



**Vale S/A**  
**Third Quarter 2019 Earnings Results**  
**October 25<sup>th</sup>, 2019**

**Operator:** Good morning, ladies and gentlemen. Welcome to Vale's Conference Call to discuss 3Q 2019 Results. At this time, all participants are in a listen-only mode. Later, we'll 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 follow by zero.

As a reminder, this conference is being recorded, and the recording will be available on the company's website at [vale.com](http://vale.com), at the investor's link. This conference call is accompanied by a slide presentation, also available at the investor's link at the company's website and is transmitted via internet as well. The broadcasting via internet, both the audio and the slide 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 microeconomic conditions, market risks, and other factors.

With us today are:

- Mr. Eduardo de Salles Bartolomeo – President and CEO;
- 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. Alexandre Pereira – Executive Officer for Business Support;
- Mr. Alexandre D'Ambrosio – General Counsel;
- Mr. Juarez Saliba – Director of Coal, Strategy and Mineral Exploration; and
- Mrs. Marina Quental – Director of People.

First, Mr. Eduardo Bartolomeo will proceed to the presentation on Vale's 3Q 2019 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.

**Eduardo Bartolomeo:** Ok, thank you. Good morning everyone. I would like to begin our conversation about the third quarter's results by recalling two messages which I have been reinforcing since I took Vale's leadership. First, that we will fully repair what happened in Brumadinho; second that we are committed to making Vale one of the safest and most reliable mining companies in the world. To recap, our priorities are safety, people and reparation. Nine months have passed after Brumadinho and we continue to be extremely committed to these three words.

We are paving the way for new forms to make our business better, safer and more stable. We are working day after day with a very high level of rigor in the manage of our risks, but also with a very keen eye for everything that society is demanding. As you can see in this slide, our objective is the full reparation of Brumadinho and each day we've moved toward this goal, taking the lead to bring dignity back to the affected families and communities.



First, we have opened a number of negotiation fronts to advance with compensation as quickly and broadly as possible. Public authorities have been key players and together we have been able to close three very important agreements addressing emergency, civil and labor indemnities. Over R\$2 billion or around US\$500 million have already been paid to individuals in compensation for material and moral damages. As for the labor perspective, we have signed agreements already considering the families of more than 230 victims. In addition, we have entered into another 22 agreements with different stakeholders covering a variety of objects including environmental remediation. On the environmental front, the second water treatment station was already delivered, and the work of tailing removals and treatment continues at a fast pace.

Next slide please. Well, speaking now about safety, I want to reinforce this message. We are working intensely to de-characterize nine upstream dams. The Fernandinho and 8B dams will be completely de-characterized in 2020. Well, next slide please. I mentioned a little bit what we are doing outside Vale. Now, I would like to refer to some changes that we are taking place within Vale. A very relevant step for our governance was to open more information, channels and discussion forums about risk management in the Company.

We currently have four specialized committees, one which is fully dedicated to geotechnical risk management. We have also reinforced our models of lines of defense with the new safety and operational excellence executive office, which already has a work planning in place. In our dam assessments and management, we are implementing a very high level of rigor with the most conservative methods. Thinking on our portfolio management, the Company's assets on a global scale are passing through a risk assessment at a fast pace. We want our asset portfolio to represent the Vale of the future. I will not anticipate further details today, but I'll give you a better view during the Vale Day in December.

Ok, next please. With relation to our business, we are actively working to reduce Vale's uncertainties and achieve our objectives. Our third quarter results indicates that we are on the road to stabilization. Please remember that we said that the second quarter was a transitional period. When we started to resume operations, we faced strong impact of fixed costs in the merging into C1 and also a large impact from stoppage expenses. Well, in this third quarter, we have already moved towards a higher normality. As we anticipated, we had higher volumes, higher cost dilution and a good reduction in C1 above US\$2 per ton. Brucutu is operating and we have resumed part of the dry processing at the Vargem Grande Complex. In the Northern System, production headed by the result after heavy and unusual rains that occurred in the last quarter.

Please, next slide. Well, with this performance, as you can see in this slide, we are sustaining a strong cash generation. Another point that deserves your attention are the provisions. As expected, we had no provision adjustment in this quarter. What we have done is the gradual desimbursement of amounts provisioned while paying indemnities and various initiatives that we have developed related Brumadinho. As for the nickel business, we had higher productivity in this quarter with greatest ability at the refiners in North Atlantic and Asia. We expect as well a stronger fourth quarter. In Brazil, the resumption of Onça Puma was symbolic steps toward the stabilization of production as well in the base metals business.

Please. Well, in this context of stabilization, I want to highlight that we are working to ensure that our asset portfolio and operations represents the Vale of the future. Vale is well positioned in a scenario of growing demand for social and environmental responsibility. A flight to quality is a necessity. Currently, there is a higher offer of better quality product in the market, but that means a moment of temporary imbalance. We believe that the demand for better products will continue to grow. As some of you may have seen in the investor tour on October, Vale has a great potential to contribute to the reduction of greenhouse gas emissions by the steel industry. Therefore, we are evolving to ensure the best and most flexible product portfolio in this new reality.

Ok, the next slide please. As for capital allocation, I've been repeating this message and I will do it one more time. The payment of dividends or buyback depends on the progress of reparation. Clearly, we have made progress in this process and I believe that at some point we will have the appropriate conditions to talk about differences, but that moment has not yet



arrived. In the meantime, we'll have some options for capital allocation with discipline. We have recently announced bond repurchases to continue on a debt reduction path. As I said before, I hope to bring you a clear idea about this theme at Vale Day as well.

Ok. To conclude, I'd like to refer to our guidelines to reduce Vale's uncertainties. We have been working hard on each of these four points starting with Brumadinho. First, I believe that reparation is a key to building a better Vale. Our governance is getting stronger and our risk management evolves every day. This quarter we took important steps towards stabilizing iron ore production. At the same time, we are working to have a portfolio that is even more adjusted to market demands. Finally, I reinforced that we will continue with our discipline on capital allocation. Well, as I said, with the commitment of our entire team of more than 70,000 employees, we will build a Vale that is stronger, safer and more reliable.

With that, I would like to thank your attention and pass the word to Luciano, who will give more color on the third quarter's results. Thank you.

**Luciano Siani:** Good morning. Four topics I would like to highlight starting by – in the iron ore business. A note on the costs, as you've seen, we've delivered a reduction on C1 cash costs regarding a further reduction of US\$1 to US\$1.5 in the fourth quarter and going forward additional reductions are very linked to the resumption of production. We were still operating at a level of US\$2 to US\$3 above what would be normalized costs even after the fourth quarter reductions. A reason for that is our production flows especially in the South are very much hindered where trucking or where we didn't want a truck, we're not loading at the bright loading points for our railways. We are not blasting the mines. We are in some cases using dismantling – using a mining equipment. These all adds to costs.

Also, within iron ore, freight rates have increased, our average freight rates, importantly in this quarter and that had to do with the sudden increase in spot rates following the restart of Brucutu. What we did was we had volumes, which were contracted on one to two-year contracts of affreightment. We sold these contracts in the markets because we didn't know if we were able to use them in order to – for Brucutu or not. And once Brucutu restarted, we have to go back to the market and rehire freight, but now at much higher rates and exposed to the spot market. This has been normalized and in the fourth quarter, you should expect the reduction of Vale's rate and a further reduction on the average of 2020. However, slightly higher freight rates in the first quarter, but slightly lower on the fourth quarter, reductions across the year with the installation of scrubbers and less exposure to low sulfur oil with the IMO regulations.

Second on the nickel business, just wanted to call your attention to the 30% hedging of production. We have very strong CAPEX outlays in the nickel business next year and the following year, especially with the completion of the Voisey's Bay underground mine expansion. Because of capital discipline, the businesses have to stand in their own two feet. And therefore, 30% of the nickel production was hedge after the spiking prices following the Indonesian ore ban. Third, on the cash flows, as you've seen we had US\$3 billion of cash flow generation, which together with US\$1.8 billion of funds, which were freezed and were released for a total of US\$4.8 less, the acquisition of Ferrous led us to US\$4.3 billion of total cash inflows, which is exactly how much our net debt decreased in the quarter.

Some things helped cash flow generation, some things didn't help. On the positive side, we had a US\$900 million positive effect on working capital, of which about half of it comes from the collection of invoices issued in the second quarter at very high prices. And the outstanding invoices from the third to the fourth quarter, they are accounted for at much lower prices, a very, very big difference. So, you see these – this change in working capital because the accounts receivable goes down, but the nature of it is collections from the very high prices of the second quarter. So, this does not something that should be reversed.

On the other hand, about US\$400 million comes with things that we will need to pay in the following quarters, especially suppliers as investments accelerate throughout the end of the year, some provisions for variable compensation for our employees, freight payments, leasing payments and the like. So, you should expect US\$400 million to reverse over the next two quarters. Calling your attention also for the amount of disbursements related to Brumadinho, US\$386 million were disbursed against provisions and another US\$225 million were disbursed



against EBITDA, so more than US\$600 million and this should be a good proxy for what to expect going forward over the next many quarters. So, this is an important reduction in cash flows going forward.

The US\$225 million for Brumadinho come mostly from day to day expenditures that are not provisioned for, for example, the 400 people that are working on the reparations are employees of Vale, the source of water for the populations around the river, the operation of the water treatment stations, the monitoring of water, small civil works of reparation that have a smaller values and do not relate to a specific legal agreements. So again, as I said, this should be typical going forward.

And again, also something which was non-recurring in the quarter was the US\$243 million that were paid as premium for the retirement of the bonds that Eduardo mentioned. Now those bonds were trading above par. So, we had to pay a premium in order to retire them that reduced our cash flows. So, all in all the factors that helped our cash flows are similar in magnitude to the fact that helped that decreased our cash flows. So, US\$3 billion is very much approximal of what the business effectively generated in the quarter.

Lastly, just a comment on net income. Some of you might have noticed that the financial expenses have increased in the quarter. There's US\$486 million non-cash charge because of the mark-to-market of our participation debentures. We have increasing price by almost 20% in the quarter. The lagged increase in iron ore price, probably part of this price increase should reverse in the next quarter as iron ore prices have come down. Those debentures are very illiquid, so they tend to lag iron ore price movements and therefore part of these US\$486 million charge should reverse.

We are now open for questions and answers.

### Q&A 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 follow by one, if at any time you would like to remove yourself from the questioning queue, press star two. Please, restrict your question to two at a time. Our first question comes from Carlos De Alba, Morgan Stanley. Sir, you may proceed.

**Carlos De Alba:** Good morning everyone. Thank you for taking my question. The first one, maybe Luciano just to clarify – so the – almost US\$600 million these bores are related to Brumadinho, about US\$346 million are coming out of what was provision before and US\$225 that went against EBITDA. So, this is something that you expect to be more or less recurring on a quarterly basis for the next few quarters maybe until late 2020 or first half of 2021. That's my first question. And my second question is given the around US\$3 billion normalized cash from operations that you expect to generate per quarter going forward. What can we expect and what are the next steps or the roadmap in terms of liability management? What do you want to tackle given that the repayment of dividends or the resumption of dividend payments is still unknown? What do you want to tackle? When do you expect that we're going to see some announcement in terms of what are the liabilities the Company will pay with this strong cash flow generation? Thank you.

**Luciano Siani:** Carlos thanks for your question. Yes, you should expect similar disbursements related to Brumadinho going forward. Things that could abbreviate part of those disbursements are, for example, if the populations resume sourcing water from the river, then you should see some decline. But while we're still waiting for good news and that's a conservative assumption of what to expect going forward. On the US\$3 billion normalized cash flow, I didn't say that we should generate US\$3 billion each and every quarter coming forward. Remember that there is some seasonality in Vale's cash flow generation tends to be stronger in the third and fourth quarter and less strong in the first and second.



So, this is a normalized cash flow generation for the third quarter for Vale, just this note. In terms of liability management, there are some non-debt liabilities that we want to address. First in line are the preferred shares of MBR, which is a subsidiary that holds some iron ore assets and there's a financial investor that holds those preferred shares. It's being very – we have been paying a lot of dividends because of iron ore prices on those preferred shares, so we intend to withdraw those. We're looking into some lease contracts as well. And you should continue to see gross that reduction given that the carry is clearly negative, so not only net debt will reduce, but also gross debt needs to come down in order to eliminate this carry. And as regards dividend payments, as we said, we linked it very directly to reparation efforts. And we don't see right now as having the conditions to resume dividend payments.

**Carlos De Alba:** Thank you.

**Operator:** Our next question comes from Jon Brandt, HSBC. Mr. Jon, you may proceed.

**Jon Brandt:** Good morning. Thanks for taking my questions. I first wanted to ask you about the iron ore premiums. So, it sounds like you're very convinced that we'll return to normalized levels. I'm just wondering what gives you the confidence, is it an improvement in sort of the Chinese steel environment and improving margin there? And if we don't see that improvement that you're expecting in the next three to six months, would you consider potentially decreasing the quality of your product portfolio and maybe shipping lower quality product. I guess that's my first question.

And the second question, just sorry to ask about the capital management. What else would you consider doing? I mean, the shareholder debentures, is that something that you could look to potentially buyback and get rid of those? And on the dividends, depending on how the fourth quarter shapes up, it would appear that you'd have a net profit for 2019. So, would you be obligated to pay the minimum 25% dividends in the first quarter of next year? Thank you.

**Marcello Spinelli:** Hello, Jon. This is Marcello Spinelli. Thank you for the question. Regarding the premiums, let's talk about the fines premiums. You're right. It depends on the Chinese margins. We still see a pressure on the narrow margins, in the steel business in China. Obviously, it depends on the price of the platts. But the supply demand balance is more to decline the Platts gradually in the next year. So, this can make the pressure of the – constraints of the margins better in this case. On the other hand, we have another component of this – the premium price that concentrates in China, the competitors in China. Most of the mines came after the problem in Brumadinho and also the eruption in Australia.

Almost 30 million tons of concentrate are leaving the market in the next – we see these leaving the market in the next two quarters. We also have a reflection of the other concentrates that came to the market. So, this is a gradual process. We still see these concentrates bothering the premiums in the next quarter, but gradually where we can see the premiums for Carajás and BRBF going up after the concentrates. We don't expect to – we are working hard to resume the operation. We see this as a fact of the higher price of the Platts and this process will decline the platts and we'll recover the premiums.

**Luciano Siani:** Jon, we do not intend to withdraw the – you named it shareholder debentures. I understand you're talking about the participation debentures, because they are extremely expensive right now because of the increasing iron ore prices. So, there is a disconnect between the price of those debentures and the price of the share, the share price, for example. On the – what else to do? There's something to highlight, which is although the headline net debt is just US\$5.3 billion, one has to remember that we still have US\$4.7 billion provision to face the Brumadinho expenditures.

So, at this point in time we're considering its liability to be like an expanded indebtedness for the Company. And we have to have clarity on how this is going to progress in order to be more bold in terms of retiring other liabilities. So, you've heard many times that we are targeting a net debt of US\$10 billion, as a coincidence, if you just sum up the US\$5.3 with a US\$4.7 to get exactly to US\$10 billion debt. So that's something we want you to have in mind. We are having an enlarged view, a comprehensive view of our indebtedness at this point in time to be on the conservative side. Next question.



**Operator:** Our next question comes from Timna Tanners, Bank of America Merrill Lynch.

**Timna Tanners:** Yes. Hey, happy Friday. I just wanted to ask a little bit about the pellet premium and the Samarco update that I've heard. You're getting closer to perhaps a restart the stocks on the pellet premium and Samarco place. And then my second question, I just wanted to dive in a little bit more to the thoughts about green pig HBI. China has been moving slowly toward adopting more electric furnaces, but a constraint has been the high cost of scrap. Do you think that this additional volume, first of all, is it short-term or long-term, and will it cannibalize your existing sales to China? Or is it kind of a necessary evolution to complement your – and sustain your existing sales? Thanks a lot.

**Marcello Spinelli:** Hi, Timna. This is Spinelli. Thank you for the question. Talking about the pellet premium, the dynamics of the market is quite different from the fines. It used to have an annual negotiation of the premiums with our clients after the disruption of offer and the index that went to almost US\$130 with US\$60 of premium price the pellets almost reached US\$200 in premiums and make a lot of pressure, made up a lot of pressure on our clients and the sustainability of their business. So, as a Company that we are really focused on our clients, we decided to adjust the way we negotiate the premiums in a quarterly basis then this change just happened to the third quarter and we are now moving forward with those dynamics. And considering what is going on in the market, this scrap cost is a key element for these dynamics. After China, they closed the market to import scraps. The price went down and also a very important consumer of scrap is Turkey is under pressure, they are production, they are probably they will reduce 11% to 12% of their production. And there's a lot of scrap available that made a lot of pressure in the – in our reduction pellets in the market. So, we would just adjust the production to guarantee that the premium – that the production that volume is not over volume to the market. So that's what happened in the pellet premium side.

The second question about HBI, well we are in the process that to seek what is going on in the market. We have many legislations around the globe. Europe is leading the process of – with the commercialization of business. And in our chain the steel business is – they have to be able to make a lot of efforts in the future, in the next 10 years. So, what we see that we need to be ready for the right portfolio to guarantee a feed, the iron feed for what the client will need. HBI, it's a possibility to solve part of the problem of our clients.

And what we are doing is to anticipate the movements and seek the technology, the right technology and be ready to lucky any perspective of iron ore in the future to feed the right process or the right way our clients will solve these problems. So, we are really committed to them and we are going to check and see what would be the right solution for each market. And HBI is part of our portfolio to understand that we will be not a trend, but we'll be ready to be the producer and the supplier for the iron ore for the future. We have the best iron ore in the market and this is very good for this problem, to solve this problem.

**Eduardo Bartolomeo:** Ok. Just to add-on to Spinelli, is Eduardo speaking, is not to move downstream and not cannibalizing our main product. So, it's a matter of facing the reality. The scrap is going to increase the need for green iron, green product is going to increase and we are going to be able to supply that if the client comes together with us. So, it's a process of joint ventures or ideas together to fulfill a need, a niche, but necessary to protect our core and not to move downstream. And Luciano is going to give some clarity on Samarco, because we are very optimistic that we're going to have the license today.

**Marcello Spinelli:** So, as you wish Timna, we hope to have a good Friday today and we see the permit for Samarco restart. We will issue a press release once it happens to give the full information to all the market at the same time, it will contain estimates of when Samarco will restart. What is the forecast for volumes going forward and some details about the restart. Just giving you context as you know, Samarco does not have tailing disposal systems, so that's a big constraint for a full Samarco restart and that's why you are going to see what you're going to see on the release. But let's wait for the good news and the details are going to be known to everyone.

**Operator:** Our next question comes from Grant Sporre, Macquarie.



**Grant Sporre:** Good afternoon gentlemen and thank you for hosting the call. Two questions from my side. The first one is just a thought on some of your – that the sort of, let's call them the poor performing assets in the portfolio at the moment. So, obviously Mozambique, and coal and VNC. Just your thoughts on when those may turn EBITDA positive and perhaps if I link that to your earlier comments on a risk assessment and having the right portfolio for the volume of the future, if you could just make some comments around those? And then just on the hedge, just around I totally understand, my understanding is the hedging is just for one quarter or does it go until the end of 2020, I wasn't quite sure on that. If we can stir some clarity around the nickel hedging? Thank you.

**Eduardo Bartolomeo:** Hey, Grant. Thanks for a question. First to get back to you on a broader view. This is true we are revising all the portfolio, not only the low performing ones, the matters not only in financial performance, but holistic view on risk. So, you get more information as I mentioned on the call when we were able to discuss that effort strategic cycle. But I will ask Mark Travers to talk a little bit about VNC, I was closely linked to it before, but I want Mark to detail a bit more to you. What the strategy to get back to a better position and draw there detail a little bit more about Mozambique.

Please Mark.

**Mark Travers:** Well from an operational perspective and profitability perspective the results have been quite disappointing to date. With respect to the question of getting to EBITDA neutral or positive, clearly stabilization and production would be necessary. Clearly higher nickel prices that we've seen and cobalt prices will help, we really do need to find a stable position in New Caledonia.

But however – because of the disappointing nature of the results, we really are evaluating all options for the operations and looking for a basis for stable operations so that a good cost performance and operating performance. We expect to be able to inform you of our conclusions about what those viable solutions are in the near future. In the meantime, we have taken some steps to moderate costs and also to protect or to minimize capital expenditures. We've re-scoped and extended the schedule of Project Lucy, which is our dry tailings project. We've extended that out a couple of years and really significantly reduced the capital in that project for next year and the year after.

**Juarez Saliba:** Yes. Sorry. I will repeat. Regarding Mozambique, we are facing lots of problems this year and most of them related to maintenance. We have problems with maintenance of our mine equipments. We have problems with maintenance in the beneficiation facilities, but we also have some problems and they are consequence of the previous ones that availability of our runoff mine, the yield that we are producing, products in an organization facilities, the ratio of cooking coal in turbo coal, everything – they are all connected. So we are, I can guarantee to you that the maintenance of the mine equipment is already done. We recall it very, very well. So currently we are running at a full capacity at the moment. We are reaching in the last three months almost 300 million tons [...] in the mining operations.

The beneficiation facility we are currently working very hard on planning and programming the maintenance we will do next year because we knew you'd just buy to buy spare parts and things like that. Bringing some mechanics and people for their work of maintenance and the way we start doing this in March next year, I think by the end of first half of 2020 the beneficiation facility would be ready. We will make some change in the flow sheet as well in order to improve the quality of the products. So, we are quite sure that we can finish the ramp-up of the operations by the end of 2020 and for sure in 2021 we will return to a positive EBITDA, right. I have no doubt about that.

Regarding the review, our portfolio is related to Mozambique. We always take a look on these issues and the Company after we finished this work, in other words by the end of next year, we can discuss further the situation.

**Luciano Siani:** Grant on the hedge, we have hedged to the end of 2020, so each and every quarter 30% approximately of our expected production.

**Operator:** Our next question comes from Alex Hacking, Citi.



**Alex Hacking:** Yes. Thank you for the question. I have two questions. First, very specifically on iron ore. Are you getting any indications from steel mills in India who are looking for iron ore next year, obviously a lot of news and headlines around the auctions of the concessions and I'm wondering if the mills there are getting nervous?

And then secondly on nickel, Mark thanks for the color on VNC. I guess, could you just give us an overview of the other major initiatives that are going on in base metals? I've lost track a little bit of that with Brumadinho and so on. Where are we in the turnaround process? I know you guys are kind of redesigned the Atlantic basin. Flowsheet you've taken quite a bit of production offline, I guess, what's next? Thank you.

**Marcello Spinelli:** Hi, Alex. Thank you for a question, this is Spinelli. We are sickened for opportunity, but we don't have any information about the process yet that they are under new concessions. But we don't have any further information yet.

Mark, please.

**Mark Travers:** The base metals, we have a major initiative to turn around the base metals business. It's been underway for more than a year. I would say the primary focus through this year has been to really invest in our assets and make us a stable and predictable operator. We've really put a lot of effort and money into our asset integrity, rebuilding our maintenance programs and really making sure that our assets are there to perform on an ongoing basis. And maybe just to comment a little bit on how things are going.

As we – as Eduardo was telling us earlier, we saw strong Q3 production. We saw the refinery stabilize in North Atlantic, so the – in Sudbury and the UK as well as we came out of plant maintenance in the Asia refinery. So, a good Q3 performance in nickel and look very – I would say look very good for Q4 with all the refineries going well. We've seen significant improvement in stabilization in the mines in Canada, which has been fantastic leading to some improve copper production this year, which has been a real bonus for us.

In terms of some of the other assets, I would say that Indonesia has really turned around nicely towards the second half of the year, as we got through some major maintenance in the first half. Producing well costs have come down and EBITDA and cash flow have picked up quite nicely, so looking very positive. In Onça Puma we're very happy with the court decision that allows us to continue and after being down for two years in the mine, it's taking a little bit of time to get back up, but we're going to see that coming back around November and the processing plant is using stockpile ore which is a lower grade. So, once the mine comes together with the plant, we're going to see some better production and we will really benefit from that next year. In Q4 which we're expecting a little bit below 4,000 tons of ferro nickel from the restart of Onça Puma.

And maybe a little bit of a comment on copper in Brazil. Salobo has performed extremely well in Q3 and expect strong performance through Q4. We had record production in July, great costs, record gold production as well. Sossego, we've struggled a little bit with some asset availability issues, but we love to have that stabilized in Q4 and I've already commented on New Caledonia,

**Eduardo Bartolomeo:** Mark, if you allow me just a few additions to that. With all this, the expected performance in the fourth quarter, we expect at least a 20% – about 20% increase in nickel production. So, because we're not going to have any major maintenance in the fourth quarter, also you might have seen the news about our signing of the heads of agreement with the Indonesian government for divestiture in Indonesia. Important step to renew our concession rights there. The resumption of the prior levels of production in nickel especially in North Atlantic its contingent on the completion of Voisey's Bay mine extension, because I don't know if you remember when we decided to do the project we delayed by one-year the decision. As a result, the current open pit mine is not producing at its full capacity in order not to have a gap in production because of that delay in the future.

But we continued to have lots of options discussing also we mentioned last year on Vale Day a potential agreement with Glencore to bring in a new ore body with nickel and copper additional production. And we are very optimistic also in partnerships in Indonesia whereby without any capital, Indonesia by itself will be able to finance expansion opportunities with partners.



**Operator:** Our next question comes from Sergey Donskoy, Societe Generale.

**Sergey Donskoy:** Yes. Thank you very much. I have two questions. One very short, could you provide some update on what is your CAPEX expectations budget for this year? And as we are approaching 2020, what do you think it will look like next year?

And secondly, one thing going back to Brumadinho expenses. One thing I don't quite understand, if I understand it correctly you spent about US\$600 million last quarter, of which roughly 60% was charged against provisions and the rest was charged against EBITDA. And you expect this level in becoming quarters. So, it sounds like you have pretty good visibility. And then the question is, if you have such good level of visibility why your provisions don't go higher, why you don't add to those provisions the amount that is being charged to EBITDA now? Sorry if it's a very basic question,

**Luaciano Siani:** Sergey, on capital expenditures we should end 2019 with something around US\$3.6 billion the rhythm, the pace of execution was also jeopardized a little bit because of Brumadinho, especially in the beginning of the year. And also, we had the depreciation of the Brazilian real that lowers capital expenditures. From 2020 onwards we continue to expect capital expenditures to be a known issue.

We continue to, obviously we will update guidance in Vale Day, but we continue to see normalize levels of CAPEX very similar to what we've announced before. There are some studies being done now to accelerate the filtration investments that might have some impact on CAPEX, but we're talking just a very few hundreds of millions of dollars. So, something's we are considering as a result of what happened in Brumadinho in order to increase dry stacking of tailings, but nevertheless the picture is pretty much stable and boring.

In terms of Brumadinho expenditures, it's interesting because part of this – the expansions which are charged to EBITDA for example, the wages of the reparation team, right? So, from an accounting basis, I cannot charge provision for those wages. So, these are Vale employees. A lot of expenditures, they relate to the water, the lack of water supply. So, we are supplying water for the nearby communities. We are operating the water treatments stations. And for example, if all of a sudden we have a permission to resume sourcing water from the river; those things can change very quickly. So, we are adopting a more conservative guidance, guiding you that this should remain stable over the coming quarters. But there are upsides; if things change those expenditures could reduce all of a sudden.

Other examples, people who are still living in hotels and for them for which we're providing food, those situations also can change. So, there's not a basis for identifying precisely a very well known liability to make a provision when it relates to those ongoing expenditures. So, therefore, what I'm putting out for you is just a good feeling of how we see things going and how they should translate on the income statement on this portion of expenditures.

**Operator:** Our next question comes from Tyler Broda, RBC.

**Tyler Broda:** Great. Thanks very much. All my questions have been answered, but while I'm on, I guess you've always seen the freight prices start to pull back here. I guess just would you be able to give us an update on sort of how you see the freight market developing through 2020 with IMO and just from your perspective?

**Marcello Spinelli:** Hi, Tyler. This is Spinelli. Thank you for your question. Well, what we see – well, the IMO is coming on January, the use of low sulfur bunker. We have a difference today between both bunkers about – it's about US\$250. What we see next year, we have this impact, but at the same time we have actions to go – to make effort for that, so the first one is scrubbers. We are in line with our – the installation of the scrubbers in our fleet. And in the end of next year, we're going to have almost more than 70% of the vessels for the scrubbers. Also have the Valemax's that are coming and also the Guaibamax still they will have an impact in freight and also they will be with the scrubbers and already installed in the vessels. And we see the – again with these actions have the same level of freight or we expect something around US\$18 like we have this in this year.

**Operator:** Our next question comes from Peter Grechenko, Barclays.



**Peter Grechenko:** Hi, good morning. Good afternoon, gentlemen. Just one of the follow-up on your comments related to Samarco. I was curious if you can provide any update on your recent thinking on the restart of actual production kind of timeline that you have in mind. Also do you expect the amended business plans to be in a materially different or someone different from prior plan? I mean, those are my questions.

**Luciano Siani:** Peter, because of the sensitivity of the information, this will be known through a formal release to the markets once the restart licenses is granted, which should happen today with the answers – specific answers for all those questions. The only context that I can give you right now is the former business plan was made before Brumadinho and there were some tailings disposals solutions that Samarco explored and defined prior to them. After Brumadinho, there were some changes in the legislation, local legislation and some structures started to be deemed to have dam characteristics. So, for example, if you deposit tailings on an exhausted pit or if you stack tailings on a certain area, some of the characteristics of those areas changed. So bottom line is Samarco had to redo all its tailing disposals plan. And that's the reason why the revised business plan is different from the previous one, but the details will come out through a press release this afternoon.

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

**John Tumazos:** Thank you for taking my question. Thank you for your service to the Company. Could you explain some of the details of the Vargem Grande restarted dry processing? Is the dry processing a temporary measure until dams are rebuild and improved? Can it be improved with dry stacking or magnetic separation as technology improves? And how is the blending? Do you take maybe 7.5 million tons of 65% Northern ore or with 5 million tons of say 55% ore or is it lower grade and you lose the quality premium? Does it cost US\$5 to bring the Northern stuff to the South? Does the blending cost US\$1.5 or some different amount per ton for handling – excuse me, if you could just explain the dry processing and the restarts?

**Marcello Spinelli:** Hi, John. Thank you for the question. This is Marcello Spinelli speaking here. Well, let me give you some colors in the presumption of Vargem Grande. Vargem Grande is – today we are with Pico and Abóboras mine that were coming. This is a dry processing operation. The limitation here that we don't – we cannot use the dams now for the production. We expect to have Maravilhas 3, that's a dam that is under construction in the end of next year. So, after that we're going to have the wet processing. So, regarding the magnetic process, we are installing the filters in this operation in 2020. We're not be ready yet. So, we'll be ready for the production of – with the filtering and also, we are adding the magnetic separation for the process after the filtering.

So, what we can expect for the quality in this – during the dry process? That will be a high silica product. We are using the high silica to blend in China for BRBF. With a return of wet processing, we have the pellet feed that we will feed Vargem Grande pelletizing plant by the end of the next year. So that's the roadmap of Vargem Grande. Today, we have a step-by-step resumption with the permit of the mining agents. It's just a step-by-step process. So, we're covering up the mine, but we need now – we already made the task for the loading in the trains. And the last permit will be regarding the pellet plants. We have high silica product in the first – the big – for most of the year, next year. And in end of the year, we – after Maravilhas 3, we have the pellet feed and the full operation of Vargem Grande at a plant. The pellet plant, we will return with pellets feed from the market. We're buying from the market to guarantee the operation of the pellet plants.

**Eduardo Bartolomeo:** And that pellet plant is very important because it's the sole supplier of pellet feed for one of the steel mills in Brazil. And remember I spoke in the beginning about additional logistics costs and for example, the supply of this client, which is CSA, is being very costly for Vale right now. So, the resumption of the pellet because it's being slide through Tubarão with a very awkward logistics. So, for example, the restart of the pellet plant reduces significantly those extraordinary logistics expenses, so it has other side benefits as well.

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



**Eduardo Bartolomeo:** Ok, thank you. Thanks everyone for the participation and for the questions. As we mentioned during the call, clearly the second quarter was a transition one and this one is a clear stabilization moment for us both for iron ore and base metals. But I want to reinforce one thing very important. Our focus is extremely given to the reparation of Brumadinho and to the improvement in our safety governance. With that, I think our team here thinks that we will reduce uncertainties and make, as I mentioned, Vale a much stronger, safer and reliable Company. Ok, thanks for your participation and I hope to see you in the next call. Thank you.

**Operator:** That does conclude the Vale's conference call for today. Thank you very much for your participation. You may now disconnect.