



Vale S/A
Third Quarter 2018 Earnings Results
October 25th, 2018

Operator: Good morning ladies and gentlemen. Welcome to Vale's conference call to discuss 3Q18 results. At this time, all participants are in a listen-only mode. Later, we will conduct a question and answer session and instructions will be given at that time.

If you should require assistance during the call, please press the star key followed by zero. As a reminder, this conference is being recorded and the recording will be available on the Company's website at: VALE.COM at the Investors link.

This conference call and the slide presentation are being transmitted via internet as well, also through the Company's website.

Before proceeding, let me mention that forward-looking statements are being made under the safe harbor of the Securities Litigation Reform Act of 1996. Actual performance could differ materially from that anticipated in any forward-looking comments as a result of macroeconomic conditions, market risks and other factors.

With us today are:

- Mr. Fabio Schvartsman – President and CEO;
- Mr. Luciano Siani Pires – CFO;
- Mr. Eduardo Bartolomeo – Executive Director, Base Metals;
- Mr. Luiz Eduardo Osorio - Executive Director, Sustainability and Institutional Relations;
- Mr. Alexandre Pereira – Executive Director, Business Support;
- Mrs. Marina Quental – Director of People.

I would like to inform you that Mr. Peter Poppinga will not join the conference today. Mr Luiz Meriz - Global Director for Sales of Iron Ore and Coal -, will be available to answer any question related to the Iron Ore and Coal businesses.

First, Mr. Fabio Schvartsman will proceed to the presentation and after that we will open for Questions and Answers.

It is now my pleasure to turn the call over to Mr. Fabio Schvartsman. Sir, you may now begin.

Fabio Schvartsman: Thank you. Good morning to all. It is a pleasure to be here and to discuss with you the latest results of Vale. And on top of everything, we think that we are moving forward in the right direction, becoming, as expected, a more predictable company, showing consistent results during time with a



meaningful evolution, and it is important to emphasize that even with the reduction in price of the index of iron ore from the third quarter of last year to the third quarter of this year of 4%, we were able to more than compensate that through our quality premium, actually. This is how the company is dealing with all this scenario and we've been helped by the lower volatility in the iron ore world in comparison to other ores, where the changes and the volatility is much more meaningful these days.

I want to make a quick remark on capital allocation. I think that this is the most significant thing for a company in the mining universe, and because of that we are taking a very cautious look towards anything that relates to capital allocation. Our primary goal is to distribute dividends and to buy back shares in order to compensate our shareholders, and marginally, we are making investments, as the two that we are announcing today: Salobo investment and the Gelado investment, both are brownfield investments that have very meaningful return on investments, and they basically showcase how we think about investments and how we think that we should handle them from now on.

One quick word in our business strategy moving forward. First, Iron Ore. Iron ore we have a very simple equation in front of us: we are ramping up S11D; we are ramping up the three pelletizers that we have restarted this year, therefore, our goal is to introduce more high-quality ore in the market, a market that is today driven towards higher-quality, therefore, the right product for the right market.

Meanwhile, it is important for you to understand that we have a clear strategy for Base Metals as well. Base Metals, as we anticipated since last year, we made on purpose a reduction in production, not reduction in capacity, but in production of around 50,000 tons of nickel per year in 2017, 2018 and 2019. Therefore, our play in nickel aims towards 2020, when we will have, at the same time, much higher production; we are aiming to have 310,000 tons of nickel production, and that's just coming back to our capacity in 2020; we are working towards a total restructuring in our business that will reduce in a very meaningful way costs, and this will be present in 2020 as well; and finally, it is a strategy to see a clear reversion and increase in price of nickel by that time. So, while we are going to enjoy the good moment of iron ore, we are preparing ourselves to substitute or add to it the good performance that Base Metals will show with a jump in results in 2020.

So, one quick word about next quarter. Our expectation is to continue to deliver next quarter, in a comparable basis, therefore, with the fourth quarter of last year, we are expecting a very nice growth in results, as it happened in the third quarter, driven by the recent increase in iron ore prices in the market, that is passing quite well. Meanwhile, we will have all this noise regarding trade wars, but you will see that iron ore is a physical demand and it is working accordingly.

So, this was my introduction, and I now pass to Luciano to complement with some information. Please, feel free, Luciano.



Luciano Siani Pires: Good morning and good afternoon. I will start with costs. You could see iron ore costs reducing from US\$ 14.7 to US\$12.4 per ton, so we delivered on our promises. We should expect for the fourth quarter this level to remain, and as you are aware, in the first quarter of next year, due to seasonality and the rain season in Brazil, likely volumes are going to be lower and costs should slightly creep up.

In terms of Base Metals, I want to point out that not only we had higher unit costs because of lower dilution, because of lower volumes, but also there was extra spending in the maintenance shutdown for Ontario. So, therefore, more spending over less volumes and not only less volumes.

In terms of Coal costs, although you saw improvement in volumes, the costs did not come down accordingly, and the reason for that is because we are moving a lot of material in the mine as part of the debottlenecking processes, so there is a lot of overburden being moved. This should continue for the next three quarters, and we expect a meaningful uptake in product volumes in the second half of 2019. Actually, probably we are going to be running close to 17 million tons of capacity on the second half. Average for the year, the total for the year will be lower, but the rate of production in the second half will be very meaningful for coal in 2019.

Now moving on to the projects. Some color on Gelado. The investment of US\$ 428 million will be roughly half financed by the savings on replacement of equipment in Carajás because the remaining mining operations of Carajás will be reduced. And in addition to that, because it operates without trucks and zero transportation distance, the operating costs, the C1 cash costs of Gelado will be US\$ 3.5 lower than the operating costs of the Carajás mine, which are already amongst the lowest within Vale. So very accretive project.

In terms of Salobo III, the expectation is to receive the bonus from Wheaton in 2023. The risk associated is very low given that the production target that we need to achieve we are very confident, it's a sister plant of the two that we have already there, very detailed engineering in place, we see very low risks of achieving the bonus. And even if there is a slip in terms of ramp-up, the sensitivity of the size of the bonus received is very low related to the timing of the ramp-up. We are talking about tens of millions of dollars, so therefore, it is given that we are going to get a substantial amount of money in 2023.

Capital expenditures also hit a low in the quarter, that's a consequence of finishing some important projects, like the emissions-reduction project in Canada and the beginning of other important projects, such as VBME and Gelado, and also the comprehensive review during the year aiming at optimization capital allocation also in sustaining investments. So, we should expect capital expenditures to go up in the fourth quarter to more normalized levels.



Finally, looking into balance sheet and capital allocation, you saw the 50% sale of Eagle Downs, we have not touched on this before, but this is just an example and a proof that we continue to streamline our portfolio aiming at a more simplified company and bringing in proceeds.

We also performed, I would say, quite well on our share buyback, we have almost 50% of it completed in the third quarter alone, and an attractive price of US\$ 13.27, so we were very opportunistic writing the volatility in external and internal markets.

And finally, debt management. We are very close to our net debt target, we reduced overall indebtedness by US\$800 million, but if you look at debt maturity until 2021, the reduction was even greater, about US\$1.3 billion. So, we continue also to optimize the overall profile of debt.

Having said that, we can jump straight to Q&A.

Question-and-answer session

Operator: Thank you. Ladies and gentlemen, we will now begin the question-and-answer session. If you have a question, please press the star key followed by the one key on your touchtone phone now. If at any time you would like to remove yourself from the questioning queue, please press star 2. Please, restrict your questions to two at a time.

Our first question comes from Carlos de Alba, with Morgan Stanley.

Carlos de Alba: Hi, good morning and good afternoon. So, the first question maybe for Fabio, Luciano: How do you decide between paying dividends or buying back shares? Is there a particular inclination? What should we expect going forward? What are the parameters that we would need to consider in order to understand your rationale?

And then second, if I understood correctly, Fabio, you basically suggested that this year the story has been about iron ore and high-quality premium or high premiums for high-quality material, and then in 2020 the story would be Base Metals. How do you see next year? What is going to drive the company's performance in 2019? Thank you.

Fabio Schvartsman: Carlos, thank you for your question. First, the discussion between dividends and buyback is basically opportunistic, it is a decision that we will make every time that we have a decision on this. And last time, we made a decision to invest in buyback instead of more dividends, first, because we had just created that policy, and we were pleased to pay dividends according to the policy, not in a different level, in order not to confuse the market; second, we thought the opportunity for buying back was a good one, and we think that we were right because we bought back shares around US\$ 13 and the value of the shares today are around US\$ 15, therefore, the return on investment was quite



fast actually, and this is a good thing, it reinforces that we made the right decision to move in this direction. So, it will depend on circumstances, it will depend, say, how it is going to be the environment in the fiscal area that impacts or not dividends. This decision will be affected by a number of things that will be evaluated at any given moment.

Second, about 2019, 2019 will be similar to 2018, but better. That means that we will have more of the same in iron ore, we are going to have more high-quality ore coming on stream, more pellets coming on stream, therefore, our average price should be higher than this year. On top of that, in Base Metals our cost reduction is in process, so we are going to see some initial good results coming out of it. But Base Metals is a story basically for 2020, where we are really expecting a big jump in performance that will achieve the goal that we have for, say, 30% of our Ebitda coming from the Base Metals.

Carlos de Alba: Thank you.

Operator: The next question comes from Andreas Bokkenheuser, with UBS.

Andreas Bokkenheuser: Thank you very much for taking my question. Thank you very much for doing today Q&A session as well. It's been reported that obviously you are considering investing a bit more in S11D, but obviously you don't want to bring more iron ore volumes to the market, so effectively displacing some of the volumes in southern systems. Can you talk a little bit more about your plans, if that is in fact what you are considering, what are you thinking terms of timeline, what are you thinking terms of Capex, what is required in terms of infrastructure and licenses and so on? Thank you very much.

Fabio Schwartsman: Andreas, thank you for your question. You are right, we are studying to extract a little more from S11D with marginal investments. We are actually in this phase, so our information is not sound at this point – and that's the reason why we are not sharing the precise information –, but I think we stand to have a chance to deliver that by Vale Day moment, when we should have terminated all this analysis and we will have all the information regarding this, and it will be developed in a very short period of time.

Andreas Bokkenheuser: Understood. If I may then, instead of asking another follow-up question, more on the freight side of things. In the last couple of quarters, you've obviously mentioned that you are in negotiations with some of your ship vessel providers, you know, ahead of the whole new IMO regulation that is coming on line in 2020, effectively trying to convince them to invest in more environmentally friendly equipment, scrubbers for the ships and so on and so forth.

Do you have any update there? How are these negotiations doing and how do you think you could be affected by the new IMO regulation? Thank you very much.



Fabio Schvartsman: Just to correct a little bit: We are not “convincing” them. Actually, we will be paying for the equipment that is going to be installed in all the ships for this purpose. So, as we are paying, it means that we are getting a lot of traction here and we can say that this point that we have most of our fleet converted already for the scrubbers that means that we are poised to actually benefit from the reduction in the cost of the bunker that is more pollutive, and therefore, we are good here, exactly as we mentioned in the last calls with you.

Andreas Bokkenheuser: That's very clear, thank you very much.

Operator: Our next question comes from John Brandt, with HSBC.

John Brandt: Hi good morning and good afternoon, congratulations on the very strong results. I first wanted to ask you about, I guess, your shares. Firstly, on the share buyback, so you said you already bought about 50%, and I can see that there is benefiting of being treasury shares. Are there any plans to actually cancel those, or should we expect to see them as treasury shares going forward? And related to that, I see that BNDES has been selling down part of their stake. I know it's not really your decision, but I was wondering if there is any update. If you have any updates as to whether or not the controlling shareholders might be looking to sell down.

And then, I guess my second question was related to the iron ore price and premiums. You said that about 79% of your volumes are sold as premium products, but my understanding is you are not actually getting a premium price for all of those products because of the contracts. So, I'm wondering if you can sort of shed some light on how much of your volumes are being sold on contracts. I'm really trying to get a sense of if iron ore price is staying the same because of the mix shift going from contracts to losing the new Metal Bulletin benchmark that you created. How that will impact premiums, how much higher they can go? Thank you.

Fabio Schvartsman: Okay, let's start with the share buyback. If I understood properly, you want to know if we are going to continue to buy back in the same speed that we've done so far. Was that your question?

John Brandt: No, I guess I was wondering if you would cancel the shares that you bought back?

Fabio Schvartsman: The idea will be to eventually cancel them, so we have no other plans for the shares other than canceling them. Regarding BNDES and the controlling shareholders, the only thing that I know is what I hear from them, and what I hear from them, especially from pension funds, is that they are not willing to sell in the short term. So, I have no idea if on the other hand BNDES is aiming to sell or not to sell. It is something that unfortunately I do not have information.

Now regarding the iron ore prices, I will pass to Luiz Meriz to give you more color in this issue of contracts that you asked.



Luiz Meriz: Thank you for your question. Basically, the premium we are capturing arise from three major families of products, let's say: We can say the pellets, which have their prices discussed on a yearly-basis; the Carajás, which is already fully indexed to the index, which represents pretty much the value of Carajás; and the third part of that will be related to the blend, which is lower alumina price. The majority of this blend is sold on a yearly-basis, so we expect as from the next quarter we will already be in a position to capture the value that the market is recognizing on low alumina quality on our products. Does that clarify your question?

John Brandt: Yes, thank you very much.

Operator: The next question comes from Alex Hacking, with Citi.

Alex Hacking: Yes, thanks for the questions. On the first question, I just wanted to follow-up on the previous answer. Is the goal to sell 100% of Brazil blend fines linked to the low alumina index next year? And then, I guess second question, just on Moatize, as the mine ramps up, what's going to happen to the mix of met coal and thermal coal? Because obviously, you know, I think there has been a bit more thermal coal in the mix than what was originally anticipated. I'm just trying to figure out like steady-state, once the mines are full capacity, what it will look like. Thank you.

Luiz Meriz: Alex, thank you. On the first query related to the goal, I mean, once we have different duration, I mean, majority of those contracts are done on a yearly-basis, as I just mentioned, so on those ones this will be implemented in a faster way. For some others, you may have a small part of that, which obviously will be slightly longer, and then it will take a few more times to happen.

In general, the market recognizes that the alumina is a natural movement in terms of pricing. We have a specific index now, which is being published, which represents the low alumina on our sinter feeds, and this is the most fair way to process the value of this product.

Luciano Siani Pires: Alex, in terms of Moatize, the mix, we have several different pits and sections on the mine, the current sections we are mining you are correct, so it has slightly lower proportion of met coal. The new sessions which we are going to be opening as of now in next year are much richer, so therefore, the situation in 19 will be similar in terms of volumes will improve strongly in the second half, as I pointed out, but the mix will continue to be similar. In 2020, the mix improves a little further, and in 2021, it improves dramatically. So, the profitability of Moatize will increase over time, but gets a big, big jump from 2020 to 2021.

Alex Hacking: Thank you.



Operator: The next question comes from Christian Georges, with Societè Generale.

Christian Georges: Thank you. My first question is on the pellets. Could you give us an idea of what is the breakdown between pellets, how much of your pellets you send to China these days compared to what, I guess, you send more to Europe? And then linking to the contract question earlier, do you have some contracts on pellets which are maybe six months-fee on your current destinations?

Luiz Meriz: Christian, thank you for your question. Well, China is not traditionally a big consumer market for our pellets, I would say that the majority will stay in Europe and Brazil. That's basically, I would say, about eventually less than 10% of our volumes are directly to China. Our full production is committed in the long-term contracts, that's the scenario.

Christian Georges: But the proportion in China is increasing, right?

Luiz Meriz: Not necessarily, we are increasing this year, eventually, you might see a small amount heading to China as the production increases, but there are to be eventually spot sales, right? The majority of the volume is in long-term contracts, of which China is a relatively small part of that.

Christian Georges: Thanks. And then my second question, on Moatize, we are looking at 17 million tons in 2020, What is the target for 2019? I mean, are we going to be flat versus 2018 and gradually going up to 2020 at 17 million tons, or is it just linear?

Luciano Siani Pires: We will provide the full guidance by Vale Day, so I just wanted to give you a direction where we are heading. So, we should be at a rate of 17 million tons for the second half, but we are still sorting out the details. So, we will give the precise guidance for the full year 19 at Vale Day.

Christian Georges: Okay. And very last thing, you know, VNC was back in the [...] you know, in New Caledonia. Is that to disappointment to you or is it part of the plan that you currently have?

Fabio Schvartsman: Look, we've never hidden the fact that VNC is a very difficult operation that Vale has, and the new management of base metals is very focused on changing that for better. So, we are now in this process, we want to reach a decision on what is it that we are going to do with VNC shortly, and as soon as we have this decision, we are going to share with the market.

Christian Georges: Okay, thank you very much.

Operator: The next question comes with Grant Sporre, with Macquaire.



Grant Sporre: Good afternoon gentlemen, thank you for hosting the call. My first question is just a little bit more on VNC, if you are able to share anything. The question really is around, it seems to me that it's more of a revenue problem than actually a cost problem at VNC in terms of some of the realizations you might be getting from the intermediate products. So, I don't know if you could share any details on that. That would be my first question.

And then the second one is back on Moatize. You guys set guidance at Vale Day 18 in terms of how the costs would evolve. Is that still your current thinking as to have those costs would evolve over time? Thank you.

Fabio Schvartsman: Hi. Regarding VNC, VNC is not only an issue of price, it's an issue of costs as well, and it is an issue of capacity. We are operating at low capacity utilization at this point, and we are focused in increasing that. If we can increase that, we are going to save thousands of dollars per ton, that will be as important as a price increase. So, there are two issues, the future prices obviously eventually can help, but we are not counting on prices, we are looking if we are able to be in a position to produce a lot more from the same equipment that we have there.

Regarding Moatize.

Luciano Siani Pires: On Moatize, we have no change to the cost of guidance that we provided at Vale Day. And just reminding everyone here, we look forward, in the longer-term, to have a total cost structure in Moatize at around US\$ 80 per ton cost at port, which means US\$ 60 per ton of operating costs plus US\$ 20 per ton of an additional tariff required to service the project finance. So, very competitive. Obviously, it will take a few years to get there.

Operator: The next question comes from Tyler Broda, with RBC.

Tyler Broda: Hi gentlemen, thank you, and thanks very much for the call. Excellent performance on the quarter. I just wanted to say, I just wanted to ask: on Salobo, as the third concentrator coming in, is that giving you the same size and design as the previous two concentrators, or is there any changes we should be looking for or any specifics on that that might change in terms of the cost profile?

And then secondly on that, if you could just bring a bit more clarity exactly what needs to happen before the money comes through? And then just secondly on Samarco, with the pellet market still quite strong, if you could give us an update on where things are there at the moment. Thank you.

Luciano Siani Pires: On Salobo, this extension is exactly equal, it's a sister plant than Salobo I and II. So, in theory, it should add 50% of capacity, but the reason why Salobo doesn't go from 200,000 to 300,000 is because copper grades they decline over time, so therefore, the peak production will be actually till 68. So, when you think longer-term, there is a trend for Salobo costs to come slowly up,



although from a very low level. You all know that we have costs there close or below US\$1,000 per ton. But on the other hand, on the first few years of the startup of Salobo III, actually, there is a calendar effect that keeps costs at the same level, which is the fact that there is an already-mined stock pile of ore very close to where the new crusher will be for Salobo III. So, transportation businesses will be zero, mining costs will be zero. So, we expect Salobo costs to be stable at the least over the next 5 years.

Fabio Schvartsman: Well, regarding Samarco this year, this year was a year of important achievements in Samarco. First, we had an agreement with all the parts involved, especially the prosecutors, that was a very complicated thing to get, and this was the most important step forward because it is taking out the uncertainty of which will be the impact of the liabilities that we had because of the accident, that Samarco has because of the accident. The second good news is that, very recently, we decided to start the construction of the tailing dam that will support the restart of the operation, called Alegria Sul, where we not only decided to start, but we got the licenses to build it, and we are under construction right now. That means that, by the end of 2019, we will have everything in place to ask for the license for restarting operation, therefore, if we are able to get these licenses, we will have everything ready for restarting the operation by the beginning of 2020.

Tyler Broda: That's perfect, thank you very much.

Operator: Our next question comes from John Tumazos, with John Tumazos Very Independent Research.

John Tumazos: Thank you very much. Two questions. Should we expect another cobalt stream in New Caledonia to finance the next tailings projects there?

Second, I was rereading my notes from the October 2011 Mozambique Vale tour and the guidance was 77% met coal trending to 22 million tons future output fully developed. There was emphasis on the Chipanga seam 25 meters thick, but the other seams were 17 or 10 meters or smaller and variable. Is there a difference where when you open up and get into the mine just isn't as good as when promised?

Fabio Schvartsman: John, this is Fabio, let me start with the cobalt stream, and then I will gladly pass to Luciano because I was not there, and I so I have no idea what was promised back then.

John Tumazos: I will send you my notes, Fabio, I already started to write you a letter.

Fabio Schvartsman: Thank you. Regarding cobalt stream, I would like you to understand that, in our point of view, is a totally different story cobalt stream in Voisey's Bay from the one in VNC. The reason is a very simple one: In Voisey's



Bay, we didn't have the cobalt. So, the cobalt was totally dependent upon opening the mine. If we didn't open the mine, no cobalt would be available, therefore, we sold something that we didn't have in order to make the mine feasible. That was the purpose. VNC is a totally different story. We already have the cobalt in our stream of revenues and the cobalt is there. So, the impact of streaming in New Caledonia will be neutral, so the benefit that we had in the case of Voisey's Bay would not be present in the case of VNC. I hope I answered your question.

John Tumazos: Thank you.

Luciano Siani Pires: So, John, on Moatize, starting by the production volume, so the 22 million tons encompass 18 million tons through the Nacala corridor plus 4 million through the Beira Corridor. So, as you know, we ceased operations in the Beira Corridor, so we would theoretically be limited to 18. However, we are going to go to 20 based on the bottlenecking of the logistics corridor. So, what is going to limit the capacity, currently, is the logistics. In terms of these split, the 77 will not be achieved over last mines, I would know more about the ore body, and it will probably peak once we go to the new sections that I mentioned, section 5 and section 6 at 65%, from today is like 55%. Chipanga will not be as meaningful as it was before, so quantity of Chipanga is reducing. However, the other seams of coal that we are mining we have also very good quality, they have strange names, like Souza Pinto and Moatize Low Volatile, but whatever they are achieving very good price realization. So, the fact that Chipanga is decreasing should not be a concerning in that respect.

John Tumazos: Thank you.

Operator: The next question comes from Alfonzo Salazar, with Scotiabank.

Hello? Mr. Salazar, your line is open.

Alfonso Salazar: Sorry. Good morning. I have two questions. The first one is regarding the premium that you will get from Wheaton once Salobo III is up and running. If you can provide more details or anything else that you can share about this.

The second is regarding the premium that you get for the quality, premium in iron ore. How do you see that in the long term, and what do you see especially the supply side, if you think that outside Australia there could be more supply of high-quality ores that will compete with Vale's? And how do you expect that to evolve as China uses more scrap, again, in the longer term? Thank you.

Luciano Siani Pires: Okay on Salobo III, the bonus is a function of three variables: The first one is the timing of the completion and ramp up of Salobo III, so the guidance that we gave you from 600 to 700 assumes that we achieve those milestones in 2023 although the startup of the project is scheduled for 2021. So, therefore, we have a full year to achieve the production targets. And as I indicated, because these are sister plants of the two which are already operating,



that should not be difficult. So, timing is one variable; the second variable is capacity. Again, it shouldn't be an issue because we've been running sister plants for a while now; and the third variable is ore grades, which as much as we continue to mine and to know Salobo, there is no surprises we expect, historically it has been behaving according to the mine plants. So, level of risk for receiving that bonus is very small.

Fabio Schvartsman: Regarding quality premium in the iron ore universe, well, we certainly think that it is a structural thing, therefore, permanent. And there is a fact that I would like to emphasize that helps understanding what is going on in the market these days. If you notice in the last few days, the index Platts went up in a very important manner, we are now in the neighborhood of US\$ 76 per ton, that was not achieved for a long period of time. That was a combination of two things, a strong demand in China, especially because of the latest stimulus that the government is making to speed up the economy a little bit; but more importantly, our competitors made the right decision of changing the quality of the product that they are offering to the market. It always comes with a consequence, it means that certainly there are more costs associated to this decision. But the truth is that now there is more high-quality blended ore coming to the market through the index, and accordingly the index is moving forward, and this is the best showcase that we can have that this trend is so real and so important that everybody is now having to adapt to it.

Either people are offering more quality products if they have them, or they are cutting production accordingly because the market is punishing very much the low-quality. So, it is implied in this comment that we are quite comfortable that this will continue like that and we don't see anything meaningful coming in the next few years as further supply, and all the initiatives that eventually you heard of are very complicated, very high Capex, very high Opex, and there is a clear doubt if these projects will be developed or not. This is the situation as we see today.

Alfonso Salazar: Excellent, very good. Thank you.

Operator: The next question comes from Mr. Alex Hacking, with Citi.

Alex Hacking: Hi, thanks for the follow-up. I just wanted to follow-up on the nickel volumes. You mentioned that those would be back to 310,000 tons by 2020, if I heard correctly in the prepared remarks. Could you maybe disclose where that additional sort of 50,000 tons, which mines that additional 50,000 tons of nickel is planned to come from? Because, if I remember correct, the Voisey's Bay underground doesn't start until 2021. So, maybe just some color there would be helpful. Thank you.

Eduardo Bartolomeo: Okay Alex, just to clarify that, the 310 is our capacity installed, so it will be around 21 or 22. Where it comes from is the mines, of course, they have to be sustained on the level, and you made a good example of Voisey's Bay. So, Long Harbor, for instance, we have spare capacity of 10,000



tons there. We still have capacity in Sudbury of over 15,000 as well, we have this capacity. And, as Fabio mentioned, we have a huge increase in capacity in New Caledonia for nothing, just for better management and small debottleneck that we have to do there. So, there is a lot of capacity on our industrial plants to capture that. So, the path to get to the 310 will be guided by the market – by the way, so as we expect the crossing of the curve is 2020 –, but I would say this guidance will give more clarity on the Vale Day, by the way. It is just a direction okay?

Just bear in mind that we are able to produce, it's a minor investment, just to get it very transparent, it's like the second phase in Onça Puma, but that's very marginal, but that gets a lot of volume as well. But, anyway, the direction is 310, it's in our plans, it is going to be achieved as the market evolves very, very cautiously, and as we mentioned before, with a better cost structure because we are going to keep our, actually, we are going to reduce our fixed based to run that whole operation. I hope it's clarified you.

Alex Hacking: Thank you, very clear.

Operator: The next question comes from Thiago Lofiego, with Bradesco BBI.

Thiago Lofiego: Thank you. Fabio, I have one follow-up question. Could you give us an update on the railroad concessions renewals in Carajás and Vitória-Minas? What is the timing expected for those renewals and what is the potential Capex linked to those? Thank you.

Fabio Schvartsman: I will start and then I will let my colleagues here complement that. The state-of-the-art here is very advanced, we are in the agency right now, we are just waiting for a final decision of the agency. I think that by cautious reasons the agency is waiting for the elections, the change of the president in order to move forward with this. But this will be a low hanging-fruit waiting for the new president to catch. So, I am pretty optimistic that, as soon as he starts in the office, he will be allowing this process to move forward. We have everything in place to deliver this as soon as the Brazilian Executive Power decides so.

Regarding the investment, I don't remember the number and how they are going to be.

Luiz Meriz: Well, I think it's quite soon to say a number, because in the agency, as Mr. Schvartsman said, we are going through a very technical analysis. It is not final yet, and after that it is going to go to the Union Court for the final analysis, and then back to the government for final decision, and then the renewal of the contracts. So, up until now, I would say that it would be early to call a final number because we are going through a technical methodology that is about to be concluded by the agents.



Fabio Schvartsman: Only to complement that, if you take, for instance, the FICO railroad that is selected by the government to become the counterparty for the concession, this will be built by Vale once the renewal of the concession is approved, but it will take several years to build it. Therefore, the investment, no matter how much it is going to be, it will be spread among many years.

Luciano Siani Pires: And just Luciano complementing, this is a general cargo railway, which by nature costs much less than a heavy haul railway like an iron ore railway. So, if you take the numbers from the iron ore industry, they are not a benchmark for this railway.

Thiago Lofiego: Great, thank you Fabio and thank you Luciano.

Operator: The next question comes from Marcos Assumpção, with Itaú BBA.

Marcos Assumpção: Hi, good morning everyone. First question on production and sales volumes on iron ore. In the first 9 months of the year, Vale sold 95% of its production volumes basically to support the strategy of increasing blending volumes. How should we expect that ratio to behave in 2019?

And the second question, if you could comment a bit or give us an update on the pellet premium negotiations for next year as well, at least how the market is so far, supply and demand is behaving, and the trend will see for pellet premiums for next year. Thank you.

Fabio Schvartsman: Thank you Marcos for your question. Regarding the 95% or so last year, most likely we will have the same situation this year or in 2019, and the reason for that is because we are using our flexibility, and today we are in a different position from other companies as we have a lot of inventories sitting in China. We can speed up sales or slow down sales according to the behavior of the market. As naturally the market slows down by the end of the year, so naturally we are going to most likely hold a little bit of sales for next year, and this explains the level of sales in proportion to production that we had in the first quarter.

Besides that, we are coming to a closer comparison to what is been produced and sale every quarter as now we are coming to the end of the building of inventories in China.

Luiz Meriz: Marcos, regarding the pellets, we basically are starting our negotiation season, right, I mean, with the market balance showing an increase on price, but I'd rather not be much more specific than that due to the sensitivity of negotiations, the moment we are now.

Fabio Schvartsman: But the truth and the fact is that we are completely oversold, and consequently the demand is higher than our capacity. So, the natural consequence is that there will be some price adjustments because of this unbalanced situation that I just explained.



Marcos Assumpção: Perfect, thank you very much.

Operator: This concludes today's question-and-answer session. Mr. Fabio Schvartsman, at this time you may proceed with your closing statements Sir.

Fabio Schvartsman: Very good. Again, as always, it was a pleasure to have you all in this call, very detailed questions were presented, and we are very pleased to tell you that Vale is moving forward in every aspect that we are looking for. So, it seems that we are poised to have another good quarter in front of us, and I hope to have you all in the next call by the beginning of next year. Thank you so much and have a good day. Bye-bye.

Operator: That does conclude Vale's conference call for today. Thank you very much for your participation. You may now disconnect. Have a good day.