



## “Vedanta Limited’s Q3 FY'19 Results Conference Call”

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**Moderator:** Ladies and gentlemen, good day, and welcome to Vedanta Limited Q3 FY2019 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 Ms. Rashmi Mohanty from Vedanta Limited. Thank you, and over to you, ma'am.

**Rashmi Mohanty:** Thank you, operator, and a very good evening ladies and gentlemen. I am Rashmi Mohanty -- Head Group Investor Relations, Vedanta. Thank you for joining us to discuss our third quarter results for FY'19. We will be referring to the 'Presentation' that is available on our website. The call will be led by our Group CEO -- Mr. S. Venkatakrisnan. I am also very happy to share that in our board meeting held today, Venkat has been appointed as the Whole-time Director and CEO of Vedanta Limited. On the call, we are also joined by our Group CFO -- Arun Kumar, several of our business leaders -- Sudhir Mathur from Oil & Gas; Sunil Duggal from Hindustan Zinc; Deshnee Naidoo from Zinc International; Ajay Dixit from Aluminum and Power; Naveen Singhal from Iron Ore and Steel; P. Ramnath from Copper; and Phillip Turner, our Group Head, ESG Practice.

I now hand it over to Venkat for an Update on the Company's Operational Performance.

**S. Venkatakrisnan:** Thank you, Rashmi. Good evening, all and welcome to Vedanta Limited third quarter FY 19 call. If I may start with a quick overview, we are very pleased with the strong operational and financial results for the third quarter. We achieved record zinc and lead MIC volumes and silver production at Hindustan Zinc; you would have seen this, Hindustan Zinc announced its results recently and the highest ever alumina production. We saw structural reductions in aluminum costs with increasing raw material linkages. If you recall, we did say that our efforts are underway and we have started to make good progress in that regard. The steel business achieved strong margins and recent developments in our copper business are also directionally positive. Our profitability and gearing metrics were strong. As compared to the second quarter of this year and I think that is the right way to do the comparison because year-on-year there is a big gap in the LME prices. EBITDA rose 13%, and net profit attributable rose by 39%. Our growth projects and ramp-up plans are all on track to set the next quarter as a base for a strong next year.

Before we get into the highlights, if I can take a quick look at the markets, the commodity prices saw some pullback last quarter on the back of speculation around global demand and the feared slowdown in China as well as continued US-China trade tensions. However, we believe that two of our key metals -- zinc and aluminum -- are best placed in the near-term.

On zinc, in particular, inventory levels are the lowest they have been since 2007, estimated that there are only four days stock of global consumption. While global zinc consumption is expected to grow at the rate of 1.8% annually, the refined market is expected to stay in deficit until 2020, thereby providing fundamental support to the prices.

On aluminum:

If prices stay at the current level and input costs remain high, most smelters will cut production and new capacity will be slow to ramp up, thus providing support to aluminum prices.

Crude oil prices were also volatile during the quarter, hitting a four-year high of \$86 per barrel, briefly in October and then falling to a low of \$50 a barrel in December. There has been a recovery in January, but prices are holding at about \$60 a barrel. Global supply will remain one of the main drivers of prices in 2019.

The outlook for our business remains optimistic:

We do have to navigate through this volatility. The underlying strength of our businesses, the quality of our efforts and our people, our disciplined approach to capital allocation and efficiently ramping up our volumes will be the key to achieve our targets. India remains the fastest growing major economy in the world, and there is an increasing level of confidence and expectation of growth. This growth will fuel consumption of commodities and we are well placed to contribute and capitalize to India's growth.

Now turning to the "Results Presentation":

If I may start with our first value, namely "Safety," I am deeply saddened to report that we had two fatal accidents this quarter, resulting in three fatalities in Zinc India. All other business units were fatality free during the third quarter. Our analysis of these fatalities has revealed that there is still more work to be done in building competencies and bringing behavioral changes to our diverse workforce and business partners. With that objective in mind, we have engaged DuPont in Hindustan Zinc. They are a renowned global safety consultant as you are aware of improvements we can bring about in our safety processes at particular mines at Hindustan Zinc. This is an addition to the work that has already been undertaken in the form of visible felt leadership, standards and procedures updates, audit programs to ensure implementation and monthly reviews of progress by the executive committee.

On critical operating aspects, such as pit, stockpile, tailings and waste dump stability and ground controls, we have conducted additional third-party assessments to review their implementation and effectiveness.

Turning to Energy and Water Management:

We are committed to reducing our energy consumption by 2 million gigajoules and water consumption by 1.5 million cubic meters. To-date, we have achieved 41% of the energy and 57% of the water target. Our work with the local communities continues to inspire and positively impact lives.

To give you a few examples, I am happy to report that the State of Rajasthan is now following the Open Defecation Free program and Cairn has played a significant role by constructing 20,000 toilets in support of this program. Both Cairn and Hindustan Zinc were commended for their

significant achievement by CII-ITC Sustainability Awards. As you know, these awards follow an extensive six-month long independent assessment on all aspects, such as climate change strategies, natural resource consumption, human resources development, social performance, stakeholder relations and corporate governance.

Hindustan Zinc has recently also won the Golden Peacock Award for 2018 for its CSR Programs.

Moving to the key highlight slide:

Looking at the quarter's results starting with Zinc India, to remind everyone, 100% of our mining here is now underground with volumes ramping up well by 38% year-on-year in terms of underground volumes. We also had record silver and lead production this quarter.

At Zinc International, Black Mountain and Skorpion did well compared to the previous two quarters and we have successfully dispatched our first contracted shipment in December 2018 from our new Gamsberg mine.

In our Oil & Gas business, our growth projects are progressing well and volumes will ramp up in the fourth quarter of this year.

In our Aluminum segment, we had record alumina production this quarter, driven by improved bauxite supplies from OMC, and we are happy with the changes we are bringing about in the cost structure of the business.

At our newly acquired steel plant, Electrosteel, production has been on the rise, and we exited the quarter with a run rate of 1.5 mtpa.

At Tuticorin, it has been a long journey but one that is finally beginning to be favorable for us with the Supreme Court upholding the NGT's order.

Our profitability metrics for the quarter were strong, driven by increased volumes and lower costs despite the fall in LME during the quarter. EBITDA increased 13% quarter-on-quarter to Rs.5,953 crores and attributable profit after tax before exceptional items and DDT was Rs.1,574 crores, which was up 39% quarter-on-quarter.

Turning to our operations, at Zinc India:

We continue to ramp-up our underground production quarter-on-quarter. We had record production from our underground mines as well as record silver and lead production for the quarter. Mined metal production from our underground mine was 691,000 tonnes on a year-to-date basis, 31% higher from a year ago on account of higher ore production and grades, even as the closure of opencast operation caused total mine metal production to remain flat on YoY, and given my background in mining, this is a remarkable achievement to generate this level of production when you are transitioning from surface to entirely underground. The cost of

production was lower QoQ to \$997/ton. Our growth projects are progressing well. At Rampura Agucha mine, full shaft commissioning is expected to happen in the second quarter of 2020 and will be synchronized with the completion of pressure and conveyor system. The ramp-up of mine will be as plan as we will continue to produce from both the decline and the midshaft loading system. The new 1.5 mtpa mill at SK mine was successfully commissioned and it produced its first concentrate during the quarter. The production shaft work is reaching completion and the shaft commissioning is expected in the current quarter.

At Zawar, completion of the new two mtpa mill is on track and expected to commission in the current quarter.

At the Rajpura Dariba mine, during the quarter, we placed the order for a new mill of 1.5 mtpa capacity with projected commissioning in about 14-months. The Fumer project at Chanderiya is expected to complete in the current quarter. We expect further improvement in the volume and cost of production in Q4 on the back of continued ramp-up from the mines. We are on track to reach design MIC capacity of 1.2 mtpa next year.

Now turning to Zinc International:

As stated last quarter, Skorpion and Black Mountain mines are poised for a better second half. Their Q3 performance at 38,000 tons is 34% higher QoQ, driven by higher grades and ramp-up from pit-112. Cost of production at \$1,757 a ton is 28% lower quarter-on-quarter on account of higher production, reduced topside consumption at Skorpion and improved copper produce at Black Mountain.

At Gamsberg mine, we shipped our first parcel of concentrate in December 2018. However, the ramp up has been slower than our expectation due to teething issues. These issues are being addressed currently and our intention here is to address these as we start to ramp up. So that once it's ramped up, the plant can operate smoothly.

We are aiming towards the full ramp up by the fourth quarter to deliver the 250,000 tons per annum MIC capacity in FY'20, which is well within our original ramp-up plan of between 9-12-months.

While some of the initial teething delays may have slowed down the pace of our ramp up, let me take a moment to remind you of the broader vision and potential at Gamsberg. We are following a model of project execution approach to enable efficient capital allocation. Phase-I, which we are in currently only uses one-fourth of the total resource potential with the capacity of 4 mtpa runoff mine production at 6.5% zinc with 250,000 tons per annum metal-in concentrate capacity. We are happy to state that this phase has been completed within the targeted capital of less than US\$400 million. The large resources and reserve base at Gamsberg can support 600,000 tons p.a. zinc production, Phase II will see a larger open pit and can add 200,000 tons p.a. in an advanced feasibility and design stage; and Phase-III which is underground can add another 150,000 tons p.a.

Turning to our Oil & Gas business:

We are making substantial investments across our portfolio, comprising of enhanced oil recovery, tight oil, tight gas, liquid handling upgrade, exploration and appraisal. Our gross CAPEX investment stands increased from \$2.5 billion to \$3.2 billion. This increase is primarily due to contracts being finalized for enhancement projects, namely Mangala ASC, satellite field development and Ravva Development and Exploration. Our CAPEX share is around \$2.3 billion. Investments of such large amounts in our oil & gas business which focus on ramping up volumes have happened after quite some time. We have hence taken comparatively longer for mobilizations and plans to ensure that we get it done correctly and safely. This has led to some delay in the production ramp up. Alongside this, we have also initiated steps to start exploration in the newly 141 blocks under the OALP. We hosted a series of global partnership meetings with oil & gas production, technology and service companies in Houston this quarter seeking to establish mutually viable long-term partnerships to undertake these development projects.

Let me move on to the next slide, which depicts our progress on our previously announced growth projects. We have commenced the execution of a large part of these projects. We currently have eight drilling rigs and three completion rigs. We shall add two more rigs from Mangala ASP drilling in the fourth quarter.

Turning to our key deliverables going forward, which will enable an increase in production volumes:

1. As mentioned in the previous quarter, we have brought forward the production from RDG gas through the installation of early production facilities. These facilities shall be commissioned in March and we shall see an increase in production once ramped up by around 15,000 boepd.
2. We shall drill 48 more wells in the fourth quarter taking the total wells drilled to over 100. We shall also start hooking up these wells for incremental production.
3. We would have our first oil from Aishwarya Barmer Hill in the fourth quarter. This shall be a major milestone in our efforts to monetize the Barmer Hills tight oil formation.
4. Our liquid handling project is progressing well. The intra field pipeline is expected to be commissioned in the first quarter of next fiscal year.

Next, we shall be awarding the contract for the ASP facility and development of 10 satellite fields in Rajasthan. Ravva block has been a global benchmark with recovery of around 50%, and we intend to continue our success story.

We are targeting a five well development program to add 17 million barrels. The drilling program shall start from the second quarter of next year. Execution of all of these will lead to an additional 20,000 boepd in volumes by March 2019.

Moving to Aluminum:

I am quite pleased with the progress we have made on the structurally reducing the cost of aluminum production. Our December cost of production was \$1,909 per ton and as you can see the reduction is compared to what we clocked in the previous quarter, and we are well poised to move to a sustainable cost of \$1,500/ton driven by efficient coal, alumina and bauxite sourcing.

On coal:

Long-term coal linkages have improved from 49% in Q2 to 72% in Q3, taking into account our tranche-IV linkage and supplies from our Chotia. We will continue to work on improving materialization and increase linkage through participation in future tranches. We will also evaluate the coal block options for improving our coal security to our target of 90%.

Turning to Alumina:

We had record production from Lanjigarh this quarter and are confident of achieving our guidance of 1.5 mt to 1.6 mt for the year. There has been \$50/ton reduction in our captive alumina cost to \$308/ton and this is significantly below current prices.

On Bauxite:

Odisha Bauxite delivery from Odisha Mining Corporation is progressing well. OMC Bauxite will meet one-third of our Bauxite requirements for the year.

Other than these initiatives, on the marketing side, the plans to achieve at least 50% EAP sales in the fourth quarter as compared to 45% that was achieved in the third quarter. Based on all of these improvements, we are confident of achieving our cost of production guidance which we outlined earlier.

Turning to some of our other businesses:

Production at Electrosteel has been on the rise, owing to improved availability of raw material, enhanced plants availability, utilization and management interventions. Total production for the quarter was 325,000 tons, 14% higher QoQ and in line with our own previously stated priorities as we achieved a run rate of 1.5 mt in December 2018.

Despite the challenging conditions in the steel market, we improved our per ton margin from \$90/ton in the second quarter of 2019 to \$120/ton reported in the third quarter. The team is now focusing on its next phase of ramp up of up to 2.5 mtpa design capacity.

Turning to iron ore:

Our business in Goa continues to be impacted by the Supreme Court judgment on the suspension of industry-wide mining operations in Goa. Our team is continuously engaged with the state and central government with the support of the people who are adversely impacted by the suspension

for the earlier resumption of mining in Goa. In Karnataka, the saleable ore production was 0.7 dmt.

At Copper India, the recent developments have been directionally positive with the Supreme Court upholding the NGT order. We continue our efforts on the legal front and are working towards enhancing our public outreach even further.

We have launched several development projects worth approximately Rs.100 crores for the community of Tuticorin after consultations with them. These include an innovative smart school, a world-class hospital, water supply for nearby villages, youth skilling program focused on employment, sports and entrepreneurship and a women development resource center. We have also committed to planting 1 million trees in and around Tuticorin towards enhancing the district's green cup. These announcements were welcomed by the local community. We plan to engage the communities on an ongoing basis and relevant stakeholders to execute these projects in a timely manner.

If I can pass the call over to Arun first, before I come over to the summary, Arun will walk you through the "Financial Overview."

**Arun Kumar:**

Thanks, Venkat, and good evening, everyone. As outlined by Venkat, the December quarter that went by further consolidated well compared to the sequential September quarter with the investment in growth projects starting to show up in terms of higher production from Zinc India especially at Rampura Agucha mines, direction of structural cost changes at aluminum business being positive, sustained turnaround at our steel asset, the erstwhile Electrosteel with production hitting almost to capacity, Gamsberg starting to get around initial teething issues in its now completed plant, and oil & gas starting to deliver increased narrow declines plus commencement of steps towards exploring OALP blocks.

Some key highlights that went by:

As our CEO already outlined, the EBITDA was higher 13% QoQ with the robust margin of about 29% for all of the reasons mentioned above. ROCE continue to be strong mid-teens. Net debt, however, increased by Rs.13,174 crores, mainly on account of dividend payout and temporary increase in working capital, which will be recouped in the upcoming March quarter. Net debt-to-EBITDA ratio though remains strong at 1.5x.

While we have a detailed income statement in the appendix, some key updates from there. Depreciation is up and in line with the higher production volume and capitalization in oil and gas and Aluminum businesses, all in line with our planned growth investments. The interest income line is higher this quarter sequentially, mainly on account of the mark-to-mark gains on the debt SMPs and other investments in our portfolio as compared to the mark-to-mark losses that we had in the sequential previous quarter. We continue to monitor all our surplus cash investments closely and they continue to be deployed in high-quality instruments which we review periodically on internal review given the market environment that we are in.



It is useful to note, just as a reconciliation point, that the other income line in the published advertisement outside of these presentation pages, will include the interest income and a few small items typically, but this quarter also includes one-time liability write-back on account of settlement agreement with the contractor at BALCO of around Rs.350 crores which is also available in our notes-to-accounts in the Reg. 33 Act.

There is no change in the full year tax rate guidance at around 30%. Between the quarters the effective tax rate swings will be more to do with timing, mix and deferred tax accounting, but I draw your attention back to the full year tax guidance at 30% which remains unchanged.

Finally, the notes-to-accounts in the just-released statutory results also cover an update around our overseas subsidiary, CIHN purchasing an economic interest in a structured investment in Anglo American PLC, held by the ultimate parent Volcan. This investment was made in December and has subsequently performed positively on an unrealized mark-to-mark basis.

Moving on to the EBITDA bridge page:

As you can see on the EBITDA bridge page, the sequential growth is being driven by cost and volumes. The others bar of course includes the one-time liability write-back which I mentioned earlier while covering the income statement. But broadly the lower LME did impact earnings adversely as you can see on the left side of the chart, but thankfully made up by higher volumes and some help from currency.

We do look forward to the operational factors of oil and gas volumes with additional wells starting to come online plus the gas bridge project. Zinc India is getting stronger with the SK shaft commissioning and the Zawar mill commissioning, likely stabilization of Gamsberg in Q4, better cost trend in aluminum to start all playing up in Q4 and a few more growth triggers as outlined by Venkat earlier for the broader FY'20. As normal, we will provide the guidance for FY'20 in the year-end call.

Moving onto the next page on the balance sheet:

We stay focused on debt management. All the FY'19 maturities were refinanced at the beginning of the year itself, enabling us to efficiently navigate a choppy market with tighter liquidity situation and widening credit spreads. However, we continue to enjoy excellent relationship and credibility with the public sector and the private banking system who are keen to do business given the balance sheet strength and growth projects pipeline. We will continue to manage the maturity profile proactively as well as stay ahead of the regulatory and market changes.

While I cover the interest income lines earlier, on the cost side, we continue to have a weighted average approximately 8% financing cost. Most of the INR borrowings continue to be at industry-leading spreads. The cash investments continue at robust levels. Post dividend, we ended with about Rs.30,000 crores, still one of the largest corporate treasuries in the country.

With that, let me hand it back to Venkat for the summary.

**Srinivasan Venkatakrishnan:**

Thank you, Arun. If I can take you back to slide #13, the summary slide, as we said, we have started the ramp ups across all of the businesses, and we are progressing very well and that would lead to better top line and bottom line growth in Q4. We should especially see a good quarter at our Zinc India business which is poised for a record MIC and silver production in the fourth quarter and it remains on track for 1.2 mtpa MIC capacity for the year 2020. At Gamsberg, we are looking forward to an accelerated ramp up in Q4, positioning us well for next year. In our aluminum business, we are on a favorable cost trend and we expect the same to continue on the back of increasing coal linkage and alumina ramp up at Lanjigarh. In our Oil & Gas business, our growth projects are ramping up, result in increased volumes in the fourth quarter. We are also geared up to realize the full potential in OALP and the exploration blocks.

At Copper India, post the favorable Supreme Court order we are working with the community and relevant stakeholders to expedite the reopening of the plant.

In our Steel business, we achieved our medium term targets to ramp up to around 1.5 mtpa and are focusing on the next stage of the expansion. Some of these may be the last few jigsaw pieces in our overall strategy that we are putting in place for a stronger fourth quarter and full year 2020.

I will now hand you back to Rashmi.

**Rashmi Mohanty:** Operator, we can now take in questions.

**Moderator:** Sure, thank you very much. Ladies and gentlemen, we will now begin the question-and-answer session. First question is from the line of Anuj Singla from Bank of Merrill Lynch.

**Anuj Singla:** Sir, I just have focus on the investment that you have made in Anglo. So I have three key questions on that; Firstly, we have been emphasizing that our capital allocation is focused on either investment in high IRR projects or deleveraging or shareholder return. So just wanted to understand, how does this investment fit in with our overall capital allocation strategy?

**Arun Kumar:** Thanks for the question, Anuj. This is part of our regular cash management at the subsidiary which invested its surplus cash instead of parking in low return foreign currencies fixed deposits. It found an attractive return in this structured investment and that is the rationale for this transaction. It has nothing to do with the capital allocation or otherwise.

**Anuj Singla:** Secondly sir, can you explain the structure a bit because on the press release also mentioned and you also mentioned the ownership still remains with Volcan, what is the structure like, and is there inherent lock-in, in the structure?

- Arun Kumar:** As we mentioned in the press release as well as the notes to the accounts, this is an economic interest purchased from the ultimate parent Volcan Investments, and it is the ownership of the underlying shares and the associated voting interest remains with Volcan, and investment was subsequently performed positively as well on an unrealized mark-to-mark basis as I mentioned during my talk track.
- Anuj Singla:** Is there a lock-in, sir?
- Arun Kumar:** Yes, there will be a period of about 20-months for this investment.
- Anuj Singla:** There have been questions from some other investors that Volcan is already a shareholder in Anglo, and one of the significant shareholders. So, does this investment imply some kind of further collaboration between Vedanta and Anglo going forward?
- Arun Kumar:** As far as Vedanta subsidiary is concerned, CIHL has just made an economic investment. Ownership and all the voting rights on the stake however remain with Volcan.
- Anuj Singla:** So we should not be extrapolating it to any kind of corporate action at all between Vedanta and Anglo, understanding is correct, right?
- Arun Kumar:** The CIHL is only focused on the economic interest as part of its overall cash management.
- Moderator:** Thank you. The next question is from the line of Sumangal Nevatia from Macquarie. Please go ahead.
- Sumangal Nevatia:** Just a follow-up question from Anuj's question. Of this \$200 million, how much have you invested so far? The note says we have partly invested currently. And the second is, how are the returns better -- are the returns linked to the equity returns or there are some bond proxy and fixed return guarantees by Volcan, if you can elaborate that?
- Arun Kumar:** Yes, as we mentioned the investment has performed positively on the unrealized mark-to-mark basis, indicating that it is linked to the underlying share price of Anglo American PLC. And as regards the payment made, as we mentioned in our notes-to-account, what we meant to say is that we have paid approximately US\$200 million or Rs.1,431 crores out of the cash surplus which was defrayed from CIHL for this transaction during the month of December.
- Sumangal Nevatia:** Second question is with respect to Gamsberg. Now the slide says MIC shipped in December but commissioning is still underway. And also we have just guided 20 kt this year versus 75 kt in the previous quarter which we were guiding. This implies only one month of commissioned volumes. So, if you can just share an update on that and what are we looking for next year FY20, the slide says more than 200, is that FY20 guidance?
- S. Venkatakrishnan:** In fact, with regards to Gamsberg, I will respond initially and then pass the phone across to Deshnee to cover. With regards to Gamsberg, as we said, the ramp up is in progress. There have

been some teething issues in terms of plant, it is completely natural for those sort of teething issues to happen. Our approach is rather than fixing it on the go we would rather pause, ensure that it's completely aligned, we deal with all of the teething issues, then we get a much steeper ramp up further down the line. So we are still looking at 250,000 metal-in concentrate production, capacity going into 2020. There might be some timing differences here and there, but that is certainly where we want to get to in terms of Gamsberg production for 2020 calendar financial year. Deshnee, anything you want to add?

**Deshnee Naidoo:**

Yes, thank you, Venkat and thank you for the question. Just to recap, the delay we are seeing is actually a deferment. We were hoping to start up in the middle of calendar year 2018. So we have been in trial production for the last quarter. So the 75,000 tons guidance relates to the quarter slip originally, but since then, as Venkat has said, we are really looking at making sure that we can process as close to the 4 mt run off mine production through this plant. What we are targeting now is almost to reach about 80% of that. So that's just under 260,000 tons of throughput through this plant by March. So rightly said, 20,000 tons on the full production will give you one month but this is actually the ramp up in terms of availability utilization and then the metal build up in this quarter that we are targeting. But the key to note as Venkat said, it does not make sense to run this plant on stop-start. We are targeting to get to a continuous operation where we complete maximum 80% of the throughput in March and that ramp up from January up until March will give up that 20 + thousand tons guidance for the rest of this year.

**S. Venkatakrisnan:**

Just to supplement Deshnee's response, what we are also seeing is recoveries are basically as we had originally planned, so the good news is as far as that is concerned, and also in terms of the metal content has been quite positive as well.

**Deshnee Naidoo:**

No, what I did to say to Venkat's point, the shipment in December which was about 2,200 tons of MIC, to double that in terms of dmt concentrate with on spec. So we are really encouraged with the initial results we are getting in terms of recovery and on spec concentrate grade.

**Sumangal Nevatia:**

Just one last small clarification, with respect to Zinc India, a few days back, the company had maintained its guidance of slightly higher production whereas we have now revised to slightly lower production. So if you can just clarify that?

**S. Venkatakrisnan:**

Yes, Sunil is on the line, he can clarify because we have not made any changes to the guidance. Sunil?

**Sunil Duggal:**

There is no change in the guidance. We said that the MIC production could be slightly higher than the last year but the finished goods could be slightly lower than the last year which is a resultant of what the MIC production would be there.

**Moderator:**

Thank you. The next question is from the line of Indrajit Agarwal from Goldman Sachs. Please go ahead.

- Indrajit Agarwal:** My first question is again relating to the investment that we have made in Volcan. Now you see that we still have surplus cash in Cairn India Holding. So is there a likelihood of further investment in the same entity?
- Arun Kumar:** As I clarified earlier, the note also says that we have made the part payment, definitely there are further installments to be paid towards this investment and economic investment that we have made as part of the regular cash management activity there.
- Indrajit Agarwal:** Can you quantify that, sir... roughly how much?
- Arun Kumar:** Yes, approximately around Rs.2,000 crores will be paid over the period that I outlined earlier.
- Indrajit Agarwal:** This is an addition to what we have already paid?
- Arun Kumar:** Absolutely, right.
- Indrajit Agarwal:** Second question on your Slide #30 on aluminum profitability bridge, if you look at the conversion and others, it is a cost item but it is a slight positive number. Can you explain how come this is a positive number?
- Arun Kumar:** I think, Mr. Ajay Dixit can clarify on the cost initiative that we are taking up in the aluminum side that broadly the conversion and others would be an outcome of increased efficiency primarily coming out of the BALCO production line. So is there something that you want to update Ajay? And it is also driven by the contractor liability write-back that we have mentioned here.
- Ajay Dixit:** Yes, besides that, Arun, you are very right, these two, plus we had significantly controlled the fixed cost also, and this has also helped us, and we also had some scratch tail, put all together has contributed to this.
- S. Venkatakrishnan:** And to put in context that number is \$11/ton out of 1,900.
- Indrajit Agarwal:** About 72 if you compare quarter-over-quarter. The lower benchmark alumina cost, the alumina cost globally has fallen. Is that capital in this quarter cost or we can see further reduction?
- Ajay Dixit:** Yes, so this is a very recent phenomena as you see and normally it takes two months minimum to come to the books directly. So, this recent cost reduction will come sometime end of March to beginning of April.
- Indrajit Agarwal:** My last question is one of the reasons for lower Zinc International cost of production has improved copper credits. How much of that is sustainable and how much is one-off?
- Deshnee Naidoo:** It is not sustainable. The cost is actually included in the ore body. This is a polymetallic ore body zinc, lead, copper as well as silver. So, we have to schedule through our mines plan in terms of when we would get the stocks for a bit of a high copper. If you look at the first two quarters of

the year, we are slightly behind, and to put that into dollar million would have been of an average of \$8 million average in the first two quarters. This quarter is a one-off at approximately \$11 million. So mine planning dependent and we obviously chase zinc and lead and the copper is actually a bi-product that we try and maximize. But it is absolutely a sweetener, so we have asked the team to relook at it if there is any optimization that we can do around it.

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

**Pinakin Parekh:** My first question relates again back to the Volcan investment. Historically, the predecessor company of Vedanta has made India group investments and equity investors have not appreciated the investments that were made in the group companies. In that background, how much investments would be made by Vedanta into the structure investments or is this something which would be reassessed every quarter depending on what is the cash flow available to invest?

**Arun Kumar:** Pinakin, thanks for your question. This is a one-time investment and the amount cannot really go up because it is the economic interest it is a locked-in portion representing the share price movement of approximately 25 million shares which is already the upside that the ultimate parent Volcan enjoys in this original instruments. So to that extent, it is a cash management decision taken to get superior returns compared to parking USD denominator fixed deposit as you know will earn anywhere between 1% to 3% depending on tenor and bank. So it is purely to get attractive returns. So there is no concept of investing more between quarters if there is more cash flow. It is a one-time thing.

**Pinakin Parekh:** Basically if there is a higher economic interest opportunity Vedanta would not pursue beyond this, roughly \$0.5 billion?

**Arun Kumar:** That is right, because that is the current structure and that is how the economic interests are shaped up. The rest of the increase would actually come in Vedanta Limited book, which is exactly why the investment has been made, there is nothing else that is remaining further on it, which is the cash management decision that has been taken.

**Pinakin Parekh:** Sir, my second question relates to copper smelter. Now we understand that the Supreme Court would at some point of time pass an order and the NGT order has been favorable. Now given that the Tamil Nadu government has revoked the consent to operate and the land lease has also been canceled, can a favorable Supreme Court order allow the company to restart the smelter because without the land lease and without the CTE, can a restart happen or would the company have to go through each one of the regulatory requirements separately and the court route for those?

**S. Venkatakrishnan:** Firstly, as you would have seen, the NGT order is pretty specific and pretty favorable as far as the company is concerned. And it did say come back to the NGT if certain things have not happened. Subsequently, the Supreme Court has also reaffirmed the position in that regard. So from our point of view, the matter is being heard by the court, the court is hearing all sides to

the argument and so did the NGT and so did the Supreme Court in the first instance. So certainly, the relief we are seeking is specific in terms of getting all of the consents we need to be able to operate the plant. So that matter is being heard. Without second guessing the outcome of the court, we are optimistic in that regard and ultimately, the rule of law will prevail but certainly from our side, we have actually adhered to all of the requirements which were made of us in terms of needing to open the plant. For us, it is a bigger picture here to take as well because having visited Tuticorin and seeing what it looked like before, we are seeing the impact it's having in the local community in terms of employment, in terms of what is happening to fertilizer plants, what is happening in terms of small and medium enterprises, etc. So, I think it is in the interest of everyone to have the plant reopened and that is certainly the direction, in which we are actually taking this forward.

**Moderator:** Thank you. The next question is from the line of (Tejas Pradhan from Citigroup). Please go ahead.

**Rajshri:** This is Rajshri here. Just coming back to the question on the economic interest, just to understand this correctly, another Rs.2,000 crores will be invested over the period of 20 months?

**Arun Kumar:** Yes, absolutely right.

**Rajshri:** On a realization basis, I understand that there is a mark-to-market gain that we can see, but what is the realized gain in the end, the realized gain is going to be what the eventual price of the annual share would be at the time if there is a swap eventually or...?

**Arun Kumar:** Your understanding is right.

**Rajshri:** You said the next charge of Rs.2,000 crores, that will still go from the Cairn subsidiary or that will come from Vedanta Limited?

**Arun Kumar:** You are absolutely right, it will go from the CIHL.

**Rajshri:** The other question that I had was on Cairn, what do we look for in terms of the volume into the next year, I know you said that you will give the guidance in the next quarter?

**S. Venkatakrishnan:** I think with regards to Cairn's volume, next year, you will certainly see a step up. We are in the process of finalizing our business plans and understandably all of these projects in terms of improving production volumes, tight oil, tight gas and getting additional liquid handling capacity all kick in. I would rather wait until we announce our results at the end of this year, but certainly in your assumptions, you can factor in a step-up in the oil and gas production coming from Cairn, but we would rather not give the numbers out now, we would rather give it as guidance for next year when we announce our results.

**Moderator:** Thank you. The next question is from the line of Amit Dixit from Edelweiss. Please go ahead.

- Amit Dixit:** Can we please go back to Slide #30, wherein you have included a note that operating cost includes write-back of liability. So, is your conversion and others credit solely because of write-back of liability?
- Arun Kumar:** That is right. As you rightly pointed out, it should have the asset mark out there. There are lot of good work that has happened in the efficiency side in the fixed cost control, but obviously, there will be a conversion cost, which in this quarter since it has conversion and others is offset by the liability write-back. So excellent observation and you are absolutely right.
- Amit Dixit:** So sir my follow-up question here is that, since it amounts to almost \$97/ton, so that means without it, the aluminum division EBITDA would actually have been negative this quarter?
- Arun Kumar:** The Aluminum division EBITDA as you rightly observed would be almost flat without that because there are other negatives also, because the others line, we are only pointing one single item. So it would be almost even, which is where maybe I will invite Ajay Dixit to brief you further. As earlier in the conversation, there were good observations on some of the trends that are happening on increased bauxite volume and reducing alumina cost as well as some of our coal linkage tranches coming in Q4. Ajay, you want to just brief?
- Ajay Dixit:** One thing important over here is that we have significantly improved on the power ore generation which in earlier times to a certain extent we were importing power from the grid. So, there has been a significant improvement in the power on this side. As you would have also seen in case of alumina, by an increased proportion of the Odisha bauxite and improvement in the plant specifics, we have \$50 improvement in the alumina cost coming out of Lanjigarh. In case of what you are mentioning is conversion and other cost, the other benefit, which I said that we have significant improvement even on the fixed cost which has been reduced and as well as **scrap tail** which is also included. So, all put together, I would say we have worked almost in every aspect of the overall operation in the alumina, but however, there has been a dip in the LME. So all put together is putting a flat practically December this quarter, which we have seen. We are slightly positive, but it is not that it would have been negative without the conversion what you just mentioned over here... liability topic.
- Amit Dixit:** Thank you so much for the elaborate explanation. My second question is with respect to the aluminum division again. Now you have guided that the ultimate aim is to see this cost of production goes down to \$1,500/ton. So would it be possible to give a timeline? Secondly, how much alumina cost you were expecting, how much power cost built up, whatever initiatives are being done?
- S. Venkatakrishnan:** If I can pick that up and then pass it across to Ajay. As we said, we do want to get to \$1,500/tons as quickly as we can... in fact tomorrow if we can do it. But in the last call, we did say it is a journey. We are going to move a number of levers to get there. Our ultimate objective is I have had to do the split of \$1,500 it would be 600, 500 and 400 in simple terms. And certainly the journey from October 2018 to where we are now in December 2018 has seen a good reduction in terms of aluminum cost, and we have actually clawed in about roughly 17% of the journey



already in one quarter. We would like to see that progress steadily and get to \$1,500 as quickly as we can. The levers are obviously getting increased bauxite, basically better linkages in terms of coal to get to zero power import and having enough stockpile of coal and also sorting out all of the logistical issues and logistical bottlenecks in this regard and getting maximum alumina production through Lanjigarh refinery, but Ajay can elaborate more. Ajay?

**Ajay Dixit:**

I would say, well summed up by Venkat, when we are saying coal initiatives, the topic which we are picking up is both the inventory and the coal cost. So initially we were operating at a very low inventory. As you know that there was a strong direction from the government to transfer most of the coal to IPP and also the mine production was low. So, this has picked up and so we have a good response from Coal India. Today we are running at a coal stock of 10-days and this is making up good progress on the continuous running of the power plant and also there is a significant portion of the coal which is coming out of our backlog of the linkage coal which is flowing in now. We have also got Tranche-IV and thereby increasing our coal security to 72%. So all this put together, we are seeing very positive traction coming out of the coal. Alumina, we have ramped up to, I would say, the production rate of close to 2 mt and when this is factored by the bauxite sourcing, the OMC is ramping up, going to give us the full capacity which is committed out of the OMC mines. This year we would be getting close to about 1.7 mt to 2 mt, next year obviously a bit more. We also have a long-term tie-up with EGA for a very high quality of bauxite which will give a better yield which starts flowing from June, July, of this year. So all this will bring down also significantly the alumina cost, which is a significant factor in the overall. So in the journey what Venkat mentioned 600, 500, 400 is something like alumina cost around 600 and 500 is around power and 400 is around rest of the other topics, all put together totaling up to 1500.

**Moderator:**

The next question is from the line of Abhishek Poddar from Kotak Securities. Please go ahead.

**Abhishek Poddar:**

Sir, on Anglo you did mention that the reason for investment is that the returns are better than the investment in foreign instruments, and you also mentioned that the share price movement of Anglo would command the returns. So just wanted to understand is there a minimum return that has been guaranteed on this and how should we be thinking about it if the share price fall?

**Arun Kumar:**

I think we should think about it as purely a mark-to-mark transaction. And as you can see, it is already demonstrated with a positive unrealized gain since entry. So it is a good investment fall that CIHL has taken and its call on getting attractive return versus a benign FD return has proved positive so far.

**Abhishek Poddar:**

So, is there any minimum return which has been guaranteed on this?

**Arun Kumar:**

I think there are a lot of commercial details in the investment which is better not discuss on a broader call. But it will be a positive upside, it has been well considered while the investment has been taken by CIHL and should result in attractive returns.

- Abhishek Poddar:** Second question is on the BALCO EBITDA that you have shown as Rs.350 crores. So that includes the part of the liability that will be returned back?
- Arun Kumar:** You are absolutely right, it includes the liability that will be returned back.
- Moderator:** Thank you. The next question is from the line of Stephanie Woo from HSBC. Please go ahead.
- Stephanie Woo:** Hi, my question maybe to Venkat. About Tuticorin- in order to prevent such flare-ups again, have we thought about investing and mitigating technology for example in this authorization unit, etc., to kind of basically show future issues will not arise because we have invested in sort of mitigating the emissions of sulfur-di-oxide and also the green house gases?
- S. Venkatakrisnan:** Couple of comments here -- Firstly, in terms of the Tuticorin smelter, it is one of the best in the world when you compare its own track record in terms of the latest technology it has, and in terms of emission rates, etc., So it is very well advanced. But having said that, we would not want to rest on our laurels. When we did the benchmarking it came out very similar to the smelter, let us say Hamburg for example in terms its emission rates and its track record. Having said that, we do not want to rest on our laurels, we will continue to benchmark and if there are additional steps we could think of to improve the environmental record of the plant even further, no hesitation in actually looking at those.
- Stephanie Woo:** Did we actually publish all this data... is it publicly available for us to compare?
- S. Venkatakrisnan:** Yes, it is provided on our website and in addition to that we can actually provide any additional information you need.
- Stephanie Woo:** And then on the aluminum side, thinking about the kind of press that the Elysis JV between Alcoa and Rio, Alcoa is obviously underwriting the commercialization of zero emission aluminum production process, and like large MNCs like Nestle are also committed to taking aluminum from this new kind of production process starting from 2024. What is Vedanta doing on this front to move towards this kind of new style of zero carbon emission aluminum process?
- Ajay Dixit:** I would say as far as the carbon intensity per metric ton is concerned, we intend to improve by 15% in coming three years' time.
- Stephanie Woo:** That is using a traditional production process, but what I am talking about is the investment that has been made by Alcoa and Rio Tinto together with Apple in the zero carbon aluminum process and then I think they plan to commercialize from 2024. So obviously granted still 5 years away. But it seems like maybe we are moving towards a kind of very different kind of disruptive technology in the aluminum space. Are we also investing in **patenting** from this and researching this process?
- Ajay Dixit:** Yes, we are working on improved efficiencies of the sell house and improved current operation in the cell. So with this, the power consumed per metric ton of the aluminum reduces and this is

going to reduce the carbon footprint even on the per metric ton. In any case, what we are wanting to do as we ramp up, we do not intend to ramp up the overall power installed capacity, and we want to rely on the internal efficiencies while we move up, and therefore this will reduce. So we are more focused on our type of power generation program and also on the efficiency improvement programs, which we are doing with the help of digital technology on our sell house as well as on the power plants.

**S. Venkatakishnan:** Stephanie, with regard to your point, certainly, we will continue to look at alternative technologies that are available. One has to understand that in India, developing economy is reliant on coal power energy sources, but that does not mean to say we cannot look at it, for example, at our zinc operations, we have got renewable power which is powering around 250 MW. We will certainly look at it from the aluminum point of view. Smelters are difficult to operate on renewable power but does not need to say that it cannot be done. We will continue to look at it, and we will actually have the discussion with Rio and Alcoa as well to see what they have done and effectively see if that is applicable and it is something we can actually do because nothing like preparing for substitution.

**Stephanie Woo:** No, no, sure, but I think it is not just about renewable energy in, but it is also about emissions out and basically they claim that their new technology will enable them to emit oxygen rather than greenhouse gases, it is a very different proposition but granted, we can look at that in the future. One last question on the Anglo investment. I think at the time that Volcan made investment they pledged the Vedanta PLC shares, the London listed ones when they underwrite that convertible bond. But now after the delisting of the PLC, is there any share pledged going on the Ltd., the Indian holding, was that replaced with that share collateral that was pledged in the process?

**Arun Kumar:** Stephanie, this is a question relating to what Volcan has done, and I am afraid we are not in the know what is happening in Volcan as Vedanta Limited management.

**Stephanie Woo:** I appreciate it, but I am just worried about the overhang that might exist on our shares today.

**Arun Kumar:** We can confirm that Vedanta Limited shares have not been pledged anywhere.

**Moderator:** Thank you. Ladies and gentlemen, due to time constraints, we will be able to take our one last question that is from the line of Ashish Jain from Morgan Stanley. Please go ahead.

**Ashish Jain:** Sir, my first question is again in going back to the investment, just to clarify you said that the balance Rs.20 billion will be invested over the next 20-months. So the lock-in that you said is also 20-months, is it starting December or is it based upon when the each investment is done over the next 20-months?

**Arun Kumar:** The investment has started in December, and for the period I mentioned earlier. There will be a schedule of paying what we call a deferred liability. Just to clarify, the number I could hear it

well, I had mentioned earlier just about Rs.2,000 crores into those 20-odd months. So that is the broad summary that I had recapped.

**Ashish Jain:** No, sir, I am still not sure when will these be redeemed -- is there a defined period on when it will be redeemed?

**Arun Kumar:** So, it will be at the end of 20-months and around you could say March 2020-ish and October 2020. So, I am just averaging the two and giving you a number.

**Ashish Jain:** Basically this is the thing which is already kind of our investment. Is that how we should think about it?

**Arun Kumar:** You are absolutely right.

**Ashish Jain:** I think this question was asked earlier but let us say because its appointed maturity, if Anglo shares are let us say below our investment price, we will be booking losses or there is a way for us to be compensated on that?

**Arun Kumar:** I think we do have the mark-to-market exposure as I outlined earlier, and we are definitely hopeful that this will be a good return beyond what we have earned in regular products.

**Ashish Jain:** I understand that but it is a contingent thing, I am just trying to see is the downside protected in any form or it is completely dependent on how the market does?

**Arun Kumar:** In certain situations, the downside is protected. It is just not so prudent on our part to share all the commercial details; however, it is protected in certain situations and we will keep giving the updates during the quarter ends.

**Ashish Jain:** Just on the copper business now, can you put a timeline by when we should think its possible to restart the smelter, is it possible to share any timeline on that?

**S. Venkatakrishnan:** I think we would not want to speculate what the court timeline is, that is taking the courts for granted, and I think it would be inappropriate. For us the bigger objective here is to reopen the smelter with full support of the local community and all of the stakeholders. If that takes an extra month or two, no issues on that regard. We would rather have full support when we go in.

**Moderator:** Ladies and gentlemen, that will be the last question. I now hand the conference over to Ms. Rashmi Mohanty for closing comments. Thank you and over to you ma'am.

**Rashmi Mohanty:** Thank you, everyone for joining us today for our results presentation for Q3FY19. As always if there are any follow-up questions, you can reach out to the Investor Relations team.

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