



Vale S.A.
Fourth Quarter 2016 Earnings Results – Conference call
February 23rd, 2017

Operator: Good morning ladies and gentlemen. Welcome to Vale's conference call to discuss 4Q16 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. The replay of this conference call will be available by phone until March 1st 2017, on **+55 11 3193-1012 or 2820-4012** – access code **4280600#**

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

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

With us today are:

- Mr. Murilo Ferreira – Chief Executive Officer (CEO);
- Mr. Luciano Siani – Executive Officer of Finance and Investor Relations (CFO);
- Mr. Peter Poppinga – Executive Officer of Ferrous Minerals;
- Mr. Roger Downey – Executive Officer of Fertilizers and Coal;
- Mr. Humberto Freitas – Executive Officer of Logistics and Mineral Research;
- Ms. Jennifer Maki – Executive Officer of Base Metals; and
- Mr. Clóvis Torres – Executive Director for Human Resources, Sustainability, Compliance, and General Counsel

First, Murilo Ferreira will proceed to the presentation and after that we will open for Questions and Answers.

It is now my pleasure to turn the call over to Murilo Ferreira. Sir, you may now begin.

Murilo Ferreira: Ladies and gentlemen, welcome to our webcast and conference call. Thank you all for joining us to discuss both our 2016 and 4Q results.

In 2016 we reached an important milestone with the startup of S11D project: The largest mining complex in our history with a nominal capacity of 90 million tons per year and average ferrous content of 66.7%.

The completion of S11D is a landmark in the mining industry as it presents technology with low-cost, high productivity operation, moreover, the complex is a clear statement of Vale's ability to make things happen.



For 2017, we stand firm in our pursuit: a significantly lower net debt while we conclude our investment cycle and prepare the foundations for even strong free cash flow generation from 2017 onwards.

First, our financial and operational performance. I'm proud to report that Vale delivered a sound operational performance in 2016 with annual production records in iron ore, copper, nickel, cobalt and gold.

Our adjusted EBITDA in 2016 amounted US\$12,200 billion. In 2016, we achieved for the 4th consecutive year a reduction of US\$1.8 billion in costs and expenses with Brazilian real depreciating on average by only 4% in 2016.

Costs decreased by 6%. Our general sales and administrative expenses decreased by over 24%. Our Research and Development expenses decreased by 28%, and our pre-operating and stoppage expenses decreased by roughly 50%. We also recorded a decrease in capital expenditures with a big reduction of US\$2.9 billion in our investments; from US\$8.4 billion to US\$5.5 billion in 2016.

The S11D project started up successfully in December 2016 with the 1st shipment in January 2017. In line with our divestment plan, we announced asset sales of more than US\$3.8 billion in 2016, including: The sale of part of the fertilizer business for US\$2.5 billion; another gold stream transaction for US\$820 million; the sale of 3 very large carriers for about US\$270 million; 4 capesize vessels for US\$140 million; and received an additional payment for the sale of Paragominas for US\$113 million.

Net debt amounted US\$25.1 billion by the end of the year; a decrease of roughly US\$900 million when compared with the 3rd quarter of 2016. The pace of decrease should accelerate as the sales registered in November and December, months with higher price, are collected in the 1st quarter of 2017.

Our forecast remains on strengthening our balance sheet while maintaining our commitment to shareholders return and dividends. In that regard, we paid out R\$857 million of shareholder remuneration in 2016, and will pay now R\$4,667 billion, subject to our General Shareholders Meeting at the end of April.

Vale reported a net income of about 4 billion in 2016; this is a great improvement from a net loss of US\$12.1 billion in 2015 as a result of higher EBITDA, higher gains on foreign exchange and monetary variation and lower impairment.

EBITDA from ferrous minerals increased 7.8% in 2016; reaching almost US\$10.5 billion mainly driven by higher prices and gains in competitiveness. Our EBITDA breakeven landed in China for iron ore and pellets decreased by US\$5.07 per ton to US\$28.09 per ton in 2016 when compared to 2015; leading to the higher EBITDA margin of US\$30.50 per ton in 2016.

Base metal adjusted EBITDA amounted US\$1.8 billion; representing an increase of 33% comparing with 2015, mainly due lower costs and expenses and higher volumes, despite lower base metals prices. Base metal EBITDA increased by 14% in 2016 when compared to 2015, despite the lower nickel and copper price of 36% and 34%.

Salobo's EBITDA was US\$736 million; an increase of US\$135 million when compared to 2015, mainly due to higher volumes. Salobo achieve a yearly production record of 175,900 tons in 2016 after completing its ramping up and reaching nominal capacity as of December 2016.



Vale New Caledonia continues to improve, despite of the still negative EBITDA of close US\$170 million. EBITDA improved by US\$240 million when compared to the previous year.

With coal, we saw an important improvement; coal EBITDA improved; increasing by US\$450 million from negative US\$508 million in 2015 to negative US\$54 million in 2016 as a result of the ramping up of the Nacala logistic corridor and the Moatize II plant, and a strong increase in coal prices.

Adjusted EBITDA of coal shipped through the Nacala port reached US\$110 million in 2016. Reduction cost per ton of coal shipped through the Nacala port decreased by US\$21 per ton to US\$77 per ton in the beginning of this year comparing with US\$98 per ton recorded in the fourth quarter of 2016, as a result of the increase in production and ramping up of the Nacala logistics corridor.

This week, Valepar announced a proposal to transform Vale into a true Corporation with diffused control and adoption of the best practices of corporate governance. This is a historical opportunity for Vale; a milestone that may be as important as the company's privatization 20 years ago. We view this proposal as a big step towards implementing a world-class governance and creation of value to our shareholders.

Thank you for your attention, and now let's open this webcast for your questions.

Q&A Session

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

Our 1st question comes from Carlos de Alba, with Morgan Stanley.

Carlos de Alba: Yes, good morning. A very strong performance; congratulations.

I just wanted to have 2 questions. Murilo, maybe, with the balance sheet in fast repair mood here in the surprising strong iron ore prices, Vale has said that they would like to turn into a dividend-paying company for all the excess cash that the company might generate. Right now, there is no really specific dividend policy other than the corporate law required dividend of 25% on net income.

Do you think that the company could turn or could come up with a more precise, maybe higher payout ratio, and stay in a given policy going forward?

And my 2nd question, maybe for Peter, is if he could comment as to how the ramp-up of S11D is likely to progress this year and next year. Any particular comments as to how the production ramp-up shipments of S11D are going that will be very useful. Thank you.

Murilo Ferreira: Carlos, thank you. I think that we have learned in the super cycle that just in case (and I'm saying about in a long-term or, at least, in the medium to long-term perspective) we should just involve in world-class projects. Then, in case of not having these long-term projects, Vale should be completely devoted to increase dividends policy. But we



cannot be precise because we needed to see in an annually basis what should be done in order to increase the value of the company.

I strongly believe that Vale will be one of the highest payout in the mining sector and in the whole stock exchange. But we think that it's very early to provide some comments. Our priority in 2017, for sure, is to reduce our leverage. Thank you.

Peter Poppinga: Carlos, thanks for the question. The ramp-up of Carajás is going well, in the last 30 days or so we produced, expect around 1 million tons. There is no major issues, where we have this still stop-and-go operations because we have to do some adjustments, which is normal. As you saw, maybe 85% physical progress on average, we have 97 in the mine and 67 in logistics and infrastructure, no major issues. Like I said, truckless is still being commissioned in some parts, and the whole system in 2017 will do 175 million tons, I mean, the S11D plus the Northern range, maybe we can... depending on how the ramp-up goes, we can reduce a little the pressure on the Northern range and increase in S11D or vice versa, this will... what we will do is to check what makes best economic sense.

Today, the bottleneck is the logistics, so we have 175 million tons on total to ship, and the complete ramp-up, as you may recall, we have... one year ago, we have revised the ramp-up and it was best for... make more economic sense to do it in the ramp-up in 4 years instead of in 2 years. And that's still the plan, and we will be ready to have a full capacity after 4 years. Thank you very much.

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

John Brandt: Hi good morning, good afternoon. Congratulations on the results and thanks for taking my questions.

I first wanted to ask about iron ore prices and the fact that they are much higher than what everybody thought. I'm wondering if that changes your mining plan, where before you were very vocal about only producing (or not producing) sort of your last profitable volumes.

With iron ore above 90, I'm sure everything that you have is very profitable, so has that strategy changed at all? And I'm thinking more from the South and Southeast systems. Are you going to start producing as much as you can?

And then sort of the 2nd part of that question: Have you noticed or are you expecting any restarts from some of the higher cost countries, like China and India? And sort of what does that mean for your 2018 supply/demand outlook?

And then secondly, I'm just wondering if there is an update on Samarco, if you're still expecting potential restart in 2017 or if we should only expect Samarco restart next year? Thanks.

Murilo Ferreira: Thank you, John. I will leave with Peter, but for sure what we have in mind permanently in Vale is to maintain, to keep our discipline in the supply side. Peter.



Peter Poppinga: Yes, thanks John. Regarding the iron ore prices, what we see for 17, in a nutshell, would be: we see much higher demand for several reasons than we had 16 (steel demand I mean), that translates into iron ore demand, steel prices and everything.

What we also see is that there is much less supply, new supply coming into the system than it was the case and 16, and finally, we see completely imbalanced stocks, the ratio between high-grade and low-grade sitting in China is imbalanced, which will probably mean an additional demand pool of equivalent of more than 5% what China imports.

So, from that perspective, I think we have a very strong 2017 ahead of us..

We see the question you asked me about how are people coming back, we don't think it's so easy, so immediate. So, the elasticity is not there so easily. What we have seen in China, for instance, for environmental reasons and also for quality discounts, which translate into cost, the breakeven is (if you had sustaining) is probably higher than US\$70, US\$75 (that's sort of a floor). And the same applies to the seaborne supply, the extra supply, where you are seeing huge discounts in terms of quality, which also translates into cost, higher costs. So, the whole cost curve has shifted a little to the right, and is now much more steep than it was in the past, and I don't see... really I don't see any average prices below 70. Probably more in the 80s in 2017.

Regarding a big change on our mine plan, we will not change our mine plan. What we have said is we are committed, we have a new long-term target, we have a capacity of 450 million tons, but we have a long-term target of base case target, which is 400 million tons, which we expect to achieve the pace of 400 million end of 2018.

And it is the fact that if you look in 18 now and you analyze all the possible supply coming in from the majors and so, you'll see that actually in 18 it's 50% coming from Vale, and certainly Vale will not be the one to derail the supply demand equilibrium. We are looking for maximization of our margins and that's what we believe in.

So, it is 400 million unchanged and we will closely watch what happens in 2018 since it's more than 50% our ore coming into the market in 18. Thank you.

Murilo Ferreira: John, regarding Samarco, for sure to get the environment permit it's out of our control. What we can say is that Samarco is doing everything in the right way. We believe that they have already delivered everything to have the new permit to the cave, to Alegria cave, and they need us to get again the same that it used to be in the existing facilities.

I could say that it's very realistic to consider Samarco going back to the operations in the 3rd quarter of this year. But for sure, I repeat, it's not something that we can have a statement because it's completely out of our control. But what should be done has been done. Thank you.

Operator: The next question comes from Jeremy Sussman, with Clarksons.

Jeremy Sussman: Yeah, hi, thanks very much for taking my question. I just want to talk a little bit about inventories. First, my 1st question: Can you guys give us a sense of sort of



where Vale's inventories are across the whole system maybe compared to this time last year?

And then I think you touched on... 2nd question is: You touched on high-grade inventories being much different than lower-grade inventories in China. Again, can you maybe give us a sense of order or magnitude? I think over all inventories at port are probably up 25 to 30 million tons year-over-year. I'm curious kind of where you see high-grade inventories, you know, year-over-year. Thank you.

Peter Poppinga: Thanks Jeremy. It's Peter speaking. In terms of Vale's products in iron ore, we have reduced our inventories from last year from 15 to 16, by roughly 2 to 3 million tons. At the same time, our inventories they have shifted downstream, they are less concentrated in the mine now and more in the ports. Well, we have actually blended... last year we have blended roughly 40 million tons, so in spite of the additional blending last year, we have reduced inventories and inventories have shifted downstream.

Regarding the inventories sitting in Chinese ports, around 10 or 20 million tons, and there are several sources, there are several ports, there is analysts' reports, we have our own market intelligence and it's a fact that the high-grade ores are... have very low inventories, the medium grades are a little higher inventories, and the low-grades are really increasing dramatically.

So, that's a fact and this means that you cannot use (if you would use all the inventories at once and let's say one single blast furnace) you would not be able to make a good quality of steel out of it, so... big iron out of it.

So, it must be said that, yes, stocks inventories have increased in China, but part of them are actually sort of sterilized, they cannot be used, and they have to be probably used in a very, very long time down the road. Thank you.

Operator: Our next question comes from Alfonso Salazar, with Scotia Bank.

Alfonso Salazar: Hello, thank you and congratulations on the results for the full year. The question I have is regarding costs. We saw an increase in the quarter that was impacted... related to labor, but also there is a stronger Brazilian real today. So, I was just wondering if you can give us some guidance on what to expect in terms of costs for 2017, and how the cost is going to be impacted by the S11D ramp-up this year.

Peter Poppinga: Yes Alfonso, thank you for your question. Yes, the cost in the 4th quarter has increased a little bit: In the freight, it was the bunker, you saw that it was exactly the effect of the higher bunker; and in this C1, there is mainly nonrecurrent cost increase where we had some stocks adjustments, but also, we had some provisions for variable remuneration, and also the deal with the unions for the wages for this year. So, that's mainly the reason why the costs have increased.

If you compare the costs in the 4th quarter the C1 and compare to last year's 4th quarter, in reais it is more or less in line what we had then.



Looking forward, I don't expect in 2017 to have a big effect of S11D given that we would still be in ramp-up, but what I can tell you is that we are working on in the next 2 to 3 years what we will have is, yes, there will be a dollar or so less in C1 due to the effect of S11D (I mean, diluted in the whole Vale), you will have another dollar coming from our global recovery (remember that we are more and more dry-processing instead of wet-processing and reducing our strip ratio, not because we are leaving ore behind, but because we are actually using formal waste and now processing it in our Itabirito project, that's another dollar), and then you would probably go for US\$2 or so, once the whole supply chain is completely integrated and optimized, which is not the case today, we have the efficiency piece where we can still work on, and we have the price realization piece.

So, we are saying roughly US\$4 a ton down the road in 2 or 3 years compared to the 2016 costs.

Of course, depending a little bit in the C1 case, depending a little bit on the exchange rate, which is now a little against us, but that's the order of magnitude I would indicate.

Operator: Our next question comes from Christian George, with Socgen.

Christian George: Yes hi, thank you. I just have a couple of questions. One of them is: On your coal production in Mozambique, if you could update us on what you're looking at in terms of production at Moatize next year. I think I saw Moatize II would be in action this quarter, but I suspect it's only going to be happening perhaps in the 2nd half. So, if you could give us some details.

And just I am not sure if I missed it in your comments, but you're mentioning that you want net debt to reduce further. Do you have any kind of target of where net debt should be ideal in the coming 12 months? Thank you.

Roger Downey: Hi, good morning. It's Roger here. We are ramping up the Moatize II plant, things are going well, we are targeting a 13 to 14 million ton production this year as we ramp-up, we had a very good January, which boosted our confidence in terms of achieving that goal. Obviously, there is always a challenge, but both... all the systems are doing very well, both the mine, the plant and the Nacala railway port. So, we are on target.

Luciano Siani: Christian, as regards net debt, we do have a target to reach 15 to 17 billion of net debt. This can be achieved over the next 12 months depending on prices, but even in a scenario of lowering prices, we are very confident that we will achieve this in the near term, helped also not only by the increase cash flow of the company, but also by the divestitures of fertilizers and coal.

Important to notice that one of the reasons behind the increase cash flow generation of the company is not only higher prices, is not only higher volumes, but in reduced costs, which are already reflecting on the results you're seeing, but also lower investments (that's very important) so freeing up more cash, and lower expenditures with the derivatives. For example, in 2016 we had a lot to spend on settling open positions in bunker hedge, and also,



we had a toll also because of the appreciation of the Brazilian real on the accounts of the currency hedges.

So, all those drags in cash flows they have been cleared, so therefore, even in an environment of variable prices, deleveraging should be a reality going forward very quickly.

Operator: The next question comes from Daniel Lurch, with BNP Paribas.

Daniel Lurch: Hi, thanks so much for taking my questions. That's 2 quick questions on base metals. The first one is on capital allocation. You are putting obviously very considerable costs on iron ore, and should, as you mentioned, consider decrease net debt in 2017. I understand your focus on balance sheet and shareholder returns, but could you outline your thinking about [unintelligible] outside iron ore? I'm thinking particularly about [unintelligible - sound breakup]. It appears as you could offer [unintelligible] option and in terms of timing what do you think, when would you start considering this investment?

And the 2nd question with regards to base metals, how do you think the cash cost develop in 2017 given the changes you are planning in Sudbury and Canada? Thank you very much.

Jennifer Maki: On the unit cash cost, when you look at the Canadian unit cash cost in 2017, it will be slightly increased as 2017 as the year of transition, we go down on March 15 with one of the furnaces that will be rebuilt and will be down until we come back up in July, and in June as the whole surface plants in Sudbury are shut down for the annual maintenance that happens every 18 months, we didn't have that maintenance in 2016, so it's an additional US\$60 million and a loss of 4 weeks of productions out of the refinery in Sudbury, as well as highly necessary this year because we'll also be doing the tie-ins for atmospheric emissions reductions project, and we come back up on July 1.

And at the beginning of... end of Q3/beginning of Q4 we'll move to one furnace in Sudbury permanently and that one furnace will have an extended capacity, the long-term reduction on production out of Sudbury is about 25%, but next year it will be probably about 7% down.

So, with the combination of higher maintenance costs and lower production because of the downtime, there is an increase in costs in 2017. And also, as we ramp-up Long Harbor and it's contributing more until it gets fully ramped up, but we have in parallel action plans to reassure ourselves and to reduce fixed costs consistent with the reduction in production as we move forward into 2018 and 2019.

In terms of the capital, from our base metals perspectives in the next few years, we have to finish the atmosphere commissions reduction program in Sudbury, but then we have to turn our attention to investment in the mine predominantly in Sudbury, we have a copper cliff mine expansion project there that we will begin this year, which will increase the mine feed in Sudbury in the years going forward.

But I would say it's predominantly focused on mine investment in Canada the Capex program over the next years.



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

Andreas Bokkenheuser: Thank you very much. Thank you very much for taking my question, and also congratulations on this solid set of results.

Just one clarification on the balance sheet. Obviously, you've seen net leverage per EBITDA come down quite significantly. Can you update us on your target, on your deleveraging process? I mean, initially I think you were mentioning 15 to 17 billion in 18 months. Obviously, EBITDA is driving down the multiple, but the actual absolute number seems unchanged with net debt still around US\$25 billion. What's your timeline to get it down to 15? That would be my 1st question.

And my 2nd question, just on the ramp-up at S11D, as you also mentioned on the Portuguese call this morning, you know, Vale certainly is going to go in and imbalance the market, which is certainly understandable.

I guess my question is: hypothetically speaking, if you did want to ramp-up S11D within the initial 24-month period, which I understand is now 4 years, but if you did want to ramped-up in 24 months, could you do that or are you constrained on the railway? Thank you very much, those are my 2 questions.

Luciano Siani: Andreas, on the debt, the 18-month target was established when we did the same results call one year ago, and we were talking about end of 17 and we put down this 18-month target.

Most recently, we have stated that we don't intend to do any further divestitures rather than fertilizers and coal. We were considering beforehand to do perhaps some... another larger transaction within our core asset base. So, given the improved cash flows, we have put this out of the table, so therefore, we are working only with coal and fertilizers as the key divestitures, which together with the prevailing cash flows probably take this timeline to the end of this year.

Any obviously, that depends on the average prices for the year. But, nevertheless, even if we get wrong, we are wrong on prices, we are just talking about taking another 3 months, worst-case scenario another 6 months. But to say that, it is very likely that we will reach that 15 to 17 target by the end of the year. So, we continue to go on that direction.

Peter Poppinga: Yes, Andreas, thank you for the question on the ramp-up, but it's like I said before, so we have decided to go for 4 years, yes, we could (a little bit we could) speed it up, but we don't want to do that. We don't want to do that because we have a very well-structured profile now, ramp-up profile, and our expansion of the railway is following a very well-defined system.

And also, we don't want to change that. And that's the answer: So, we don't want to change this four-year ramp-up.

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



John Tumazos: Thank you very much for the nice dividends, and great performance, and good job. First, as you dredge individual tributaries, you must've rebuilt a lot of houses by now. How are the actual costs coming versus projections?

And 2nd, is it a practical goal to buyout BHP and Samarco so it can be integrated into one company and more streamlined decision-making structure?

Murilo Ferreira: About the potential acquisition of Samarco, John, I think that is something that is out of the context at this stage. We believe that our priority is to reduce our leverage.

And in my understanding that BHP's very committed with the whole process into the river, in the region, mainly going back with Samarco. I think that it is the subject that we have on the table is precisely just to go back and to work as should be.

We know that we can reach the level of 70% of the existing, of the nominal capacity, but it must to be a very important milestone to pay our..... to Samarco to pay its debt and to go ahead with all the obligations. Peter.

Luciano Siani: John, on the costs on the Samarco recovery, they are pretty much in line what was expected when we drafted the original agreement by March last year, we've been obviously updating and getting more comfort with the numbers, but the good news is that they are hearing to the... very much to what has been outlined a year ago.

And just to say that also we flew over the river very recently and the progress of the remediation work is amazing. I would say that in a very short time we will be very proud. We already are, we'll be very proud of what we are delivering to the communities in terms of remediation.

Operator: The next question comes from David Wang, with MorningStar.

David Wang: Hi, good morning. Thanks for taking my question. I just wanted to see if you could offer some thoughts on the dynamics for supply and demand going forward.

I know you previously mentioned on the call that a lot of the new supply will be coming from Vale, but I'm wondering, with the higher pricing we've seen a lot of smaller players wanting to reenter the market because they would be profitable as well, and what's your longer-term outlook on the sustainability of the credit field boom in demand that we saw last year?

Peter Poppinga: David, hi. So, the supply and demand and other players coming back, well, I already said that we have a better demand than last year, we have less new supply this year coming in than last year, and we have imbalanced stocks; this means a very strong environment for iron ore prices.

I don't see the prices at all, the players coming back either being Chinese mines or seaborne, because the curve has shifted, it's not only about cost anymore, it's now really about quality;



this translates into a huge discount and translate into additional cost. So, that is distinctly higher than 70... this breakeven 70 including some sustaining US\$70, sort of natural floor, sort of limit.

And then, the other one is [inaudible – papers sound] we believe they don't come back easily and quickly because there are environmental restrictions more and more in China, and it is not so elastic like we have seen in the past.

So, in terms of longer-term, there is also the depletion issue, and lots of them will face huge depletion issues, and I don't see them coming back easily. They may come back a little bit, but it's not from one day to the other. That's my call here.

Operator: The next question comes from Jamie Nicholson, with Credit Suisse.

Jamie Nicholson: Hi, thanks for much for the call. Just quickly, given your comments on strong net debt reduction, do you expect to continue with liability management on your bonds and buyback, some additional bond debt? And if so, would you be focusing on the higher coupon debt or the near-term maturities, or what objectives would you be looking to achieve? Thank you.

Luciano Siani: Well, we just did one example of what you're mentioning, the bond that we issued a few weeks ago, we announced yesterday that we are repurchasing the Eurobond which matures in 2018. So, yes, we look forward to continue to do liability management, which doesn't mean that we will keep accessing the markets, we have other alternatives outside of the capital markets to do liability management.

But it's good to use this nice window in terms of lowering costs of debt in order to refinance part of the maturities.

We did, in our view, a good job last year by cleaning up 2017, we have only US\$1 billion mostly in agencies maturing this year, and we now have the task to push forward the maturities of the 18 and 19, which will happen simultaneously at debt reduction.

And we don't have a clear preference, there are some high coupon debts over the longer term should the cash flows surprise on the upside, we should also remove some of those high coupon debts. But the priority with the short-term still is to refinance shorter-term maturities.

Operator: Our next question comes from Thiago Ojea, Citibank.

Thiago Ojea: Hi, thanks for the question. I would like to get (if you can provide) what is your expectations on pellet productions for this year and next year.

And regarding Moatize, I know that you mentioned briefly on 2017 production, but what is the expectations about the expansion to 22 million tons? Thank you.



Peter Poppinga: Hi Thiago, thanks for the question. Pellet production this year we will have higher production than we had last year, so probably coming close to 50.

But pellet production is of course one of our competitive advantages, and we will do everything in this current environment to increase production without jeopardizing the quality, we are even considering tolling options around the world where we provide the pellet feed and get back the pellets.

So, pellets will be... and by the way, the new pellet price, which in the previous call was why didn't reflect in the 4th quarter, this will kick in only in the 1st quarter of this year, and you will see effect this year. So, it will be increased the production. And we also announced the São Luiz pellet plant restart, this will only happen in the 1st half of 18 since we have to do some works there.

And the rationale is actually really that we have this plant there. What changed from the past is that we have now the logistic infrastructure, we had not infrastructure at that time, so we had to make a choice between selling sinter feed and grinding sinter feed for the pellet plant. Now we have the infrastructure logistically speaking.

And also, what we are doing in São Luiz is: We are going to recover pellet feed from tailing dams, where we have huge tailings dams which will be reutilized, there is no concentration needed, just the cycloning and getting these pellet feeds ready to be palletized with minimum of grinding. And so, this is a very good case, a very nice case in terms of sustainability of the region, but also about making use of the resources we have.

And the plan is to make blast furnace pellets and to swap some of the blast furnace pellets from the Tubarão plant into this São Luis plant and to create more space, make space available in the Tubarão plant for increase in the production of the pellet reduction segment, which is the segment really growing in the world in the next years. Thank you.

Murilo Ferreira: Roger Downey, please.

Roger Downey: Hi, good afternoon. We are ramping up intended with the railway, expecting to reach 18 million tons next year, followed by 19-20 million tons in 2019. After that it really depends on the market, we are obviously going to be disciplined and sensible about how we move towards any bigger targets. Obviously, with some investments, the mine could even go to 30 million tons. It's just a matter of what the market looks like and how the investments payout. Thank you.

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

Thiago Lofiego: Thank you gentlemen. I have 2 follow-up questions. One is: Peter, why do you think swing capacity's not come back online? At least not in a massive way for now. What do you think are the factors behind that?

And 2nd question, considering no changes in oil prices from here, where should we expect your average freight rate to stabilize? You still have higher price contract maturing that



should be replaced by lower priced one, I mean, just sort of understand that dynamics, thank you.

Peter Poppinga: Regarding on the freight, once the 2nd generation of Valemax shipments once they kick in, it will be more than 30 ships, as you know, US\$3.5 more competitive than the 1st generation, and once we have rebalanced our portfolio, I would say at the bunker of 250 (based on 250), I would say that should come close to US\$11 in the midterm.

That's our average portfolio, which is of course lower than what we have today, but it really depends on how we can rebalance our spot contracts one year seaways and certain generation of Valemax coming in.

The other question was on why would they not come back (the marginal of supplies). Well, they will, but it's a question of... in China, for instance, what you are seeing is more and more environmental restrictions.

Lots of mines *reluctance* to come back, lots of strict controls, and, as I said, the breakeven on [unintelligible] on the cost basis even if they got... you know that they got a recent tax incentives, but even that, even with that, if you check the average breakeven cost is US\$65-64 including the sustaining, and if you now add the quality (because those concentrate they have 6-7% silica on average, but now the guys coming back they would have 8-9% silica), and this is in today's market conditions with the [unintelligible] coal prices, is very difficult and translates into another 5, 6, US\$7 penalty. So, we are talking 75, which is today possible, we are higher in seaborne, but it is the reluctance what we see, it is also the elasticity, which is not there, and lots of those are actually underground, which is not easy to restart the mine like that from one day to the other. That's why we think it's not from one day to the other.

Murilo Ferreira: Thiago, just to add one further comment, we needed to pay attention, as you know, just recently we have learned about eventually the government cannot allow to mine coal in some provinces. We must be attention, we can see some chance not allowing iron ore as well. Thank you.

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

Marcos Assumpção: I have a question on coal... Sorry, can you hear me?

Murilo Ferreira: Yes, go ahead.

Mr. Assumpção: Okay, sorry. I have a question on coal. You mentioned on the press release that as the Chinese mines would be able to get back to the 330 days of production per year, the market could get back to equilibrium. So, if you could mention what is the equilibrium level that you are expecting.



It also, when we take a look at the Sena-Beira, the profitability of the Sena-Beira corridor, we see that's actually much, much lower than the one for Nacala. So, for how long will we still have like the take-or-pay contracts for Sena-Beira, so we should see some lower profitability in this corridor?

So, if you could comment a little bit the volumes that you have to carry on that corridor would be nice.

And last question on iron ore. We are seeing some talks about Simandou being sold to Chinalco. If, by any chance, this is confirmed, as you know the projects very well, how long do you think you would take to put a project like that in place? Thank you.

Roger Downey: Hi Marcos, good afternoon. Just to start off with coal then. First, on the market then, we have seen the coal prices move exactly with the news flow, which kind of tells you the difference between 276 days and 330 days' production in China is where the balance lies.

When the 276-curfew (day curfew) was implemented (and, yes, we did have some supplies disruptions at the time), coal prices shot up to US\$300. Since then, with the flex... when they flexed production to 330, coal prices started basically to free fall. And now, with the announcement of the resumption of the 276 curve, they bounced back.

So, what I would say is that that's basically... I think we've seen a floor, we've seen where prices need to be in order to settle and where to satisfy supply and demand today, and where they will probably remain at least over the course of this year.

Peter's comments about the steel industry in China and steel prices just corroborate the fact that we're probably going to see the balance laying a bit above where we are today.

The other comment that I think is worth making in that respect is that because of the volatility we saw especially in the 4th quarter 2016, the buyers (and a lot of those buyers were left without volume at the end of last year) probably don't want to see the volatility and they want to make sure (especially those who are on contracts) want to make sure that they have a benchmark price which is sufficient to guarantee their volumes.

So, we would say that it's probably worth the risk of saying that the 1st quarter (the Japanese fiscal year starting April 1) we're likely to see a benchmark that we settled above what the spot market is, which I think is a very good reading for our business.

Regarding your comments on the Beira railway, this is the last year of our take-or-pay contract, you know, any volumes that we push down Beira now will obviously be in addition to what we can do in Nacala, and Nacala will be ramping up towards a 19-20 million-ton target by 2019. And, again, anything above that will be... depends on the market, where the market is, if the market needs more coal, and whether we could be competitive through Beira.

Murilo Ferreira: The maturity, Roger, I think that is the 3rd quarter of this year, the maturity of the existing contract.



Roger Downey: Oh, the contract, yeah! Ends this year in the 3rd quarter.

Murilo Ferreira: And just to answer you, Marcos, I think that the level of complexity in having a green light in the Simandou project is very high.

As you know, the project is facing a huge dispute regarding the past... into the court, and I think that before anything it must be decided about the processes, the SGR and to solve some issues. And regardless of this, I think that just in the 1st phase (that used to have in the Rio Tinto hands) I have learned that the cost could be above US\$20 billion, which is, in our view, something that can jeopardize the whole project.

But it's very early to say because, first of all, must to be solved regarding the legal dispute. Thank you very much, Marcos.

I would like to say thank you very much for spending your time with us. We really appreciate your questions, and all the best. Bye-bye.

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