



**Vale S/A**  
**Second Quarter 2019 Earnings Results**  
**August 1<sup>st</sup>, 2019**

**Operator:** Good morning ladies and gentlemen. Welcome to Vale's conference call to discuss second quarter 2019 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](http://VALE.COM) at the Investors link.

This conference call is accompanied by a slide presentation also available at the investors' link at the Company's website and is transmitted via internet as well. The broadcasting via internet, both the audio and the 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 macroeconomic conditions, market risks and other factors.

Today with us 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 - Acting Executive Officer for Base Metals;
- Mr. Carlos Medeiros – Safety and Operational Excellence Executive Office;
- Mr. Luiz Eduardo Osorio – Executive Officer for Sustainability and Institutional Relations;
- Mr. Alexandre Pereira – Executive Officer for Business Support;
- Mr. Alexandre D'Ambrósio, 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 second quarter 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:** Thank you. Good morning everyone. I would like to begin by expressing our respect for the families that have been suffering since the dam breach in Brumadinho. I want to thank once more our employees, the authorities,



the firefighters, the Civil Defense, and the volunteers, all of them deeply engaged to provide support and comfort through such tragedy.

SAFETY, PEOPLE and REPARATION. These three words will continue to be our priorities and define our actions since I took on the responsibility of leading Vale. The safety of the people who work in our operations, the people from our communities: this is our obsession, this is what moves us to transform the company. And it will be the safety of our assets and our processes that will ensure the safety of the people in our operations. Please, next slide.

Vale is totally committed to repairing damages. Over the past six months, we have made progress with countless measures to ensure the safety of the people and to repair the impacts caused. The Special Department for Recovery and Development, coordinated by Marcelo Klein, has been working with agility and flexibility with the objective of alleviating the suffering of the families as well as repairing the losses, interacting directly with communities and authorities.

Caring for people is fundamental. Increasing the financial security of the families is only a part of that. On this front, we have advanced with individual agreements with those who reach for us. At the same time, we have opened a dialogue with all the authorities involved with the reparation efforts so we can build together a fair and quick solution through collective agreements.

An example is the agreement established in July with the Public Ministry of Labor of the State of Minas Gerais, which had the participation of workers' unions and already had legal approval.

On the environmental front, we have submitted a Tailings Containment Plan to the authorities. We have completed several structures in the Ferro-Carvão Stream water treatment station to ensure that no more tailings are carried from the dam's breakpoint toward the Paraopeba River.

For a quick repair of the damaged infrastructure, a package of work is underway and includes, among other projects, the maintenance and improvement of some 700 km of roads in Brumadinho and region.

Lastly, we continue to give transparency to the investigations into the cause of the tragedy. The two investigations started internally, one conducted by a panel of specialists and the other by an independent committee. are also ongoing. Please, next slide.

Our safety and risk management are being reinforced. We are on a journey to transform Vale into the safest and most reliable mining company in the world. The new Safety and Operational Excellence Executive Office is independent from Operations and reports directly to me. This structure strengthens our strategic pillar and aligns our safety and risk management governance with the best benchmarks in the world.



Carlos Medeiros – with us in the call –, with solid experience in managing large transformational projects, will be an important leader on this front with focus on safety and operational excellence at Vale.

We are continuing to search for the best ways to raise the safety level of our assets. We have been working to accelerate the decharacterization of nine upstream dams in Minas Gerais and we expect to deliver the first two complete decommissioned dams (Fernandinho and 8B) in the first half of 2020.

In June, we were able to increase the safety level of the Vargem Grande dam, thus people were able to return to their homes. This is the result of a series of improvements that Vale has been implementing in the structure since January, such as lowering the reservoir water level and cleaning the drainage channels. Please, next one.

Well, we are also advancing in our strategy. As we said, at the end of the first quarter, Vale's strategic agenda will also be one of continued focus on the three strategic pillars established in 2018: strong discipline in capital allocation; maximizing the flight to quality in iron ore; and turnaround of base metals.

We have made progresses in this quarter, still a transitional quarter for Vale, which has a premise of reducing risks in our business. With the appointment of Marcello Spinelli as Executive Director of Ferrous, and with Juarez Saliba taking the leadership of Coal Business, we have taken important steps towards the stabilization of production and the reliable and sustainable development of both businesses.

In iron ore, we have made substantial progress. As mentioned in our last call, expectation of resuming operations in the Brucutu iron ore mine was confirmed in June. We have also partially resumed dry processing production at the Vargem Grande complex, and we are having conversation with the National Mining Agency to restart other dry processing operations as well.

Maximizing the flight to quality in iron ore remains one of our top priorities. Accordingly, I would like to confirm today the conclusion of Ferrous acquisition, which was announced in December last year and recently approved by CADE, the Brazilian Antitrust Agency. This acquisition will increase Vale's production with high quality pellet feed at competitive costs.

Our efforts to transform Base Metals are ongoing. In this quarter, we performed strongly at the Sudbury mines in Canada. In New Caledonia, we have the biggest challenge of the Base Metals business. Our approach in VNC has been the full transformation of the management system. One example in this regard is the preventive maintenance plan under implementation. Our expectation for Base Metals, as previously stated, is to see the first results of these transformations starting from the fourth quarter.



As for coal, we are working to stabilize production and overcome the operational challenges that have impacted our performance. We are developing our knowledge of the deposit, which will allow us to be more assertive about production levels.

Finally, all of our actions must support our “new pact with society”. We want to restore society’s trust in our ability to operate with safety while creating shared value, fostering sustainable economic development in the territories which we operate. We are committed to the redefinition of mining in Brazil and around the world. Please, next one.

It is important to reinforce that we are going towards great reliability. The second quarter reflects a transitional period. We had great pressure on volume and costs, which are already starting to show a positive trend for the coming quarters.

The reduction of uncertainties in our business is in progress: with actions to improve safety and risk management; with actions to stabilize production in all lines; and with greater predictability of expenses with Brumadinho and others. Resuming operations in Brucutu and part of the dry processing of the Vargem Grande complex is an important step to restore stability in iron ore.

On the financial and operational perspectives, we have had a strong cash generation, which will help us honor our commitments to society and strengthen our balance sheet further. Luciano will give more color on these points later.

We believe we are on the way to a fair and quick reparation and to the rebirth of Brumadinho in the medium term. We continue to work tirelessly to increase our safety, support the people and repair the damage caused.

I am confident that these ongoing changes will transform Vale into a safer, more sustainable and even more humane company; a better company. Thank all of you for your time today, and I now pass the word for Luciano to make the comments on the financial results.

**Luciano Siani:** Good morning and good afternoon. I will start going through the provisions.

As you saw, we provisioned about US\$1.2 billion of a total of US\$ 1.5 billion for environmental reparation this quarter. The key message here is that now we have a comprehensive level of provisioning to all the scopes that we believe will be the subject of our reparation. Any changes to those provisions will come from a refinement of the numbers going forward, as we get more information about how the programs will develop. So you should not expect any additional scope to be included in the provisions.

How did we get to those US\$1.2 billion in environmental provisions? We based ourselves on the agreements already signed, that we already know what we need to do on this topic; we based ourselves in the agreements which are under negotiation, for which we already have a clear view of what the final scope will be;



and we are also including compensation measures. We already have also indications about what kinds of compensation the authorities will demand for the environment.

So, for example, these provisions, they include tailings removals, dredging of the river, recovery of fountain heads, recovery of degraded areas and even sanitation compensation efforts, water supply securities for some of the cities, water sourcing alternatives, water treatment stations. So, this is very comprehensive.

In total, so we have already booked in our balance sheet US\$5.7 billion, including not only the environmental, social-economical, but also the provisions for decommissioning of dams.

Relating to the business now, going to Iron Ore. On the volumes, just to make a simple calculation for you, of the 400 million tons nameplate capacity that Vale has, at one point in time we had 90 million tons stopped, plus 9 million tons of the Córrego do Feijão mine, in Brumadinho, which will never come back; so therefore, our production capacity bottom at 300 million tons.

Now we have about 30 million tons back of Brucutu, and 12 million tons of dry processing in Vargem Grande. So therefore, as we speak, we have a total production capacity between 340 and 345 million tons annualized. And additional comebacks of operations will add to that number.

In terms of costs, as you saw, there was an important increase in costs from the first to the second quarter. Three main drivers for that. Demurrage costs, which we underestimated when we spoke to you on the last call, but this is completely normalized now. The line of vessels is back to normal levels. There is the iron ore price, which impact the purchase of feed from third-parties, and that's good news, right, but it has impact on costs. And there are the cost carryovers because of the 45 to 60 days which takes from production costs to flow through inventories and then to be sold.

If you take this, you have approximately US\$ 160 million of excess demurrage and the lack of cost dilution. And if you add on top of that the US\$ 351 million of stoppage and other expenses related to Brumadinho, of which US\$ 225 million – and you find all those numbers in the release – relates to stoppage expenses themselves, and US\$ 126 million to logistics extraordinary expenses. When you add all of this, you get to approximately US\$500 million of ongoing recurring effects on the business related to the stoppages and to the consequences of the Brumadinho dam breach.

So what we are telling you is, we have addressed the reparation costs fully, to our best knowledge, on the balance sheet, however, we have US\$500 million of recurring business impact of which we expect a reduction going forward. Why reduction? We expect US\$2.5 per ton reduction on C1 – because of the elimination of the demurrage effect, cost dilutions and the reduction of the carryover effects on costs –, and we expect US\$1.5 per ton of reduction in expenses related to the comeback of some operations, which naturally reduce the stoppage expenses.



When you add those US\$ 2.5 + 1.5 per ton multiplied by production, we expect of those US\$ 500 million-recurring-impact on the iron ore business, US\$ 300 million will be out of the financial statements next quarter. So that's the size of improvement we expect going forward.

Another topic important in iron ore is freight. You saw the very steep increase in spot rates in the month of July, reaching US\$27 per ton from Brazil to China. This will not meaningfully impact Vale on the third quarter. We expect a very small marginal increase in our average freight rates. The main reason for this is, because of the smaller production, our exposure to the spot market today is minimum.

On the 4Q – if you want to discuss, we can do it later –, we will start to see some effects of the new IMO regulations, which will then be mitigated over 2020 and 2021. But the freight rates, on a relative basis, the freight rates for Vale will remain very competitive even in this environment of increased freight rates.

Talking about the other businesses, just very briefly, I would like to stress the very strong performance for Copper, and we will reach our guidance this year. And why is this important? Because part of the Copper production comes from the Canadian mines. The Canadian mines are performing very well, the mines, the mill, the smelter, and you're not seeing this in the Nickel numbers because of specific problems we had with the refineries. But the Copper production doesn't flow through the refineries. So it is proved that with the turnaround of Base Metals [...] to bear fruit in Canada, that we are increasing by more than 30% the Copper production from Ontario this year, and we are going to reach our guidance. It is going to be very strong, Q3 and Q4.

In Nickel, Q3 will post an improvement, although, because of the scheduled mine maintenances, not strong as what we will see in Q4, which will then be very strong. Do not expect improvements yet in New Caledonia in the second half. We may discuss this in the Q&A.

You saw a little bit of increase in financing costs because of the additional debt that we took over to buffer up our cash resources in the first quarter. This additional debt has been repaid, so financing costs will come down over the next quarters. When you look at net income, we had also non-cash impacts that go beyond Brumadinho.

Most importantly, the Germano dam, which is a dam at Samarco, will be decommissioned as well. We have an estimate of over US\$500 million to be spent on the decommissioning, so Vale's share was provisioned, and we also had an update on the indemnification expenses, through the Renova Foundation, in Samarco, and Vale's share, US\$383 million, was also provisioned.

Investments came in low, but they will recover in the second half, so we still expect to reach over US\$4 billion in investments this year.

And in summary, you saw the very strong cash flow numbers, which will naturally improve in Q3 and Q4. So, in summary, what we expect for the second half of the



year is marginal variations in the provisioning on the balance sheet related to Brumadinho, decreasing costs and higher production volumes with the recovery of the operations, some already announced, and some that we expect.

### **Question-and-Answer Session**

**Operator:** Excuse me, I'd like to make a correction. The name of the Executive Officer of Safety and Operational Excellence is **Carlos** Medeiros, and not Marcos, as I said before.

We will now begin the question-and-answer session. If you have a question, please press the star key followed by the 1 key on your touchtone phone now. If at any time you would like to remove yourself from the queue, press star 2. Please, restrict to two questions at a time. The first question comes from Carlos de Alba, Morgan Stanley.

**Carlos de Alba:** Good afternoon, gentlemen. First question would be on what are the next steps on concluding the agreement or the framework related to the Brumadinho event? When do you expect or when can we expect, perhaps, to have the sign off of the prosecutors and the other authorities in Brazil, so that we or the company and the market can close this tragic event and start focusing on natural reparations and indemnifications, which I understand you have already started?

And my second question is regarding the restart of the 20 million-dry-operations, that I see in the slide that you presented, when I read in the release that by year-end they should be restarting, but does that mean that only at the beginning of next year they will start producing? Or should we, or can we expect a gradual ramp-up throughout the second half of the year and therefore by the beginning of next year the 20-million run rate will be already achieved? Thank you for the clarifications.

**Luciano Siani:** Carlos, unlike in the case of Samarco, where you had one single agreement to address all the topics of the civil lawsuits, we've been addressing specific matters of the civil lawsuit one by one. So we have already 15 agreements which have been already settled, which means that the scope of the remaining agreements to be signed keeps reducing.

There will come a point when the authorities feel that all the relevant topics of the lawsuits have been addressed, that, yes, there can be a suspension of those lawsuits. And through the progress that we've been making, we expect this to happen until the end of the year.

But what is important to notice is that you talked about closing this tragic event. From a perspective of estimating the total financial impact, given all the negotiations that are ongoing, we expect this to be a quarter of closure. But from a legal standpoint, obviously, we need to see the agreements be signed one by one.

One concrete example of that is that, in the 1Q, we made a provision for the reparation of our employees and the families of the deceased employees and we



finalized, from a legal perspective, the agreement this quarter and we actually eliminated the civil lawsuit. And the difference between the final agreement and the original provision was small.

So that's the dynamics that we expect going forward. There will be, perhaps, some differences in the actual numbers and the provisioned numbers, up or down, but from a scoping perspective, everything that we know and that's on the table, being negotiated with the authorities, is being taken care of. And we have an expectation that until the end of the year, perhaps, we will address all the issues from a formal perspective.

**Marcello Spinelli:** Carlos, this is Marcello Spinelli, thank you for your question. It is a pleasure to talk to you, it is my first time here. Regarding the production, we already have one third that we already talked about, the dry operation. Just reinforcing, we already have the return of the Pico production in Vargem Grande.

And just to answer, that's a gradual return. So just to have in your mind what it is based on, we need to prove and talk to the National Mining Agency that we don't have any impact in the dams, that we call it a seismic impact, so we need to check with the engineering tests to guarantee that we can return step-by-step the operations.

So, we are committed to having this return in the next six months, and just to reinforce what you said, we expect to have the run rate operation in the next year, but to recover partially the operations during the next semester.

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

**Timna Tanners:** Hey, good morning and thanks for all the great details. I wanted to take a step back and ask if you could give us some detail on the expansion plans in the Northern system and remind us about your progress and your projections there, timing-wise and also the necessary infrastructure involved to get to the increase production targets?

My second question was really hoping for more detail on nickel, also a bit high level. So, I know in the past you talked about potentially consolidating or divesting some of the underperforming assets, but there's also been some headlines about some potential big investments there. So, I'm just wondering if you can verify how you are thinking about that business over the medium term. Thanks very much.

**Eduardo Bartolomeo:** Hi Timna, thanks you for your question. [...] I think the process undergoing there is an operational turnaround, we need to structure the business to be able to whatever route we can [...], so I think as Luciano mentioned, we've been doing progress very well in Canada and we are struggling with New Caledonia, as we already said.



So, for that sense, we keep our strategy to catch the upsides of the electric vehicles for the nickel, and as I think some advances have been made in Indonesia around the joint ventures that will be created, internally funded by PTVI by the way [...] Sorry, just a minute. Sorry, Timna.

That will be self-funded by PTVI. So, basically nickel is focused on transforming the business, on transforming the operation, having the assets in the condition that they are supposed to be. Most importantly, as I already pinpointed, is VNC, that is really underperforming. So, I think nickel is up to capture the upside from electric vehicles. And I think the expansion plans for the North, I will pass the word to Spinelli.

**Luciano Siani:** Eduardo, before we go on, perhaps you should comment on Indonesia, because that was perhaps the headlines that were mentioned by Timna.

**Eduardo Bartolomeo:** I mentioned Indonesia, I think it was exactly when we had the problem with the phone. Those headlines, they are related to the investments that have to be done in Indonesia for the resource, but they will do on a joint-venture basis and, fundamentally, through the financing of the PTVI. So it's going to be an equity finance, the exposure of risk and finance is being discussed, it has not been approved by the way, so it's just a matter of the development of the resources in Indonesia.

**Marcelo Spinelli:** Hi Timna, thank you for the question. It is a pleasure to talk to you. Let's divide this in three steps. The first one is about the ramp-up of the S11D, it is going really well, we are in a run rate this quarter of 230 million tons (in the Northern System). We expect to expand the system, the Northern System, to 240 million tons on the second half of 2022, and we are already planning, we don't have yet concluded the project, but we are planning to expand the S11D to 150 million tons. So, we are going to have further information about this expansion when we get the final details of the engineering.

**Operator:** The next question comes from Chris Terry, Deutsche Bank.

**Chris Terry:** Hi Eduardo and Luciano. Thanks for taking my questions. The first one is on the pellet market. You have got this year a better round of 45-million-ton level. Does this include the acquisition of the 4 million tons? I don't think it does, but can you just talk about your pathway back to 60 million tons and above? And also, just some thoughts on how Samarco might fit into your medium-term pellet guidance. Thank you.

**Marcelo Spinelli:** Thank you, Chris, for your question. Regarding pellet market, well, we have the constraints in production, we now have the number of 45 million tons of production this year. This depends on the pellet feed production, we are out of product in the South and Southern systems.

So, regarding production today, we are full in Tubarão and the North system, and also Oman. To recover about 11 to 15 million tons of production in the Southern system, we need to recover the production of pellet feed, we still have to wait for the



return of the wet production in the Southern system. So gradually, we are going to return this production and, in this case, end up more mid to long-term view, almost two years. We can feed these plants Fábrica and also Vargem Grande, using some products from third parties, but we still don't have the total capacity to return these plants. So, we plan to recover this in a few months, but we need to guarantee the pellet feed production to have this.

**Luciano Siani:** With regards to Samarco, the expected restart for Samarco is second half of 2020, but Samarco will restart with only a third of its capacity, so 10 million tons. And still, this one third will be subjected to a ramp-up.

To add a second concentrator to Samarco depends on additional work towards tailings systems. Samarco had a plan to restart a second concentrator, sooner after the first concentrator, but these plans were jeopardized because of the new regulations following Brumadinho. It is currently working on adjustments to its business plan to see when the second concentrator should restart.

And a third concentrator, even in the original business plans, would be dependent on the permitting of a brand-new structure, be it probably a new tailings dam, which becomes even more of a constraint in the much medium to long-term future. So do not expect Samarco to make a meaningful contribution to Seaborn pellet markets in the short term.

**Operator:** Our next question comes from Amos Fletcher, Barclays.

**Amos Fletcher:** Hi, good afternoon gentlemen. Just one question really. I just wanted to ask about the 20 million tons of dry processing you potentially are going to bring back. I just wanted to ask, given how quickly the Vargem Grande capacity was restarted, can we expect that the next 20 million tons of dry processing could restart sooner than the year-end? And could you also give some clarity on how that dry processing output will influence your product mix? Thank you.

**Marcello Spinelli:** As I told, it depends on the negotiation and also studies and engineering design to test actually the impact of the regular production, the dry production, in the dams. Actually, we need to do this side-by-side with the National Agency, so they have a line to progress these analyses and return step-by-step.

So, the first one was Pico and Vargem Grande production. So, we are waiting to recover Abóboras, Timbopeba, Alegria, Fábrica, so, step-by-step we are expecting to do this in the next six months. So, the recovery is gradual, and they are waiting the first quarter next year to have a run rate production of the other 20 million tons.

Regarding product mix, it is important to say this product will feed our BRBF (the Brazilian Fine Blends) that we blend with the Carajás fines. So, it is a very important product to guarantee that we have the total use of the Carajás, an important product to the market. So, this will feed the BRBF.



**Luciano Siani:** Carajás fines cannot be mixed with other lower-quality ores to make BRBF because the specific product from the South, the dry processing from Vargem Grande, for example, has very low alumina, and one key feature of the BRBF is low alumina. So, whenever you bring Vargem Grande back, for example, you do more BRBF, which you couldn't do otherwise.

**Operator:** The next question comes from Grant Spore, Macquarie.

**Grant Spore:** Hi, good afternoon gentlemen. Thanks for hosting the call. Just two questions on my part. Just a small sort of technical one. The Viga mine, just in which system will those tons be reported under? So a very simple question.

And then the second one is, is it too soon to be restoring the old dividend policy, just given that you now have more clarity on provisions? Your debt has come down and the cash generation in Q2 was very strong. Thank you.

**Marcello Spinelli:** Hello, Grant, it is a pleasure to talk to you. Well, the Ferrous production will be connected to the South complex, so we can use to feed our plants of Fábrica, the pelletizing operation. We still have contracts in place that we need to finish, so we are going to keep these contracts until the end of the year, we have a decrease of these contracts, so after the end of the year we can use the product to feed the production in the South system.

**Eduardo Bartolomeo:** Okay, Grant, thanks for your question. Just to be very clear, we are not discussing dividends now. Our focus is totally on the reparation and restoring our company's risk profile. Thank you for your question.

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

**Tyler Broda:** Great, thanks very much for the call today, everybody. My question, actually, I'm just going to actually ask some more questions to add to Grant's, but I guess, while I'm on the line, have you seen, with any of the falling Chinese steel margins, have you seen any change in the behavior of your customers yet?

**Marcello Spinelli:** Tyler, thank you for your question. Well, the margins of the steel market in China depends on the production and to keep the strength of the market there. So we really believe in three components that are still pushing the sales and the production. First one is about the property market, that we think that is slowing down, but not really something that we need to be worried about. The *politburo* is not reinforcing this stimulus, but on the other hand, we have the manufacturing and their production of infrastructure investment that can recover.

So considering this part of the balance of supply and demand, on the supply we see a pressure, we still have the recovery of Vale and other majors, Australian majors, but we still have a gap in the stocks. So, this is a gradual process to rebalance the demand and the supply. So, the price is still high, they are pressured by the raw materials cost, and we still see a constraint and a narrower margin for this market.



**Eduardo Bartolomeo:** Okay, I think just for coming back to Grant's question... Sorry, Tyler's question about dividends, being very clear, we have other options to do – and Luciano will explore a little bit where our mines are in the short term –, as I mentioned, focus on repairing and in due time we will come back to discuss that. But there are other options that we can discuss as well.

**Luciano Siani:** We are very mindful of the needs of our shareholders, and no one more than us would like to get back to normal so we can resume dividend distribution.

In the meantime, the way we are thinking about the balance sheet is, you saw that with the releases of funds, our *pro forma* net debt is about US\$8 billion today. There is another US\$1.8 billion of leases in our balance sheet, IFRS leases, and those US\$ 5.7 billion that were provisioned, they will need to be disbursed at some point in time. So, one should think perhaps of these US\$ 5.7 also as a liability when you think about capital structure.

But it is also true that if the cash flow generation was strong in the second quarter, it will be even stronger in the third and fourth quarter. So, if you think about our US\$10-billions-target net debt, when you put this altogether, we are not there yet, but on the other hand, once the cash starts coming in, there is no alternative use for it in projects or whatever rather than manage the balance sheet and perhaps make a nest-egg for future distributions.

In terms of the use on the balance sheet, we can, yes, address part of those leases, which today consume financial expenses, and there are other liabilities on the balance sheet, for example, minorities still have shares in our MBR, one of our subsidiaries, and there are others that may be addressed on the second half. If eventually the balance sheet becomes under levered, this will be fixed, when, let's say, the social license to pay dividends comes back, we will likely re-lever the balance sheet in order to do the proper distributions going forward. But this is, I'd say, a medium-term concern of management. Shorter-term, as Eduardo underscored, we are not discussing because we are very mindful of the homework we need to do first.

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

**Alex Hacking:** Hi and thank you for the call. I have 2 questions related to iron ore. First question: could you discuss your inventory strategy in the second half of this year? And then the second question: once Vale is back to 400 million tons in 2- or 3-years' time, should we think about your cost structure being back where it was historically, or would there be some long-term effects from Brumadinho in terms of operating costs? Thank you.

**Marcello Spinelli:** Hello Alex, thank you for your question. This is Spinelli here. Talking about inventory, well, the first half we used about 6 million tons of our stocks to guarantee the sales and, actually, it was a trend in the market, in China we could see a decrease of 30 million tons. So what we see is the supply demand more in



the trend to recover balance, we don't see for the market this fast recovery of the inventory, but it is a midterm process to recover the inventory. So that's what we expect with the decrease of the inventories in the whole China for the whole suppliers.

**Luciano Siani:** For all practical purposes, we believe the cost structure will return to the 2018 levels. From a strategic perspective, perhaps obviously Vale will spend more, for example, on dry stacking, we will accelerate our plans through New Steel to do dry concentration. But the impacts on the cost structure will be marginal in a longer-term and more than compensated by the ongoing cost reduction initiatives with digital transformation, operational excellence and cost-cutting.

Just a note for you. In May of this year, so 2 months ago, S11D reached the nameplate business case cost performance of less than US\$8 per ton, so we reached US\$7.7 per ton at S11D. As the S11D proportionally overall of Vale increases (and you are not seeing it today because of all that noise around the cost structure), structurally you could have a lower cost structure because of the larger share of S11D.

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

**Sergey Donskoy:** Yes, thank you very much. I have one question and probably it will be a simplistic one. Just trying to understand your production performance in iron ore and to put this into context of your guidance.

In Q2, iron ore production outside of North system was, in annualized terms, roughly 90 million tons. In Q2 last year, it was around 200 million tons, and the average of the last 3-4 years was also around 200 million tons. So we are talking about a roughly decline about 110 million tons.

How can this be reconciled with 93 million tons, which, as you show in the presentation, was the effect of these stoppages? So what was the addition of impact in Q2 that led to stronger decline? Thank you.

**Luciano Siani:** Well, that's a hard question. I would guess that we are talking about typical variations, and we may have had a weaker quarter in some operations in the South. But I am quite sure that we... Actually, when we talk about 90 million, it's 93 million, right, that this is the loss of production.

Every operation has some long-term trends towards production. Sometimes, for example, the production within Marianna has been coming down slightly over the years, our production in Itabira had a great jump in 2015 and 2016 and was coming down recently. But you can be pretty sure that the bottom of the production capacity of Vale was 300 million tons, when we had 93 million tons stop plus 9 million.

That's one good point, one piece which is missing is the 9 million tons of Brumadinho itself, which will never come back. So when we say that we have 93 stopped, the actual total loss was 102 million tons, because it is the 93 million tons which may



eventually come back plus 9 million tons that will never return. So that accounts for half of your difference.

I am pretty sure that the other half is small variations amongst the different operations. And as a consequence, which is implicit in your reasoning, is that the Northern System is increasing and compensating part of this larger loss in the South.

So today, when we talk about 400 million tons of capacity within Vale, people should think more of 220 to 230 million tons in the North and 180 to 170 million tons in the South. So that's what we need to do; to try to recover these 180 million tons of production in the South and the Southeast.

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

**Alfonso Salazar:** Good morning and good afternoon. Thank you for the call. I have 2 questions. The first one is regarding demand, iron ore demand. Outside China because what we have seen in the first half of the year is very strong crude steel production in China, but not so in the rest of the world. So if you can make comments on that and also keep in mind that there is an increase on ferrous scrap use in the past years, so how do you see that evolving in time?

The second question is on the new pact with society that is one of your new strategies, if you can comment on something specific, on the timing, how do you plan to implement that? Certainly public opinion and the investors need to understand that Vale is working under stricter safety standards from now on. So if you can give some details on this as well. Thank you.

**Marcello Spinelli:** Thank you for your question. This is Spinelli speaking here. Well, as you said, China is putting a lot of pressure on the demand and actually making the price higher. We expect a 5% increase in production and the demand there. Ex-China, we are confident in the lower growth, it's 1.5%. We have some pressures in some markets regarding the problem of high price, this is specific for China, but they are the price setter of the market, so we have in Europe some productions that are slower, with slower growth than we expected in the beginning of the year, but they are keeping the growth in 1.5%. That's what we are working on in our forecast.

**Eduardo Bartolomeo:** Alfonso, thanks for your question. I'll try to be brief. This pact it starts with a fundamental thing: That society has to trust that we can operate safely. That is a broader discussion, it has to be done with society, has to be done with the regulators, with the associations. In Brazil, we are talking with IBRAM, with CNI, for instant, in that sense, and in the world, we are talking ICMM. As you know, it is developing new standards for mining. So first of all, safety is the key issue here. Second, we have to expand development through where we operate. Brumadinho is a good example because you stop the mine, suddenly you have to restore economic development there, or you should prepare when that happens in the sense of Itabira, is something that is coming. So you need to prepare the new phase after mining is gone. So developing the territory is a very important element in that.



And thirdly, we are going to start discussing a lot, it has to do even with the scrap that you just mentioned, we need to create an environmental benefit for society. As miners, we have to look at the chain, we have to go beyond scope 1 and 2, we have to look at scope 3. So we are redefining our carbon footprint, we announced last year in Vale Day the SDG, with the UNO, and we are going to expand that, we are going to come even more aggressive on our strategic plan.

So in summary: operate with safety, help the territory, develop the territory and build a sustainable future for society. I hope I answered you well. Thanks for your question.

**Operator:** The next question comes from Peter Grishchenko, Barclays.

**Peter Grishchenko:** Hi, good morning and thanks for taking my question. I wanted to follow up a little bit more on the debt reduction plan. Can you maybe be a little more specific in the way you are contemplating with respect to debt reductions? Do you think the company could resume tendering for the bonds, as you did in the past, or you're more targeting the loans and bank debt?

If you're considering tendering, maybe you can provide some color on how you are thinking on any particular trench or a reduction across the curve? I mean, any details would be helpful.

**Luciano Siani:** Peter, this level of detail we cannot disclose, but if you just do the math, it is pretty clear that we will need to attack everything at the same time. So it is not that we have so many alternatives. What I indicated in my previous analysis of the balance sheet is that, also beyond loans and borrowings, there are other liabilities that we may present opportunities for balance sheet optimization.

So leases were an example, minorities were another example, and there are others. So we very much will... That will be the main use of funds for the cash surplus until we resume paying dividends.

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

**Eduardo Bartolomeo:** Okay, thank you for your participation and questions. I'd just like to reinforce, as we've been doing during the call: it is a transition quarter. We are really moving towards a greater reliability, we are improving our safety, our risk management, we are resuming production, we increased predictability of the expenses in Brumadinho.

So that's very well said, but I just want to conclude my speech with these 3 words that are guiding our work inside Vale: Reparation, Safety and People.

Once again, thank you for your participation and have a good day.

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