced; expected to commission by Q3 FY19
- Expansion of RD from 0.9 to 1.08mtpa and Kayad from 1.0 to 1.2mtpa approved by Expert Appraisal Committee of MoEF
- Civil construction work for the fumer project is 70% complete; on track for completion by mid FY2019

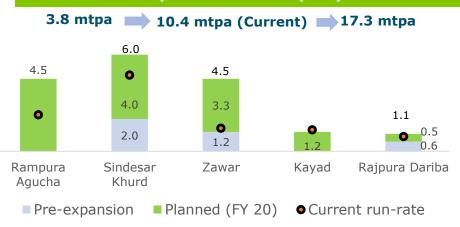
#### **FY2018 Outlook**

- FY2018 integrated Zn-Pb production c.950kt; silver 500t+
  - Q4 mine production to be higher than Q3 due to higher RAM production and higher overall grades
- FY2018 CoP of \$950-\$975/t due to high input commodity prices
  - Q4 CoP to be lower than Q3 due to higher production & cost efficiencies



Underground mining operations at Rampura Agucha mine

Underground Mines Ore Capacity Expansion to facilitate MIC expansion to 1.2mtpa by FY2020



#### **Zinc International**



#### Q3 FY2018 Results

- Total production at 47kt
  - Skorpion at 26kt: highest in last 6 quarters due to higher blended grades and refinery performance
  - BMM at 21kt: highest quarterly production in the last 4 years, driven by higher grades and plant improvement initiatives
- CoP lower at \$1,383/t driven by higher volumes and targeted improvement projects

#### **Skorpion Pit 112 extension**

- Contractor mining fully ramped-up
- 25% of waste stripping completed, full completion by Q4 FY19; first ore extracted in Nov'17 before schedule
- Project to extend mine life by further 2.5 years and produce 250kt of metal

#### **Outlook**

- FY18 Production of c.160kt
- YTD CoP at 1,495/t; Q4 to be temporarily high at c.\$1,700/t due to early production from Pit 112 and currency appreciation

#### Significant progress at 250kt Gamsberg project

- On target for first production by mid CY2018, with ramp-up to full capacity in 9-12 months
- Capex on target of \$400mn, CoP expected at \$1000-1150/t
- 70% of pre-stripping completed with record 12.3mt of waste achieved in the quarter; 500kt ore stockpile targeted ahead of 1st feed
- Construction of concentrator underway
  - Ball mill shell and crusher mechanical erection completed
  - Power and Water pipeline infrastructure is 90% completed
  - Plant cold commissioning to commence in Q1 FY19



Erection of Ball Mill Shells, Bearing Housing & Motor

ROM - Primary Crushing

Gamsberg project video: https://tinyurl.com/ydfuama3

#### Cairn Oil & Gas



#### Q3 FY2018 Results

#### Gross average production at 184,133 boepd

- Rajasthan production at 157,096 boepd
- Offshore production at 27,037 boepd

#### Operating cost

- RJ waterflood operating cost at \$4.3/boe
- RJ blended cost including EOR at \$6.4/boe

#### Production to ramp-up in Q4 as planned:

- 15 infill wells at Mangala: 8 wells brought online; balance
   7 to be online in Q4FY18
- Satellite fields: 8 well campaign commenced
- RDG phase I: Successful ramp-up to 45 mmscfd
- Liquid handling facilities upgrade for 1.2bn bbls: Progress as per plan
- Cambay: 3 well infill drilling campaign commenced in Jan

#### FY 2018 Outlook

- Rajasthan Q4 production expected at 165 kboepd
- Net capex estimated at \$250mn
  - 90% for development incl. EOR, tight oil & gas projects
  - 10% of exploration and appraisal



Rajasthan: Mangala Processing Terminal



Ravva: Oil Field

### Cairn O&G: Execution of growth projects commenced



#### **Enhanced Oil Recovery**

- Contract awarded for Bhagyam & Aishwariya EOR
- Rigs to be mobilized during Q4FY18

#### **Tight Oil & Gas Projects**

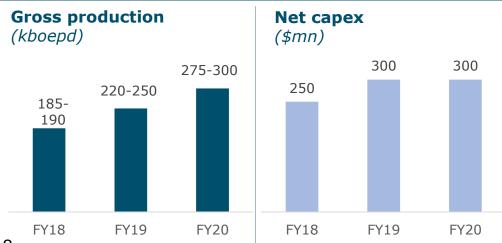
- Contract awarded for tight oil & gas wells
- Rigs to be mobilized during Q4FY18
- Contract for RDG tight gas facilities to be awarded in Q4FY18

#### **Exploration**

- Rajasthan: Prospects identified to drill in FY19; Drilling tender to be awarded in Q4FY18
- KG Offshore: Drilling of 2 exploration wells to commence in Q4FY18; contract has been awarded

#### **OALP**

- Expression of Interest submitted in prioritized blocks
- Evaluating opportunities for bid submission



Summary of key projects							
Project	Gross EUR <sup>1</sup> (mmboe)	Gross Capex (\$m)	Peak Production (kboepd)				
Enhanced Oil Recovery (Bhagyam & Aishwariya)	40	155	19				
Tight Oil & Gas Projects	137	640	45				
Other Projects:	41	290	53				
- Mangala Infill (60 wells)	22	140	32				
- Liquid Handling Upgrade	12	120	15				
- CB/OS-2 Infill (3 wells)	7	30	6				
Total	218	1,085	117				

Note 1. Estimated Ultimate Recovery

Project IRR of over 20% even at \$40/bbl per barrel Brent → Positive Free Cash Flow post capex every year

#### **Aluminium**



#### Q3 FY2018 Results

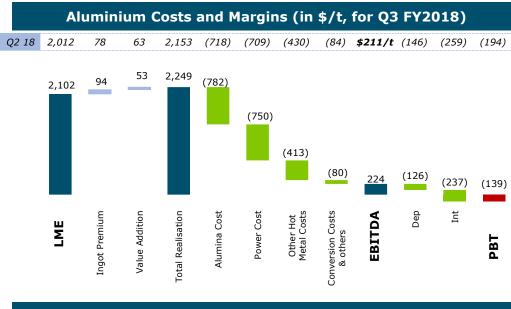
- Record Aluminium production of 445kt, with current run rate of 1.8mtpa and alumina production of 287kt
  - Aluminum CoP at \$1,945/t, higher q-o-q due to increase in power cost on account of continued coal shortages, high import alumina prices and carbon cost
  - Alumina CoP at \$327/t vs. \$ 430/t for imported alumina

#### **Operations**

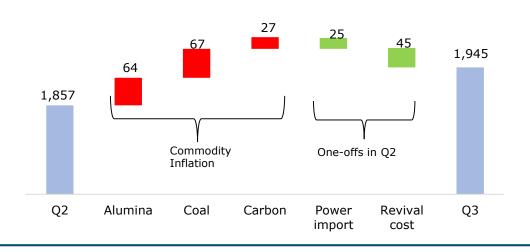
- 500kt Jharsuguda-I smelter: Restart of pots impacted by outage in Apr 2017; currently fully ramped up
- Ramp-up at 1.25mt Jharsuguda-II smelter:
  - 1st line: fully ramped up in Q3 FY2018
  - 2<sup>nd</sup> line: fully capitalized in Q4 FY2017
  - 3<sup>rd</sup> line: 193 pots operational, full ramp up by Q4 FY2018
  - 4<sup>th</sup> line: Under evaluation
- BALCO I (245kt) and II (325kt) fully operational

#### **FY2018 Outlook**

- Aluminium production 1.5 to 1.6mt (excl. trial run); Alumina production 1.2-1.3mt for FY2018
- CoP estimated at \$1,850-1,900/t for Q4 FY2018 due to improved materialization of coal linkages and elimination of one-off impacts of power imports and revival costs



#### Movements in Aluminium COP (in \$/t)





#### **TSPL (3 x 660 MW)**

- Record quarterly plant availability of 97%; 9 months availability at 68% and targeting availability of c. 75% for FY2018
- 'Take or Pay' arrangement with input coal pass through and EBITDA margin of c. INR1/unit

#### **Other IPPs**

- BALCO 600MW: Q3 PLF of 43%, higher than Q2
- Jharsuguda 600MW: Low PLF of 5% due to the ash dyke incident and temporary coal shortage



#### Coal Outlook - Aluminium CPPs

- Domestic coal supply situation
  - Low realisation of linkage coal in Q3 resulting in higher coal cost
  - In Jan'18, Coal India announced increase in coal price across various grades
- Addressing challenges in coal supply and costs
  - Working towards improved materialisation of linkages and realisation of backlogs
  - Restrictions on linkage coal supply for captive power plants removed, better availability expected in Q4
  - Total coal linkage secured: 8mt from Tranche I and II auctions, 2mt from Tranche III auction; coal delivery from Tranche III to start in Feb'18
  - Third Party quality control to help offset coal GCV losses

#### **Iron Ore**



#### Q3 FY2018 Results

- Total sales of 1.8mt and production of 0.9mt
- Goa commenced production of higher quality ore through beneficiation and blending
- Karnataka achieved full allocation production in Q3, inventory of 0.5mt to be sold in Q4

#### **Realizations:**

- Beneficiation and blending increased realisations from the higher quality ore at Goa
- Karnataka had strong realizations of \$28/t in Q3
  - Working towards higher realizations in the domestic market

#### **FY18 Outlook:**

- Original production allocation: 5.5mtpa at Goa & 2.3mtpa at Karnataka
  - Granted additional allocation in Goa; expect to produce higher quality ore of c.2mt in Q4 FY2018
  - Mining cap increased from 30 to 35mtpa for the state of Karnataka, company wise allocation in progress



Iron Ore Mine in Goa



Sanquelim Reclaimed Iron Ore Mine, Goa

### **Copper India**



#### Q3 FY2018 Results

#### **Volumes**

- Production at 101kt
- Q3 Tc/Rc's at 20.8 c/lb
- Net CoP of Usc 5.6/lb, higher q-o-q due to higher input commodity prices

#### **Outlook**

- Maintain guidance for FY2018 production at 400kt
- Benchmark Tc/Rc for CY2018 at Usc 21.3/lb; c.11% lower than CY2017

#### Tuticorin II (400kt) Update

- EPC contract awarded:
  - Site mobilization and civil work commenced
  - Contracts for balance construction to be awarded by March 2018
- Completion in Q3 FY2020



Tuticorin I Copper Smelter



Construction of Tuticorin II (400kt)





### **Consistent and successful strategy**

Delivering profitable capacity growth in attractive commodities

Uniquely positioned to harness India's resources potential and demand growth

Clear priorities for capital allocation and shareholder returns



### **Appendix**





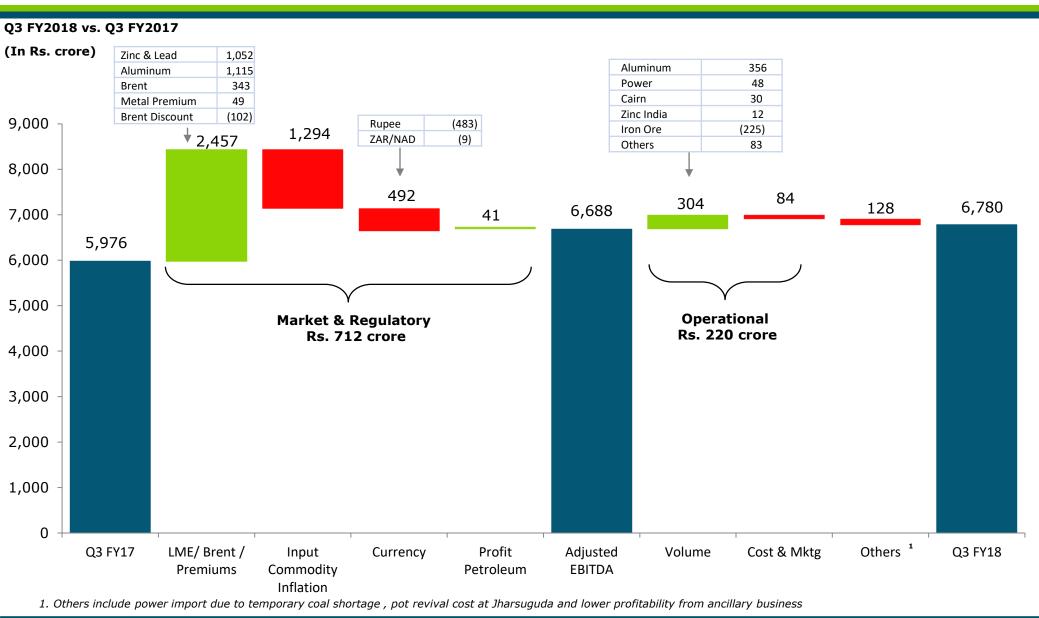
### **Guidance**



Segment	FY18e	Comments
Zinc India	Zinc-Lead Integrated: 950kt Silver volume: +500 tonnes CoP (\$/t): \$950-975/t	Revised guidance due to high input commodity prices
Zinc International	Zinc-Lead volume: c.160kt Q4 CoP: c.\$1,700/t	<ul> <li>YTD CoP at 1,495/t; Q4 to be temporarily high due to early production from Skorpion Pit 112 and currency appreciation</li> <li>Gamsberg expected CoP: \$1,000-1,150/t</li> </ul>
Oil & Gas	Q4 RJ Gross Volume: 165kboepd Ravva Gross volume: 16kboepd Cambay Gross volume: 10kboepd	
Aluminium	Alumina: 1.2-1.3mt Aluminium: 1.5-1.6mt (excl. trial-run) Aluminium CoP for Q4: \$1,850-1,900/t	Q4 aluminium CoP incorporates high input commodity prices
Power	TSPL plant availability: c. 75%	
Iron Ore	5.5mtpa at Goa and 2.3mtpa at Karnataka	<ul> <li>3mt extra allocation in Goa</li> <li>Mining cap limit increased for the state of Karnataka, company wise allocation in progress</li> </ul>
Copper - India	Production: 400kt	

### EBITDA Bridge (Q3 FY2018 vs. Q3 FY2017)





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



(in Rs. crore)

		31 Dec 2017	7	30 Sept 2017		30 Jun 2017			
Company	Debt	Cash & LI	Net Debt	Debt	Cash & LI	Net Debt	Debt	Cash & LI	Net Debt
Vedanta Limited Standalone	36,894	11,897	24,997	38,232	12,375	25,857	42,711	16,698	26,013
Cairn India Holdings Limited <sup>1</sup>	3,480	6,280	(2,800)	3,554	6,562	(3,008)	4,155	6,759	(2,604)
Zinc India	-	19,183	(19,183)	593	19,986	(19,393)	6,959	23,967	(17,009)
Zinc International	-	778	(778)	-	705	(705)	-	614	(614)
BALCO	4,841	47	4,794	4,647	82	4,565	4,765	102	4,663
Talwandi Sabo	8,262	449	7,813	8,055	294	7,761	8,029	70	7,960
Twin Star Mauritius Holdings Limited and Others <sup>2</sup>	1,741	289	1,452	717	202	515	723	108	615
Vedanta Limited Consolidated	55,218	38,923	16,295	55,798	40,206	15,592	67,342	48,318	19,024

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

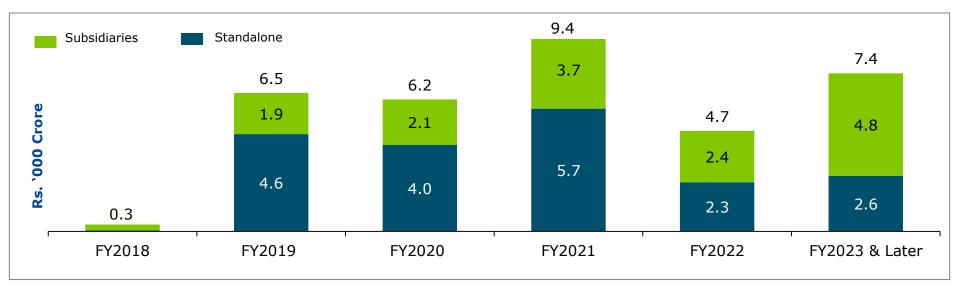
<sup>1.</sup> Cairn India Holdings Limited is a wholly owned subsidiary of Vedanta Limited which holds 50% of the share in the RJ Block

<sup>2.</sup> Others includes MALCO Energy, CMT, VGCB, Sesa Resources, Fujairah Gold, Vedanta Limited's investment companies and ASI.

### **Strong Credit Profile and Balance Sheet**



#### Maturity Profile of Term Debt: Rs.34,467 Crore (\$5.4 bn) (as of 31st Dec 2017)



Term debt of Rs.34,467 crore (Rs.19,433 Cr at Standalone and Rs.15,034 crore at Subsidiaries)
Maturity profile excludes working capital / short term borrowing of Rs.17,741 crore, and preference share of Rs.3,010 crore

#### Continued focus on balance sheet management and cost optimization

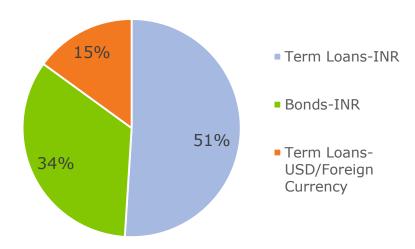
- ➤ Term debt reduced by c. Rs.11,450¹ crore during YTD FY2018
- Improving credit profile lowered the spreads on bank borrowings and competitively priced debt market borrowings led to reduction in average borrowing costs by about ~40 bps on term debt portfolio during YTD Dec 2018
- Strong liquidity: Cash and liquid investments of Rs.38,923 crore and undrawn fund based line of credit of c. Rs.3,800 crore

Note 1. Excluding repayment of temporary borrowing by Zinc India & preference shares issued pursuant to the Cairn India merger in April

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



## **Diversified Funding Sources for Term Debt of \$5.4bn** (as of 31st Dec 2017)



 Term debt of \$ 3.0bn at Standalone and \$2.4bn at Subsidiaries, total consolidated \$5.4bn

#### **Debt Breakdown**

(as of 31 Dec 2017)

Debt breakdown as of 31 Dec 2017	(in \$bn)	(Rs. in 000' Cr)
Term debt	5.4	34.5
Working capital	0.4	2.8
Short term borrowing	2.3	14.9
Preference shares issued pursuant to merger	0.5	3.0
Total consolidated debt	8.6	55.2

Cash and Liquid Investments	6.1	38.9		
Net Debt	2.5 16.3			
Debt breakup (\$8.6bn)				
- INR Debt	90%			
- USD / Foreign Currency Debt	10%			

Note: USD-INR: Rs. 63.9273 at 31 Dec 2017



## World class assets and operational excellence to deliver strong and sustainable cash flows

## Production growth and asset optimization

#### **Strong Shareholder Returns**

- Announced dividend policy at Vedanta Ltd
  - pass through of HZL's regular dividend, plus
  - minimum 30% pay out of Vedanta Ltd Attributable PAT (ex HZL PAT)
- HZL dividend policy minimum 30% pay out

#### **Maintain Strong Balance Sheet**

- Continued reduction of gross debt
- Target for AA+ rating from current AA rating (CRISIL)

#### **Grow Existing Businesses**

- Focus on full capacity utilisation and production growth in existing businesses
- Any investment opportunities to clear hurdle rate of return

### **Segment Summary – Zinc India**



		Q3		Q2		9M	
<b>Production</b> (in '000 tonnes, or as stated)	FY 2018	FY 2017	% change YoY	FY2018	FY 2018	FY 2017	% change YoY
Mined metal content	240	276	(13)%	219	693	595	16%
Refined Zinc - Total	200	205	(3)%	192	585	457	28%
Refined Zinc – Integrated	200	205	(3)%	192	585	456	28%
Refined Zinc - Custom	-	-		-	-	1	-
Refined Lead - Total <sup>1</sup>	46	39	18%	38	118	94	26%
Refined Lead – Integrated	46	39	18%	38	118	94	26%
Refined Lead – Custom	-	-		-	-	-	-
Refined Saleable Silver - Total (in tonnes) <sup>2</sup>	132	118	13%	140	387	314	24%
Refined Saleable Silver - Integrated (in tonnes)	132	118	13%	140	387	314	24%
Refined Saleable Silver - Custom (in tonnes)	-	-		-	-	-	-
Financials (In Rs. crore, except as stated)							
Revenue	5,853	5,328	10%	5 197	15,964	11,793	35%
EBITDA	3,238	2,729	19%	3 001	8,608	5,782	49%
Zinc CoP without Royalty (Rs. /MT) <sup>3</sup>	66,100	58,100	14%	63,300	64,100	57,200	12%
Zinc CoP without Royalty (\$/MT) <sup>3</sup>	1,022	861	19%	984	994	852	17%
Zinc CoP with Royalty (\$/MT) <sup>3</sup>	1,437	1,198	20%	1,333	1,361	1,159	17%
Zinc LME Price (\$/MT)	3,236	2,517	29%	2,963	2,935	2,230	32%
Lead LME Price (\$/MT)	2,492	2,149	16%	2,334	2,331	1,913	22%
Silver LBMA Price (\$/oz)	16.7	17.2	(3)%	16.8	16.9	17.9	(5)%

<sup>1.</sup> Excludes captive consumption of 1,786 tonnes in Q3 FY 2018 vs 1,731 tonnes in Q3 FY 2017 & 1,634 tonnes in Q2 FY 2018. For 9M it was 5,376 MT as compared to 3,652 MT in 9M FY2017

<sup>2.</sup> Excludes captive consumption of 9.275MT in Q3 FY 2018 and 8.918 MT in Q3 FY 2017 & 8.750 MT in Q2 FY 2018. For 9M it was 28.229 MT as compared with 18.745 MT in 9M FY2017

<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. 67,082 in Q3 FY2018

### **Segment Summary – Zinc International**



		Q3		Q2	9М		
Production (in'000 tonnes, or as stated)	FY 2018	FY 2017	% change YoY	FY2018	FY 2018	FY 2017	% change YoY
Refined Zinc – Skorpion	26	17	50%	23	62	64	(3)%
Mined metal content- BMM	21	15	36%	20	59	51	17%
Total	47	33	43%	42	121	115	6%
Financials (In Rs. Crore, except as stated)							
Revenue	970	588	65%	853	2,624	1,726	52%
EBITDA	446	203	-	389	1,156	792	46%
CoP - (\$/MT)	1,383	1,615	(14)%	1,470	1,495	1,412	6%
Zinc LME Price (\$/MT)	3,236	2,517	29%	2,963	2,935	2,230	32%
Lead LME Price (\$/MT)	2,492	2,149	16%	2,334	2,331	1,913	22%

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



		Q3		Q2		9M	
OIL AND GAS (boepd)	FY 2018	FY 2017	% change YoY	FY2018	FY 2018	FY 2017	% change YoY
Average Daily Total Gross Operated Production (boepd)*	193,647	191,230	1%	190,389	193,553	201,286	(4)%
Average Daily Gross Operated Production (boepd)	184,133	181,818	1%	180,955	184,086	191,674	(4)%
Rajasthan	157,096	154,272	2%	153,238	156,552	162,957	(4)%
Ravva	16,876	18,172	(7)%	17,266	17,498	18,874	(7)%
Cambay	10,161	9,375	8%	10,452	10,036	9,843	2%
Average Daily Working Interest Production (boepd)	117,828	115,829	2%	115,332	117,538	122,254	(4)%
Rajasthan	109,967	107,990	2%	107,267	109,586	114,070	(4)%
Ravva	3,797	4,089	(7)%	3,885	3,937	4,247	(7)%
Cambay	4,064	3,750	8%	4,181	4,015	3,937	2%
Total Oil and Gas (million boe)							
Oil & Gas- Gross	16.9	16.7	1%	16.6	50.6	52.7	(4)%
Oil & Gas-Working Interest	10.8	10.7	2%	10.6	32.3	33.6	(4)%
Financials (In Rs. crore, except as stated)							
Revenue	2,413	2,149	12%	2,099	6,787	6,073	12%
EBITDA	1,359	1,051	29%	1,176	3,920	2,892	36%
Average Oil Price Realization (\$ / bbl)	53.0	46.0	15%	45.1	47.8	41.9	14%
Brent Price (\$/bbl)	61.3	49.3	24%	52.1	54.4	46.9	16%

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

### **Segment Summary – Oil & Gas (contd.)**



		Q3		Q2		9M	
OIL AND GAS (boepd)	FY 2018	FY 2017	% change YoY	FY2018	FY 2018	FY 2017	% change YoY
Average Daily Production							
Gross operated	184,133	181,818	1%	180,955	184,086	191,674	(4)%
Oil	175,911	177,820	(1)%	173,408	176,391	185,984	(5%)
Gas (Mmscfd)	49.3	24.0	-	45.3	46.2	34.1	35%
Working Interest	117,828	115,829	2%	115,332	117,538	122,254	(4)%
Rajasthan (Block RJ-ON-90/1)							
Gross operated	157,096	154,272	2%	153,238	156,552	162,957	(4)%
Oil	153,530	153,621	-	150,245	153,232	160,987	(5)%
Gas (Mmscfd)	21.4	3.9	-	18.0	19.9	11.8	69%
Gross DA 1	140,584	141,176	-	137,562	140,091	147,908	(5)%
Gross DA 2	16,445	13,095	26%	15,606	16,344	15,049	9%
Gross DA 3	67	0	-	70	117	0	-
Working Interest	109,967	107,990	2%	107,267	109,586	114,070	(4)%
Ravva (Block PKGM-1)							
Gross operated	16,876	18,172	(7)%	17,266	17,498	18,874	(7)%
Oil	14,273	16,389	(13)%	14,771	15,029	16,712	(10)%
Gas (Mmscfd)	15.6	10.7	46%	15.0	14.8	13.0	14%
Working Interest	3,797	4,089	(7)%	3,885	3,937	4,247	(7)%
Cambay (Block CB/OS-2)							
Gross operated	10,161	9,375	8%	10,452	10,036	9,843	2%
Oil	8,108	7,811	4%	8,392	8,130	8,285	(2)%
Gas (Mmscfd)	12.3	9.4	31%	12.4	11.4	9.3	23%
Working Interest	4,064	3,750	8%	4,181	4,015	3,937	2%
Average Price Realization							
Cairn Total (US\$/boe)	52.8	46.2	14%	44.9	47.6	41.9	14%
Oil (US\$/bbl)	53.0	46.0	15%	45.1	47.8	41.9	14%
Gas (US\$/mscf)	7.6	5.9	29%	6.4	6.9	7.0	(1)%

### **Segment Summary – Aluminium**



		Q3		Q2		9М	
Particulars (in'000 tonnes, or as stated)	FY 2018	FY 2017	% change YoY	FY2018	FY 2018	FY 2017	% change YoY
Alumina – Lanjigarh	287	328	(12)%	269	859	895	(4)%
Total Aluminum Production	445	319	40%	401	1,198	860	39%
Jharsuguda-I	116	132	(12)%	99	307	393	(22)%
Jharsuguda-II <sup>1</sup>	187	84	-	157	464	161	-
245kt Korba-I	65	65	-	65	194	192	1%
325kt Korba-II <sup>2</sup>	77	38	-	79	233	115	-
Jharsuguda 1800 MW (MU)	-	-	-	-	-	511	-
Financials (In Rs. crore, except as stated)							
Revenue	6,514	3,858	69%	5,212	16,276	10,183	60%
EBITDA - BALCO	166	175	(5)%	140	481	342	41%
EBITDA – Vedanta Aluminium	444	475	(7)%	317	1,113	975	14%
EBITDA Aluminum Segment	609	651	(6)%	457	1,594	1,317	21%
Alumina CoP - Lanjigarh (\$/MT)	327	265	23%	331	325	273	19%
Alumina CoP – Lanjigarh (Rs. /MT)	21,200	17,900	18%	21,400	21,000	18,300	14%
Aluminium CoP - (\$/MT)	1,945	1,429	36%	1,857	1,855	1,452	28%
Aluminium CoP – (Rs. /MT)	125,900	96,400	31%	119,400	119,700	97,500	23%
Aluminum CoP – Jharsuguda (\$/MT)	1,919	1,388	38%	1,853	1,833	1,418	29%
Aluminium CoP – Jharsuguda(Rs. /MT)	124,200	93,600	33%	119,100	118,200	95,200	24%
Aluminum CoP – BALCO (\$/MT)	2,000	1,499	33%	1,865	1,896	1,513	25%
Aluminium CoP – BALCO (Rs. /MT)	129,400	101,100	28%	119,900	122,300	101,500	20%
Aluminum LME Price (\$/MT)	2,102	1,710	23%	2,012	2,009	1,634	23%

Including trial run production of 18 kt in Q3 FY2018 and 36 kt in Q3 FY2017 and 15 kt in Q2 FY2018. For 9M Trial run production was 52kt in FY2018 vs 67kt in FY2017 Including trial run production of 56 tonnes in Q3 FY2018 and 270 tonnes in Q3 FY2017 and 1000 tonnes in Q2 FY2018. For 9M Trial run production was 16.1kt in FY2018 vs 28kt in FY2017

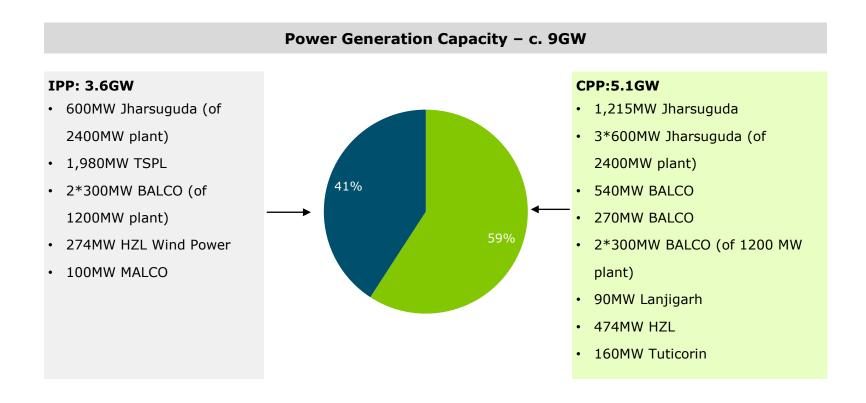
### **Segment Summary – Power**



		Q3		Q2		9M	
Particulars (in million units)	FY 2018	FY 2017	% change YoY	FY2018	FY 2018	FY 2017	% change YoY
Total Power Sales	3,146	3,413	(8)%	2,950	7,933	9,453	(16)%
Jharsuguda 600 MW	111	879	(87)%	93	768	2,376	(68)%
BALCO 600 MW	466	660	(30)%	132	1,148	1,817	(37)%
MALCO	-	29	-	-	4	144	(97)%
HZL Wind Power	57	53	8%	143	356	373	(5)%
TSPL	2,512	1,792	40%	2,582	5,657	4,743	19%
Financials (in Rs. crore except as stated)							
Revenue	1,724	1,532	12%	1,431	3,888	4,099	(5)%
EBITDA	595	435	37%	366	1,071	1,177	(9)%
Average Cost of Generation(Rs. /unit) ex. TSPL	2.74	2.10	30%	2.09	2.15	2.04	5%
Average Realization (Rs. /unit) ex. TSPL	2.97	2.77	7%	2.85	2.79	2.85	(2)%
TSPL PAF (%)	97%	77%	-	87%	68%	75%	-
TSPL Average Realization (Rs. /unit)	3.49	3.33	5%	3.61	3.56	3.45	3%
TSPL Cost of Generation (Rs. /unit)	2.40	2.34	3%	2.64	2.63	2.44	8%

### **Segment Summary – Power (contd.)**





Note: MALCO 100MW (IPP) is under care and maintenance since 26th May 2017

### **Segment Summary – Iron Ore**



Particulars (in million day matric towns as		Q3		Q2		9М	
Particulars (in million dry metric tonnes, or as stated)	FY 2018	FY 2017	% change YoY	FY2018	FY 2018	FY 2017	% change YoY
Sales	1.8	3.7	(52)%	0.7	4.8	7.1	(32)%
Goa	1.0	2.7	(63)%	0.1	3.0	5.1	(42)%
Karnataka	0.8	1.0	(20)%	0.6	1.8	2.0	(8)%
Production of Saleable Ore	0.9	2.6	(64)%	1.2	5.4	7.3	(26)%
Goa	0.8	2.3	(64)%	0.4	3.4	5.2	(35)%
Karnataka	0.1	0.4	(61)%	0.9	2.1	2.1	-
Production ('000 tonnes)							
Pig Iron	165	154	7%	137	465	526	(12)%
Financials (In Rs. crore, except as stated)							
Revenue	843	1,449	(40)%	542	2,104	2,990	(28)%
EBITDA	231	467	(51)%	(4)	267	935	(71)%

### **Segment Summary – Copper India**



		Q3		Q2		9М	
Production (in '000 tonnes, or as stated)	FY 2018	FY 2017	% change YoY	FY 2018	FY 2018	FY 2017	% change YoY
Copper - Cathodes	101	102	(1)%	106	298	300	(1)%
Tuticorin power sales (million units)	3	46	(93)%	4	36	136	(73)%
Financials (In Rs. crore, except as stated)							
Revenue	5,898	5,440	8%	6,237	17,457	15,326	14%
EBITDA	297	447	(34)%	392	902	1,259	(28)%
Net CoP - cathode (US¢/lb)	5.6	3.9	42%	4.5	6.1	5.0	22%
Tc/Rc (US¢/lb)	20.8	22.2	(6)%	21.6	21.1	21.9	(4)%
Copper LME Price (\$/MT)	6,808	5,277	29%	6,349	6,280	4,924	28%

### **Sales Summary**



Sales volume	Q3 FY2018	9M FY2018	Q3 FY2017	9M FY2017	Q2 FY2018
Zinc-India Sales					
Refined Zinc (kt)	200	583	211	479	193
Refined Lead (kt)	45	119	36	91	39
Total Zinc (Refined+Conc) kt	200	583	211	479	193
Total Lead (Refined+Conc) kt	45	119	36	91	39
Total Zinc-Lead (kt)	245	702	248	570	232
Silver (moz)	4.2	12.5	3.8	10.1	4.7
Zinc-International Sales					
Zinc Refined (kt)	26	62	20	64	24
Zinc Concentrate (MIC)	6	28	6	19	7
Total Zinc (Refined+Conc)	32	90	26	83	31
Lead Concentrate (MIC)	14	45	9	30	12
Total Zinc-Lead (kt)	47	134	34	112	43
Aluminium Sales					
Sales - Wire rods (kt)	93	266	74	233	87
Sales - Rolled products (kt)	6	19	6	10	7
Sales - Busbar and Billets (kt)	89	214	43	104	73
Total Value added products (kt)	189	499	123	348	167
Sales - Ingots (kt)	252	660	199	491	213
Total Aluminium sales (kt)	441	1,158	322	838	380

### **Sales Summary**



Sales volume	Q3 FY 2018	9M FY 2018	Q3 FY 2017	9M FY 2017	Q2 FY2018
Iron-Ore Sales					
Goa (mn DMT)	1.0	3.0	2.7	5.1	0.1
Karnataka (mn DMT)	0.8	1.8	1.0	2.0	0.6
Total (mn DMT)	1.8	4.8	3.7	7.1	0.7
Pig Iron (kt)	171	459	141	511	154
Copper-India Sales					
Copper Cathodes (kt)	60	158	53	139	59
Copper Rods (kt)	42	139	48	156	46
Sulphuric Acid (kt)	126	367	116	386	133
Phosphoric Acid (kt)	53	150	51	146	51

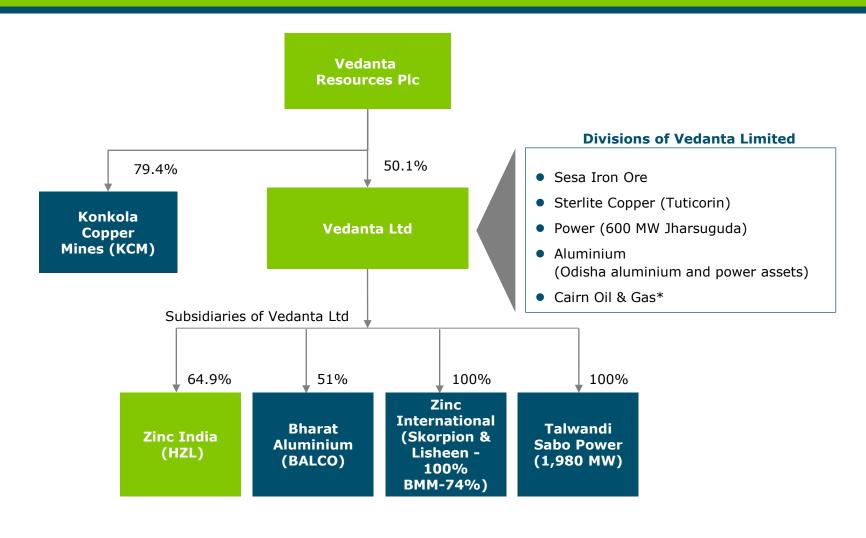
Sales volume Power Sales (mu)	Q3 FY2018	9M FY2018	Q3 FY2017	9M FY2017	Q2 FY2018
Jharsuguda 600 MW	111	768	879	2,376	93
TSPL	2,512	5,657	1,792	4,743	2,582
BALCO 270 MW	-	1	-		-
BALCO 600 MW	466	1,148	660	1,817	132
MALCO	-	4	29	144	-
HZL Wind power	57	356	53	373	143
Total sales	3,146	7,932	3,413	9,453	2,950
Power Realisations (INR/kWh)					
Jharsuguda 600 MW	1.90	2.16	2.46	2.36	1.10
TSPL <sup>2</sup>	3.49	3.56	3.33	3.45	3.61
Balco 600 MW	3.14	2.84	2.96	2.98	2.52
MALCO	-	3.07	6.75	5.75	-
HZL Wind power	3.75	3.96	3.39	4.24	4.29
Average Realisations <sup>1</sup>	2.97	2.79	2.77	2.85	2.85
Power Costs (INR/kWh)					
Jharsuguda 600 MW	4.47	2.52	2.02	1.98	3.46
TSPL <sup>2</sup>	2.40	2.63	2.34	2.44	2.64
BALCO 270 MW	-	-	-	-	-
Balco 600 MW	2.48	2.35	2.11	2.23	2.78
MALCO	-	18.57	5.51	4.35	-
HZL Wind power	1.45	0.55	1.47	0.62	0.57
Average costs <sup>1</sup>	2.74	2.15	2.10	2.04	2.09

<sup>1.</sup> Average excludes TSPL

<sup>2.</sup> Based on Availability

### **Group Structure**





Note: Shareholding as on Dec 31, 2017
\*50% of the share in the RJ Block is held by a subsidiary of Vedanta Ltd

Listed entities

Unlisted entities

### **Results Conference Call Details**



Results conference call is scheduled at 6:30 PM (IST) on January 31, 2018. The dial-in numbers for the call are given below:

Event		Telephone Number
Earnings conference call on January 31, 2018	India – 6:30 PM (IST)	Mumbai main access +91 22 3938 1017 Toll Free number 1 800 120 1221 1 800 200 1221
	Singapore - 9:00 PM (Singapore Time)	Toll free number 800 101 2045
	Hong Kong - 9:30 PM (Hong Kong Time)	Toll free number 800 964 448
	UK - 1:00 PM (UK Time)	Toll free number 0 808 101 1573
	US - 8:00 AM (Eastern Time)	Toll free number 1 866 746 2133
For online registration	http://services.choruscall.in/diamondpasmber=5267915	ss/registration?confirmationNu
Replay of Conference Call (January 31, 2018 to February 6, 2018)		Mumbai +91 22 3065 2322 Passcode: 34255#