

## Rio Tinto 2021 Investor Seminar

20 October 2021

### Q&A Session 2

#### QUESTION:

My first question is just on the Pilbara and I guess we have covered a lot of ground today, but I was more concerned on going back to the basics of looking at your overall output potential.

It has been about 10 years or so since the Pilbara 360 project was first announced and I guess today we are still looking at a range below that in terms of the outlook, and that despite 133 Mt of new capacity being tied in. So I guess what I'm asking you, why can't Rio commit to 360 Mt capacity across its mine, port and rail and what's actually changed in last little while to sort of I guess create some doubt over that? That's the first question.

The second question is also on the Pilbara. We followed the money being spent on decarbonisation I'm wondering if you can commit to an opex saving because at the moment I guess from a modelling point of view we are putting in lower sales, we are putting in more capex and what I am really looking for is some sort of opex benefits? Thanks.

#### **SIMON TROTT (Chief Executive, Iron Ore):**

I'll do them in order, so maybe working through on capacity, 2021 shipment guidance we gave recently, 320-325 Mt. Included in that number is some of the one-offs from this year, so things like the tie-in projects that we had. Our first focus has been on getting to 345 Mt, and so we have got the brownfield projects which will complete through the back end of this year; we will have Gudai-Darri which will come on in Q1 2022.

Now as we have talked about before, Gudai-Darri is a mixture of both incremental as well as some replacement capacity, so that will come on and we will ramp that up through 2022. To then go beyond that we need improvement, which I talked through in the presentation in terms of the areas that we are focusing on, to really drive our performance and we have to acknowledge that we need to improve our performance.

We also need a tranche of mines, 2025,26/27 that I talked to, to really reach and sustain that upper end of the guidance, so that's how we are looking at it. Certainly, I guess one of the things we are really focused on is being really clear about what we need to do to deliver the outcomes that we need.

On the decarbonisation, and I guess stepping back, for us decarbonisation is really in two blocks, about 70 per cent of emissions come from diesel, about 30 per cent of our emissions from our gas turbines, and so the things that Peter and Mark were talking to, really focused on that first chunk on our emissions from gas.

Pilbara is very advantaged for solar and wind and so we have got a programme in place to deliver the first gigawatt to really repower those gas turbines and, as you say, technology has improved for renewables and so they have got to a stage where we can really bring those in on a financial basis and use them to repower.

Now we will do it in a way that provides optionality, optionality then to do that next tranche of decarbonising which is HME and our other equipment and also look at the potential to go further than that, but we will build that option into that first phase.

**JAKOB STAUSHOLM (Chief Executive):**

If I may just add a little bit because this question of course we are getting a lot particularly in Australia. I just want to remind you, it is an amazing business that we have built over decades and just back to the beginning of Simon's answer, 345 Mt, that's the first step towards 360 Mt, we have never produced 345 Mt, it is going to be a new record.

We are this year the world's largest producer of iron ore. I hope you can see the challenges the team are facing. I think it makes eminent sense. I'm actually very, very impressed with what the team is able to lift right now and we can see a path forward, a path of growth, there is demand for our products and I am absolutely convinced that we this time around are getting there.

But it goes without saying we don't want to over-promise here. I am acutely aware that we have had to cut guidance in the past and we need to get out of that. So I think what you have got is a very precise deliverable path forward scene from Simon. Thank you.

**QUESTION:**

Hi Jakob and team, a bit of a subjective question for Simon. I saw in one of the presentations that SP-10 will be around 9 per cent of the product mix. I just wanted to get an understanding of what's actually driving those higher values? Is it the mines or the kind of base? Will it take two years to resolve and is this a mixed tranche of the replacing mines in the Pilbara? Do you envisage an impact on the quality of the Pilbara Blend? Thanks.

**SIMON TROTT:**

So talking then first to the SP-10 question, we are seeing elevated levels of SP-10 through the back end of 2021 and that's really about those new mine developments, the brownfield mines and also Gudai-Darri which

we now expect to come in at Q1 2022. Whilst we are waiting for those new mines we are seeing elevated levels of SP-10 as we really protect the quality of Pilbara Blend.

SP-10 is a bleed product which we use to protect PB and the delay in those mines has certainly caused elevated levels. We will sell SP-10 going forward - SP-10 we have been selling since around about 2014/15 in varying quantities - and so the chart we've provided today showed around about a 6 per cent SP-10 [in 2024].

As we look more longer term, 2024 and beyond, once we have got those new mines up and ramped up, and longer term we have got the next tranche of new mines 2024/25/26 which really go to support the quality of Pilbara Blend. As we look forward, we have got a fairly deep resource base and so we are pretty comfortable we can continue to produce Pilbara Blend well into the future.

**QUESTION:**

Sinead, you highlighted the significant potential that IOC has, particularly with regards to the low-carbon steel as well as obviously some of the challenges you have there, but I wonder if you go into any more detail on some of those bottlenecks and how confident are you that you'll get the asset to its theoretical capacity or would it take more significant investment to get there?

**SINEAD KAUFMAN (Chief Executive, Minerals):**

From an asset perspective what we have seen particularly in the last while is an opportunity and we have doing that this year to improve the mine production productivity. So there is still work to do but we have seen some good outcomes from that, and hence with the Safe Production System we have identified the concentrator now as the next opportunity to de-bottleneck the concentrator and make sure that we can operate that with full capacity.

Once we have done that we know we have, as I said latent capacity in the rail system. We will be investing some money next year in the car dumper and rail off-loading system so that we can also maximise throughput there.

So really it's around that continuous de-bottlenecking and expecting that to move and change over time, but really in the next 12 months it's about now it's the mine and the concentrator, work that is starting now then I'd expect next year we'll start to see some improvements in the rail downstream as well as we bring on that additional capital.

**QUESTION:**

Jakob, it looks like 2022 is shaping up to be a big year for project announcements and also project approvals. Can I ask the first question maybe to Ivan about aluminium capacity additions? It been probably 3 or 4 years now since we did talk about the potential expansions of Alma and Arvida, but you have said in the past you need \$2500 a tonne aluminium sustainably and also a lower capital intensity before you look at

the expansions in Canada. If ELYSIS™ is commercial in 2024 does that change that thinking around potentially adding capacity?

I actually have a second question on Simandou, which I will come back to.

**IVAN VELLA (Chief Executive, Aluminium):**

Okay, thanks Paul, a good question. Look ELYSIS™ is a big part of the puzzle as we look forward, the conditions are very favourable in the Saguenay, the hydro-facilities that we've got gives us a low-cost base, put that together with ELYSIS™ and that gives us the kind of pieces that we need for that next step of growth.

But, we haven't finished the work on ELYSIS™ yet, so it is really one step at a time. There is that extra half a line there at Alma ready to go and that's where we are starting to put those first commercial scale pots in for ELYSIS™ to see how it operates in that environment.

**QUESTION:**

Ivan, thanks a lot. It does sound like you'll get pretty big productivity gains as well and opex reductions from ELYSIS™.

A question now on Simandou, maybe for Mark or Bold, whoever wants to take it, but two things on this project: One is, can Rio Tinto actually commit to this project before democratic elections take place in Guinea? And secondly, have been able get Winning logistics or Winning to the table on a joint venture, on discussions?

**BOLD BAATAR (Chief Executive, Copper):**

Good questions. I think, first of all, we do have to find a way to engage with this government and of course we would be keen to understand when the elections will take place, but we have a long-term commitment to Guinea as a country so obviously we are going to be patient and work through it in stages.

As far as Winning is concerned, we have had or I have had myself two meetings with them and a number of my colleagues have, so we are continuing the dialogue. It is about the question around what does that future sharing of infrastructure look like and I think that is going to take some time to shape up.

So, unfortunately, I can't exactly give you the time and precision on the capital, but all I would say is that we are actively engaging.

**QUESTION:**

A very good day to you Jakob and team. I'm happy to see that you have strengthened and accelerated your decarbonisation plan with your capex guidance. We hope to see some more other commitments on Scope 3 soon, however, we acknowledge that you need your clients for this as well.

I have two questions. First of all, to what extent will you connect your performance targets to the [UN] sustainable development goals, that means mapping, connecting and delivering impacts on the sustainable development goals? And my second question is, are you considering installing long-term incentive plans for ESG tied to your remuneration in the coming year and by that I mean your strength and decarbonisation ambitions. Thank you very much.

**JAKOB STAUSHOLM:**

Thank you. Let me start with the second question. Absolutely so, and we have an upcoming Board meeting where it is not us but it is the Board that determines remuneration. But clearly the scorecard should reflect where our focus is and climate change is clearly increasingly important. My sense is that the Board wants to hold this team accountable for us delivering on that, so that goes with saying.

I would say it goes in two ways: short-term you can look at some very tangible impacts but long-term we are tied to shareholder return and, quite frankly, I believe it's good business to be in tune with what the society needs.

What we are talking about here today is about future-proofing our business. I firmly believe that this is in the interests of the shareholders what we are suggesting, so you should see that measurement coming across in both the short-term and the long-term.

Look, we are definitely using the UN sustainable goals in terms of how we communicate out, how we insure ourselves. I laid out four objectives; one of them is about impeccable ESG credentials and actually is a very holistic thing to achieve. It is quite a big value statement and it is very helpful to check the boxes of the sustainability goals.

It goes without saying, our previous question came around Simandou and, yes, there is a little bit about how do we make that have as little climate change impact as possible but there are much bigger things around biodiversity, in migration etc.

Mining is a very holistic discipline and are tapping into a lot of the UN sustainability goals and we are using that methodology, and you'll see that in our reporting out there at year-end. Thank you very much for the question.

**QUESTION:**

My first question is for Simon on the iron ore costs. Clearly you have articulated on slide 40 that there are quite significant structural drivers lifting your cost base and probably accelerating inflation from here. Is 2021 a good starting point for these costs or are there any elements in 2021 that are transitory in nature and will eventually fall away?

**SIMON TROTT:**

Maybe to put it in some context, so if we look at the increase 2019 to where we are today around about half of that increase, or a bit over half of that increase, is exchange rates as well as some of those COVID costs that we have seen, that we certainly hope are transitory.

In addition, we have had Work Index, which has flowed through, and the other component is some of those infrastructure and joint venture payments that are between the different areas.

As we outlined on the slide, we do have some headwinds, certainly the labour market here in Western Australia continues to be fairly tight and we see obviously areas like the energy costs increase of late as well. We have our own challenges so the Work Index increases, that I outlined on the slide, of around 20 per cent. We'll work through all of that and obviously provide guidance in time.

We do have some things going in our favour as well, so obviously higher production lets us amortise some of those fixed costs and it just underlines the work we are doing on productivity and the programme that we have outlined and aspects like Gudai-Darri obviously helps as well.

Gudai-Darri, a strip ratio of a bit less than 1.0 compared to on average strip ratios at the moment of about 1.8, so this level a bit closer to the coast as well. So we have some of those factors also providing us some assistance as we go forward.

**QUESTION:**

My second question is for Peter on the growth capex budget that you have set. Clearly you do have a framework for allocating your capital, but do you think that by setting very precise growth numbers or growth budgets for 2023/24 you are signalling to the market that you are prepared to take budget-driven decisions instead of opportunity-driven decisions?

**PETER CUNNINGHAM (Chief Financial Officer):**

Absolutely not! I think what we are saying is we believe the options are out there if we work very diligently to bring that enhanced level of growth and we think for a company of this size that we should be looking to have a broader range of options to pursue.

So we look at what we are spending now. We have got projects that are in flight; we look at the options we are studying very hard, there is our exploration programme and what we can do through business development. We look at the new options that are evolving from discussions we have had today because as we talk about decarbonisation that things start to change and new options start to evolve.

So we think across all of those. We have got enough to work with to start working towards those numbers; if we don't have the options we will not commit the money. It is as simple as that, we are going to be very, very disciplined but we have got ambition. We think that's what we should be looking for in terms of growth for this company.

**QUESTION:**

I have got two questions. I think the comments on strategy were slightly different in terms of country, countries that are creeping on to the Green List. Given that you are already in South Africa, is South Africa increasingly on that Green List for new capital? In the past you've mentioned PGMs as being a commodity that you were potentially strategically interested in – is that still the case?

My second question on Simandou, could you maybe give us some insight when we next hear from Rio on Simandou in detail? I guess my specific question is, does Simandou as a project across its entirety, will it comply with your impeccable ESG credentials aspiration?

**JAKOB STAUSHOLM:**

So let me start off answering it because I think actually you've heard Bold and what he's saying about operating in different countries. I have of course worked very closely with Sinead during the year because the situation has been difficult at Richards Bay, because it's not just South Africa but the KwaZulu-Natal Province have had particular security issues, and it just a very challenging environment.

I am very, very impressed with how the team have coped with extraordinary difficult conditions. We had to shut it down and we have started it up again and I think we are right now demonstrating that we can actually operate not just in South Africa but in the KwaZulu-Natal Province. That gives me a lot confidence that we can operate in difficult conditions and I think that's totally aligned with what Bold was saying in his presentation.

On Simandou, look, there is no doubt it has to be done to the same standards as everywhere else – it's impeccable ESG credentials. I think it's possible and, quite frankly, I think we are very aligned with our joint venture partners, the Chinese SOEs, as well. Did you read the speech from President Xi last week about biodiversity? I thought that was very interesting. So definitely it is possible and we have studied this for many, many years; we really know how we can go about the development in Simandou. Do you want to add anything, Bold?

**BOLD BAATAR:**

Now look, we have been working for over a decade now with one of the leading independent experts and recent scientists around the behaviour of the chimpanzees and even through the worst of times we have been consistently funding that research project to make sure that whatever the future development is doesn't impact the potential livelihood of the 25 chimpanzees that are living in that area. So, we are absolutely committed to make sure we do the right thing around biodiversity and in migration.

One thing that you have to think about is if you would like to reduce CO<sub>2</sub> the steel blast furnace emits 2 tonnes of CO<sub>2</sub> for every tonne of steel production. If Simandou ore comes in it raises a potential to reduce it by more than half. So I think impeccable ESG has a view towards a balance of many considerations and I think decarbonisation and the future of DRIs is definitely in the cards.

**QUESTION:**

On this inert anode technology you are developing, two questions: one, will it give you a commercial advantage which you will be able to monetise once you have sufficient production available? And two, eventually do you need to rebuild all your smelters so that they can adapt to that alternative technology and at what cost?

**IVAN VELLA:**

Obviously, the world is still coming to terms with the rate of decarbonisation and how consumers will reflect on that and value that. There is a lot of talk about 'green premiums' in the aluminium markets. It is still very premature, but it is just starting and naturally that is something we would be pursuing for zero carbon aluminium.

There are operational benefits as well without getting into the specifics, it's a different approach to generating or producing aluminium and we'd obviously want to pursue those opportunities.

But, you finished on the critical issue, which is of course how you then scale it, so is this a retro-fit process or is it better from a capital-intensity point of view to actually build fresh assets?

That's exactly the kind of homework that's ahead of us, to understand what's the best economic pathway to take that and make that mainstream; so, going from what is an R&D project to large-scale zero carbon aluminium is still a very big task.

**JAKOB STAUSHOLM:**

But look, let's get it to work first! But the point is of course the more the world is prioritising to decarbonising, if we can get it to work, the more we have to push ourselves to think about how can we roll it out in our amazing aluminium business? And quite frankly that will be the ultimate futureproofing of our aluminium business, so I cross my fingers. The research is going well but it was an amazing trip and going and seeing it there. I'm very excited about it.

**QUESTION:**

A couple of quick questions on capex: Are you able to split your \$7.5 billion decarbonisation spend into Pilbara, ELYSIS™ and MACC, just a broad indication? And secondly, which of the unapproved projects are part of your growth capex guidance and, more specifically, what are you budgeting for Simandou up to 2024 capex? Thank you.

**PETER CUNNINGHAM:**

We've set our very broad basis at \$7.5 billion. We really said that for the next four years half-a-billion and then it will accelerate in the second half of the decade. That's very much aligned to our overall view of, firstly, what we can do right now, and the really big things we can do right now is around the deployment of



renewables. Quite clearly in the business that's what we can do in the Pilbara and that's why we've talked very centrally about that one gigawatt.

As we get into the second half of the decade more opportunities open up, so that's when we are getting much more into the industrial processes and to actually move forward; and that's when we can start to think about ELYSIS™ as well as part of that roll-out.

So think of the \$7.5 billion not in terms of concrete steps but in terms of that roadmap, if you like, and what we think is our best estimate of those dollars. We have a fairly clear picture of what's going to happen in the next few years and then a conceptual roadmap in the second half of the decade made up of a whole variety of projects.

But we think that is about the right level of capex that would be required to deliver that 50 per cent reduction in emissions which is what we have set out today. That's the first part of the question. And for the next few years, the exact timing we still working on but we are working really, really fast now to accelerate those projects.

In terms of growth, again we've set out that as an ambition to double, so we are fairly clear on the 1½ layer, if you like, and what that will be for the next few years. Over and above that there are a whole number of things that I could see coming in or coming out. We've set ourselves the ambition to bring them in; if they don't then that second 1½ will be pushed out.

But there are a whole number of things we are working on from Resolution, Winu, Simandou, other projects in that stage; we have got other projects coming through the exploration programme that we talked about today; and there are other options that we've started to talk about around Canadian HBI for instance. So for all of these things we think that's the right level.

But, is there a concrete list that makes up the number? Not at this moment in time. But we think we have got enough to work with if we can really deliver against it to achieve that degree of growth, and it's valuable growth, that's the key. We are going to do this with real discipline.

**QUESTION:**

You have been talking a bit about future-proofing the business but there's also some real present issues and you have addressed some of them here in terms of ESG. But one of the clear and present issues seems to be this supply chain issue vis-à-vis China, and so probably this is going to go to Ivan.

There are some of these critical metals that we need for aluminium that come out of China. They are not coming out, so what does that mean for your customers, what does that mean for your business, is this something you need to take on board? Could Rio Tinto build a magnesium plant or a silicon plant?

**JAKOB STAUSHOLM:**

This is wonderful. I'm actually going to ask first Ivan, then Bold and then Sinead to talk about it because it affects us a lot.

**IVAN VELLA:**

Let's talk short-term and absolutely it's very clear that there are supply chain issues across all sorts of materials in the world. Our procurement team is very proactive there and managing it well and we are not having an impact on any VAP at this stage, but of course we can't predict the future and how long these challenges will play out.

In the medium term I think the reflection is, well, how do we make our business more resilient to create the green materials and the in-demand materials more importantly. And if we start looking at some of our waste streams, not just doing the right thing with the waste streams, a lot of them actually have valuable minerals in them and when we start to look at processes that can actually valorise and extract those.

I didn't get into specifics, but with our bauxite residue if we start to pull those apart the amount of opportunity there is quite significant, so we are working hard on that. I am sure Sinead will talk further, and Bold, about the work that's going on.

**JAKOB STAUSHOLM:**

Maybe Kennecott from your side and then critical minerals in general and Canada.

**BOLD BAATAR:**

Absolutely. I think the one benefit of having your smelter and refinery is actually at the tail-end being able to recover other minerals and I think that is something definitely we are looking into. You may have seen the announcement of investment in the tellurium extraction.

So there is definitely more work we are doing, actually in partnership with US state government, on Critical Minerals Institute to look on how to optimise more out of the ore bodies, so it's a multiple product group approach and I am sure Sinead will cover what's she's doing in the Minerals space.

**SINEAD KAUFMAN:**

It looks certainly from our perspective a bit like Bold with Kennecott. We have a smelter complex associated with our titanium dioxide business in Sorel and Sorel is also the location our critical minerals research institute, working with Mark's team with the chief scientists, to look at what are the opportunities out of processed liqueur to extract materials that we haven't previously done.

I have mentioned scandium and also extracting lithium from the boron tailings and we continue to look at other opportunities to extract materials that exist in those process streams and also in our existing tailings dams. That work will continue and we continue to look at other opportunities to produce materials that typically we have imported from elsewhere.

(End of 2nd Q&A Session)