# Q3 2016 Earnings Call

## Company Participants

- Gerd Peter Poppinga, Executive Director-Ferrous Minerals
- Humberto Ramos de Freitas, Executive Officer-Logistics & Mineral Exploration
- Jennifer Anne Maki, Chief Executive Officer of Vale in Canada
- Luciano Siani Pires, Chief Financial Officer
- Murilo Pinto de Oliveira Ferreira, Chief Executive Officer
- Roger Allan Downey, Executive Director-Fertilizers & Coal

## Other Participants

- Alexander Hacking, Analyst
- Carlos F. De Alba, Analyst
- Christian Eric Andre Georges, Analyst
- Daniel Lurch, Analyst
- Ivano Westin, Analyst
- Jeremy Sussman, Analyst
- Jonathan Brandt, Analyst
- Marcos Assumpção, Analyst
- Rene Kleyweg De Monchy, Analyst
- Thiago Lofiego, Analyst

## MANAGEMENT DISCUSSION SECTION

### Operator

Good morning, ladies and gentlemen. Welcome to Vale's conference call to discuss the third quarter of 2016 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. 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 November 2, 2016, on 55-113-193-1012 or 2820-4012, access code 8585970#. 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 comment 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. Clovis Torres, Executive Director, Human Resources, Sustainability, Compliance and General Counsel.

First, Mr. Murilo Ferreira will proceed to do the presentation. And after that, we will open for questions and answers. It's now my pleasure to turn the call over to Mr. Murilo Ferreira. Sir, you may now begin.

## Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Ladies and gentlemen, welcome to our webcast and conference call. Thank you all for joining us to discuss our third quarter 2016 results. I'm proud to report that we had another good operational and financial quarter. With operational performance, we reached several production records in the third quarter.

For example, we achieved production records for iron ore including a record at Carajás for 3 pelletizing plants in Brazil, Tubarão 3, Tubarão 8 and Vargem Grande for containing gold as a byproduct in copper and nickel concentrated and for what is coal production.

On the financial side, we achieved impressive cost and expenses reduction. In the first nine months of 2016, which is quite over $2 billion when comparing to the first nine months of 2015 as a result of our continued success in cost reduction initiatives.

Moving to the third quarter performance, adjusted EBITDA was $3 billion about 27% higher than in the second quarter 2016 with improvements for our ferrous minerals, base metals and coal business segment. Our CapEx amounted $1.3 billion in the third quarter with project execution amounting $740 million also of which $530 million in the S11D project. There is only one main project under development, the S11D project.

We are happy to see that S11D achieved an important milestone with big progress in the third quarter. S11D successfully began its hot commissioning with almost 200,000 tons of production in the third quarter 2016 with the startup expected for this quarter and first commercial ore sales planned for the first quarter 2017.

The S11D project will reduce our C1 cash cost, improve our operational flexibility, increasing logistics capacity in the north system to 230 million tons per year by 2020. We remain focused on strengthening our balance sheet and continue to reduce our leverage. In the third quarter of 2016, we managed to reduce our net debt by $1.5 billion to $26 billion with a cash position of $5.5 billion.

Few comments about Ferrous Minerals. Our C1 cash cost for iron ore fines in Brazilian real reduced by 10% to BRL 42.20 per ton versus $46.09 per ton in the third quarter of 2015 despite inflation of over 8%, mainly through the improvements in operational performance and ongoing cost cutting initiatives.

Our landed-in-China iron ore and pellets EBITDA breakeven decreased to $28.30 per ton in the third quarter from $28.50 per ton in the previous quarter despite the appreciation of the Brazilian real and higher bunker oil price.

In Base Metals, we note Salobo's EBITDA was $131 million, increasing by $9 million when compared with to the second quarter 2016. Salobo's EBITDA amounted $384 million in the first nine months, excluding the impact of the gold stream transaction the coming quarter big contributor to Base Metal cash generation.

VNC continues to improve despite the still negative EBITDA close to $40 million. EBITDA improved by $11 million when compared to the previous quarter despite the plant maintenance shutdown in the third quarter 2016. VNC's units cost net of byproducts credit reached slightly more than $12,000 per ton in the third quarter 2016.

In coal, we had an important improvement in the third quarter. Coal EBITDA almost reached breakeven as a result of lower cost in Mozambique with the ramping up of the Nacala Logistics Corridor and the starting up of the Moatize II processing plan. Met coal realized price had not yet reflected the recent sharp increase in coal index price due to Vale's lagged price system that had expected to improve the fourth quarter of 2016 with the improvement in bench market price.

We start up the Moatize II processing plant in August. The ramping up is progressing well and contributed to a quarterly production record in Moatize of almost 1.8 million tons being 40% higher than the second quarter of 2016. The ramping up of the Nacala Logistics Corridor continued as planned. Production cost per ton at the Nacala port continued to improve at $87 per ton in third quarter 2016, 16% lower than in the previous quarter with further improvement expected for the coming quarters.

And looking at the fertilizer business, EBITDA increasing about 85% to $59 million in the third quarter 2016 compared with the previous quarter, driven by lower cost and higher values despite lower market price and the appreciation of the Brazilian real.

We are committed to complete our divestment program in line with our commitment to have taken two important steps in transaction. In August, we sold that additional 25% of the gold stream as a byproduct from Salobo's copper concentrate, and in September, we achieved an important milestone in the Mozambique coal transaction by approving new terms with Mitsui.

The divestment program is key to our efforts to strengthening our balance sheet and continuing to reduce our leverage. As I think you all know, we are driven by our commitment to safety, people and to preserve the environment. Moreover, we understand that it's important to all of our stakeholders including the people in place where we operate.

We are constantly looking to adapt and evolve by building what we have seen, experienced, and learned. On that regard, on November 5, Samarco's accident one year anniversary, and since then we stood by our committed to do what is right.

Thank you all for your interest in Vale, and now let's open this webcast for your questions. Thank you very much.

## Q&A

### Operator

Ladies and gentlemen, we'll now begin the question-and-answer session. Please restrict your questions to two at a time. Our first question comes from Mr. Carlos De Alba with Morgan Stanley.

### Q - Carlos F. De Alba {BIO 15072819 <GO>}

Thank you very much. First question has to do with any specifics perhaps that you could share with us on selling of the fertilizer or the strategic transaction in the fertilizer business. Clearly, you are still committed to that. But if you could give us more specifics, that will be very useful.

And the second has to do with VNC. The operation has continued to perform better and improve its results. Is this now an asset that Vale feels comfortable keeping in the portfolio going forward or still the company is analyzing whether or not it will sell the asset or do something strategically with it? Thank you.

### A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Start at VNC. Jennifer Maki, please.

## A - Jennifer Anne Maki {BIO 16392645 <GO>}

Yeah, as it relates to Vale New Caledonia, we've seen good progress on the cost reduction. We've seen almost by the end of the year $100 million of fixed cost reduction relative to 2015 and today the cost is around $12,000 a ton. And included in the third quarter, we had some one-time maintenance cost and so if you were to adjust for that, it gets you to just above $11,000 and we also had 21 days of shutdown.

And so to me it's clearly reachable by the end of the year that we are below $11,000 a ton and I know the employee they are working really hard to achieve that. And we need to achieve that because then the coal price is at $10,500 today. And so I think since we've come back from the shutdown in July, the production has trended in the right direction but we still need to increase it further and it needs to be consistently delivered.

I know our employees are obviously putting safety first. They are working hard to ensure a future for VNC and we're receiving good support locally. But the job is not yet done and we have some more work do to there.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Regarding selling fertilizer, we must address that we are looking for a strategic transaction. As you know we have huge resource and reserves in nickel, in iron ore. We have a good portfolio in copper. We have a value interest in good project in Mozambique. But we don't have a good with project in potash, for instance.

Then it's not just the case of doing a divestment. We are looking at some alternative in order to increase the efficiency of the whole system in fertilizer. We continue very positive about the future of the fertilizer and we wanted to stay into the business. But we wanted to address differently, as a company that recognize that we don't have huge reserves, huge resources mainly potash in Brazil. Thank you very much.

## Operator

Our next question comes from Jon Brandt with HSBC.

## Q - Jonathan Brandt {BIO 17988091 <GO>}

Hi. Good morning. Thanks for the call. Two questions from me. The first, wondering if you can give us an update on the FMG agreement that you signed back earlier this year. We have better iron ore prices, better premiums, you're now blending your own ore. I'm wondering if this agreement still makes sense and if it does, if you could sort of give us a rationale as to why and maybe bit of an update on that agreement?

And then secondly, with higher iron ore prices and some of the other non-core asset sales that you're doing, I'm wondering if you're still open to selling part of your iron ore operations or streaming or trying to realize some value there if you can reach your targeted $15 billion in net debt in 2017 by sort some fertilizers, vessels as well as higher EBITDA and cash flow generation from the better prices? Thanks.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Regards of my comments about fertilizer, we had a transaction in coal and I think that is extremely positive in order to enjoy the full benefit of the Nacala Corridor. As you know, we will stay with 50% of our existing positioning in the Nacala Corridor and just selling 15% into the mining. Then I think that in the context of the divestment we are addressing properly and not to invest so heavily in the logistics side in Mozambique and be much more focused in mining, in the coal mine.

And fertilizer, as you know, I did some comments and about to do streaming about assets that could be divested, we can adjust the amount of money that could be received. The main focus, I repeat again, is to reach a fair net debt. I think that this number can be in the range of $15 billion to $17 billion. It's our forecast. We are not considering to reduce our divestment, but not exceed in that way that we could reach the level of, for instance, $12 billion and $13 billion. No, way I think if that we must calibrate properly. And Peter?

## A - Gerd Peter Poppinga {BIO 17245689 <GO>}

Jon, thanks for the question. For us, FMG has a strategic component. It's not a tactical approach changing with fluctuating or fluctuating with iron ore prices of premiums so that is Vale is the rationale. There is a strategic component to that.

We are still discussing for actions in 2017 although the negotiations are more complex than originally thought. And that's probably because of different expectations where the value creation for both parties will occur. So those of expectations have to be adjusted but at least from our side, it is a not a tactical approach. It is a strategic approach and we have to adjust those expectations. Thank you.

## Operator

Our next question comes from Rene Kleyweg with Deutsche Bank.

## Q - Rene Kleyweg De Monchy

Hi gentlemen and thanks for taking my questions today. Could you provide an update on what you're seeing on the mine site into the commissioning with S11D and how everything's going there, Peter?

And with regards to San Luis, on the last call, you touched on the potential ability to add some crushing capacity at San Luis and get things up and running there. Are there any other challenges to ramping up at San Luis and is dependent on what visibility you have on Samarco restarting. Thank you.

## A - Gerd Peter Poppinga {BIO 17245689 <GO>}

Rene, thanks for the question. When you mean San Luis, you're probably not - you're still talking pellets right, not S11D? Yes, we are analyzing all the options. We have several options to increase pellet production. Like I said before, we have options increasing the productivity of existing pellet plants. This has to do with more feed availability which has to do in turn with some licenses we are still working on. We are increasing productivity in Oman, for instance, by shipping Carajás ore, Carajás fines to Oman. You increase dramatically the grand ability of the Oman pellet plants so you produce more because it's rich ore. Even we are studying shipping - transshipping some Carajás find into the Tubarão pellet plants where you can also achieve the same effect. Cost to do more, but more than offset by higher production in the pellet plants in the South because it's a very easy ore to grind.

And then there's, of course, the Sao Luis pellet plant and then the other pellet plants in Tubarão which we are analyzing. All of these options are being analyzed and that I think we can in Vale we can have a better picture of what's the most feasible situation there.

Regarding in the mine in S11D, we are on schedule. We have - on the whole S11D, as you know 95, the mine mill is 95% physical progress complete. The logistics is 74% physical progress completed. In the mine mill, we are already commissioning. We are ready to use, like Murilo said before, almost the 500,000 tons of run of mine and the systems are all working well being commissioned. So far no big problems, only small normal adjustments in terms of commissions. So we are positive that end of this year in December, we will have the first production. But the first phase will only happen in the beginning of 2017. Thank you.

### A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

If you allow me just to confirm that our Vale Phase 4 is completed including other supervision control that we have in San Luis it's completely - it's 100% completely our Vale Phase 4. Thank you very much for your question, Rene.

### Operator

Our next question comes from Christian Georges with Société Générale.

### Q - Christian Eric Andre Georges {BIO 1557701 <GO>}

Thank you, gentlemen. Two questions on Moatize, can you give us an idea of your targeted production level for coal next year? And also you are saying that the met coal price increase has not been reflected yet, but has thermal coal price increase has been reflected yet on your performance in Q3?

And then the second thing on Moatize, with regard to the project finance you're contemplating once the Mitsui deal goes through, I mean, are you well advanced with the banks and other mini banks in the project finance or it is something which may be delayed due to the problems with deadline in general? Thank you.

### A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Roger and Luciano, please.

### A - Roger Allan Downey {BIO 7419641 <GO>}

Hi. Good afternoon. As we ramp up the Nacala Corridor, we're also ramping up the mine in tandem, so what we're achieving should be somewhere around 13 million tons of coal transported to Nacala next year. And basically that is a result of reaching the 18 million ton capacity level by the end of the year. Luciano, on...

### A - Luciano Siani Pires {BIO 15951848 <GO>}

On the project finance, so as you saw, we have reached agreement with Mitsui, which is a very positive milestone for going forward. We also had top level meetings in Tokyo two weeks ago. Our CEO, Mr. Murilo, met with the governor of (24:51) and also on a very high level, the commitment of the institutions have been sealed going forward.

I myself went to visit next year as well in the beginning of last week of September and it was also very well received, continues to be a lot of strong institutional support going forward. There is an understanding that the roadblock now is just go through the lengthy documentation for finalizing the project. We're talking about 115 agreements almost 20,000 pages of documents. So that's where the teams are working on.

We've got all the approvals in Mozambique. We're having very high level of meetings with the ministers in Malawi. There is especially a single meeting today, which might be definitive, and we're still waiting the final approvals of the Malawi government. But looking forward, the only obstacles to successful completion should be documentation and Malawi approvals. Syndication is progressing very well. We have more demands then ECA coverage from the banks, which means there will be some competition. Costs are actually coming down, and we expect to deliver (26:02) not only with a decent size but also very competitive in terms of costs.

## A - Roger Allan Downey {BIO 7419641 <GO>}

Yes, just coming back to your question on price, coal prices have surprised because of the issues with the Santa Corridor where we stopped loading from there. We have some carryover tonnage, so we haven't been able to really get any effect of the new coal prices, or the higher coal prices in the third quarter. The first shipment of new or, let's say, high price coal is being loaded right now. So we will have that effect in the fourth quarter, of course.

In terms of realization, well, just to give you an idea, if you compare the current levels of premium low vol seen on the spot market today, our Chipanga product received a very small discount to that, somewhere just above $245. But of course, we have a mix of different cold, so the average realization in relation to the benchmark and to these spot plant level is obviously a bit lower in the mix.

We also are reducing the freight differential that we had in relation to previous quarters. When we shipped from the beta, because of the size of the vessels and because of the fact we have to transfer, use a transfer vessel there, we absorbed a freight differential which was against us and with Nacala now, we don't have that anymore. So that should improve realization going forwards.

## Operator

Our next question comes from Alex Hacking with Citi.

## Q - Alexander Hacking {BIO 6599419 <GO>}

Thank you. Good morning. Good afternoon, everyone. Roger, just a follow-up on Moatize, when Nacala was up 18 million ton a year capacity, how much of that 18 million tons do you anticipate would be premium hard coking coal versus thermal coal versus intermediate coal? If you could quantify that, it would be very helpful, given the very different prices between those products.

And then the second question, I guess is for Peter, is Vale still intending to reduce its iron ore inventory from current levels? And if so, could you maybe quantify to what extent you intend to reduce inventory in the fourth quarter this year and then how much you could maybe think about reducing that in 2017? Thank you very much.

## A - Roger Allan Downey {BIO 7419641 <GO>}

Hi, Alex. Just on your question regarding our product split this year, as you know, over the past few years, we've been accumulating thermal coal stockpiles which we are unloading, offloading this year. So we have a slightly twisted mix in our 2016 shipments. But from 2017 onwards, we won't have those inventories anymore, and so you should work with a two-thirds met, one-third thermal split in favor of that.

## A - Gerd Peter Poppinga {BIO 17245689 <GO>}

Hi Alex, thanks for the question. So on the inventory, as I said before it's a balancing act between three, main three actions. First targets, we want to progressively reduce inventory in Vale's iron ore chain. That's the first statement. And when you compare the end of December last year and looking now to end of December this year, we are forecasting a reduction of, say, four to five million tons of total inventory reduction. That's the driver number one.

The other driver is that you want to have a progressive increase in offshore blending for better price realization that sometimes against the – because we're still not completely, let's say, full or completely loaded in our distribution centers. So it's still work in progress, still building up some inventories offshore. But this helps price realization. That's why you're doing it. This year, we are bending roughly 40 million tons. Next year we are going to 70 or 80 million tons offshore.

And then the other driver is a progressive, since we have inventory, ferrous will have more downstream than more upstream, so our aim is to shift inventories more and more downstream and I reminded in the production report that in 2014, we had less than 10% offshore and in 2017 its targeted to have roughly 35% offshore. But generally speaking, inventories will go down, but much more in the mine, in Brazil in the fourth and less on a global scale because of those three drivers. Thank you.



## Operator

The next question comes from Daniel Lurch with BNP Paribas.

## Q - Daniel Lurch {BIO 17122284 <GO>}

Hi. Thanks so much for taking my question. A quick follow-up on the gold transaction, do you view that the political situation in Mozambique could in anyway influence the timing of the completion? I think there has been a number of issues in recent weeks. What is your update on that one?

And quickly on the $2.7 billion, which you mentioned in the recent press release, can you again confirm, how much the actual amount is, which you expect to flow in this? Any requirement to capitalize in the Nacala Corridor?

And just second question on Samarco, could you give a quick update on your discussion with authorities here, do you see any progress in reinstating the previously agreed framework agreement on restarting the operation? Thank you.



## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

I was in Tokyo last week and I can say that we are extremely well aligned about the closing of the transaction with Mitsui. I think that it's a issue of a few weeks, probably November that we will sign the final agreement with Mitsui, and it's no big issue regarding the accident that we note in Nacala Corridor recently.

Luciano, about the project finance?

## A - Luciano Siani Pires {BIO 15951848 <GO>}

Yeah. Some more information as you know, the dollars for Mozambique, they have stopped sending money there because of the statements by the IMF that they were not happy with the discovery of someone unknown debts in the external account of Mozambique. That has been attention for a few months. However, in September, President Nyusi for Mozambique visited the Washington and met with Christine Lagarde, and Mozambique acquiesced with the idea of having a forensic audit of the debts.

So, therefore, there was a resumption of the IMF missions to Mozambique. We believe the country's on its way to normalizing its relationship with the financial community. And in between, we had received assurances from the majors ECAs that the current situation will be no obstacle to going forward with the support for Mozambique. Much to the country, there's a belief that it's part of the recovery of the country and it will help a lot going forward.

On the $2.7 billion, yes, we have that amount of money. We wouldn't have the difficulty. As I said demand is above what we need. And now we will, in the end, calibrate the precise amount depending on the cost for the overall package. So if we're going to have a few hundred million less or more, it will basically depend on the final cost conditions for the package.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

And about Samarco, it's important to point out that, first of all, we must reach a good alignment with BHP in order to be well prepared to going back into the operation. We have some discussion about telling them as Vale we have some infrastructure in the region that can help Samarco, but we must adjust the terms of and condition of this increase structure.

And up to now, we are not able to reach of these agreement and we must reach a consensus as well about that. We have a different view of BHP. I have a meeting with the CEO, Mr. Andrew Mackenzie, next week in London. And we hope that we have a nice, strong. and good relationship with him. I also like us to reach an agreement in some key points to live with our teams in order to go ahead with the transaction. Thank you very much.

## Operator

The next question comes from Jeremy Sussman with Clarkson.

## Q - Jeremy Sussman {BIO 15112588 <GO>}

Yeah, hello. Thanks very much for taking my question. I just want to ask about that 2017 guidance. I know you're going to discuss it more on the upcoming Vale Day, but recently, you gave a number of 360 million to 380 million tons in 2017, which was a little bit lower than what you'd given at the last Vale Day, I believe. I was just wondering with S11D on track kind of what's changed since then, are you holding back some tons that you could ship if you wanted to? And any color would be fantastic. Thank you.

## A - Gerd Peter Poppinga {BIO 17245689 <GO>}

Thanks, Jeremy, for the question. No, nothing has changed on this guidance. We are still sticking to the number – to the range of 360 million to 380 million, and we will detail that a little more in the Vale Day in one month. But, again, it is guided through the margin optimization. And, of course, we will always have a mature eye on the market. But the main rationale for this range is that we have a – the key here is that we have a constraint in logistics in the northern system in 2017, which is 175 million tons. We want to maximize the northern system. And the ramp-up of S11D is not two years anymore, but it's four years. So it will reach 90 million tons by 2020. And then we have the full logistics of 230 million tons.

This phased approach can be done with the same CapEx we had forecasted before. But we are stretching it out in terms of execution and also this also minimizes the operation interference with the existing operations. So the 175 million we want to maximize 2017 from the northern system as a whole, ramp up of S11D plus the northern region we have already. And then the rest will come from the southeastern system and from the southern system. So this is the information I can give you today.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Peter, if you allow me, just to confirm that the north system will work in terms of the number of 230 million tons. Originally, the idea it was in the north region with 140 million and in the south region in S11D with 90 million, which means 230 million. As right now, we have reached 155 million, which means that in the end we have to reach the level of 75 million. But that is not a matter of the source of the material, which the north range or the south range. All depends on the demand, what material would be better received by the market. Then it's some adjustment but considering that we have an infrastructure of 230 million tons for iron one. Thank you very much.

## Operator

The next question comes from (40:15) with Barclays.

Hi, guys. And thanks for taking my questions. Just want to follow up again on met coal. Do you guys see any changes in the type of contracts your customers are willing to enter? In other words, are they more inclined to lock in a spot (40:34) very high price? And I guess, generally, any thoughts you might have on the industry response from the supply side to the price would be very helpful.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Well, I think everyone is still unsure of how long the coal prices can stay this high. There's lots of very specific issues that have led to this the price hike. I don't think customers are looking into anything but, of course, you have seen the benchmark being settled at much higher levels. So I think that what we are seeing is the long-term market, the term contracts being adjusted accordingly to where we think the coal prices should be over the year the following quarters.

## Q - Operator

Thank you.

The next question comes from Thiago Lofiego with Bradesco BBI

## Q - Thiago Lofiego {BIO 16359318 <GO>}

Thank you, gentlemen. Two follow-up questions. One on the blending side. Peter, if you could comment on what are the pros and cons of doing your own blending with the southern tons versus engaging on the potential blending with the FMG. Just would like to understand your rationale specifically on that and if you could give us an update on what exactly could go on with agreement with Fortescue?

And the second question on the freight rates, is there more room to continue to negotiate rates down versus your own average or you're pretty much at a limit there in terms of the contract rate? Thank you.

## A - Gerd Peter Poppinga {BIO 17245689 <GO>}

Yeah, thank you, Thiago. Regarding FMG, I think we have our own blending strategy. It was built sometime ago. We are now executing it. There is nothing hindering us to do both. But it still depends on further negotiations with FMG so I will not enter into details right now because we don't have them, first of all, and second, it wouldn't be right to discuss things which have been negotiated.

But it is not, one, it's not excluding the other. We have our own blending strategy. We have our own blending resources. For instance, as I said before, one of the big changes we are implementing is that we don't spend now anymore enough – we don't need to make final products in the southern system in the port, losing capacity in the port, stressing too much our mind. Now we have intermediate products blended offshore, which gives them the final product that's one of our strategies. But again when FMG comes, where we are ready and when we have agreement, it can be a phased approach, one is not excluding the other.

On the freight rate it depends very much on the bunker, of course, but let's say at constant bunkers yes, we have still some room for optimization. The biggest (44:25) the first one is – we have $3 to $3.5, depending on the bunker, $3 to $3.5 more competitive freight rates than the first generation, so that's a plus. Then you have the fact that probably if you then consider the whole supply chain, we still have floating trans-Pacific system in the Philippines, which will be probably idle. And then, of course, there's the whole new dimension we are working with which is the active and rebalancing of our spot policy, spot fright rate policy, how to optimize that.

So yes, there is room to go down. But as you know the biggest element in freight is today the bunker variation. But at constant bunker, yes, we can still go down little bit in our freight rate optimization.

## Q - Thiago Lofiego {BIO 16359318 <GO>}

Thank you.

## Operator

Our next question comes from Felipe Hirai with Bank of America Merrill Lynch.

Hi. Good afternoon everyone. This is actually (45:46) here. My question is a follow-up on base metals to Jennifer. Jennifer, you mentioned earlier in this call, that you aim to reach a cash cost of below $11,000 per ton by the end of the year and we're wondering if you could share with us what the long-term goal is in terms of cash cost for the asset and when you think that could be achieved. That's the question. Thank you.

## A - Jennifer Anne Maki {BIO 16392645 <GO>}

Thanks for the question. I think we can achieve below $11,000 a ton at the end of the year – by the end of the year, obviously, not the average for the fourth quarter, but as we continue to grow the production and that's really what we need to achieve the $11,000 a ton, but slightly below that. And I would say, when you look to 2017, it will probably be the same level. But long term and we're fully ramped up at 57, we will be below $10,000 a ton after byproduct credits.

## Q - Operator

Okay. Thanks.

Our next question comes from Ivano Westin with Credit Suisse.

## Q - Ivano Westin {BIO 17552393 <GO>}

Hi, gentlemen. Thanks for the follow-up questions. Just two points, please. One the first one, on the fertilizer divestments, can we expect it to be concluded this year, just to be clear, please and the guidance provided for Mozambique is very helpful. The other point on a follow-up to Peter, on the previous caller's question, $25 and all the measures that they expect to take to achieve that. Can you just qualify, Peter, please, when you expect to achieve this $25. Thank you very much.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Peter?

## A - Gerd Peter Poppinga {BIO 17245689 <GO>}

Ivano, thanks for the question. That's a tough question. When we have the aspiration to target $25, and I can list you again of all on the main elements how we can get there. But we haven't established a firm target of when. It's, of course, not next year. It's not 2018.

One of the condition must be S11D must be full ramped up. The other conditions, second generation (48:20) must be fully operational with more than 30 new vessels, right? And so we are talking mid-term. We not talking next year or 2018.

Again, what are the main pillars to achieve that? It's three pillars. We have to optimize our global integrated supply chain in terms of efficiency and price realization. This is not optimized yet. But I talked about the Valemax generation, the full discharge in China which is increasing to rebalance our spot portfolio and long term freight. The ability that we have now to reduce cost in the southern system because we are not making final product at the port anymore, we are blending it offshore.

We are reducing OpEx by replacing trucks by belt conveyors companies (49:22) and Carajás and so on. And the price realization that if you blend more, you have a better price realization and to explore the optionalities which is very important and you can adjust for certain macro movements in the market

Then we have the distributions centers in China, which will be important for us to also to increase our price realization. And as I said before in this call, we feel that we are – that are market is not pricing in correctly our low alumina iron ores from the southeastern system. So we will work on that to increase our premiums for low alumina ore. All that is part of the road to the 25.

The other one as I said is the availability and the global recovery which is a very important macro element that we are increasing our global recovery strongly from one quarter to the other and from one year to the other. That's the total amount of product improvement (50:33) run of mine plus the waste. And I said before, we are out of the waste. We are not living ore behind. We are not jeopardizing our ore bodies.

We are transforming waste into ore either by beneficiating the waste now we have the ability (50:53-50:58) or by simply calling including some surface material which is too hard and considered waste, we are now including the waste into the ore, so that in the past we had one to one strip ratio. Now we are practicing at 0.621 strip ratio which is a big progress.

And then the other element of this global recovery is of course the way you treat the ore. So we are more and more dry processing. It was already a plan before Samarco incident but we are more in that processing and this today, let's say, this year we are 40% dry and we are going in five years to 70% dry, which of course in previous also recovery which postpones to CapEx which reduces OpEx and so forth. So further macro elements for which will be met and which will be detailed to the road to 25. Thank you.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Ivano, on the fertilizer deal we have ongoing discussions within the third parties and we expect to announce it soon but for sure before year end.

## Q - Ivano Westin {BIO 17552393 <GO>}

Thank you very much.

## Operator

Our next question comes from Marcos Assumpção with Itaú Corretora de Valores. Mr. Assumpção, your line is open.

## Q - Marcos Assumpção

Hello?

## Operator

You may go ahead, sir.

## Q - Marcos Assumpção

Okay. Good morning, everyone. First question, still on the Nacala Corridor, if you could comment that eventually it's more for the future if you could – if the project is scalable. If you could expand the capacity of the railroad and port considering that you have already a higher mining capacity?

Second question on China, regarding a potential devaluation of the currency, what could be the impact for Vale and, Murilo, if you could comment specifically on the shutdowns that we have seen in the mining industry in China, if you would expect some restarts, if they would regain some cost competitiveness in the future, or if the restart – or is the capacity shutdowns are probably irreversible? Thank you.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Marcos, I don't think that its visible really to say that we could expect some return to the market. I think that it's not so easy to shut our plan and later on to reverse and to going back to the operation.

I think that the evaluation that we had recently, it was almost 3% which is not a big number and the problem that they are facing is mainly in the environmental perspective, and I don't think that – until the number of 120 billion tons, I believe that this people will stay to the business. But the level of flexibility from 120 billion until 161 billion, 165 billion , we could consider. But something above those number I don't think that is realistic if you consider going back to the business. And the Nacala Corridor, Humberto.

## A - Humberto Ramos de Freitas {BIO 17479092 <GO>}

Yes, we can easily increase the capacity of Nacala Corridor. The bottleneck today (55:13) if we put this back, we could install a second (55:18) We move the bottleneck to the railway and in this case we can just increase the number of crossing guards.

## A - Murilo Pinto de Oliveira Ferreira {BIO 1921488 <GO>}

Thank you very much. I really appreciate your interest about the Vale, and I hope to see you soon. Thank you very much.

## Operator

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