Q&A Session - Sydney

Thursday, 15th December 2022
Q&A

Tom Gallop (General Manager, Investor Relations, Australia): So with your Q&A, if you wouldn’t mind, just naming yourself and the institution you represent just for the broader audience. And the first question is Paul.

Paul McTaggart (Citi): Thanks, Tom. Paul McTaggart from Citi. So we talked to you a little earlier outside, Jakob, but I wanted to follow up around the latest EU carbon border adjustment tax mechanism because I guess what caught my eye was that yes, it’s going to be imposed on raw materials coming in, but it’s not including importantly the kind of carbon that’s attached to aluminium as an example that comes from the generation of the power that goes into that aluminium, which just seems ridiculous.

Is this because European legislators don’t understand this? Or I mean, how do we get them to understand that you actually need to go right back through the food chain, otherwise we have zero hope of ever achieving reduction in carbon emissions.

Jakob Stausholm (Chief Executive): So we are working on being crystal clear in what we stand for because we believe we are a private enterprise. We believe in a free economy. But if you want to achieve something and you don’t put a price on it, it doesn't work. We have to have some kind of pricing on carbon, otherwise, the world will not go to net zero in 2050.

Now, there are different ways to do it. You can either do it with a carbon tax, with the CBAM adjustments, you can have some trading schemes but trading schemes doesn’t really work for globally traded commodities. And then you can have straight subsidies but straight subsidies is kind of second best to getting the right solutions.

We are closely discussing particularly with Canada and EU on how such schemes can be done. In theory, it's the right solution but the devil is in the details.

And it is a bit sad to think about that we found so many years have owned our own hydropower and sold all this low carbon aluminium and never got a premium on it. But you actually can address that with a carbon tax. So it would be a great thing both for the environment and for Rio Tinto if such things could come in place.

Paul McTaggart: So you’re confident that the legislators will revisit that aspect of the current proposals?

Jakob Stausholm: Look, these things are unpredictable, but we work from the assumption that the world will have to address climate change. And if it stands still for a few years, then it will have to accelerate or it starts accelerating and it becomes a more smooth line. It's very, very difficult to say how short-term scenarios are panning out, but we always work in different scenarios.

Glyn Lawcock (Barrenjoey): Hi, it's Glyn Lawcock with Barrenjoey. Jakob, a couple of weeks ago you talked about the value over volume approach, but when I look at the struggles you’re having in your iron ore business, you’re pushing the system to its limit. You said approvals are taking longer, your mine plans are changing frequently, and by your own admissions, you’re going ahead with probably the least preferred option and the most expensive option. Why
didn't we just stop? Why do we have to grow the business? What's the thinking behind it? Why don't we just let the business pull back a bit and get off this treadmill?

I saw your peer last week say the exactly the same thing, that they're struggling, and they admitted that it's not worth pushing the business. I mean, we're pushing it and I feel like we could break it and if you break this business, there is no Rio. So I'm just trying to understand what's you're thinking. I don't see the value over volume approach when you've got all these challenges in front of you. So if you could maybe put some colour on that.

**Jakob Stausholm:** Two things and I'll ask Vivek to talk a bit about the demand and then Simon, but I will say to you, I really think that we are not at the punch of breaking it. We are actually making the iron ore business stronger and stronger every single day. But let's hear it from our colleagues. First of all, there's a need for steel.

**Vivek Tulpule (Head of Economics):** Sure. Thanks. Thanks very much, Jakob. Yes, there will be a need for steel in the future. So the demand for steel is not going anywhere. And there are a range of sources. China obviously is will – we've said it many times will peak at steel demand in this decade. But then there is an expectation that Indian and ASEAN demand will grow from relatively low levels, and so that acceleration could be substantial.

And there is a demand for steel in the decarbonisation process as well as we build out renewables in particular. And then there is an increasing demand for steel at the higher – for iron ore at the higher end of the quality spectrum. So we do see the potential for growth and demand for iron ore, especially as we head out into the 2030s and beyond.

**Simon Trott (Chief Executive, Iron Ore):** Thanks. And hello, Glyn. We've got to build a stronger business completely aligned around that. And a lot of the work that we've been doing over the last two years and a lot of the work as we look forward is exactly to your point. Now, that means in the here and now ensuring that we improve our operating performance. It also means securing our future. And you've seen us, I think, take some really significant steps over the last year.

Rhodes is an example and Western Range - the agreements with traditional owners. This business will be around for decades and decades. And one of the things that we talk about amongst the honourable leadership team is making sure that the business is stronger and has more options when we move out of our roles and that's the focus, and I think we go some good data points Capital Markets Day around particularly in the second half some of those improvements as we turn for 2023.

Now ultimately, we're in business to meet the needs of our customers. And that's what value over volume is, is looking at the market and making sure that our production levels and the products that we are producing are what the market needs. And our assessment is that we've got scope both in terms of the guidance that we gave last year and in terms of that medium-term guidance that we gave Glyn, that's looking at our business, looking at our options and looking at the needs of customers.

But you're absolutely right, one of the things that we talk about as a team a lot is let's make sure that we do the work we've got to do. And so compromising on maintenance isn't something that we are going to do. And similarly, our sustaining capital programme is designed to ensure that the business is stronger as we go forward.
**Glyn Lawcock:** I appreciate all that, but I mean, you're pushing a business now with $80 a tonne mine, you could have just done nothing, gone backwards until you've got a better option. Like Rhodes Ridge I think is the best option you've got. We think we all agree. It should have happened years ago, and it could have happened anytime since 2013. But like you could have just slowed.

We'll take it offline later, but just a final question on iron ore just while you're on the floor. Just Simandou, can you put any meat around the scope? I know you've talked about the dollar figure around two weeks ago, but just, is it going to be a deepwater port or transhipping? Like what's the vision? Is this 100-million-tonne entity on an aggregate basis, or is it 200? Because I think there's a lot of conjecture out there as to what – because I mean, if you tranship, I don't think it'll be more than 100, 120 unless you go deepwater port.

**Mark Davies (Chief Technical Officer):** Yeah, so I think Simandou, yeah, the scope for the first phase is a trans-shipment port. And then we're actually working – part of the negotiation that we currently have actually going on in country in terms of the infrastructure joint venture is what does the second phase look like; is it another river port or is it actually a jetty. So that is still an open question for sort of the phase two of the port, but phase one is a trans-shipment.

**Rob Stein (CLSA):** Hi, Rob Stein from CLSA. Just a quick question about country risk exposure. You're investing more in Argentina and there's a declining political and economic environment there. You're obviously concentrating up your equity stake of OT and obviously the move into Guinea as well. How are you thinking about country risk and the perspective that a lot of your earnings are going to be in countries that potentially can't export the cash and you might not be able to get the returns that you need out of the country so that you're investing in?

**Jakob Stausholm:** Yes, I certainly do it with my eyes open. I used to live in Argentina. It is – and if you want to hear more about Rincon, we have Sinead here. It's actually a really good environment. Salta is a very pro-mining province, but your point is well made. There have been periods of history where you couldn't export cash and there has been open windows for Argentina.

I think the key thing to think about, not just China, but Guinea and other developing countries, is you need to not just make an assessment of country risk. You need to think about how do you actually manage the geopolitical risk here. In this case, you are probably seeing MOUs with American automakers, and there's a big interest from the US to see these things happening. And we work together, and we are all finding solutions. And through that, you are reducing your risks. There's no doubt, Guinea, as well, there's a very obvious Chinese interest, but there's also a US interest in us being in Simandou.

So, this is how you manage your geopolitical risk. It's not just an assessment of the countries, how you manage that risk. Actually, I feel very comfortable, I have to say.

And if you take Guinea, yeah, difficult, and there was a coup, yeah, but we have been there for 50 years with CBG, and it has actually just been running through those 50 years.
Robert Stein: So, perhaps, just a quick follow up, if I may. So, Argentina is a place that you could see yourself investing more into the future as a jurisdiction, given, obviously, your experience there.

Jakob Stausholm: Look, I think so. I think Argentina, I think we provide a lot to Argentina. We were the first kind of big blue chip mining company going into Argentina. We are also in Chile, but Chile is much more developed in that area. There's a small need for development. But right now, 100% focus has to be on developing Rincon.

Rahul Anand (Morgan Stanley): Morning, Rahul Anand from Morgan Stanley. Two on the iron ore business. Perhaps, first one, a quick update on the Pilbara perhaps, if we can understand post the ramp up that are currently underway, where do you get to, in terms of your mine capacity, and where do you get to, in terms of your rail capacity? What's the bottleneck in the business at the end of that ramp up? Do you want me to give you the second one now? Second question, it's more about the market. So, I wanted to understand how can you position the Pilbara, perhaps, for green steel? Have you looked at options? I mean, I'm sure you've looked at options around beneficiation, and perhaps also magnetite in the Pilbara. Where can you get to in terms of grades for these two options?

Simon Trott: Okay. In terms of the system, we've been mine constrained, and we're now with Gudai-Darri, become more balanced. So, our ports are in place, we've got capacity there, 360 million tonnes above, on our rail, we've got some work to do, particularly on the interfaces between rail and port, as that becomes more balanced, those interfaces become relatively more important. So, 340, 350, somewhere in there, but obviously, with some work, we can look to push that.

Auto haul is performing really well, we're really comfortable with how that's performing now. It's taken some time, it's taken a lot of work, but that gives us significant advantages in terms of being really able to stretch that. Gudai-Darri this year, as you say, ramping up. So, we'll produce a bit more than 20 million tonnes out of Gudai-Darri, having turned it on in the middle of the year, and so comfortable with how we're seeing that ramp up and obviously that continues into next year. So, guidance next year. 320 to 335 million tonnes. And as I talked about last week, the week before, we need that next tranche, '25, '26 and 2027, to really reach into that medium term of the 345 to 360, to really push into that range, we need that next tranche of mines and then longer term, obviously, roads, to really make sure we're producing the products that we need.

And maybe I'll bridge then to the second part of your question. You know, I think what really distinguishes our portfolio is that global footprint, we've then got across low grade, medium grade and high grade. We've really got levers that we can pull depending on how green steel then unfolds. And I guess the way we're thinking about that is really two buckets. And Nigel talked a bit about it at Capital Markets. But the way we're thinking about that is, for green steel, either in terms of, you've got to ultimately get rid of met coal. And so, we're doing work in terms of the process. And so we've talked about biomass, we've talked about the work we're doing with electric melter, or the other ways you beneficiate – and so, we're looking at those sort of options in the Pilbara. We're certainly exploring what concentration would look like for our business in the Pilbara and progressing that work, and also doing work on our ore bodies to say, okay, which bits actually would suit green steel, and what are the options there.
Look, magnetite, obviously, others are moving into that space. You know, cost is an issue, and CapEx, you know, we’ve got some options there. I’d like to make sure we progress those so that they are options. But there’s probably better pathways given our resource base for us.

**Rahul Anand:** Okay, perfect. Just one quick follow up. So, at the end of the ramp ups, then, is it fair to say you’re at about 340 for the mine system?

**Simon Trott:** So, in line with the medium-term guidance I gave, and it’s really that next tranche of mines. Western Range, we’ve been able to progress well, really pleased with where we got to, within the approvals pathway and that gets us into that range and then obviously Rhodes down the track.

**Rahul Anand:** Perfect. Thank you.

**Paul Young (Goldman Sachs):** It’s Paul Young from Goldman Sachs. Question for Simon, actually, again, on the Pilbara, Simon. First of all, great to see that you’ve outlined a turnaround sort of pathway for the Pilbara to fill the infrastructure that you have, after many years, and Gudai-Darri obviously, is doing the heavy lifting now to get to the 345 to 360, so, that’s fantastic and great to see in my opinion. Question is actually about Rhodes Ridge, huge ore body, high grade, you know, your effective equity tonnes will be, however, probably 60% to 70%, you know, so below your current effective equity tonnes in the Pilbara on average, but this ore body’s huge, and your order of magnitude study is for 40 million tonnes, yet the ore body could probably do 100, right, like a South Flank, and etcetera.

So, how do you bring Rhodes Ridge into the system, and, you know, what depletes, but also, what are the benefits of Rhodes Ridge on costs, and product quality, and margins and free cash flow? Maybe just talk through, you know, what Rhodes Ridge will do to the business, post the medium-term time frame, because Rhodes Ridge is post the 355 to 360 that you’ve outlined.

**Simon Trott:** Sure. So, Rhodes, you know, you’ve probably all seen the slide in the pack. And I guess part of the crafting of that slide is just to highlight, this is a phenomenal ore body, clearly the best undeveloped ore body in the Pilbara, but on a global scale. And maybe the best way is, at the signing, standing on the top of the ore body, you can see the whole thing effectively, it’s 40 kilometres across. And so, you know, that gives tremendous advantages’ topography, one of the challenges with Western Range, was, as we talked about, was the topography, which drove capital intensity there. Topography is better. We’ve got a railway line that effectively cuts between two ore bodies.

And so, in terms of development, that’s obviously gives us significant advantages. You know, the size of that ore body just gives us great options. So, yes, we are studying that initial development, but clearly, that sort of ore bodies, you’ve got a lot of options then, either to replace depletion, or potentially, to grow. And the other aspect of Rhodes that’s really exciting for our business, particularly as we think about green steel, particularly as we think about where the market’s going.

On equity, I think the way that you’re looking at it, in terms of – as part of those discussions, it’s a stranded ore body, and so, put yourself in the shoes of each of the participants in terms of where you get to, on a transaction. So, I think that’s the way to think about it.

Depletion, I gave a number of around 7, 8 million tonnes that we see depletion next year. You’ve got the bubble chart there that you can effectively get a handle on what our depletion
looks like over the next five years. Yandi steps down 2024, and so, Rhodes will replenish that supply, but also gives us options to grow depending on the market.

**Paul Young:** Okay, thanks, Simon, that’s really helpful. And then a question on copper. Jakob, you mentioned the focus in that was around iron ore and aluminium also, and you couldn't talk about copper, well, hopefully, you can now. And just first of all, I guess your copper guidance for next year is a little bit of an increase. I presume that's just the first tonnes out of the underground at OT. Now that you're at that point where, you know, Turquoise Hill effectively closing the transaction, and you know, it should be quite transformational for your copper business, can you talk about the upside at OT, and potentially around plant expansion, just what you can do, anything you could talk about in respect to a three or four year view about what we might be missing on OT that maybe that you haven’t been able to talk about, that you’d like to, now.

**Jakob Stausholm:** Yeah. Look, the reality is, of course, TRQ have been totally transparent about the situation of OT, and you just have to recognise that there is a lot of uncertainty from your start up of underground mine until you reach sustainable production, which we are confident, very confident that we will reach in the first half of next year.

We were just in Brisbane, the Board here, this week, and we met up with the team, they are doing a phenomenal job. This is world class expertise and technology, but the uncertainty is there. But, you know what? That's the kind of risk that goes to the heart of what we should manage as Rio Tinto. But I’m afraid I can’t give you much more at this point in time. But we will – next year, we will tell you much, much more, as we are removing some of the uncertainties and getting more clarity. So, I think that next year will be the year where we can just become much more specific around OT.

On the guidance, where is Peter. Peter, if you want to comment anything about the copper guidance?

**Peter Cunningham (Chief Financial Officer):** Thanks, Jakob, Paul. I mean copper guidance is a bit – next year, is a bit extra in Kennecott because they clearly are moving through the sort of pushback. That's the key one there.

I mean, I think the key is that, on OT, that we're delivering to exactly what we said, you know, on the project, that the infrastructure is being developed. We've got sustainable production in the first half of next year. That's putting us just on that track to deliver in ‘24, ‘25. Those are the key years for the copper volumes.

**Lachlan Shaw (UBS):** Thank you. Lachlan Shaw, UBS. Just sticking with copper. Two questions, if I may. So, looking elsewhere in the portfolio, what's the update on Winu, and also Resolution?

And then second question would be, the Nuton Technology, the other day in Bundoora, really impressive. Just curious to understand, I guess, why has it taken until now to be on the brink of commercialising that?

**Mark Davies:** Yeah. Okay. So, we knew – we are working through the permitting process, and really, we’re going as fast as our traditional owners can move. So, the Nyangumarta, it's really their first development on their country, the Martu – with the airstrips on the Martu, the
mines in the Nyangumarta, the Martu are more experienced, but then Nyangumarta – it's really coming up at their speed.

We've also probably moved to sort of an alternate slightly slower permitting process, which is more certain and more comfortable with the TO. So, moving ahead, but at a bit of a slower pace than we'd originally hoped.

In terms of your question on Nuton. I think the challenge we've had with Nuton is that we've always had alternative options that have probably had more attractive NPVs in terms of putting it in, putting that same material through the concentrator at Kennecott or putting it in Nuton. You know, the numbers in terms of we just had alternative options.

So, now, we're really looking at the ideal – we've got a list of five or six opportunities that – where we can actually demonstrate Nuton at scale. And I think there's also the ESG benefits of Nuton the market is more expecting, it's a much lower carbon footprint, it's a much lower water footprint, and the potential to access ore bodies that you probably couldn't otherwise access, makes it a far more attractive type. But I've worked on this in the 90s, writing the original CFD code, so, I'm desperate to see this one work. Resolution needs to happen as well. We want to be very, very respectful to the First Nations people, and we're making good progress. The society, the US needs it desperately. In the US, you've got 1 million tonnes of production, but the consumption is 2 million tonnes. With the current plans, at the end of this decade, the US will consume 4 million tonnes, but still producing one, unless they start unlocking new copper deposits.

The technical progress is good. We're looking at a starter mine operation to allow us to actually generate revenue while we evaluate the viability of block caving and capture the information we need to design a block cave. So, that's making good progress and we just got a word respectfully with the communities and the government to get the permitting done, but technically it's – we're ready to go.

Lachlan Shaw: Super. Alright. Just a follow up, if I can, just quickly. With the Inflation Reduction Act in the US, are you detecting from government any push to accelerate the approval processes in the US for mines?

Isabelle Deschamps (Chief Legal Officer): Yeah, that’s a big question. Actually, I think, there’s definitely a will, I think, because what Jakob has highlighted in terms of demands, I think that comes through very highly. There’s huge interest, I think, in moving things but, again, the respect of the First Nations is the first and foremost, I think, that the government will be looking at this moment.

Jakob Stausholm: There is a big drive in the US on critical minerals and they're desperate to solve it but it is really upon us to make sure that the processes with first nation’s people is the right process, but I can tell you there is a lot of support from Washington at this point in time to see, you know, basically, strengthening the supply security of the industries in the US and there’s an element of reindustrialisation, given the geo-political tensions.

Kaan Peker (RBC): Few questions on iron ore, if that’s okay. I think, there was a few comments on Rhodes Ridge. The JV seems to be – or will be using Rio’s rail import. Just wondering how this works.
And, secondly, on slide 23, Robe fines looks like it’s lower value in terms of that they’re still making process in – also high carbon intensity. Just wondering how the Robe Valley, sort of, fits within the portfolio or that product portfolio of the medium-term. Thanks.

**Simon Trott:** So, in terms of the Rhodes, to answer that first, as you say, it will utilise existing rail and port facilities and so, similar to our other joint ventures, Hope Downs by way of example. Yeah, the material is mined in that zone by the joint venture and then there’s various charges, etc., that reflect the installed capacity that we’ve got there. Rhodes will support Pilbara Blend and so, it flows into that product and it will be marketed and, yeah, shipped and marketed in the normal course and so there’s a range of, I guess, commercial agreements that sit behind the joint venture that govern exactly how that works, but very analogous to existing joint ventures that we’ve got in the Pilbara.

In terms of the Robe product, so it is lower grade. It’s a mine we obviously have with our partners in Japan, and so we recently renewed some of the plant as part of the expansions, or part of the projects that we did over the last few years. That’s sustained for the coming period and, obviously, we continue to test that; when we get to that next phase of replenishments, we’ll test that in the market in terms of what’s the next best from our perspective. You know, it’s a product that has performed well over many, many years. Clearly, as the market evolves, we’ve got to have another look at is that the next best step for us but that’s some time away.

**Kaan Peker:** Thanks. And also just the finally with nickel interesting to see that nickel has come back into focus for Rio, given that there’s no producing assets. Just wondering, geographically, where the focus is and how nickel will play a part in the medium-term product that Rio offers.

**Sinead Kaufmann (Chief Executive, Minerals):** Yeah, sure. Look, as we talked last year following our board’s strategy, we said we want to look at battery materials in general and we’ve looked at all of the potential opportunities. What we’ve really tried to do is focus where we have the expertise and what do we bring, how can we bring value to some of these assets. And so, we’ve, you know, with the lithium deposits as an example, we’ve got some excellent processing technologies that we bring.

With nickel, we’ve been pretty location-agnostic as we have with lithium and just looking at where the best assets available, you know, what is the opportunity for us to bring something to the table and we just continue to explore the market but very conscious that we got a – when we make a decision on any commodity like that, we’re just going to make sure we’re really disciplined with our capital, that we’re really clear we’re going to be able to add value to whatever we get into and that we can deliver that. So, we don’t have a specific location in mind; and, certainly, same as with lithium, we’re just continuing to look for good opportunities which are little bit challenging right now given the market. So, we know what’s out there but we’re, obviously, we need to be disciplined around what we purchase.

**Tim Gerrard (Janus Henderson):** Thanks for the opportunity to ask some questions. I’ve got a couple of, sort of, pretty wide-ranging questions but, first, maybe, on the nickel, you got a lot of expertise in iron powder, actually. You know, iron powder is from Quebec. Maybe, you can talk a little bit about that. Tesla’s heading towards, you know, those sorts of batteries. It’s going to be very important and I’d be very surprised if Rio couldn’t take advantage of that but we’re not hearing anything about that. That’s the first question.
With regard to remediation, I mean, like Ranger, some great lessons and complexities of remediation for all sorts of reasons and Rio is not alone and completely always underestimating remediation costs so I’ll like to hear bit about progress at Ranger but where you can do better, quicker. It seems to be a very last – I know it’s not really a last-minute thing by the mining industry but it seems to be well down the list of priorities.

Jakob Stausholm: Can we stop with the two and then you take the next afterwards so Sinead first and then Kellie?

Sinead Kaufman: Yeah, as the iron and titanium business are quick to tell me they are also in battery materials, so, yeah, thanks for that. Look, I think, what I love about business in Sorel and Canada is they’ve got an excellent technology development centre as well at Sorel, so while Sorel is traditionally a smelting and processing business, they’ve also been the same group that have pioneered the development of scandium oxide out of the spent liquor from the smelter, the same group that are also looking at other technologies. So, people visited Bundoora, certainly, is an impressive facility and Sorel is a, sort of, equivalent in Canada.

And, so, what we’ve been working through with the titanium dioxide business is one of the other opportunities. So, we have iron powders. We started to look at opportunities to use 3-D printing technologies and, again, working with downstream manufacturers around where the capability there could be and what the technology that exist today that, maybe, wasn’t there ten years ago that we can unlock to continue to grow that business. So, you know, same with the decarbonisation of Sorel is also part of that priority as well. So, certainly, looking at new technologies that we can use.

In the battery technology space, and Nigel might want to say a few words on this, but we’ve been very conscious as we ventured into battery materials and, particularly, lithium, it’s a really fast-moving industry. There’s lots of technology advancements and we’re not experts in battery manufacturing but we have worked to partner as much as we can with industry through our joint venture with the likes of InoBat through technology advancements that are coming up so we can keep an eye on the horizon about what the next batteries could be and make sure that we’re ready to respond to that, not just the current technology. But Nigel’s leading a lot of that work on the partner. You might want to say something, Nigel?

Nigel Steward (Chief Scientist): Yeah, sure. The way we’re tracking the battery side it is through partnerships with other people. So, it’s more than just lithium. There’s sodium-ion technology out there, aluminium-ion technology out there and different electrode materials and can form those anodes and cathodes in different ways. So, we’ve been forming partnerships with other people in those fields. So, on the lithium-ion side, we’ve been working with Nano One and made an investment in them, and also InoBat as Sinead just said. We continue to pursue other options. We’ve formed a partnership with GMG here in Australia as well on aluminium-ion batteries using graphene technology. So, we’re out there learning more about these and about how the materials that we can provide as a company fit into those future battery chemistries.

Jakob Stausholm: So, before we go to Ranger, I just wanted to say thanks for picking up on this. We’re very big in Australia but we’re also very, very big in Canada. And I was in Canada last week and again meeting with the government. They’re very, very excited of joining up with us and developing a lot of the critical minerals. You probably saw our announcement –
what, is it two and a half moons ago – where there’s co-investments from the government to develop critical minerals around Sorel, so it’s always nice when you can do things hand-in-hand with your hosting government, and this is something I’m super, super excited about.

But let’s go to Ranger. You’ve just been there, Kellie.

Kellie Parker (Chief Executive, Australia): Yeah, I was in the Ranger last week, and I think that Ranger had – in the closure programme had known risks that came to fruition and that’s what’s in the situation is now where we’re looking at another FS study and finalise the cost by the end of next year, unknown cost for how we close Ranger, how we close Ranger. But the challenge that we work at Ranger is that we worked with the supervising scientist who approves what happens with closure. And I worked right alongside the teams on the ground, approving the way that we close. They’re very much informed by the world leading experts around uranium but were also informed by our previous history in Australia where with uranium mines in the northern territory have closed and the Commonwealth government is left with still a debt, because society’s expectations have changed. What was expected to be closed 40 years ago, what we close now is quite different. So, the supervising scientist works with the history of Australia and the moving society’s expectations. So, we’ve seen this in the Ranger programme, we’ve seen this around their expectations about what’s the flora and fauna that needs to be planted in the ground. Can it withstand fire? Can it withstand lightning strikes? Can it withstand and recover? And this is not the sort of thing that we did 40 years ago. So that is absolutely changing the way we’re working with the supervising scientist. And the big challenge at Ranger is around water and having the real garden surround what will be discharged. So, it’s a big discussion that happens and that’s with the supervising scientists on site on a regular basis working with the team.

Tim Gerrard: Yes, but how does, you know, a lot of focus there, kind of, been delayed and a lot of mistakes made along the way, I guess, but how do you pass that learnings onto other complicated ore bodies that may be in the books that’s substantially less than what the remediation cost should be? Like, maybe – I’m sure your auditors don’t agree with that but seems to be that the risk is the wrong way always. How does the group handle that?

Kellie Parker: So, I think, we’re really fortunate in Australia that we’ve got Gove, ERA and Argyle that is under closure and we’re learning massive lessons and, you know, Mark’s area with closure of how we take that globally, what do we understand with what happens onsite but also what happens in the town, how is our size expectations changing and therefore what you need to do when your current operations.

Mark Davies: Yeah, so just to build on that. We’re, actually, a couple of years ago created a dedicated closure team to learn exactly that lesson, how do we take the lessons from one closure to the next to the next and deal with the legacy sides. And so, yeah, and how do we, actually, think about closure as an opportunity, you know? So, we announced the joint venture last year called Regeneration where we look at how do we actually create revenues, you know, from, you know, some of the waste dumps actually have reasonable grade in some operations in today’s world.

And the other area that we’re looking at in closure is, you know, part of Nigel’s work around R&D. You know, if we can treat water, you know, extract metals, you know, treat the water, a number of our closure sites that’s a real opportunity as well as, actually, renewables or nature-
based solutions on a closure site. So we're trying to, you know, on average, you're right, the trend is, as you learn more, it does get more expensive but we've been trying to learn those lessons with a dedicated team for the last two years and when you look at the options that those sites provide us.

**Peter Cunningham (Chief Financial Officer):** Tim, I probably should add, I mean, in terms of those lessons as they're translated across, we do adjust to the numbers for all the closure programmes that we have across all our sites and when you look at our accounts. That's why we have, you know, number the provision at 14 billion.

**Tim Gerrard:** And just a quick last question. I guess it started the China boom. We all underestimated just how quick that was and how massive it was. Major companies slow to change the offer price, their long-term mine ore prices, slow to commit to big projects or committing to big projects in very risk-adverse ways which was good in lots of ways but it did underestimate what was going on in China and that left a gap for someone like Fortescue.

Now when we look ahead with decarbonisation and think of copper, it doesn't seem to be that any of the major miners are kind of saying, well, we're in a different environment. There's a scarcity factor to consider, but no one seems to be changing their long-term prices, not that you'd like to tell us. But after a while, you get a sense that you do change the long-term prices. Shouldn't – how are you looking at doing that, given that we're at the start of something new, which is akin to China 15 years ago?

And do we run the risk of the Chinese who are not that interested in your view of a long-term copper price just hoovering up all the strategic assets out there in any event, because you're still stuck on your 375?

**Jakob Stausholm:** Yeah. So that was a very smart trick question to try to say something on prices. And I'm not going to do that. But I will say to you a couple of things that has been a mantra for this company, certainly since John Ralph was leading CRA in the 80s about the cost curve, and about being in first quartile assets. And it's undisputable but it's an amazing asset, Oyu Tolgoi, and we're just doubling the exposure to that asset.

We are working very well with BHP and keep on renewing. Escondida is still an amazing ore body that we have got there. And then we have got – there's no other miners that has got the opportunities we have got. Look at Resolution. It is an unbelievable ore body. So I think instead of – I really don't want the team here to think too much about price because you don't know. I want them to unlock the amazing opportunities we have and I hope you see we are doing everything we can to do so. And I'm a bit reluctant on the M&A side, because quite frankly what I've seen so far is just you pay a fairly full price and you work like crazy for ten years without adding a lot of value.

So I think we're just in a very, very good spot of having these things, these really first class ore bodies in the cupboard and it's our job now to unlock them.

**Mark Davies:** And Jakob, just to build on that, I think exploration, 70% of our exploration almost go into copper and the rest pretty much into battery minerals.

**Jakob Stausholm:** Bold has just been a little bit busy on Oyu Tolgoi and TRQ and Simandou, but Mark and Bold looking after anything is possible. I'm just a little bit reluctant because we're not going to go into a game of overpaying for copper assets.
Paul McTaggart: Hi, Paul again. So BHP were in town, two, three weeks ago and we were asking about the latest tax proposal in Chile under the revised constitution. And I don't know where it's posturing but BHP were quite explicit in saying that even the revised proposal, which is circa 50% tax take, Escondida expansions wouldn't fly. We asked them explicitly about the fourth concentrator. I just want to get your sense on how you see that playing out.

Jakob Stausholm: Yeah, no, I do think the operator is definitely BHP, so I don't want to pull Mike's legs here. But I will say to you a couple of things. We are in Chile for the long term. And suddenly, we saw Chile was the most stable country in Latin America, and suddenly we wake up and see a very split society.

So one has to understand, and I met the President and you have to understand that he has to pull this country together. That's actually in our interest. So it's not necessarily entirely bad that there are some changes to the fiscal system. The question is, of course, the extent to which. And my sense is that there is a very, very good dialogue. And there's a good consultation process, and I remain convinced that we will end up with something that is – that works for us, that works for the country. And that means that we can continue to develop Escondida as the operator will suggest.

Jakob Stausholm: We're barely having any more questions. So one thing that while we are thinking about the last killer question that you haven't really asked a lot about, but we deliberately put it up at the Capital Markets Day to talk about culture. We went out with a very disturbing and difficult report at the beginning of this year. And we're working these issues very, very hard.

We are working very hard on the leadership development at the lower level, at the senior level in this company, and I do think that we are making progress. But I just note that I haven't got any questions from the audience here. I will tell you at the end of the day, and I keep on saying this, culture eats strategy for breakfast, because I can stand here and talk about strategies, but is it going to happen? And that's what we're really putting most of our emphasis in.

We have here James, our HR Director as well. So you have a chance for asking a question in that area. That was a leading question. Have we got a final few questions here?

Rahul Anand: Rahul Anand, Morgan Stanley again. Thanks. Look, another hard one to answer perhaps, Jakob. But Jadar, there's a fair bit of press at the moment and it seems to be like the government seems to be talking about how it's not going to go ahead. I'm not going to ask you whether it will or it won't, but I guess the question is, what are your next steps here? How do you engage? How do you change status quo?

Jakob Stausholm: Look, that was the other reason why I didn't ask Sinead to present at the Capital Markets Day because for sure, I mean, we haven't got it right yet on Jadar. But the reality is it's an amazing asset. And Europe needs it and Serbia needs it for its development, so we need to figure out how to go about it. The only thing I will say today is we haven't given it up and I think you can see Sinead, she will be nodding here as well. It's something that we spend a lot of time on. Do you want to say a couple of words?

Sinead Kaufman: Yeah, sure. Look, with Jadar, it's almost been a year now to the week that we lost the base permit, the special permit for that Jadar project. But one of the things that
I'm really clear on with Jadar, it is a fantastic ore-body, as Jakob said. It's on the edge of Europe. It's needed.

We spent 20 years between finding Jadar through our exploration team, finding a way to process this unique mineral, figuring out a way to manage water to the highest of standards, dry stack tailings, underground mine with very low footprint on surface, no surface expression of the underground mine at all except for the facilities on top.

We've never actually told that story in Serbia, and part of the reason for that is that the permit itself – the way the permitting process works is the environmental impact assessment goes out for public comment, but you can't put it out for public comment until you have the permits that we didn't get. So we've had – we've done a tonne of work on Jadar over 20 years.

And I think from my perspective, I really welcome the opportunity to be able to go back and tell that story and be able to give some of that fact and that detail to the people who are concerned about the environmental and the potential social impact of the project.

So it's a great project. We haven't given up. But we fully respect the Serbian government's position on it at the moment.

**Menno Sanderse (Head of Strategy and Investor Relations):** It's Menno. I was talking before the meeting with somebody in the foyer, and that somebody asked a question the Liz Broderick report, when you're going to update us on progress? Are you going to say something on the report? And are you going to do an interim survey or when you're going to repeat the survey?

**Jakob Stausholm:** Yeah. Let me – there's several people that can answer this, but I just wanted to make it absolutely clear to you how important it is part and parcel for everything we do. We have a first indicator. Every six months we do a people survey where all staff basically replies on a number of questions, and we had a huge increase in the number who participated, actually a record number and we had an uptick in the engagement.

It's still not where it should be in my view. I think we should aim very high because I do think that a high engagement is absolutely critical for the success of this company, but it is moving in the right direction and we do have the discussions on sites, in our hub offices, etc. It is progressing. And then there was 26 action points and we are making a lot of progress. I don't know – we have basically split the action points between three ExCo members, James, Kellie and Isabelle. Who wants to comment?

**James Martin (Chief People Officer):** Yeah. Well, I mean, I can kick off. I mean after this sort of very damning report that we put out on 1st February, I mean, what was interesting is that we have our best ever performance in the following six months on gender diversity, an increase, a net increase of 1,100 women joined our business. At the senior level, I interview all the senior leaders who join our business. And for the females who joined us, one of the key reasons that they have cited to me is precisely this, is that we've actually been courageous on this journey and they want to be part of it.

So there's some really nice indicators that things are moving in the right direction. We've had a focus on three broad activities this year on the everyday respect recommendations, which is around leader training. It's around how we manage our facilities, and it's also around how we manage complaints.
And I'll hand over to my colleagues for the other two. But on the leader training, we're now over 90% of our leaders through the training across the whole scope of the recommendations. Five of the 26 will be complete this year. 16 are in train. We're on track to complete all 26 by 2024.

I know Menno alluded to whether we're going to repeat that same survey that we did last year? And we will be doing that in 2024. So we'll get a good like-for-like comparison on what's really happened on our culture, but maybe if I hand over to Kellie. Do you want to go next?

**Kellie Parker:** So my part of the work that I lead is around the facilities. And this year what every site did a self-assessment on their facilities. They then needed to make sure that the urgent safety rectification was completed by the end of this year and that actually is currently being assured because it's linked to our bonus systems.

We have then the decision making on the priorities made by people that use the facilities. So every site has done something slightly different on how they prioritise but it's actually hearing the voice of the people that use the facilities of what they want to hear and what they want to see in the site change. So we've seen an uptick with that. And as James said, the leader training we see a very strong correlation between when the leader training has increased, so does the facilities and the drive for changing in the facilities. So we're seeing a significant change in some of the sites.

**Isabelle Deschamps:** And I'm leading the part which is around ensuring that we've got a good, trusted mechanism to report and complaints. So we've been doing a lot of work to having a trauma-informed support for our employees but also colleagues that may be experiencing some of these behaviours. So we've been working really actively on that.

We've seen an uptick in reports, which is good, including less anonymous complaints. So there's some indicators there but they're very early that the reporting systems are slightly more trusted, and we're rolling them out around all the operations where we are as well. So this is good work and we want to enable the conversations to happen and learnings from mistakes or learning from some of the behaviours. So engaging in the stories in accordance with what Liz Broderick’s Report have indicated is really important.

So we've also launched building on the safety culture that we've got which is very strong at Rio Tinto. We've launched the purple banners, sharing of learnings that started in iron ore, which were well received and we're rolling them out, again to all assets and operations.

**Jakob Stausholm:** Great. And just so you know, two days ago we had a Board meeting and – in Brisbane and we actually invited Liz Broderick. She came in and said, how about you and the board walking the talk? So it's very live because it takes time. And there's not a single person who individually can change the culture. We can only do it together. But I think the train is moving. I really sense that.

Well, on that basis, I think we will say thank you very much for coming here today. And let the dialogue be ongoing. Any more questions, then it's going to be in the foyer. Thank you.

[END OF TRANSCRIPT]