



## “Vedanta Limited Q3 FY2018 Results Conference Call”

**January 31, 2018**



**MANAGEMENT: MR. KULDIP KAURA -- CEO, VEDANTA LIMITED  
MR. G.R. ARUN KUMAR – CFO, VEDANTA LIMITED  
MR. SUDHIR MATHUR – CEO, OIL & GAS  
MR. AMITABH GUPTA – CFO, HINDUSTAN ZINC  
MS. DESHNEE NAIDOO – CEO, ZINC INTERNATIONAL  
MR. SAMIR CAIRAE – CEO, ALUMINUM & POWER  
MR. ABHIJIT PATI – CEO, ALUMINUM, JHARSUGUDA  
MR. KISHORE KUMAR – CEO, IRON ORE  
MR. ASHWIN BAJAJ – DIRECTOR, GROUP INVESTOR  
RELATIONS**

**Moderator:** Ladies and gentlemen, good day and welcome to the Vedanta Limited Q3 FY2018 Results Conference Call. As a reminder, all participant' lines will be in the listen-only mode and there will be an opportunity for you to ask questions after the presentation concludes. Should you need assistance during the conference call, please signal an operator by pressing '\*\*' then '0' on your touchtone phone. Please note that this conference is being recorded. I now hand the conference over to Ashwin Bajaj, Vedanta Limited. Thank you and over to you, sir.

**Ashwin Bajaj:** Thanks, operator, and a very good evening, ladies and gentlemen. This is Ashwin Bajaj, Director of Group Investor Relations. Thanks for joining us today to discuss our results for the third quarter of FY'18.

We will be referring to the presentation that is available on our website. From our management team, we have with us our CEO --Kuldip Kaura and our CFO -- Mr. Arun Kumar. We also have several of our business leaders with us; we have Sudhir Mathur from Oil & Gas; Amitabh Gupta from Hindustan Zinc; Deshnee Naidoo from Zinc International; Samir Cairie and Abhijit Pati from Aluminum and Power and Kishore Kumar from Iron Ore.

So, with that, let me hand it over to Mr. Kaura.

**Kuldip Kaura:** Thank you, Ashwin. Good Evening, Ladies and Gentlemen. I am pleased to welcome you to Vedanta Limited's Third Quarter Earning Conference Call.

We have seen further improvement in the commodity prices in the last quarter and that strength has continued into the new year as well. With the sentiment of global growth remaining strong and China supply side reforms underway, the base is set for a strong 2018.

With that, let me take you through some of our "Third Quarter Performance."

Numbers First:

Focusing on Safety: Vedanta remains focused on a zero harm, zero waste and zero discharge culture but regrettably fatal accidents at four of our businesses overshadowed our HSE efforts in Q3. Three of them were fatalities of our contract employees and relate to understanding hazards in the workplace and the effectiveness of supervision. The fourth relates to understanding and control of a critical risk in our mining operations to ensure the stability of waste dumps.

Our Executive Committee has increased involvement in some key areas of visible leadership, risk identification and control and closure and corrective action. We have bolstered our HSE organization by induction of additional HSE experts with global experience. We have also completed a third-party audit for tailing/ash management practices and water risk assessment to identify physical, social and economic risks across the group in India. We have put in place measures to address this and remain committed to bring Vedanta to the best HSE performance in the resource sector. Let me assure you that all of us in our executive team are committed to our safety goals.

Slide on Results Highlights:

Moving to our Results Highlights for the Quarter:

On operations, we have delivered strong volumes in the quarter and continue with production ramp up across our portfolio. At Zinc India, we had higher production and we remain on track to achieve our 1.2 mt target. At Zinc International, we had strong production from BMM and Skorpion. Our Gamsberg project is on track to commence production in mid-calendar year '18. At Aluminium, we are continuing to ramp up and have exited Q3 at a run rate of 1.8 mtpa. At TSPL, we had record plant availability of 97%. At Iron Ore, we have an additional 3 mt of capacity allocated to us in Goa for the current financial year. The Supreme Court has also increased the mining cap for Karnataka. The company wise allocation is in progress.

We are also progressing well on our growth projects announced last quarter. Contracts have been awarded on the new projects in the oil & gas segment and mobilization of drilling rigs are in progress. On the 400,000 tons smelter expansion at Copper India, the EPC contract has been awarded and civil works are underway.

Talking about the Financial Highlights:

I am happy to report that Q3 EBITDA was Rs.6,780 crores and profit after tax was Rs.2,173 crores. We have maintained a robust EBITDA margin of 35% quarter on quarter. We have had strong cash flows of Rs.4,600 crores and have reduced our gross debt by Rs.11,450 crores in the first nine months of FY'18. We also have one of the strongest balance sheets in the sector with net debt-to-EBITDA at 0.7, one of the lowest across both our Indian and global peers.

Next Slide please:

As we see our assets ramping up and delivering growth, we are also focused on delivering strong shareholder returns. We aim to do this by focusing on our four key areas: Executing our strategy which has been consistent over the last several years and has delivered results. Over 80% of Vedanta's EBITDA comes from commodities that are expected to grow the most over the coming years. We are ramping up our existing capacities and have taken specific actions to grow our volumes across all our businesses. India has very strong growth potential and its consumption of key commodities will increase exponentially. We are uniquely positioned to serve this demand being the only diversified natural resources company in India.

We are focused on value creation for our shareholders through prudent capital allocation and we have a robust dividend policy in place which entails a minimum 30% dividend payout.

Strategic Framework:

Our strategic framework is quite simple and am quite excited about the growth opportunities in our various businesses and being able to leverage our presence and position with our fast growing Indian markets. Our world-class mines have long life and we have been continuously adding to

reserves through exploration. Through this rich asset base, we will grow across our portfolio both in the near and medium-term. Key among that growth will be our plans in zinc and oil & gas. We are actively working on plants to expand our zinc business to 2 mt of mine zinc and lead accompanied by over 32 million ounces of silver and our oil & gas business for a level of 300,000 barrels per day to 500,000 bpd of output.

The growth which I have detailed will be funded by internal cash accruals. Our disciplined approach to capital allocation will deliver superior long-term returns to shareholders. I will walk you through details in the following two slides.

Near-Term Priorities:

The priority in the near-term up to financial year 2020 is to ramp up to design capacity across all our businesses. Key aspects in projects had underpinned this growth are laid out on the slide. We are on track to achieve our volume growth as per our guidance. You have already witnessed our progress of our ramp ups at Zinc India and Aluminum in Q3. This will accelerate as scheduled to ramp up to respective design capacities. At Zinc India, there will also be significant reduction in the CoP as we complete our expansions and transition to the underground mining. At Zinc International, our Gamsberg project in South Africa is in erection phase. The project is on target for first production by mid-2018. In our Oil & Gas business, development partners have been finalized for our next phase of growth to get to a near-term capacity of around 300,000 bpd. At Copper India, the EPC contracts have been awarded to double smelter capacity from 400,000 tons to 800,000 tons per annum. In our Iron Ore business, the state has already increased the mining cap in Karnataka and we are soon expecting an increase in the mining limits in Goa too which will enable us to swiftly ramp up to our pre-ban levels of over 20 mtpa without any significant investments.

Next slide please:

In the medium-term beyond FY2020, we have carefully evaluated and conceptualized the following attractive growth options, most of which are Brownfield, across our existing portfolio. Some of these include:

- Expansion at Zinc India to 1.5 million tonnes of mined Zinc-Lead, accompanied by over 32 million ounces of silver, given the long mine life of over 25 years.
- Phase 2 and 3 of our Gamsberg zinc project, which has the potential to take total zinc concentrate production from 250kt to 600ktpa
- Potential at our Oil & Gas to increase output from 300 to 500kboepd on the back of continued exploration and ASP technology
- We are also in the final stage of evaluating the Alumina refinery expansion at Lanjigarh to 6mt.

Coming to Development of Iron Ore Deposits at Jharkhand:

We believe that steel is the natural bolt for us to our core iron ore business as Jharkhand iron ore mining license for example comes with the requirement of value addition. This has been our trigger to evaluating steel assets being auctioned under the IBC. We will participate in suitable opportunities that we believe will help strengthen our iron ore business provided the investment clears our capital allocation criteria and hurdle rates.

I would like to emphasize that as we ramp up to our near and medium-term capacity, our assets will generate strong incremental cash flows to enable funding of all our growth through internal accruals.

As an organization, we are well-equipped to take up these growth projects with the requisite management bandwidth, global talent base and systems in place.

I will now hand over to Arun who will take you through the financials.

**G.R. Arun Kumar:**

Thanks, Mr. Kaura. Good Evening, all. So we have delivered another steady quarter and a strong set of numbers. It is driven both by higher volumes reflecting the operating performance per plan and helped along by a higher price scenario. Thus the EBITDA of Rs.6,780 crores represents the 17% growth sequentially and 13% higher YoY despite a couple of inflationary cost headwinds. EBITDA margins continued to be robust at 35% which is now the sixth continuous quarter of 35-40% range. Balance sheet remains strong with cash and liquid investments of nearly Rs.39,000 crores. This is post repayment of gross debt by about Rs.11,500 crores in the last nine months....Of course, it excludes Rs.7,900 crores repaid by Zinc India early this year which was a temporary borrowing. Our gearing continues to remain best-in-class in Corporate India whichever sector you take with net debt-to-EBITDA at 0.7x. We also had CRISIL upgrade our outlook to 'Positive' in October as you recall. While EBITDA or attributable EBITDA per share improved significantly, the mark-to-market accounting on investments and a typical deferred tax accounting have led to EPS at 5.86 per share which is higher sequentially from 5.49, though lower on YoY basis.

Overall, as you heard from Mr. Kaura:

A) we are on track in executing our current near-term volume and ramp up plan.

B) growth projects, while simultaneously charting out the path for the medium-term where zinc becomes 2 mt, oil 300 to 500 kboepd, an eye on alumina refinery expansion which is in the final stages as well as iron ore at Jharkhand.

C) the earnings are good, the cash is good, so it will self-fund all these Brownfield growth plans and we expect these will be well executed through our credible track record. Those are the key highlights I would say of our performance so far.

Moving on to the EBITDA bridge over the next page:

As we said, it represents 17% growth QoQ. If you see our aluminum ramp up on track, run rate of 1.8 should exit Fiscal '18, with 2 mtpa. Zinc - grew 7% and metal basis is 10%, metal-in-concentrate sequentially, so it is a strong growth. Iron Ore again post-monsoon, dispatch of higher grade ore, better realizations as part of its new production and sales strategy. Oil volumes were up too sequentially and Zinc International volumes were the highest in the last eight quarters.

Summing up it was outstanding quarter operationally and it has delivered about Rs.400 plus crores of contribution to the EBITDA out of the total of 1,000 crores increase...the balance of course came from price as I mentioned earlier. We are lucky to have zinc at a 10-year high, Brent and aluminum at 3, 4-year highs. Yes, some of the input inflation took away the part of the price upside.

Overall resilience I would say of the diversified portfolio has been a cornerstone of our investment case or investment series as you would like to call it and it has played out very well in the last three, four years, both in a down cycle as well as the up cycle as is very evident and it is probably only one of the two companies globally in the sector out of the top-25 to have very good portfolio of diversified metals and oil and gas and even in the diversified metals, the absence of base metals like zinc and aluminum and copper, all of them in a sweet spot at this point of time, both from our own internal volumes and operations as well as from an external environment.

Volume guidance for the year is unchanged which means we expect good volume performance to continue into Q4 and perhaps beyond that, given the fact that the next year will reap the benefits of ramped up asset base. We also expect the cost inflation to ease soon especially in domestic coal...the government is doing some good work to bring the supplies up and cost down, alumina is already easing from the peak levels that were seen in Q3.

So with that hint of optimism, I will move on to the income statement on the next page: Self-explanatory as usual. Some of the headline numbers are already explained. The other key numbers are on the page. On the finance cost, our blended cost of borrowing was 7.7% for the quarter, continued to stay below 8% for the second quarter in a row. After nearly eight quarters we achieved the target and we expect this kind of rate to stay for the rest of the year in the near-term. The other income line of course represents the investment income. It was lower very clearly mark-to-market accounting which is nothing to do with cash economics reality as we continue to hold our investments mostly to maturity and that is of course due to the 65 bps sharp rise in the G-Sec yields over the quarter, sharp rise. Investment income for Q4, however, is expected more like the Q2 levels assuming the G-Sec would stay stable during the quarter. I am sure that helps you model out some of the cash flows. The portfolio of course is outstanding, continues to be safely and conservatively invested, tier-1 assets, very good based on CRISIL's audit and rating on a monthly basis. Depreciation line FY'18 would be marginally lower compared to FY'17, nothing new in the guidance out there. Tax line, again, well within our yearly guidance, we had always said mid-20s to 30%, we will probably come up at the higher end of the range. For the quarter it is a tad higher, that is again purely deferred tax accounting and some true-ups, but for the year we should be in that range.

With that, I move onto the next page:

Net debt waterfall during the quarter as you can see, we generated cash flow from operations of over Rs.5,000 crores, clearly driven by higher EBITDA and fundamental operation performance. That helped us in reduction of the net debt to Rs.14,500 crores prior the acquisition of course despite Rs.2100 crores spend on CAPEX in line again with our guidance. We continue to be disciplined in our capital allocation. With all our CAPEX spends IRRs of 20% and above, we are likely to be marginally lower than our \$1.1bn CAPEX guidance for the year basically a timing of plus/minus few weeks here and there. Our Zinc business CAPEX program is making a steady progress. We commenced the next phase of growth program with a Copper Smelter project at Tuticorin as Mr. Kaura highlighted. Oil & Gas again on track for all the projects that we announced during the Capital Markets Day in London during the month of November. Working capital investments you see on this page is mostly driven by LME prices, few one-off items, all of which should reverse back in the coming quarter. So we feel good about the coming fourth quarter as usual which last few years have always been a strong quarter as we wind up the year in terms of cash flow. One off investment of \$158mn or about Rs.1,000 crores is Japanese manufacture LCD Glass as you all know. Obviously on consolidation of books given the transaction is consummated, there will be the net debt which will add on to the balance sheet. Otherwise, the net gearing at these levels as I reiterated earlier 16%, really the question is what is the right level out there.

Moving on to the Final Page:

The priorities remain consistent. Again, if I have to summarize, the focus on cash, capital allocation and volume growth will deliver the consistent earnings into the near future. It will keep the balance sheet strong and self-fund all the growth projects... I think Mr. Kaura also made the point. As I mentioned earlier, the diversified portfolio, especially base metals and zinc is the highlight of the base metal space, whether it is a price side or the cost side, with the handsome margin of \$1800-\$2000 plus per ton at these levels and oil of course have an important part of our growth strategy and we are blessed to be in these two spaces as we look forward. We continue to be a compelling investment proposition for both our equity and debt investors.

With that, thank you all for the patient hearing and back to Mr. Kaura.

**Kuldip Kaura:**

Thanks, Arun. Zinc India Slide please:

Starting with Zinc India, we have achieved mined metal production of 240,000 tons refined zinc, lead production of 245,000 tons and refined silver production of 132, tons in the Q3. Our CoP was higher due to high input commodity prices such as met coke and imported coal and also lower overall grades in Q3. We are in the last year of the transition and I am happy to report that the underground mines have ramped up to contribute 85% of total production in the last nine months. Rampura Agucha underground mine crossed 2 mt run rate of ore production last quarter. The rate will significantly accelerate in Q4. SK mine has crossed 4.5 mt ore production run rate in Q3 with the 75% of its plant capacity.

We are progressing well to achieve our FY'20 guidance of 1.2 mt and significant milestones that have been achieved in this journey are as follows: At Rampura Agucha, offshaft development is

on track to take total production capacity to 4.5 mt in Q3'19. At SK mine, equipping of main shaft is progressing as per schedule and expected to complete in Q4 FY'18. Shaft will take total production capacity to 6 mt progressively by Q3 FY'19. Also, public hearing for EC enhancement from 4.5 to 6 mt was successfully concluded paving the way for next phase of expansion. The new mill of 1.5 mt is expected to commission in Q2 FY'19 and will take the total milling capacity at SK to 5.8 mtpa matching with our ore production ramp up. Post completion of the Zawar debottlenecking to 2.7 mt. Site construction work has commenced for the new mill of 2 mt capacity which is expected to commission by Q3 FY'19.

We are happy to report the receipt of approval of Expert Appraisal Committee of MoEF to expand ore production at our Rajpura Dariba and Kayad mines.

On the outlook:

We are confident of meeting our earlier guidance of mined metal production to be higher than FY'17. Refined zinc, lead metal production of around 950,000 tons and silver production of 500 tons. Q4 mine production to be higher than Q3 due to higher production from Rampura Agucha mine and higher overall grades. We expect FY'18 cost of production to be in the range of \$950-975/ton with the Q4 cost less than Q3 as will benefit from higher volumes and cost efficiencies like usage of linkage coal, etc.

Zinc International Slide:

Moving to Zinc International. We had a strong quarter with the total production of 47,000 tons, mainly due to higher blended grades and operating efficiencies. Cost of production was \$1383/ton, lower than last quarter. At Skorpion, the pit extension is progressing well with full ramp up of contractual mining, 25% of waste stripping has been completed and full completion is expected by Q4'19. We have also extracted the first ore in November 2017, slightly ahead of schedule. This project will extend the mine life to 2.5-years and produce 250,000 tons of metal. Our production guidance for FY'18 remains unchanged at 160,000 tons. Although the nine months cost of production has been around \$1,500/t in line with our full year guidance, Q4 cost of production will temporarily be higher at \$1700 due to re-allocation of stripping costs of Pit-112..

At Gamsberg project, we have Deshnee Naidoo, our CEO at Zinc International on the call. Maybe I will ask her to expand on the Gamsberg project progress.

**G.R. Arun Kumar:**

Sure. Thank you, Mr. Kaura. On the Gamsberg project, we remain on track with our guidance of our first ore production in the middle of this calendar year. In Q3, we had record excavation of about 70% of the waste rock of our total pre-stripping requirement of 60 mt. We are on target for 500,000 tons of ore stock pile ahead of the first feed date. Construction of the concentrator is underway and we remain at peak contractor strength of around 2,500 people on site.

In terms of selected highlights for the quarter, the ball mill shell and crusher mechanical erection has been completed and the power and water pipeline infrastructure is around 90% complete. We

are expecting cold commissioning of the concentrator plant to start early this quarter which is already underway. Thank you.

**Kuldip Kaura:**

Thank you, Deshnee. Now we move to Oil & Gas and I will request Sudhir Mathur..

**Sudhir Mathur:**

Thank you, Mr. Kaura and good day to you all. In the oil & gas business we have commenced our journey towards our vision to contribute to 50% of India's crude oil production. In this journey, there are three key elements – First, we have commenced work on the immediate opportunities to increase volumes through infill wells and debottlenecking facilities which has potential to add around 20 to 30 thousand barrels per day.

Secondly, for the growth projects which we announced in Q2, we have awarded contracts to key global oilfield service providers.

Thirdly, we are rejuvenating our exploration portfolio through investments in the prolific Barmer and KG Offshore basins and participation in OALP rounds.

Let me begin with our Q3 Operational Performance:

Our core fields continue to deliver along expected lines with gross production at 184,000 barrels. Our world-class operational capability that kept operating costs at the lower end amongst our global peers. Rajasthan water flood OPEX was at \$4.3/barrel. Blended operating cost for Rajasthan was at \$6.4/barrel. In Q4 FY'18, we are targeting to exit with gross production volume of 200,000 bpd. This ramp up of volume shall primarily be driven by infill and debottlenecking activities.

Drilling of 15 infill wells at the prolific Mangala field is progressing as per plan with eight wells online. The balance wells shall be drilled during the current quarter. In order to boost volume from satellite fields, we have commenced eight wells drilling campaign. Raageshwari Deep Gas Phase-1 ramp up to 45 mmscfd got completed during Q3 as per plan. We are upgrading our infrastructure at the Mangala processing terminal to increase liquid handling capacity by around 30%. We have also commenced the three wells infill program at Cambay to monetize around 7 million boe.

Next Slide which is about investments for growth:

We have a rich set of options in our portfolio ranging from enhanced oil recovery, tight oil, tight gas and exploration prospects.

As mentioned in the past, our development projects generate an IRR in excess of 20% at brent of \$ 40 per barrel and provide free cash flow post capex every year.

In order to execute these projects, we have awarded integrated contracts to global oil field service companies with an in-built risk and reward mechanism. Engagement with global oil field service providers also brings in the benefits of technology and commerciality.

Moving on to Individual Projects:

In our core MBA field, we are focused on increasing recovery. The success of the Mangala Polymer EOR is being replicated in the Bhagyam and Aishwariya fields. An integrated contract for this project has been awarded with rig mobilization expected in the current quarter. In addition we are also working on the ASP project to boost the recoveries further. This project aims to monetize over

100 million barrels of oil. This contract is expected to be awarded in the current quarter. Monetization of the tight oil & Tight gas prospects shall enable unlocking of the vast potential of the Barmer basin. Raageshwari tight gas project provides us with an opportunity to grow our gas business to a sizeable scale. The project is expected to increase the overall Rajasthan gas production to over 150 million scuffs per day and condensate production to around 5,000 boepd. In tight oil, we are on track to monetize Aishwariya Barmer Hill. The project provides an estimated ultimate recovery of 32 million barrels. Integrated contract for tight oil and tight gas wells have been awarded with rig mobilization expected in the current quarter. Exploration holds a key to ensuring sustainable growth through addition to prospective and contingent resources. The Rajasthan block provides us with a unique proposition of singular access to the full Barmer basin with its multiple play. Our partnership with global partners has enabled us to identify exploration drilling prospects. We shall shortly award the contract for an integrated exploration and appraisal drilling program in Rajasthan.

In the KG Offshore, the contract is in place for a two well exploration campaign from the current quarter. The target of this program is to add another 300 million barrels of contingent resources.

With that, over to you, Mr. Kaura.

**Kuldip Kaura:**

Thank you, Sudhir. We move to Aluminum. Aluminum has been a strong ramp up story this quarter. We achieved record quarterly production of 445,000 tons during this quarter with the current run rate of 1.8 mtpa. We maintain our production guidance of 1.5-1.6 mt of aluminum excluding trial production in FY'18. We are on track to exit FY'18 at a run rate of 2 mtpa. At the Lanjigarh alumina facility, debottlenecking initiatives were undertaken in Q3 to achieve design capacity. Our alumina production this quarter total 287,000 tons due to constraints in rail logistics. With the ramp up of refinery and expected improvement in the logistics of bauxite, we aim to achieve stronger Q4 and full year alumina production of 1.2 to 1.3 mt.

Moving on:

The cost environment for the aluminum industry has been a point of concern. We recorded cost of production of \$1945/ton in Q3. Higher input commodity inflation resulted in \$160/ton QoQ increase in CoP, partly countered by the offsetting impact of revival cost and power import cost due to operational improvement. Coal cost was higher because of lower realization from linkage coal, higher cost of e-auction and GCV slippage. Other input commodities like caustic and CP coke were also up 35% and 15% respectively compared to Q2. Domestic coal situation is a key focus area for the management. We have secured an additional 2 mt of coal linkage from the tranche three auction where delivery should start in February. On 8<sup>th</sup> January 2018, Coal India announced an increase in coal price across number of grades, averaging 7 paise per GCV. We also expect third-party quality control to eliminate GCV losses which along with improved linkages will help to marginally reduce the coal cost. We have revised the cost guidance and expect Q4 cost of production to be in the range of 1850-1900/ton as a result of one-off elimination and anticipated better domestic coal situation.

Moving to Power and our IPPs:

Our 1.9 GW TSPL plant is running at record availability of 97%. We had another record quarterly EBITDA at TSPL of INR429 crores and maintain our target availability of c.75% for the full year. Balco IPPs PLF at 43% recovered Q-o-Q, but remained low impacted by the high coal cost environment. Jharsuguda IPP continue to be adversely affected due to the closure impact related to the ash dyke incident and temporary coal shortage. This is expected to recover in Q4 FY'18.

Moving to Iron Ore:

We had sales of 1.8 mt and production of 0.9 mt. Production and sales volumes were lower YoY on account of extended monsoon and the low pricing environment. In Goa, we have commenced production of high-quality ore in Q3 through beneficiation and blending which is resulting in improved realizations and margins. We sold some of these high-quality ore in Q3. At Karnataka, we achieved production of our annual allocation of 2.3 mt. We continue to have strong realizations of \$28/ton in Q3 at Karnataka. We are working towards improving these realizations in the domestic market. We continue to engage with the respective state governments for increased mining allocation in both states. In January, we were granted an additional allocation of 3 mt in Goa for financial year '18. We expect to produce saleable high-quality ore of about 2 mt in Q4 FY'18. At Karnataka, the Supreme Court has increased the states cap from 30-35 mt. Company wise allocation is in progress.

Moving to Copper India:

We produced 101,000 tons of cathodes in Q3. Production was marginally lower than the previous quarter due to an unplanned plant shutdown of about eight days on account of a boiler leakage. The smelter is now operating at high efficiency and we maintain our guidance of 400,000 tons of cathode production during fiscal 2018. TC/RCs have been marginally lower than the previous quarter at US\$20.08/pound. This decrease was on account of lower spot TC/RCs. About 90% of our concentrate requirement are sourced through long-term agreements. Benchmark TC/RC for calendar year '18 are about 10% lower than calendar year '17 at c. US\$ 21.6/lb.

Our net cost of conversion was higher Q-o-Q mainly on account of higher coal and input commodity prices and lower volume. Our 400,000 tons expansion project is progressing well, the EPC contract has been awarded and site mobilization and civil work has commenced. Contracts for the balance construction activities will be awarded by March 2018. The project is expected to be completed by Q3 FY2020. Completion of this project will place Tuticorin smelter as one of the world's largest single location copper smelting complexes. That covers update on all our businesses.

Coming to Summary:

Let me once again reiterate our key messages here by saying that Vedanta has a well invested asset base that will deliver growth and we are committed to shareholder returns. With our consistent

strategy, prudent capital allocation and growing Indian market, we are poised to grow and deliver on these priorities. With that, let me summarize by stating that our ramp ups across all businesses are progressing well which will lead to higher volumes in Q4. We should especially see a good quarter at our Zinc India business as Rampura Agucha increases its contribution in overall production and with improved grades. Aluminum businesses as we continue to ramp up, at oil & gas from our debottlenecking initiatives, at our iron ore business with better realizations as we sell higher quality ore. Secondly, commodity markets remain robust and we have a strong outlook for the future. Our costs are being impacted by high input commodity prices especially in aluminum but we are working relentlessly to mitigate these in line with our low cost philosophy. These factors combined should help us deliver stronger performance in the last quarter and finish the year with excellent cash flows and shareholder returns.

Going forward into FY2019, EBITDA and cash flows will continue to pick up further, as our capacities ramp up and we deliver our near term growth with Zinc –India racing towards 1.2mt and production at our Oil & Gas business moving to 300kboepd. Our robust balance sheet will support us in this expansion – we have one of the strongest balance sheets in the sector globally, and this will be maintained as our growth will be funded from internal cash flows.

With that, I would like to thank everyone and pass you on to Ashwin.

**Ashwin Bajaj:** Thank you, Kaura. Operator, we are ready to take questions now.

**Moderator:** Sure. Thank you very much. Ladies and gentlemen, we will now begin the question-and-answer session. We will take the first question from the line of Sumangal Nevatia from Macquarie. Please go ahead.

**Sumangal Nevatia:** A couple of questions; First, I will start with more of top level questions. First one on the capital allocation strategy, last few months we learned about investments in LCD glass substrate company, a non-core area and also about our interest in steel assets which you did explain in your opening remarks. So the question is what is the broad capital allocation strategy we are looking at and what further investments in these areas say in LCD, etc., do we expect in coming years?

**Kuldip Kaura:** As regards AvanStrate Glass, this was a very small and unique technology oriented opportunity, supplying materials to the fast-growing markets. So this was a small one-off investment and should be viewed as such. As regards our capital allocation strategy, as we stated earlier, basically we are on three pillars, maintain a strong balance sheet, we look forward to invest in projects which meet our hurdle rates at a strong IRR and fundamentally.

**Arun Kumar:** Just to supplement what Mr. Kaura ji is explaining, I think we have been sharing consistently over the last year, our capital allocation very clear, maintain a strong balance sheet, allocate capital to the high return projects, most of them perhaps will be self-funded. The second point is ensuring that gross debt comes down while we have a lot of cash, net debt is not an issue for us, and maintain a high credit rating. Last but not the least is to ensure that the dividends to the shareholders and shareholder return is robust. So it is always going to be a sense of balance

between the three, that is really the essence of capital allocation exercises, and we have enough of cash and capital, it is a positive problem for us to have in a manner of speaking.

**Sumangal Nevatia:** Continuing on this when we are looking at steel assets having significant debt, so what level of gearing are we comfortable when we are looking at these assets?

**Arun Kumar:** I think on the steel asset per se, I will leave it to Kaura ji, but on the balance sheet side, gearing is 16% at this point of time, and net debt-to-EBITDA is virtually non-existent at Vedanta Limited consolidated basis, so I really do not think it is much of a discussion point on what it is, it is a best-in-class balance sheet as I always articulated, whether you compare it to our peers in probably the petroleum sector or the automobile or any sector for that matter in respect to mines and metals. As regards steel, I leave it to Kaura ji.

**Kuldip Kaura:** We are in the resources business and iron ore is our main business. For the growth of iron ore business, as you are aware, the governments put sometimes stipulation regarding value addition in grant of the mining licenses. We look at our extension into steel in that light and that is the reason we are evaluating some of these assets now. You are also perhaps aware, we have 800,000 tons of pig iron capacity at our Sesa Goa complex. This is our perspective really on the steel.

**Sumangal Nevatia:** Second question is with respect to the oil & gas division. Slide #10 near-term expectations is that we are targeting almost 50% increase of 275 to 300 kboepd. How will volume growth shape up in FY'19 & '20?

**Sudhir Mathur:** As we mentioned in the call as well as in our Capital Markets Day, we have got a line of projects, which we are working on and I mentioned that the contracts have been awarded for most of them, barring one which we will do within the current quarter and the drilling is going to start within the current quarter. Starting from the beginning, we mentioned that we are de-bottlenecking the Mangala processing terminal to increase capacity by 30%. The fluid handling capacity what it would do is to be able to bring all our wells online. Second, there is infill program at Mangala that is taking place in 15 wells. We expect this to add to 20,000 to 30,000 barrels. Our key projects are Aishwariya Barmer Hill and the tight gas project in which the drilling is going to start within the quarter, Bhagyam and Aishwariya ASP, Polymer and the ASP project. All in all, we expect to add more than 100,000 barrels of production equivalent per day as well as 100 million barrels of reserves. So this will be phased out depending on how much drilling for which we have a schedule that will play out.

**Arun Kumar:** Just supplementing Sudhir, as we said in the beginning, in India, we produce only about 15% of our total crude oil requirement, and out of that, we produce about 27% of that today. Our aim is really to take this to 50% level of crude oil production in India. Apart from the projects which Sudhir mentioned, we are also investing in exploration at Rajasthan as well as the offshore areas, and we are looking at a possibility that we can actually take up our oil production to a level of about 500,000 bpd going forward in the medium-term.

**Moderator:** The next question is from the line of Vineet Maloo from Birla Sun Life Mutual Fund. Please go ahead.

**Vineet Maloo:** My question is related to Aluminum. We have seen an impressive ramp up in production. Just wanted to understand in this environment of high cost inflation, what is our marginal cost? So buying alumina from market and buying coal also from market for additional ton, what kind of margin cost are you working with?

**Kuldip Kaura:** Fundamentally, as we were saying, that with the coal cost pressures sort of easing off with the better coal production and distribution in India, if you go back, last year we were having margins in the vicinity of \$400/ton, but with our higher volume and some of these cost pressures decreasing and our better and higher production of Alumina at our own facilities, we can expect margins depending upon how the cost develop in the range of about \$600 to \$700/ton. That is the scenario we are working in the immediate future.

**Vineet Maloo:** My question is regarding the marginal cost of production when you are buying alumina from outside, not about current margins on integrated production which I am sure are very good.

**G.R. Arun Kumar:** Let me just supplement it, it is very simple and we have reiterated in the past many times, we do not burn cash on marginal business, very clear, very simple. With the kind of aluminum prices, let us not forget that premia is also quite attractive. We have huge domestic market to cater to. Demand for that metal is a green metal. Demand for the metal is very robust. So there is no cash burn if that is your question. The bigger picture here is about the 2.3 mt and how can you get to \$600-\$800 margin profile, and it is a potential cash cow, it is a nice space to be in. That is really the big picture out here and there is no cash burn if that is your focus question.

**Moderator:** Thank you. The next question is from the line of Pinakin Parekh from JP Morgan. Please go ahead.

**Pinakin Parekh:** My first question is on aluminum. The aluminum cost of production has disappointed consistently on the upside this year. The 4Q guidance is \$1850-1900 per ton, and this is based on improved materialization of coal linkages and elimination of one of the impacts. Just trying to understand in this current commodity price environment, is this new normal base level cost of production in aluminum assuming alumina, coal and energy prices remain or can this cost reduce from here?

**Samir Cairie:** Yes, your question is valid, but I would say that clearly these costs are not the new norm. I think, A) the last quarter while the costs have been higher not only for us, for everybody who have been using coal. As you are quite aware of the logjam in Railways as well as Coal India which starts to ease off. So, that is all structural part because there are linkages which have been allotted to us and those linkages will materialize. So that is point #A. As you are saying rightly, let us leave the commodity prices as it is for the time being, and say, okay alumina remains where it is, carbon remain where it is. I think the big swing for us is our own refinery which as we said has been now fully ramped up and the last quarter exit we will be fully producing at the full capacity of

our own Lanjigarh refinery and it is getting expanded further. So for, at least I cannot talk about other aluminum players, we can talk about Vedanta, that we have an opportunity of actually reducing the cost and the cost will come down structurally even if the commodity prices remain where they are.

**Pinakin Parekh:** Just to carry forward, in terms of the alumina refinery what is the expansion from wherever it is right now, 6 mt, would it take place only if there is bauxite security and hence without that there would not be any refinery expansion if that does not take place, then how do we lower cost structurally in aluminum?

**Samir Cairae:** When we have decided to expand the refinery from two to six, we have developed various scenarios of bauxite sourcing. What I can share without divulging all what we have worked out because some of this is competitive information and clearly we are not going to start divulging publicly that we have various scenarios in which we will phase the refinery with various sources of bauxite, some of them are existing in the country, some of them might be outside the country, some of them might be in different states, but either way we have different scenarios which have been tested and we are quite confident that we will be able to feed. In first stage, we have 2 to 4 mt, 6 mt is the second phase of the refinery, but 4 mt is what we need today because we produce 2 mt of aluminum, which is why I am saying, that look, structurally, we are quite confident that this will play out.

**Pinakin Parekh:** When do we start work on the 2 to 4 mt refinery expansion?

**Samir Cairae:** This has been considered by the board and we are in the process of working out various approvals and the packages. So I think as soon as something is officially done, that we will announce publicly.

**G.R. Arun Kumar:** That is well rounded up. We are in the final stages of design as Samir articulated. Once we are there, we will come and announce it.

**Moderator:** Thank you. The next question is from the line of Sanjay Jain of Motilal Oswal Securities Limited. Please go ahead.

**Sanjay Jain:** One question is on Iron Ore business. On Slide #24 you talked about that we have been granted additional allocation in Goa, but you have not quantified how much it is, and then you are saying you expect to produce high-quality ore of 2 mt. So if I look at, we have 5.5 mt capacity, but we have done 3 mt sales in nine months, that leaves us with 2.5, plus this enhanced production you are talking about right now. What is the total volume we should expect in fourth quarter from Iron Ore?

**Kuldip Kaura:** I think the positive thing is that we have started producing better blend which sells there in the market so that process has been established and now there are additional allocations by the state government to the extent of 3 mt, but Kishore, would you like to come and supplement?

- Kishore Kumar:** Yes, thank you Kaura ji. Mr. Sanjay, this entire 3 mt which has been allocated in Goa will be produced from the ROM perspective in terms of production. In terms of sales, we are expecting a sale of anywhere between 2.5 to 3 mt in this quarter of both the good quality upgraded ore as well as the old 57-58 low grade, because you know China market has undergone some strategic shift in terms of the steel margin. So that continues to be an opportunity that will happen post the winter session. So we are in that framework as far as Goa is concerned.
- Sanjay Jain:** 5.5 plus 3, should that be 8.5, but...?
- Kishore Kumar:** 5.5 plus 3 would be the ROM production. We will have to carry some inventory of low grade ore which will not be consumed by China immediately.
- Sanjay Jain:** When you enhance this grade how much to the index what discounts we are getting?
- Kishore Kumar:** The grades are enhanced not only in terms of heavy, but also in terms of Alumina, Silica and all the other impurities. So overall, the current discounts operate in the market, earlier it was 45-46% of discounts is to go for the low grade, but currently we are at about 20s as far as discounts is concerned to the index.
- Sanjay Jain:** What is the grade like -- is it 58 grade?
- Kishore Kumar:** 58 grade with the improvement in Alumina, VIU discounts are reduced. So, it all about the quality improvement overall.
- Sanjay Jain:** 20% with respect to adjusted 50%?
- Kishore Kumar:** Adjusted quality.
- Moderator:** Thank you. The next question is from the line of Amit Dixit from Edelweiss. Please go ahead.
- Amit Dixit:** I have two questions: One is on copper. Since we are expanding smelting capacity from 400 KT to 800 KT and TC/RC margins have been negotiated at a lower base. Are we thinking at some point to do backward integration in copper as in to acquire some mines or by some inorganic means?
- Kuldip Kaura:** This project has been conceived as a standalone copper smelter basically and we believe we are one of the most efficient copper smelters in the world. If you are knowledgeable about our copper business you will also know that we have some by-products like phosphoric acid and other waste to value stream, additives plus our gold slime refineries and stuff like that. Fundamentally, we are in a position to achieve net cost which are below zero actually. So that is the potential this plant has. With our long-term relationships which we have built over last-20 years with the miners, we have a strong possibility to source good quality concentrates across the world. We think with these attributes we should see actually fairly value-accretive business as a standalone smelter.

**Amit Dixit:** Second question is with respect to coal sourcing since there was a lot of disruption in Coal India supply and all. So can you just spell out how much coal supplies was in linkage and through imports, and how it is going to change in future, future particularly FY'19?

**Kuldip Kaura:** I can give you a broad answer. May be will ask Samir to supplement it. Fundamentally the coal linkages were not getting realized because of A) lower production by the coal mines and then the logistics bottlenecks because of Railways. In both these areas, there have been improvements and we are not only realizing our linkages now, but we also plan to cover some backlogs of supplies which we had during this quarter and going forward. Samir, do you want to supplement this coal business?

**Samir Cairae:** Yes, let me give you a snapshot, of course, we have Jharsuguda which is catered by MCL and Balco and SECL, but I will give you on a sector basis, for example, Q1 linkage and linkage auction constituted almost 55% of our total coal requirements which by Q3 dropped to 37% because of the reasons Mr. Kaura just touched upon. I am sure you are aware of what is happening in the sector because it is not only affecting us, but everybody else. What we are seeing in January, some improvement not to the full extent of going back to what we needed, but there is a significant improvement and what we believe is that going forward especially in the next financial year, the situation should get better than what it existed in Q3. Now, how much and what exactly will it be, is going to be looking into the crystal ball, but clearly, the indications are that we are on the right track, and then as a sector we see that the realizations are improving even though February still continues to be a month of some struggle. I would say, yes, our basic basket is comprised of coal linkages, linkage auctions which we get, some auctions come and we participate, then there are auctions which are happening, and last is the imports. For us, of course, we do an arbitrage and see clearly linkages and linkage auctions and the backlog is the cheapest basket. Between auction and imports, we are doing an arbitrage all the time that where is the cheapest coal and we take from that. As you would imagine for us to give you what exactly the number will be, we will be taking a view on what the coal index would be on auction as well as import, which we cannot, but as I said, 50% linkages, so that in the coming financial year come back to normal.

**Moderator:** Thank you. The next question is from the line of Saumil Mehta from BNP Paribas Mutual Fund. Please go ahead.

**Saumil Mehta:** My first question is with respect to the capital allocation. While I understand the infill investment as of now is small and the hurdle rates are pretty stringent for us. But how should we look at the overall investment in that area and further processes where we find hurdles rates to be pretty attractive? Subsequent to that promoters earlier had made some comments about Anglo-American possibly getting merged with Hindustan Zinc. As minority, how should we look at the corporate structure?

**Arun Kumar:** Thanks for the question. Line was not clear but I will try answering. I think the later part of your question is nothing to do with Vedanta, it is a personal investment by the Chairman's Trust, so we leave it at that. As regards the hurdle rates, I guess the first part of your question on capital

allocation, as we have been articulating it is a very disciplined approach to evaluating a project, ensuring that these certain risks are built in, ensuring the right assumptions are taken in, ensuring that there is a Plan-B out there, and hence it is much higher, if you look at our back end reality, it is probably between 13%, 15% depending on what sort of alpha you attach to the number and if you are comfortably 7, 8 or 9% above all the time in terms of targeted IRR, which is also based on a fundamentally good set of numbers, then you can be rest assured that the company will add value to the investors by delivering a superior return. That is exactly what we do. If you see, an example, Gamsberg, right, it is a project that we committed mid-teens if you recollect when we announced it, and the very fact that you save project cost, there was some very innovative way of outsourcing the contract with Deshnee articulated in some of the earlier investor calls, has led to a much higher IRR, not to add the zinc prices of course, so the timing was also right. So that is how smart capital decisions work. Also, new ways of working even in the oil projects that have been allocated, if you see all the big players are involved, and more or less the costs are capped, then they are outcome-driven, interesting way the oil & gas team under Sudhir have been able to work out. So, all these augurs well for better quality return than what you would typically see in traditional way of project evaluation. As far as acquisitions it will always be absolutely case-to-case and very opportunistic, far and few with so much Brownfield opportunity in front of us, that is our focus.

**Saumil Mehta:**

In terms to extending that further, is it fair to assume that any investment be it in LCD or any other businesses, though our IRR could be very attractive will be in a phased manner so that the balance sheet deleveraging will not suffer, is that a fair assumption?

**Arun Kumar:**

Very clear I think since you mentioned LCD, it is important to clarify, it is nothing to do with Vedanta, whatever LCD is very different, it is the glass business which feeds into the LCD industry, it is not the LCD industry per se, but you are absolutely right, it will always be balanced, and our focus is Brownfield. If you see what our CEO articulated, Zinc 2 mt, just imagine, 2 mt, if we can really get there in medium-term and we do expect zinc prices to stay firm in 18-months timeframe, but even otherwise we are the lowest cost producer in the world with \$2000 margin, you can well imagine, not to leave behind silver which can well exceed 1000 tons at that level, and again the oil & gas projects we are making them work at \$40, so obviously at \$70 which it is now I am sure one can imagine that the returns would be far superior than what we have been articulating, it is a good portfolio. Aluminum again, once you have scaled up, the operating leverage is so high with the 2.3 mt. So all these temporary headwinds of coal, alumina inflation we spend 90% of our time worrying about it, but really it is about 90% of the time pondering over the huge amount of operating leverage we have in aluminum, it is going to be a huge cash cow in future. If you add all of these together, you have a very healthy cash flow and enough to invest in all our growth CAPEX and manage all the capital allocation expectation. I really hope I was able to articulate it clearly for you.

**Moderator:**

Thank you. The next question is from the line Anshuman Atri from Haitong Securities. Please go ahead.

**Anshuman Atri:** My question is regarding the bauxite mine which we have recently won. How do you see more auctions coming up for bauxite by Odisha government? In terms of availability of bauxite domestically, how do you see it pan out as well as own captive bauxite by Vedanta?

**Kuldip Kaura:** Fundamentally, the primary source for us for bauxite apart from the mines that we have already in Chhattisgarh, which currently also supply to this, will be the further mine concessions auctioned by the government. So that will become primary source of bauxite. As you know, we are very fortunate in India to have very high-quality bauxite, Odisha itself sits on 1.3 bn tonnes of bauxite, very high-quality, low silica bauxite, and this auction process should start soon. In the meantime, the OMC has certain mines, and they get into production, so we enter into arrangement with them for offtake of some of those bauxites. So this will become our sources for feeding to our refinery of the domestic product.

**Moderator:** Thank you very much. Ladies and gentlemen, on behalf of Vedanta Limited that concludes this conference. Thank you for joining us and you may now disconnect your lines.