Q&A Session 1

Wednesday, 30th November 2022
Q&A

**Menno Sanderse (Head of IR):** So first Q&A. Jason, do you want to kick it off?

**Jason Fairclough (Bank of America):** So I guess for Simon. It's interesting to see 360 back up there as a target. It's been a few years since we've seen that up there. So could you talk about the timeline from here to there? And is that actually a real 'we will produce 360?' Or this a Vale style target, which is '400, maybe one day?'

**Simon Trott (Chief Executive Iron ore):** Hi, Jason. Probably just unpack that, and maybe to split it into three buckets. So in the near term, and I've touched on some of the productivity. I've touched on some of those low-cost creep opportunities. That's the sort of the very near-term together with ramping up those new mines.

As we outlined on the famous bubble chart, we've got that next tranche of mine development, Bedded Hilltop, Brockman Syncline and Western Range, which is – which has been progressed currently. And that gives us the mine platform that we really need.

Now, longer term, Gudai-Darri and Rhodes Ridge come into play. But in terms of the here and now, next year is really about ramping up those projects well and progressing that next tranche of mines to really push into that 345 to 360 range, and then those subsequent developments to really sustain that at the sort of product grades that we need in the market.

**Jason Fairclough:** So just to push you a little bit.

**Simon Trott:** Sure.

**Jason Fairclough:** Three to five years, or is it beyond five years?

**Simon Trott:** So the next tranche of our mines developments is '25, '26, '27. And we need those to really get into that range. So that really defines the timetable, Jason.

**Jason Fairclough:** Okay. Thank you.

**Operator:** We are now taking the first question. The first question from Rahul Anand from Morgan Stanley.

**Rahul Anand (Morgan Stanley):** Hi, Jakob and team. Thanks for the opportunity, and good morning to everyone. Questions for Simon. Simon on the iron ore business, I mean, one of your charts lays out how you've got an exit rate of close to 340 million tonnes per annum in the iron ore business this year. If you get your guidance sits below that for the full year next year. Could you help us square the circle on that?

And then also, as a follow-up for that question, in the Western Ranges, you put out the map. And if I heard it correctly, you said that only about 20% of what you initially thought would be mined if you compare it to the previous map. If I heard that correctly, how should I think about the rest of your reserve base as a company? And what kind of threat do you foresee in terms of being able to run that?

**Simon Trott:** Sure. And maybe I'll – Rahul, I'll just take that last question first. So the example I was giving was one of our big operating sites. It wasn't relating to Western Range. And it was when we look at the mine plan in 2019 and we compare it to today's mine plan, only 20% of the material was mined when we scheduled.
Now some of it was mined at different times, some of it’s been pushed out beyond that window as we work through that heritage constraints.

So it wasn’t that those times have necessarily disappeared. They just weren’t mined as we scheduled. And what that means is we’ve got to re-sequence. What that means is we have faster lateral development. And hence some of the aspects you’ve seen over the last few years, including SP10, which we’ve used to fill the gap.

In terms of your first question around the guidance, and I’ll go into some detail in terms of how we thought about that. We are finishing the year with really strong momentum. And we want to make sure that we’re building quarter-on-quarter. And so we’ve taken 320 because that’s what’s been demonstrated.

Now, clearly, we’re going a lot harder about that next year. And as a team, we’re chasing a higher number, but we’re using demonstrated rate to set that bottom end of guidance. We think that’s the prudent thing to do, particularly given the context of the last few years. As we look at next year, Rhodes is – sorry, Gudai-Darri is on track. So we’ll produce a bit over 20 million tonnes from Gudai-Darri of the 43 million tonne capacity. We’ll produce a bit over 20 million tonnes having commissioned it in June.

And similarly, the Robe Valley, we’re seeing positive ramp up of those projects. And the challenges we’ve had are within the envelope of normal ramp up. But those projects are ramping up. And so what we want to do is demonstrate performance and build on that each quarter. And that’s the approach we’ve taken with the setting a guidance.

Menno Sanderse: All right. Thank you. Sylvain, please.

Sylvain Brunet (Exane BNP Paribas): Good morning. Sylvain Brunet with BNP Paribas Exane. My first question is on iron ore, as you were alluding to your market share. Have you identified any market share gains? At the time some of your competitors are facing high silica issues? And is that an issue you have to address also? And is there any technology available for that?

And my second question is on aluminium and on waste, the so-called red muds, in that field also, is there any new technology available to minimise that impact, please?

Simon Trott: So maybe I’ll take the first one quickly, and then pass off for the second one, which we’re very interested in the answer.

In terms of the market, look, our approach to the market hasn’t changed. We take a value over volume approach. And we work with our customers to really make sure that we’re meeting their needs. And we’re certainly engaging with our customers, as they think about the products that they need.

Now Pilbara Blend gives us tremendous advantages. It gives us advantages, because it is the industry base load. And so that's the product that we really see as the flagship of the business. SP10 does give us some flexibility around that, and we can place that to customers. I think we’ve done a lot of work in the last few years, particularly in modelling and understanding all of our different customers and their needs, and then really targeting products that they value the most.

Jakob Stausholm (Chief Executive): It’s actually a very, very interesting question, Nigel.
**Nigel Steward (Chief Scientist):** Well, I think, more broadly, what we're doing is we're looking more and more at our waste and what we can do to extract value from our waste. So we talked about Nuton earlier in the presentation. We're doing some work on copper tailings as well, with a start-up in the US looking at how we can use copper tailings to make supplementary cementitious materials. So that's becoming sort of quite advanced. And we're doing similar things with red mud as well.

I think the key with red mud with bauxite residues is finding a suitable market at volume. That's always the challenge. We know, for example, that the material contains rare earths. So can we extract some of those? And I think that changed our direction and our focus. We're looking more now rather than just taking that material and sending it to another industry and getting them to try and cope with it. And this is where we find the supply – the demand and the supply imbalances.

We're looking at what we can do to extract more from it. So the question for us is how can you extract it and extract multiple very valuable materials from it. So that's a subject of an R&D programme at the moment for us. And so we're looking at that, looking at what we can do with the iron oxide that's developed that comes out of the residual alumina, the residual titania and also the rare earths.

**Menno Sanderse:** Tyler, please, behind you. Thank you. We'll go back to the line after this.

**Tyler Broda (RBC):** Thanks. My question is on Rhodes Ridge. Just wondering if you can provide a bit more colour on how that fits into the portfolio now that that agreement has been signed? Does that push out some of the projects and studies stage? I'd assume capital intensity's likely be lower. And then I guess maybe just as a follow-on. The chart very helpful from Vivek on page 23 showing the intensity of emissions. How does Rhodes Ridge fit on that chart? Thank you.

**Simon Trott:** On Rhodes Ridge, I guess one of the really exciting things about Rhodes Ridge and standing on the top of the ore body as we were signing, 60 kilometres across, our current operations are spread over something like 800 kilometres east to west. And so that volume of resource, that sort of grade and you can stand there and basically look at it all. The railway line cuts between two ore bodies. And so, it's well positioned from an infrastructure point of view.

We are certainly reviewing our development sequence now that we have the joint venture at Rhodes Ridge, to really look at how do we streamline. One of the things that we're working through in the Pilbara is just the volume of work, both in terms of labour but also in terms of stakeholder approvals, etc. And so Rhodes Ridge does give us an opportunity to look really hard at some of those developments and think about that sequence in a different way. And so that's some of the work that we're doing currently.

Vivek, did you want to?

**Vivek Tulpule (Chief Economist):** It broadly sit in line with PBF, because it's going to be used as a supplement PBF. So that's well considered. But as Simon says, there are options that we can look at in terms of the timing.

**Menno Sanderse:** One question online first, and then we'll go back to the room.

**Operator:** The next question is from Lyndon Fagan from Morgan Stanley. Please go ahead.


**Menno Sanderse:** Lyndon, it’s you. I think it’s JP Morgan. Lyndon, go on.

**Lyndon Fagan (JP Morgan):** Yeah. Thank you for that. Yeah, look, my first question was just a quick update on Simandou, please. Seems like the CapEx guidance has been brought down as that project has been delayed. I’d appreciate any sort of update.

And then back on the Pilbara. We’re not really talking about Gudai-Darri phase two, which seems like an obvious project, considering there’s a workforce there, recently been there. And it’s a brownfield expansion now. I’m wondering if you can explain why that isn’t being sequenced a bit earlier.

And I guess further to that, heritage delays. It looks like Western Range has been sequenced not necessarily because it’s the optimum mine to sequence but it’s simply the only one that’s had approval if you’re able to talk to that issue.

**Jakob Stausholm:** Great. Thank you. Let’s start with Simandou. Certainly, Bold and I have had quite a few trips to Guinea. What’s the latest status?

**Bold Baatar (Chief Executive Copper):** Well, the team is in Guinea today.

**Jakob Stausholm:** Exactly.

**Bold Baatar:** Look, I think for Simandou, the key is to formalise the TransGuinean infrastructure joint venture with the government of Guinea as well as of partners there. You may have seen now Baowu is formally come in into the consortium of 1 and 2, and they’re entering into the discussions as well with the government of Guinea. So we hope to move in progress that and will take you know the government of Guinea’s pace on that. I think they’ve appointed technical and financial advisors. And I think it’s really important to set an agreement now that can actually last for decades to come. So it’s quite important to have that right level of expertise. So we’ll see where it goes.

I think in terms of CapEx intensity, I think we talked about, I know the numbers are out there, but roughly $4 billion Peter is roughly our equity share of that number. And it’s obviously going to be driven how fast we ramp up over the years, but we’re very pleased with WCS. They are absolutely in the country, and they have all the equipment on all the Chinese railway construction companies on the ground who help – will accelerate the project. So there’s a timing advantage in terms of that partnership.

**Jakob Stausholm:** Excellent. It certainly hasn’t disappeared for me, phase two.

**Simon Trott:** Yeah. And in terms of our approach, so when we look at our development sequence, we structure it in a way that delivers the greatest value. So Western Range is where it is, because of value. Now Paraburdoo was declining. And so if you don’t progress, Western Range at that point, then you have an idle plant, but you also have a talented workforce, and to re-sequence that obviously comes with costs, and that played a part.

Really excited with Western Range with the partnership with Baowu, which strengthens our connections with customers. And it probably answers to some degree, the Gudai-Darri phase two question as well. So we’re having a look at that project in terms of what is the development pathway that gives us the greatest value. And we have learned a lot about ore body. We have learned about environment. We have learned with the Gudai-Darri temporary crushing and
screening, that that might may provide a pathway that we're actually able to liberate greater
value for Gudai-Darri.

And that's some of the work that we're currently progressing as part of an order of magnitude
study, and we'll make those decisions and move forward. But it will absolutely be part of our
future. It probably just sits a bit beyond the ones on the bubble chart there.

**Menno Sanderse:** Great. Two more questions in the room here before we break for coffee.
Keep in mind there's another Q&A session at the end and there's the break and there's
sandwiches after. So everybody in this room will be able to ask questions. But Myles and then
Dom please. Myles here in the front.

**Myles Allsop (UBS):** Maybe, Vivek, you could talk a little bit about your long-term outlook
for iron ore demand. Obviously, you've touched upon the growth that's coming in your future-
facilitating commodities. But how do you look at overall iron-ore demand in the context of scrap
steel growth, in the context of the Asian Indian demand potential?

**Vivek Tulpule:** So we predict in terms of total steel, which is the starting point for when we
think about iron ore, broadly flat future growth as India and ASEAN take over from China, in
terms of absolute growth. And the scrap aspect of it will just keep the story relatively flat for
steel.

And then we have to translate that into iron ore. And there's a couple of additional aspects
that we need to think about when we think about that flat line for steel. And iron ore is always
going to be a little bit above that, or at least traded iron ore. Issue one is India and ASEAN.
They're going to grow. ASEAN doesn't have any iron ore of its own. So that will add
incrementally to iron ore demand above that flat line.

And then India, of course, has a lot of iron ore, but its scale of growth is going to be enormous.
And so our expectation is that we'll begin to import iron ore, whereas at the moment, there
have been small exporters. So that will add on top of that once more.

And the final point, the third point I'd like to add to it is a key technological aspect. As we
move in the future to greater use of scrap and, indeed, greater use of DRI in electric arc
furnaces, that process is actually not very efficient using iron ore and you get yield losses. So
you need more iron ore per tonne of steel used in the DRI electric arc furnace, and that will add
yet another increment on top of iron ore.

So we can see in a number of very plausible scenarios growing demand for iron ore, even
though the ultimate demand for primary steel might look flat.

**Menno Sanderse:** Alain?

**Alain Gabriel (Morgan Stanley):** Thank you. Simon, a question is on the unit costs. We
have seen a big reset higher of unit costs in the last three years. Do you see any opportunities
for reversing these trends as you accelerate decarbonisation, and anything you can do better
or faster than your peers?

**Simon Trott:** Sure. Certainly, escalation over the last few years across the industry, as the
chart showed, has been above trend. And so obviously, this year, you've seen energy prices,
you've seen labour, you've seen some of those inflationary impacts. I guess what we're really
focused on is making sure that we're driving productivity that we're driving costs in the best
way. And we are breaking the trend line on some of those. So whilst work index increased at 12% through this year. Next year, we're expecting about 5%.

And as we work our way through that next tranche of mine developments, that'll flow through. Obviously, longer term, Rhodes will enable us to completely reset the business as well. And really position for the decades to come.

In terms of whether we can improve? Absolutely. And I think one of the really nice things we're seeing with SPS is some of the changes we're seeing both on safety, but also on productivity as well. And that will flow through into cost performance.

We really needed to focus on stabilising our front end. That's what I talked about last year at Capital Markets Day. And we've seen some real improvements there. Stability means you can then really drive to optimise as well.

**Speaker:** Follow-up. Yeah, please go.

**Alain Gabriel:** Just to follow up on that question is, as you decarbonise, as you spend more CapEx on renewables, are there any specific opportunities within that tranche to reduce your unit costs?

**Simon Trott:** Yeah, so the solar farm that we talked about today, that gives you about 15 to 20 cents in terms of reduction in your operating costs, because it's much lower costs as it's constructed. And so that does give us some real opportunities to reduce costs as we implement that programme.

**Alain Gabriel:** Thank you.

**Menno Sanderse:** Okay. Thank you very much. We now have a 20-minute break. 20 minutes, and as said, please be back promptly. Those who didn't get a question will get the first question after the break. Thank you.

[END OF TRANSCRIPT]