



**Local Conference Call
Vale S/A
Third Quarter 2020 Earnings Results
October 29th, 2020**

Operator: Good morning ladies and gentlemen. Welcome to Vale's conference call to discuss 3Q20 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 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 is accompanied by a slide presentation, also available at the Investors link at the Company's website and is transmitted via internet as well. The broadcasting via internet – both the audio and the slides changes – has a few seconds delay in relation to the audio transmitted via phone.

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. Eduardo de Salles Bartolomeo – Chief Executive Officer;
- Mr. Luciano Siani Pires – CFO;
- Mr. Marcello Spinelli – Executive Officer for Ferrous Minerals;
- Mr. Mark Travers - Executive Officer for Base Metals;
- Mr. Carlos Medeiros – Safety and Operational Excellence Executive Officer;
- Mr. Luiz Eduardo Osorio – Executive Officer for Sustainability and Institutional Relations;
- Mr. Alexandre Pereira – Executive Officer for Global Business Support;
- Mr. Paulo Couto – Director of Coal;
- Mr. Alexandre D'Ambrósio, General Counsel; and
- Mrs. Marina Quental – Director of People.

First, Mr. Eduardo Bartolomeo will proceed to the presentation on Vale's 3Q20 performance, and after that he will be available for Questions and Answers.

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



Mr. Eduardo Bartolomeo: Okay, thank you. Good morning everyone. First of all, I hope everybody is safe and sound.

Well, it's been more than seven months since we started managing Vale in a remote way, and one thing has not changed: the safety of our employees comes first. Vale continues to face the Covid-19 pandemic with discipline and sense of urgency. We maintain our guard very high and our priorities remain intact: safety, people, and the reparation of Brumadinho.

We have been learning a lot since Brumadinho and transforming our culture and practices for a better Vale. With that in mind, I'm pleased to share that our processes and results continue to improve together with our derisking process.

Please, next one. Starting with the reparation, our commitment to Brumadinho remains steady. We already disbursed US\$2.6 billion on the reparation. The indemnification process continues with about 8.200 people covered by agreements for moral and material damage, 600 people more since our last call.

The works for infrastructure and environmental recovery are progressing as well. We completed the waterman at Pará de Minas to ensure the supply of water to a city with a population close to 100,000 people. As well, we have concluded the tailing containment structures at the Paraopeba river. Since May, the river has no longer received sediments, and most importantly, we continue open for dialogue and to active listening throughout the reparation process. This quarter we delivered the integral reparation plan for Brumadinho, which was built on the communities' perspective and submitted in September to the municipality.

We are certain that with this we have a solid plan in our hands to repair the damage and support the development of Brumadinho.

Finally, we are having encouraging conversations with the state of Minas Gerais and other stakeholders to get a framework agreement for collective indemnities, indemnification and compensation for the society and the environment. With that, we continue to pursue our goal of reaching a stable agreement for reparation and compensation.

Please, next one. As well, we continue to enhance our safety in dam management. The Engineer Record is already implemented for 100% of our dams in the iron ore business with an improved continuous monitoring. In risk management, our Risk Identification Program (HIRA) continues now including our dams: 59 operational units were assessed since 19; 42 in 2020; and another 12 sites will be assessed until the end of this year. This program is being applied to our dams as well with pilots underway in Sudbury and Long Harbor. The HIRA will be fully implemented by 2022 in Vale.



Finally, our new Tailing Management System is under implementation and we are doing that by also complying with the ICMM standard launched in August. Our initial assessment indicates close to 60% of adherence to the ICMM recommendations. We want to be fully compliant by 2020.

So, our ambition is clear: to be world-class and have effective standards in process in place with a safety-driven culture. I can assure you that Vale is on a journey to become a safer and more reliable company.

Next slide, please. Brumadinho required us to become better listeners. We are listening to the community and society and building a strong and consistent relationship with all of our stakeholders. Based on their demands, we have mapped 52 ESG gaps, which have already closed 31 of them. In 2020, we already addressed five gaps and five more must be closed by the end of this year. Our ambition is to transform Vale into a benchmark in ESG practices.

In this agenda, another important subject is the protection of the Amazon. Let me reinforce this: we have been operating in the Amazon for more than 30 years, during this time, we have helped to protect the closed 800,000 hectares of rainforest, five times the size of Greater London. In fact, we already protect about 1 million hectares of forest globally.

With those actions, I believe that we will contribute for a sustainable mining and act accordingly with our new pact with the society.

Next one, please. Well, talking about the operational performance of our business, we continue with our plan to stabilize our production; a path that was detailed in great length during our Investor Tour in September. And I am glad to share that the iron ore production results for this quarter was very strong, an increase of 21 million tons versus the second quarter, a 31% growth. We had an all-time production record in Carajás. That indicates that we are making progress with our plans for protection stability and the initiatives for operational excellence.

Spinelli will come shortly to explain the dynamics between production and sales for the quarter.

In base metals, as anticipated last quarter, some maintenance postponement was strategic before the pandemic. We had normalized that routine and expect better results for the fourth quarter. In relation to VNC, we are taking steps to place it in carry maintenance in 2021. We also have a new group of potential investors interested in the asset. However, all possible solutions contemplate Vale's exit.

In coal, this was also another challenging quarter, highly impacted by weak demand, which continues to weight on our production. But on a positive note, we expect a finally start the plant revamp in the coming week. After that, we should reach a run rate of 50 million tons per year.



Next one, please. Besides that, we are focused on recovering our production, but we are also taking important actions to make our production compacity more flexible. The launching of Serra Sul 120 Project is one of them. Besides creating an important buffer of production capacity ensuring operational flexibility, it will allow growth of 20 million tons in the longer-term with due logistics.

Also, we launched Project West III to expand the Shulanghu port capacity in 20 million tons per year, bringing it to a total capacity of 40 million tons, securing strategic port capacity for Vale's BRBF in China.

In summary, we are taking the necessary actions to ensure the stability we need to operate with efficiency and the growth options required by the market.

Please, next one. Well, to finalize, we are derisking Vale to build a better Vale. Let me walk you through the most important steps on this journey: first, we are repairing Brumadinho in a fast way and with quality, listening and engaging with the families and community; second, we are becoming a safer company. With discipline, we continue to make solid progress with our tailing management system and our operational safety process as well; third, we are resuming production under safer conditions. I am sure that we will achieve the 400 million ton run rate during 2022. We have a clear understanding of what we must to do and we are fully capable of delivering it; and finally, we are building the conditions for a long-term stable business, keeping focus on capital discipline. With that in mind, we resumed our dividend policy and paid a solid dividend last September.

Well, to conclude, we intend to continue creating and sharing value for all stakeholders, but most importantly, I ensure you that we are doing everything we can to guarantee the safety of our employees in our operations and in our communities.

Now, I will pass to Marcello Spinelli, who will give some details about our results in iron ore. Thank you very much for your attention and we will get back at the Q&A.

Mr. Marcello Spinelli: Thank you, Eduardo. I have some information to share about iron ore production and sales. I think you have a lot of questions about sales, so let's start with the production.

So, can you pass, please, the slide? Some weeks ago, we had a chance to detail, as Eduardo said, the roadmap to reach the run rate of 400 million tons in 2022. So today, I think we have a check list, a transparent check list, we can have some deviation quarter by quarter, but definitely now we can follow together the evolution of the recovery of the production.



So, in Q3, first information, as Eduardo said, huge production in ore, 57 million tons, record, on track, with production also in all the projects around the North. And in the South and the Southeast, so far so good, on track projects, production, and the initiative with the dams.

For Q4, we are with the running rate running with the production around 1 million tons a day, it is good news, so far so good. Our target, you know, we are in the lower level of the guidance, around 310 million tons. It's very important to say that this time of the year we don't have any more capacity to offset some deviations if we face some problem, so we must deliver exactly what we have in our plan.

And what kind of risk we have ahead? So, we can say two: first one is related to the license of East range, we are still waiting for the license, we are in the last mile of that, no more information to the regulators, but we need to receive this to start this operation and we are waiting for that; and we also have been very caring about the rumor of La Niña effect. Well, La Niña effect in Brazil. just to understand, comes with more rainfalls in the North, we can anticipate this process in the North, and we have a dry season in the very South of Brazil without so many impacts in our operations. So, we have to track this trend day by day. I'd let you know if we have any change in our guidance.

So, let's focus on sales now, I think it's the most important information to the end of the year. You can pass the slide, please. Well, I have a rationale here to share with you in three steps, so I will start with the number one.

You know that we've been growing our production, our blending process in China, it's a very successful strategy, value over volume brings the high silica product from the South of Brazil, today we have a discount for US\$30 for that and we meet the IOCJ, Carajás fines. You can see the growth in this slide from -4 to 145. So, we have a stable product, growing in the market, our clients are very well-satisfied.

The second information here is about our exposure to China. China in our sales are now reaching almost 70% of our sales. Why? This is due to Covid. You know, we are following, China is in a V-shape, the rest of the world is struggling to recover the production and demand.

So, what does it mean? We have 45 days of transit time, just transit time, the shipping part, and after that we have the discharge, the blending time and also the retrieval period. And remember that last quarter China suffered with a lot of delays in the discharge time and congestion in the port. So, the lead time to close the sales is not the same as you have in FOB or a CFR, traditional CFR. We are more exposed to China and we are selling more BRBF.

We had some questions about this in the last call and it's very important to understand the difference between shipping, you know, the FOB sales, the CFR sales and the blending sales in China because sometimes in FOB you can



define the price in the time you sell, but when you have the CFR, you can sell during the shipping, but the price will be only when the product arrives in the client, and also the BRBF spends more time to blend, to have the product to blend.

Another information here to understand the whole picture, we have the inventories. You know that last year, after Brumadinho, we had to reduce our inventories to keep the supply chain of our clients. So, we reached the minimum level in the end of last year, so this last quarter we had the first chance to turn the gap in our production, to increase our production, and we need to have this time to put this product in China.

So, we're not talking about speculating inventories – that I heard some ideas about this –, it's about operational inventories. We need this to make it happen and we are now more for close on China.

But two main information here that I want to set here for Q4: first information, we don't have any intention, we don't have any planning [inaudible – audio breakage] the gap of inventories or gap of protection in Q4 and our forecast for Q4 in our production. So, we don't see any necessity to have any other kind of gap like we had in this quarter; the second information, we don't see many deviations between the Q4 sales and the Q3 production.

So, as we are moving our inventory mostly in China, we have probably numbers close to sales and inventories as we are just moving these inventories to the sales after a lot of time that we need.

So, if you have further questions, I can help in the Q&A session. Now I pass to Luciano Siani.

Mr. Luciano Siani: Okay, a few selective remarks here starting on the iron ore.

In the cost side, you saw we reduced cost from US\$17.2 to US\$14.9 per ton. We have guided for 14.5 for the second half, we will not achieve that, and the reason is because of the price increase on the third-party ore that we purchase.

Although the volume is small, we have a C1 for third-party purchasers of around US\$50 per ton, and the US\$25-increase in the 62% index impacted those purchases to the point that we decided to include information in our release about what the C1 for Vale looks like without those third-party purchases, and we have US\$12.5 per ton for the quarter, we also showed the numbers for past quarters, and that's the best measure of Vale's competitiveness because it shows how the operations are performing, not the ore that we purchase from third-parties. So, something for you to track going forward.

If we didn't have that price increase, we would have gotten to our 14.5 guidance, but we are not going to for the reason price increase.



Q4 costs tend to trend down because we had some maintenance, especially in July in the Northern system that we will not repeat this fourth quarter, and that all assuming stable exchange rates, right, because they've been fluctuating a lot and they are a tailwind for us.

For 21, costs tend to stay flat compared to 20. Counterintuitive, but the reason is although costs will be diluted by bringing more volumes, the volumes will come from the last competitive operations in the South and in the Southeast, so the mix effect will offset the cost dilution effect.

My remark on base metals goes to copper. All-time record for copper EBITDA and also on the byproduct revenues. Just a reminder for you, in 19 we have collected US\$1.25 billion on byproducts other than nickel and copper – I'm talking about gold, palladium, platinum, cobalt and a rhodium –, and that amount will increase this year to approximately US\$1.4 billion. So, something to track because these byproducts, especially palladium, they have been increasing in price and there is a US\$150-million-boost in our EBITDA compared to last year just for better byproducts prices.

And finally, the fourth quarter will be strong because we don't have any plant maintenance in our nickel operations and we are going to have Onça Puma back on full steam, and depending on prices we expect Onça Puma to start generating between US\$40-US\$50 million every quarter in EBITDA.

Going through the P&L, you saw financial expenditures, some one-offs, these were fundamentally why we missed the consensus on earnings per share. We had a US\$550 million expense on the debentures, the participation debentures. These debentures they were issued at the privatization of Vale, more than 20 years ago, and they work like a royalty on iron ore sales, and they, therefore, are mark to market every time iron ore prices go up, they are mark to market. This is not a cash expense and they flow through our balance sheet.

And the news here is that the most important holders of these debentures are the National Treasury and the Brazilian Development Bank, they announced the intention to sell those debentures. That poses an opportunity to Vale because those debentures are a royalty or a leakage to our shareholders.

This year alone we are paying US\$200 million on those royalties. So, we have the fiduciary duty to look at this opportunity and eventually Vale, if we decide to repurchase those debentures, that would entail a tender offer for repurchase and that would happen in the first quarter of 21. So, something that we are analyzing.

We had also increases in the value of guarantees provided by Vale to some of its affiliate companies, that relates to the depreciation of the Brazilian real, those indebtedness are in US dollars, so, therefore, the increase in value when translated to Brazilian reais this flows through the P&L.



Other important thing, we updated the guidance for capital expenditures for this year. The we have guided on Vale Day US\$5 billion for this year, the exchange rate depreciation would bring that number now to 4.5, but with Covid delays we are now into 4.2 territory, and those Covid delays they will necessarily impact capital expenditures for next year because the work needs to be done and it just shifted from 20 to 21.

Finally, on cash generation, you saw robust cash generation this quarter although working capital were still negative, the change in working capital for two reasons: Spinelli talked about inventory buildup still; and secondly because the sales that were mark to market at the end of the quarter were marked to higher price than the sales marked at the end of the second quarter. So, that increased Accounts Receivables. So, again, those two effects should revert next quarter and you are going to have a better conversion from EBITDA to cash on the fourth quarter.

Financial net debt decreased despite the substantial dividend distribution and expended net debt also decreased, and I assure you that... and the expended net debt is at 14.5, which is still far from the target of US\$10 billion. Important here is that the US\$10 billion-target for expended net debt is a long-term goal, it's not something to be reached on the short-term and it will prevent us from keep paying extraordinary dividends on the path, which is our goal.

Now onto 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 star one. If at any time you would like to remove yourself from the questioning queue, press star two.

Please, restrict your questions to two at a time.

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

Mr. de Alba: Good morning everyone, thank you very much. I hope you are doing fine.

My first question is regarding the potential agreement or the negotiation discussions that you are currently having with the authorities on the Brumadinho settlement. Could you explain us maybe what are the next steps and the roadmap on this process to the extent that you have it?

And second, on the same topic, it is my understanding that there are four big blocks of potential payments: one is the collective damages; two, the social



economic damages; three, individual and social economic damages; and four, environmental damages. Are all these four, if I am correct, included in the ongoing discussions that you are having or only some of them are part of the discussions?

And then if I may ask, just very briefly, maybe an update on Samarco and also given that Luciano spoke about potential opportunity for Vale to buyback the shareholders' debentures, what about the potential sale of divestment of shares owned by the still (I guess) controlling shareholders that is expiring in November?

There might be some regulation that I think may prevent you from buying those shares in the market, or directly you might be able to buy it in the market, but if you could help us to understand that situation that would be great. Thank you. Thank you very much.

Mr. Bartolomeo: Okay, Carlos, we are fine, thank you. I will give you a broader picture and I will ask Alex D'Ambrósio, our Legal Counsel, to detail. I think it's everybody's question, so I think it's better to tackle everything, so we don't leave any room for doubts.

I think, first of all, we've been discussing with you during the last calls and in the meetings that we have that we were having discussions with all stakeholders, and when I mean stakeholders is the state, the prosecutors, the defendants, even the AGU (it's a Brazilian entity at the federal level).

So, what is different now? It's different that now we are making a process of mediation that was brought to the Court of Justice and that improved, in a way, the convergence of the framework, because one thing that we have been consistently saying is that we want a stable, a legal certainty that we can execute on the compensation and the reparation of the tragedy.

So, the news is that now we are under a different environment, on a different approach, and then I think we will come to your question about our roadmap. There are steps that have to be taken, and I think Alex can cover you and explain with a little bit more detail on those kinds of steps that are necessary to achieve this framework agreement.

And secondly, it's encompassed everything, but I think Alex can manage that as well because, you know, we have three civil actions that refers to those elements that you mentioned, and, of course, they will have to be covered on this more holistic or whole agreement.

Can you help me with that, Alex?

Mr. Alex D'Ambrósio: Of course. Thank you, Eduardo. Hello Carlos. As Eduardo was saying, there has been a very positive evolution as of last week since the conversations have now moved to the mediation chamber of the Court



of Appeals of Minas Gerais, it is a formal mediation chamber, they call it the Cejusc. As a result, these negotiations will now take place in a more structured environment with the support of mediators, who are judges themselves of the Court of Appeals, and the president of the Court of Appeals himself is participating in this mediation process since he wants to see this agreement to succeed.

Now, if we reach an agreement in this environment, we will have much more legal certainty as it would be sanctioned by the Court of Appeals itself. So, that's why we think it's positive. All the plaintiffs are invited to this mediation, and so, it's a large group of people and the conversation is mediated by the judges, as I mentioned, and so, the idea is that it would be encompassing for all the parties involved.

Conversations are indeed evolving and they are very constructive, but, as you can expect, there are many challenges to overcome and the main one is to draft a document that would be acceptable for the many parties involved and that would offer legal certainty.

So, we need legal certainty, that's been stated from the outset, we need governance that ensures speed of reparation, and there is still no definition of values, okay, because this will be discussed after we have this framework.

The second part of your question, what will this cover? Well, we have, as you said, four basic blocks: one, which is not in this agreement, is the individual indemnification, so people are coming to discuss with Vale directly and that's Eduardo mentioned 8,200 people as of this date approximately have already been indemnified. What we expect is that the agreement would sanction the individual discussions with these people. So that's been already agreed in concept and that would be part of it; there is environmental reparation, that would be in disagreement although environmental reparation is an obligation that we would undertake to deliver. We don't have a value, we only have estimates, but that's not something that we would pay off, we would actually continue to pursue the reparation; there is a collective damages part that would be kept, that would be paid off; and there is what we call the social compensation part, which would also be kept and that would be paid off.

So, I think the covered the four, and that's what we are proposing, that's what we are discussing at this time. I hope I answered your question. Thank you.

Mr. Siani: Okay, Samarco continues to be on track for restart in December. It will produce to the capacity of 8 million tons, there will be a ramp-up in 21, so probably by 21 the production will be somehow smaller than 8 million, but it will reach, definitely reach that production capacity somewhere in 21.

As regards the potential sale from shareholders after the end of the shareholders' agreement, obviously, that is a decision that pertains to them, but should it happen, Vale can eventually... that would be a public offer, like a



follow-on offer, a secondary offer in the capital markets, there will be book building process, demand could be x times higher than the supply, and yes Vale could theoretically put a bid on those shares. However, according to Brazilian legislation, if demand is higher than the supply of shares from any selling shareholder, Vale would be the first one to be cut because it is considered a related party in this process.

So, if Vale wants to buy shares in the market, the most obvious way would be to launch a buyback program rather than go into such a follow-on because it's very unlikely that we will be able to buy those shares in such a process.

Operator: Thank you, before proceeding, please, restrict your questions to two at a time.

Our next question comes from Timna Tanners, Bank of America.

Ms. Tanners: Yes, hi, and I hope everyone is doing well. I want to ask a bit more about your market outlook on iron ore, if you could give some specific comments on the pellet premium outlook and premiums for higher iron ore grids. So, along those lines, just asking I guess about the better demand outlook for the year to support higher pellet premiums, and, you know, with the announcements with some additional supply coming on, how are you thinking about the outlook for supply and demand in the next year or two? Thanks.

Mr. Bartolomeo: Go ahead, Spinelli.

Mr. Spinelli: Okay. Hi, Timna, thank you for your question. Well, let's start with the pellet premium.

Well, what we see, as you know, what we have I think two main markets here in this case: the direct reduction pellets is more related to the Middle East, and in the US we see a recovery in these markets – obviously, all the problem with Covid that we can further problems –, we see these markets more stable and recovering for next year; and in case of direct reduction, we have one thing that we must track: that China is again opening the import of scraps, this can bother the scrap in market, the seaborne scrap market that is around Turkey and the US, this can improve the price of the scrap and bring more margins to this Middle East market.

So, last track on that we see that the trend for short-term we just see a stable price, a stable premium, but we can have some cap between the blast furnace pellet and the direct production pellet for next year, but we must track that.

On the other hand, the blast furnace pellet is quite the same that is happening in the market of Europe or Japan, so we are struggling with these new lockdowns in Covid. Our number for this year is that we will have for the whole ex-China a decrease of around 12%, and the most developed countries we see



19%, but depends on the new Covid outbreak, and we see a recovery for next year around 9%. So, that's the outlook we see in the market.

The supply demand balance, I see today during this quarter and the next quarter will be more balanced, we are returning around 60 million tons, only Vale. With the market, we see some new exotic producers that are coming to China, like India or other regions like Europe going to China. I think they will probably go back to their original markets, that's the tendency that we see in India. And then we see a supply and demand well-balanced, our numbers are narrowing now the supply and demand to 1% or 2%. That's the forecast for next year.

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

Mr. Brandt: Hi, good morning, good afternoon. Thanks for taking my questions. Luciano, I first wanted to ask you about the C1 cash costs. So, I certainly appreciate the disclosure around sort of your own C1 cash costs of 12,50. If I'm not mistaken, the target and the guidance that you've historically talked about has sort of total C1 cash costs including third-party purchases.

I'm wondering if you could give some more guidance or target as it relates to your own C1 cash costs in the next three to four years as you ramp-up production close to that 400 million tons. I mean, how much further should we expect your own C1 cash costs to fall?

My second question I guess is more related to nickel and the EV battery theme. Is it something that you're potentially looking to move further upstream in the battery supply chain given your exposure to nickel and cobalt, especially considering the government of Indonesia's ambitions to become EV battery destination and your relationship with the government? Could we see sort of more investments further upstream here? Thank you.

Mr. Siani: Okay, Jonathan, I will give you numbers, the full numbers, okay, including the third-party purchases. The best quarter we had was 12.8 fourth quarter of 18 when we were producing at a rate of 385 million tons. So, that gives you an idea of where we can get. With the adjustments for the new FX rate, that 12.8 could be perhaps between US\$10 and US\$11 per ton.

Yes, we have had some depletion, which means transportation distances have increased, but if we have the licenses, for example, in the [unintelligible - audio breakage] open up new mines at the rate that we you would like to, then we could reasonably get, when we get to 400 million tons, to US\$10 to US\$11 per ton at existing FX rates.

Mark?

Mr. Bartolomeo: Yes, I want to answer this question first. John, thanks for the question because I still have my foot on the base metals. So, first of all, there is



a lot of interest on the OEMs and the kinds to talk about the [doubtful word – BASF/ASF], a lot of players are coming to talk to us, but we have no intention whatsoever to go upstream. We are focused on using our assets and our mining assets. That's a very important point is well.

So, there are initiatives, they are looking to different mining assets that would require that kind of approach that you mentioned around governments and helping like specific mining in Canada, we are having this kind of discussions, but we would stick to where we know and where we are good at, that's the mining side.

Mark, are you still in the line? You could complement.

Mr. Mark Travers: Yes. Oh, yeah, that's absolutely the case. And I would say that we already have some options for some participation. For example, we do have the Pomalaa Project in Indonesia where the product would be suitable and would be directed towards the electric vehicle batteries. So, those kinds of things are there, and also, some of our products, for example, coming out of Sudbury and the UK refineries are suitable for electric vehicles.

But as Eduardo said, if we see the kind of growth that we are anticipating in the electric vehicle market, the supply chain is going to look for some tremendous amount of supply. The typical source people are talking about are [unintelligible] technologies out of Indonesia, but we would think they were going to need more mines developed in the coming years to meet that supply, and obviously, that's our interest, is trying to find the right ways to get those mines up and running to support the electric vehicle industry meeting the returns that we need to see.

Operator: Our next question comes from Andreas Bokkenheuser, UBS.

Mr. Bokkenheuser: Thank you very much. I hope you all are well.

Just a quick question on freight. How has it been so far with the past year in terms of the freight, especially to China? Has that most been on Valemaxes and VLOCs? And equally as important, as you kind of progress towards 2022 and aim to get to those 400 million tons production back, what is your vessel capacity there? Do you still have new vessels coming in the shape of Valemaxes and VLOCs or are you going to be more dependent on the third-party vessels possibly in the spot market in that scenario? Thank you very much.

Mr. Spinelli: Thank you, Andreas, it's Spinelli here. Thank you for your question. Regarding freight, I think we have to talk about the fleet firstly. We are improving our Gvaibamaxes' fleet. The strategy is to have vessels and the vessels are on track. So, our trend in one or two year is to reach our level what we consider the optimal level to 400 million tons, so that's a track coming out.



So, in short-term, we have some exposure in the spot market, it's not so high, we had some reflections in the freight this quarter and we will have some next quarter, but all the fluctuation in the bunker price there will be some offset in this trend, so we will see a stable freight for the next short-term period.

[Unintelligible - audio breakage] about the scrubbers and the freight, you know that we have the permit installations almost on track, so today the gap between the high sulfur and low sulfur is lower than before, now it's 60, but most of our freight will be used this year, and we count on that on next years is higher than 90%.

So, that is a trend, keep the strategy to grow the fleet, but in the level that we can manage this part and the flexibility of this part in our own vessels.

Operator: Our next question comes from Chris Terry, Deutsche bank.

Mr. Terry: Hi, Eduardo, Luciano and Marcello and team. Two questions from me. Just on the sales versus production, for what I understand, you're correctly saying sales should be close to production in 4Q, and as we focus on 21 and 22, as you ramp up to 400 million tons, can you give us some color on what you expect the inventory bill to base you at additional blending thoughts over that period?

And my second question is on coal. After you did the three months revamp, how long will it take you to get to the 15 million ton run rate? Thank you.

Mr. Spinelli: Thank you, Chris, for your question. It's Spinelli. Again, it's important to understand the fluctuations are related most of the time... we should not compare the production in the quarter and the sales in the quarter. So, I think the best comparison is between, in this case, Q4 sales and Q3 production. So, if you consider all the time the transit and the lead time, it is the best comparison today.

We can have some gaps of inventory in case of a gap of production like we have. So, as we've been building for a long time, we lost inventory last year, now we are going to return this inventory building because it is the quantity we need to make the blend. So, we see few gaps (probably in one or two years) every time we have a difference between production in the quarter, but as we have the inventory in China, we have more flexibility. So, we don't have significant the difference between sales and production during the period.

So, it was the first time we had this gap after the decrease of inventory, but it's not what we think in short or long-term, we are going to increase gradually this inventory and we have some differences, but not significant.

Mr. Bartolomeo: Paulo, can you go ahead?



Mr. Paulo Couto: Yes, thanks for the question. After the maintenance program, we will have a small [unintelligible - audio breakage] and we expect to reach the 15 million tons per year run rate starting from the second half of the year, of 2021.

Operator: Excuse me, are you ready for the next question?

Mr. Bartolomeo: Yes, go ahead. I think he answered the question from Chris.

Operator: Yes, our next question comes from Alfonso Salazar, Scotia Bank. Please, proceed.

Mr. Salazar: Thank you, thank you for taking my questions. I have two. The first one is regarding iron ore and the implications of the Chinese restrictions of medical imports on your iron ore operations. I don't know if you can explain if you expect the use of different coals to change the needs of blending or adjust the marketing strategy of your products?

The second question is regarding your base metal division, and in particular on copper. There is a lot of interest on good performing copper assets, but apparently the ones that you own look bullish in your iron ore and nickel portfolio. So, I was just wondering if you can share thoughts on how to unlock value of those assets in particular, copper assets and the expansion projects that you have on copper, and if it's possible to unlock that copper value before nickel.

Those are the two questions I have.

Mr. Spinelli: Thank you, Alfonso, it is Spinelli here. Well, if I understand your question, so our product is now very stable quality in BRBF in China, as we can have some demand regarding the problems, now their increasing the cost of coke and if they have a better margin they can save some cost of energy they can improve to better quality. So, we can support them with iron ore IOCJ or the Carajás fines or our BRBF.

Every time we discuss about quality, we can I adjust this, but we've been working in a very stable operation for BRBF, it's very important for the choice that the steelmaker can take when they want to change the blast furnace products, so we must to take the quality in a stable way.

Mr. Bartolomeo: Okay. Alfonso, if I got your question clear, I really think we have to unlock value on copper. There is a good discussion undergoing Vale now around exploring our Carajás province. We have a tremendous province there, there are some synergies with iron ore that we are unlocking, so we are talking about Alemão, we are talking about even Salobo floor if we can revise reserves, we can talk about Paulo Afonso, a series of assets that we have there.



So, I think there is a (we call it here) “copper dream”, everybody wants copper, it's obvious, it's the commodity, I think iron ore and copper are the no-brainers, and we do have exceptional assets in Carajás that need to be developed.

And why you talk about unlocking value? I think it's a more complex question because since the beginning and we started to turn around the whole base metals business – and we believe this is undergoing pretty well as nickel has been proving –, we need to fix the house as well. So, there are (I think) double... I would say, double-face story here: one is to fix the assets that you have, and second is to grow the assets that you have on the ground.

So, we are extremely optimistic that we can – and we are doing to show that on Vale Day by the way –, our expectations about copper, we are very upbeat on that, and if we come back to the famous 30% of relevance of base metals inside Vale, we could unlock on that way when people start to perceive value on the base metals business besides iron ore.

Iron ore is too big still in relation to base metals. We won't have time to discuss in the call what kind of options we have, but one for sure is to do the right thing with the right assets and that's the one thing that the market (how could I say) values it.

But I'd like to ask Mark as well, because Mark is very passionate about this theme as well.

Mr. Travers: Eduardo, you are right, I am very passionate about the copper business and base metals. It's an excellent business, it generates a tremendous amount of free cash flow and it's got tremendous opportunities going forward. We spend a lot of time stabilizing the business, we are seeing some good stability coming this year, Salobo is performing very well now, now Sossego is performing extremely well this year and staying on budget. Next year I think we are moving more into a productivity-type agenda to increase at the returns of the base that we have right now.

And as Eduardo mentioned, the growth opportunities are there, not only the ones we've talked about in terms of Cristalino and Alemão, which are on our agenda, but also unleashing through synergies, as iron ore and the railroad system, they can bring us even further.

And finally, I will note that we have a very good, world-class project in Project Hu'u in Indonesia, we've been releasing drill results, this is a world-class copper project in the making as well.

So, very excited about the copper business as well as the nickel business. Thank you.

Operator: Our next question comes from Sylvain Brunet, Exane BNP Paribas. Please, proceed.



Ms. Brunet: Good afternoon gentlemen. So, two questions. The first one on iron ore, just to maybe get some sense of the demurrage costs you would guide us to Q4, if we should assume some continuity in them.

And my second question is on VNC. Should we assume zero production in Q4 as you are ramping down? And what is the value left on your books after the several impairments fees? Thank you.

Mr. Siani: Okay, yes, Sylvain, the costs, the iron ore costs will continue to come down on the fourth quarter because we don't have any major maintenances and we are going to spend less and dilute through the production.

On the books, VNC has zero value, we just wrote down the rest of the value that it had this quarter.

Mark?

Mr. Travers: Yeah, and Luciano, just in terms of production at VNC, the way the carry maintenance process works is we do need to prepare for consultation with the Workers Counsel and we continue to operate at, I would say, sort of a stabilized rate while we go through that. So, you will see production of the nickel hydroxide in Q4 let's say roughly what you would have seen in Q3.

Operator: Our next question comes from Christian George, Societè Generale.

Mr. George: Yes, thank you very much. Luciano, can you just go through again your cash costs for Vale iron ore operation? You mentioned 10-11 was your best performance in 4Q18. That was at the FX rate of today I understand, and you are saying that you can achieve again 10-11 in future. Is that also just for Vale or that includes purchase ore? That's my first question.

And the second question is on the debentures that you may be considering purchasing or bidding for into new year. What kind of [unintelligible] or magnitude should we take into consideration? Thank you.

Mr. Siani: Okay. Yes, the 12.8 of fourth quarter of 18 at today's exchange rate would be between 10 and 11. And yes, we may get to there, but also you should normalize by the price of iron ore, if the price of iron ore was the same price of the fourth quarter of 18, the third-party purchases costs would be lower and the overall aggregate C1 of today, as we speak, would be perhaps another US\$2 below what it is. So, instead of 14.9, it would already be at 12.9 and we would be targeting 10 to 11.

So, those are important.



I think on the last question I had mistaken my answer; the question was about demurrage costs. So, there is no meaningful decline of demurrage costs from the third to the fourth quarter.

And I think the next question is for Marcello Spinelli, right?

Mr. Spinelli: We don't have a lot of source of purchasing in Brazil, so there must be stable number comparing to this year.

Operator: Thank you, our next question comes from Tyler Broda, RBC.

Mr. Broda: Great, thanks very much for the presentation. My questions have been answered, but I have two quick follow-up ones. I guess on the Project West, if all goes to plan, when should we expect that inventory to start building products for 20 million tons?

And then secondly, I guess just on VNC, in terms of seeing bidders back in table, if nothing is able to be agreed, what should we look at in terms of shape of the closure costs? Thank you.

Mr. Spinelli: Thank you, Tyler, it's a Spinelli here. Well, the West Project, we have this partner in China, it is the Shulanghu port, we already operate there, it's in the Delta of the yellow River... the [unintelligible] river, sorry. So, it's a very important position for our blending and all distribution in China.

So, when we are improving that, we are not saying that we are going to use this, increase this inventory considering the whole picture of Vale. So, that's our main market in that area, so we want to evolve there and sometimes we can offset with other ports. And we are expecting to run this operation in two-two and a half years. So, it will give more flexibility rather than improve or increase our inventories.

Mr. Travers: Tyler, just on New Caledonia, as you mentioned, there some bidders that are looking at the asset, there is one group that is, I would say, put forward, I would say, a rather fulsome offer, but that's an offer by management working together with employees and supported by Trafigura. We will know in the next... you know, in the coming week or so how that is pending out. But we haven't stopped on the planning for carry maintenance.

And just in terms of estimates, what we are planning for is carry maintenance rather than full closure. And just in terms of how that looks, it is quite a detailed process that is underway and we are preparing for and it does require us to sit down with the Workers Counsel and talk about what that looks like. So, at this point, we don't have an estimate we can release.

What we can say is that if you look at the requirements to fund New Caledonia if we were to operate for the full year next year, we would estimate that the carry maintenance funding requirements would be roughly the same next year and



then the carry maintenance funding requirements for the following year would be a fraction of those operating costs.

So, primarily next year so roughly equal to what we would require to fund the operations.

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

Mr. Bartolomeo: Okay, thank you. Thank you again for your questions, attention, and the opportunity to share with you our story.

I think, as you perceived, the quarter was a really positive one and it encourages us that we are on the right track, but I'm being repetitive on this: we are not in a sprint, we are in a marathon, and I think we've been making strides in Brumadinho, I think we are repairing, as we mentioned before, with quality, with empathy. Safety is our priority, we've been improving, we are very happy with the results in Carajás this quarter, it shows us the potential that we have in that province in iron ore and we are on track to recover production.

And, as everybody that knows of Vale, we are extremely conservative on capital, we are going to return the capital to the shareholders, to all stakeholders in place, we've been extremely disciplined. So, I think what we want to convey to you is that we are striving to derisk the company, but that will make us a better company.

And again, thanks a lot for your attention and let's see you in the next call. Have a good day and stay safe.

Operator: That does conclude Vale's conference call for today. Thank you very much for your participation.