Q&A Session 2

Wednesday, 30th November 2022
Q&A

**Menno Sanderse (Head of IR):** Great, second session. I’ll take two questions in the room. There were two outstanding from the previous session still and then we’ll go to online. Ephrem? Thank you.

**Ephrem Ravi (Citigroup):** Thanks. Three questions. Firstly, on the iron ore business, how are you thinking about your customers’ decarbonisation, you know, pathways with sort of higher-grade iron ore requirements and your own business grade how it’s defined? The question is basically, if everyone requires 65-67% and the preference of magnetite in HDRI, how are you going to fix that issue given your current portfolio which is more like 62% in terms of overall – Are you investing in beneficiation, etc?

The second question related to the decarbonisation framework that was presented in terms of capital allocation. Is – I mean, I’m thinking of how best to ask this question. If carbon prices drop below $20 per tonne for whatever reason, in theory it makes sense to defer all these decarbonisation expenses as far as possible to kind of, you know, get into a time value of money. But if carbon prices drop will you kind of rephase these decarbonisation expenses again? I.e. as happened this year, will you kind of push out your decarbonisation capex, you know, in outer years as well?

And sorry, third and final question. Now that growth of $3 billion is back – per year is back on the table obviously your ROCEs have gone up significantly over the last ten years. That’s a good problem to have but the market now expects you to make 30-40% ROCEs going forward rather than 15-20%. So how are you thinking about that in terms of your return requirements when you are approving new projects?

**Jakob Stausholm (Chief Executive):** Well, thank you. That was quite a lot and I’ll ask Nigel and Peter to answer. But I just wanted to make the point because isn’t it beautiful that we finally seem to be able to bring on Simandou because the world needs it more than ever? And if you look very carefully at the footnotes on the slides about Simandou you’ll see that it’s, what is it, 40-45%. It’s of so high grade that it could go straight through a DRI electric arc furnace. And that’s actually if you do the maths the biggest contribution we can make to reducing the Scope 3 emissions. It’s massive and on top of that also at the same time unlocking Rhodes Ridge which is very high grade. You can just see that we have done some super tangible steps towards meeting the needs of the future, but your question was deeper and more complex so Nigel, I need your assistance here.

**Nigel Steward (Chief Scientist):** Okay, you’re quite right. The iron ore quality that goes into direct reduced iron furnaces today, requires, high grade ore above 65% iron. The challenge that we – that we’re going to face collectively as an industry as an iron ore supplier and also as the steel industry, is how can we get that scale down? How can we go to lower grades? And this is what we’re doing with our customers. Alf spoke to the fact that we’re doing this with Blue Scope and the key thing is it’s not that we can’t actually reduce the iron ore in a blast furnace with a lower grade. It’s what you do with the gangue, the slag that forms afterwards. So you can’t put that directly into an electric arc furnace so you have to – you know, you have to have some other form of melting technology. So there are melting furnaces that exist in the world that we can use. So what we’ll do is we’ll tap that slag off at that stage and then the iron then goes into, you know, the conventional steel making. That can be, you know, through an
electric arc route or some other route. So this is the way we see it. It’s really, really important that we work with our customers and work with technology providers to prove all of this out. So this is the pathway that we’re taking. So that’s just one but there are other technologies that are out there that are – that are being explored at the moment. And we’re keeping an open mind and we’re exploring all of those. And they’re actually addressing this issue as well about how do you go to broader iron ore qualities and still make high quality iron and steel.

Jakob Stausholm: Great. Allow me, Peter, it’s for you but I have been a CFO for 25 years so I simply have to answer one thing. It really is super irrelevant whether a company has 40% return on capital employed or 5% in terms of investment decisions. What is absolutely great is that we have seen an improved profitability and that means we have a super, super resilient business. But our responsibility is that every forward spending is value accretive, independent of what our return on capital employed is. And I hope you see this was the key thing of today is that we are not wasting any shareholder’s money neither on growth investments nor on decarbonisation. But Peter, over to you. I’m not CFO anymore.

Peter Cunningham (Chief Financial Officer): But I completely agree with you. No, I just really answer the first question about carbon price. I mean, fundamentally what we’re doing is for the long-term. It’s to de-risk the assets for the very long-term. And we’re doing it in a very logical way. Hopefully what you took out of today is that we’re progressively moving through the projects curve, if you like, to really take – make sure we’re taking those opportunities that are there that present attractive economics now. And set us up for the long-term. And some of those near-term opportunities actually take away volatility of the business because by deploying, you know, renewables within the business we’re taking out some of those exposures to sort of gas prices and coal prices within the business. So I think we’re just taking a very logical but long-term view of this and making sure that our plans really sort of link together the technology pathways and the economics in a very disciplined way. On return on capital, Jakob, I think you said it all.

Menno Sanderse: Danielle, you had a question before the break.

Danielle Chigumira (Credit Suisse): Thank you. A couple of questions from my side. I’ll start with the first. On the decarbonisation spend, given you’re running almost a year behind in terms of the near-term spend objectives is the 2030 target at risk? And just on the slide 39 you had 2.4 million tonnes of other reduction of which 1 million tonnes is nature-based solution. So should we assume that the rest, as in the 1.4 million is like carbon credits that you’ll go out and buy in the market?

Jakob Stausholm: Mark, why don’t you...

Mark Davies (Chief Technical Officer): So I think – in reality I think there is a pathway to that 2030 and we have – and we can work through it with those six levers we identified. In terms of that 2.4 million gap the 1 million on nature-based solutions is just the first four projects. So obviously there’s a second round of projects that we will – we are progressing now that will add to that. It also in that other bucket includes things like energy efficiency, etc. Those smaller projects that don’t fit within those six big buckets. So it’s not all going to be going and buying credits on the market. There’s a bunch of other options that we have.

Jakob Stausholm: I will say just a couple of things. First of all, yes, we’ve not spent as much capital but we have actually spent a lot of operating expenditure and that’s kind of the phasing
of it. We’re getting an awful lot – and I hope you can see that from the presentation. We’re getting an awful lot done but it has taken a little bit longer to spend the capital. But capital is the back end of the – of the project. So we are absolutely committed to the 2030 target. And I want to say one last thing because I didn’t have the chance for presenting this nature-based solutions. This is something that’s becoming really, really big in the world. Two weeks ago, we – I hosted one of these civil society roundtables and all the civil society people they’re just super, super excited about what we’re doing. Given the fact that we have so much land we can actually make a real difference there. And I would argue one of the ways of de-risking our 2030 target is actually that we have that. You know, we have the six workstreams plus one and the plus one is an amazing offset really for the benefit of the planet. Plus achieving our targets. One follow-up, please, yeah.

Danielle Chigumira: So just taking it back to the beginning of the day talking about culture and the desire to create an environment of safety psychologically, physically, etc. Obviously, part of that is reducing sexual harassment and so what tangible steps have been put in place to reduce that? And is there a move towards thinking about incidents of sexual harassment in the same way that we think about other injuries as in kind of down tools and you do an analysis? Is that part of the way that you’re thinking about it?

Jakob Stausholm: Kellie?

Kellie Parker (Chief Executive, Rio Tinto Australia): So no, anything to do with sexual harassment is intolerable, and we are treating the reports very, very seriously. There’s been an absolute increase in the reporting and a change in the way that we hear these reports and ensure people are staying safe whilst they get cared for. There’s a significant change under leadership – the leadership of Isabelle around how do we actually investigate and how do we actually take things forward, and what do we learn and what do we need to change in our business. In the iron ore business Simon’s been leading some work around actually stopping for respect so actually totally stopping the operations and talking about respect so we actually continue to build in what is appropriate behaviour. And we’re – and the – and how we take things forward around our facilities is really important as well. So we’ve done urgent work – urgent safety rectification work around our facilities, so this is about lighting and ensuring people have got safe facilities. They’ve got locks on doors and those sorts of basic things of dignity. But there’s still a significant amount of work to do in our facilities and I – when I look at our facilities it’s a reflection of how we respect people. So, you know, Angela talked about, you know, the changes that were happening in Diavik. It’s really, really important what you see in our sites is how we respect people. So the changes will continue to go but, you know, anything that is bullying, sexual harassment and racism is intolerable and we’ll continue to focus on it.

Jakob Stausholm: And allow me to just make one additional comment because sometimes it’s the intangible that has the biggest impact. And the fact that we have put things transparently forward every time I go to a site there are people who come to me and says, ‘Thanks for doing that. We’re now talking about something that we did not talk about before.’ And it’s only through that dialogue that the change will happen. That the intolerable actually really becomes unacceptable and people will intervene. And I think that is the change that is happening now.
Menno Sanderse: Thank you. Just to go back to the – I think there’s one more question online.

Operator: There are no questions from the phone.

Menno Sanderse: Great. Then Jason please.

Jason Fairclough (Bank of America): I’d just ask one question. It’s for Ivan. So on aluminium you were talking about a new line of AP60. Your partner in ELYSIS, Alcoa, has said they’ll never build another Hall–Héroult smelter. So what do you think about building an asset that’s obsolete on day one?

Ivan Vella (Chief Executive Aluminium): Thank you Jason. So AP60 is technology that’s grown up inside our business from Aluminium Pechiney and it is the best smelting technology, conventional smelting technology we’ve got available out there. Yes, it’s not zero carbon but it is extremely low carbon. In fact the lowest of its kind in a conventional technology. And this is about finding that balance between meeting the demands of the energy transition. North America has got, you know, a big ramp-up in demand for aluminium. We don’t want to miss that and wait for ELYSIS, which we are working as hard as we can on. So it’s a fine balance and we completely appreciate that challenge which is why we’re studying and judging what’s the right sizing for that investment and how does that fit with our ELYSIS ramp-up. And I guess we have that optionality because that technology is something that’s – that IP’s inhouse and we can – we can choose to apply it as makes sense.

Jason Fairclough: Sorry, just a follow-up. Could you talk about the potential to retrofit ELYSIS to existing facilities?

Ivan Vella: Yeah, so to retrofit ELYSIS to an existing facility is something that we are looking at and studying as well. I think at this point let me give you a fairly high-level answer and say I think it’s going to be challenging. You know, you’ve got to look at a couple of issues. One, most of these smelters are aging. Kitimat is our newest smelter and it’s – you know, it’s already coming up to ten years. But Alma which is, you know, one of the best in our fleet is more than 20 years old. And, you know, these assets, yes, they’re maintained and sustained over a long period of time but putting largescale investment into one of these smelters from a retrofit point of view has some question marks on it economically. The other big challenge though is what you do with the workforce while you actually take the smelter down. It’s very hard to do it in a staged way. Now, I’m not saying we can’t but it’s something we’re going to have to look at hard. And you saw in Mark’s chart, you know, 2030 plus the abatement that could come from ELYSIS on existing smelting. That’s why we’re going to keep pursuing it. But in the first instance I see ELYSIS as a growth opportunity to add new zero-carbon aluminium.

Menno Sanderse: Great. There is a question online. Roberto operator please.

Operator: We’re now taking the next question. The next question is from Rahul Anand.

Rahul Anand (Morgan Stanley): Hi. Thanks again for the opportunity. I think I can hear myself on phone through the line so there’s a bit of feedback. Look, I had a couple of questions. The first one was around the conversation about the US and the renewable metals demand. Have you seen a change on the ground at all in terms of permitting looking at projects? And I’m trying to talk about Resolution here.
And then the second part of my question or my follow up is around ELYSIS. Peter, you talked about the value accretion carbon price for a lot of projects that are coming up. Have you done a carbon price that makes ELYSIS value accretive?

**Jakob Stausholm:** So I’ll take the first one. Look, time will tell when it comes to Resolution ultimately. It’s not just about a process. It’s also about us finding a solution that is acceptable to all First Nations in Arizona. But I will tell you and I’ve spent quite a few days in Washington. There is a sea-change happening there. You’ve seen the IRA act. I mean, the US is super, super alert to addressing climate change and what the needs come from that. And the geopolitical tension that actually they want to have more supply chain security. So all forces and I would say bipartisan forces are working in our favour. But, you know, time will tell. I just think that the external environment is actually enhancing our business development opportunities in the US. And I think that’s all I can say. We’re working diligently on Resolution. Thank you.

**Ivan Vella:** Look, on the economics on ELYSIS, I want to tackle it from two ends. Let me start first, Alf’s team on the commercial basis are engaging with the market and trying to understand how they would value zero-carbon aluminium. And that’s, you know, something that we’re thinking about as more than just a carbon price. It’s the value premium that we can generate for that very unique material. The other side of it and this is I guess more fundamental, the economic decision’s going to get driven on foundation principles. Like the energy cost that goes into the smelter and the capital intensity. And, you know, ELYSIS can stand on its feet on those factors if you get the parameters right. It doesn’t require a carbon price for it to be value accretive.

**Menno Sanderse:** Dom please here in the room.

**Dominic O’Kane (JP Morgan):** Could I just maybe ask for some clarification on the – on the Simandou growth capex? So I think Simon you mentioned $4 billion of equity share, but what does the equity share actually mean? Is that – is that the joint venture 42.5% and therefore Rio’s underlying true equity share is about $2 billion? And then maybe could you also maybe give us an indication or give us a steer what that $4 billion looks like? Is it towards the mine, the rail or the port?

**Peter Cunningham:** Yeah, thanks very much. I can take that. I mean, first of all, you know, that capex is effectively what’s in our three-year guidance which was on my slide. So that’s – that’s what that sort of frames it up. So we haven’t given all the details on Simandou because we are still in negotiations around exactly, how that that project will firm up. So we haven’t given the total envelope. But that’s what we expect to spend in the next three years. And we said it could slip depending on when we actually reach agreements. So that’s why it’s probably the major source of uncertainty particularly in our 2023 guidance on capital.

**Jakob Stausholm:** You might talk about the accounting.

**Simon Trott:** I’m sorry, yes the accounting. So it’s actually – it’s just Rio Tinto’s equity share that we’re – that we’re reflecting in those numbers. So our – you know, our share of the – our 53% share of the capital in our joint venture, the Simfer joint venture and our share of any infrastructure spend. Our Rio Tinto share. That’s all we’re reflecting there. And that will be our process going forward to reflect that.
**Menno Sanderse:** And final question from Liam. Don’t worry if you have any more questions. There’s sandwiches after the break so everybody in the room you can speak to people here and obviously in Sydney we’ll see you on the 15th. And for those who are really keen, 13th December in Melbourne on Technology. So last question for Liam.

**Liam Fitzpatrick (Deutsche Bank):** Thanks Menno. I’ll try and make them exciting. If I can do two. One for Ivan on green aluminium. You know, we hear a lot about kind of low-carbon products but not much about green premiums. I mean, do you think the industry needs to change its mindset in terms of how it pushes these products from a price taker to trying to get customers to actually pay for the low carbon content? And then the second question is on M&A. There hasn’t been any real mention of that throughout the presentation slides. So if we’re looking beyond TRQ is this still a key plank of the – of the growth strategy? And how do you want the market to think about it? Is it early-stage opportunities or could you have bigger goals? Thank you.

**Jakob Stausholm:** Yeah, so let me start with the M&A question first. Look, I hope you can see today that we have embarked upon quite a significant transformation and large scale M&A tends to completely derail what you’re doing. So I think that would be really, really sad for us if we embarked upon too large a scale acquisition. But I do think when I look back all the deals we have done so far in my view have been super value accretive. Small things like we bought 50% of Diavik or 40%. It’s been super, super valuable. We were a bit lucky with the – with the diamond price. We have sold things that we can’t add any value to like the Cortez gold stream. We’re not the right owner of that. Somebody else has a much lower WACC. The Rincon Project of course is early days but it looks like we’re adding an awful lot and it fits perfectly into our strategy. So when we can find assets at the right price that can be developed, can be operated it’s part of achieving our objectives. But I must say I’m very reluctant to do too large a scale M&A because there are unintended consequences which tend not to get into your evaluation when you get excited about it. But they are unintended. We are on a pathway that creates in my view a lot of value and I’ll do everything I can to avoid us being disturbed from that. But the smaller assets fit us super well and we need to keep our project organisation busy. And that was exactly what we needed with Rincon.

**Ivan Vella:** Look, yeah, on green premiums, as I said earlier with regard to ELYSIS, Alf’s team’s working hard engaging with customers to understand their needs there. I think a couple of reflections. One, we’re starting to really segment our products in the aluminium sector. There is ELYSIS so zero-carbon aluminium and that’s obviously still emerging. There’s our primary metal, very low carbon metal, two tonnes in a smelting sense. And then of course there’s recycled metal. And customers are starting to think and differentiate these and we’re sort of starting to position that accordingly. Not every application can take that universally either so we have some applications that have to use primary aluminium and obviously in other cases they can use recycled. We start to look at the market and how we actually then position the products accordingly. The other piece of the premiums that’s really important and has been very relevant in the last 12-15 months is then the product premiums. And you saw our investment in the billet centre that we announced. You know, we need to freeze metal and as we grow the metal production in the Saguenay we’ve got to do something with it. But having the right ability to cast and form that into the products and the alloys that our customers want.
And I’d go to an example like scandium alloys. That’s where we think we can really start to differentiate and drive incremental margin on our products.

Lastly, I’d say then just generally in terms of green premiums how they’re emerging, I mean, it’s been very modest now for the last couple of years but we’re just starting to see, you know, some uptick there. And of course, in a depressed market that’s going to be more difficult. But as we get through this period of the economic cycle, I think that’s a time to start looking for more movement.

**Jakob Stausholm:** I want to end on – because it’s quite a nice question actually, just to elaborate and end on that. Think about the following. First of all, we differentiate ourselves from other mining companies for having more processing activities than other miners. If you look historically, it might not have been the most profitable part, I have to admit, but think about it for the future. It’s exactly what is needed right now in terms of the requirement from final customers to have lower carbon products. We are extremely well positioned. We’re extremely well positioned with all our processing activities in North America. And I can tell you, Alf and I we have had so many conversations with CEOs of auto makers. Beer makers, whatever, who are using our products. There is an enormous appetite to start securing up longer-term contracts and we have a very open debate saying, ‘You want ELYSIS we have to invest. It’s going to cost.’ I mean, absolutely of – I don’t worry about not being able to get extra price for ELYSIS. The most challenging things about ELYSIS is the technical one. It works at small scale. How do we industrialise that? And unfortunately, it takes a little time. I mean, it is a revolution of the aluminium industry. It will happen but it will take some time. I’m absolutely convinced that it will be a very, very good business for us. But what I want you to leave with is that I feel that the last 12 months there has been a sea change in terms of – since COP26 actually where all the manufacturers of final consumer goods suddenly have to stand up and explain what is the CO₂ content of what I’m producing. And that plays to our strengths, particularly because we have so much processing activities as well.

Thank you.

**Menno Sanderse:** On that note, thank you very much for turning up. Rio team, thank you very much and everybody thank you very much online. See you next time.

[END OF TRANSCRIPT]