

## Rio Tinto 2021 Investor Seminar

**20<sup>th</sup> October 2021**

### **Q&A Session 1**

#### **QUESTION:**

Good morning. It is nice to finally see everyone in person. Hopefully I'm not jumping ahead, but it's a question on downstream decarbonisation. You've outlined your plans on Scope 1 and 2 and some high level goals on Scope 3, so I guess my question is we've seen some very different plans from FMG and BHP, one is going downstream in a big way, the other not so much. Where do you see Rio's within that very wide range and when will we start to see more details in terms of those plans and what it could mean in terms of capital commitments? Thank you.

#### **MARK DAVIES (Chief Technical Officer):**

Firstly, we are very much at the early stage of some of those; some of that work is very much R&D, on that pathway, and we need to work through that R&D. I think the one probably closest to making a decision around is the HBI plant in Canada but that is still in study stage. Peter will talk about this a little bit later, but any investment that we make will still be subject to our key investment criteria.

We do need to make sure we incentivise that technology deployment, we want to make sure there are multiple pathways, because we don't know which pathway is going to win in that greenfield transition.

I think the other development of Scope 3, which Ivan will talk about a little bit later which is much nearer term is ELYSIS™ and obviously we'd hope to scale that one up sooner.

#### **QUESTION:**

You seem to be really styling yourself here as 'the green and greening miner' and I'm just wondering is that the new pitch for Rio Tinto and do you expect this to drive a re-rating in the shares?

#### **JAKOB STAUSHOLM (Chief Executive):**

We are running a business and we are trying to be relevant to societies and we are trying to grab the opportunities as we see them coming along. We have an amazing business, amazing assets - look at our First Half Results.

We need to be sure that those great assets are also great assets 10 years and 20 years from now, plus we need to build new assets and we need to build assets where there is growth. What is happening in the world is an energy transition; that is what we are responding to.

**QUESTION:**

So just to follow up if I could, the capex seems to have gone up a lot and it's not really so clear that that's translating into dramatically increased volumes, so is this, if you like, enabling capex because you have to decarbonise the business or how should we think about that?

**JAKOB STAUSHOLM:**

Look, I suggest we take it a little bit later on because Peter will explain the capex and we will talk about what we concretely are doing. But the way you should think about it is, that the energy transition basically goes from a lot of energy you pay on a variable basis when it's oil and gas towards you getting energy for free but you have quite an investment upfront.

Of course, we are not going to make very stupid investment decisions, but we actually think there are certain things that can work for us, but let's take it later on.

Next question? We will take one more from the room here.

**QUESTION:**

On the three levers for decarbonisation you mentioned, on the one gigawatt of renewables in the Pilbara, would you be putting in the investment yourself or is it a build/leaseback kind of approach that you are thinking of to reduce your investment capital?

Then on the \$75 carbon cost that you are putting into external projects, I'm sure you have done some back-testing on those. Can you give some examples of projects that could not have gone ahead which you have done in the last 10 years with the \$75 carbon cost?

**JAKOB STAUSHOLM:**

Thank you. Let me answer the first. I think we'll come back on the other as Peter is covering the carbon tax later on. On the first gigawatt time will tell, but we are prepared to use our balance sheet and do it ourselves and that's what we are developing it towards right now.

**QUESTION:**

Hi team, thanks for the opportunity. Look, on one of the slides you outlined the potential scope 3 emission savings you can make through better grade iron ore and I wanted to touch on that a bit if I can please. Have you thought about how much you can beneficiate your current iron ore products using conventional techniques, especially in light of the increasing mix of SP-10 going forward? Thanks.

**MARK DAVIES:**

Yes absolutely. We are looking at that. There are some challenges of the different ore types in the Pilbara but there are some ore types that are very amenable and we are absolutely looking at all of those options, including the novel research project that we talked about, that we announced last week. It is really about, or specifically designed for upgrading our Pilbara specific ores in a carbon-friendly way.

**QUESTION:**

And would I be correct in thinking that this is largely focused on wet processing and how much do you think you can achieve? Have you done any testing so far?

**MARK DAVIES:**

Yes, we have done a lot of testing and actually ironically I think our Bundoora facility in Melbourne was built in the nineties to do a lot of this work and we are using that now. To be honest with you, I think we are looking at a range of options, so the green project we announced last week is actually about using microwaves and biomass to create a reduced product that actually can go into a lot more low-carbon steel pathways.

**QUESTION:**

Hi Jakob and team. Can I start by saying this seems like a complete change of strategy for Rio Tinto, it is certainly a massive pivot, a focus on decarbonisation and green metal over real fundamental production growth as a mining company it seems. I'd say that maybe the whole of the industry must do the same, but that's another discussion.

The question I have is very high level, how do you create value for shareholders with this strategy? How do we value these decarbonisations investments? Is it through setting the cost of carbon; is it through capturing green premiums; is it through generating a lower cost of capital or attracting green funds into your stock? I am just trying to level, trying to actually just grapple with this, what I see as quite a big change of strategy, Jakob.

**JAKOB STAUSHOLM:**

Thank you very much. On the one hand, I would say “yes”; on the other hand, I would disagree. But we haven’t still covered that, we are having the first Q&A session and we will talk about growth in the business in the second panel, so maybe please wait with your judgment.

But your question about green investments, it is about future-proofing our business and a number of those things actually makes eminent economic sense. Just as an example, and I know it is a small example, but what we did in Madagascar – I think we announced it about a month or two ago – it was actually very economically attractive to go to renewable energy.

We have done that in a number of places, Kennecott, and BHP are doing it with our share at Escondida, so it’s a natural extension of what we are doing on the West Coast in the Pilbara.

I just think this is not going to happen tomorrow, but a decade down the road we cannot continue using coal-fired power for aluminium smelters. We think that there are economically viable paths to follow for the future for the PACAL smelters and that’s what we are working very hard on.

Then actually I disagree with you. I think actually we have an amazing opportunity ahead of us to start growing as a company. We haven’t grown for many years as Rio Tinto, but we will talk about that in the second part of the seminar. Thank you.

**QUESTION:**

A year ago Rio Tinto was in a bit of a hole with society, especially in Australia. How do you think you are now and what would you point to, to kind of encourage us that you’ve made good progress there?

**KELLIE PARKER (Chief Executive Australia):**

Thanks for the question. I’ve certainly done a lot of listening and heard some very confronting feedback about how we had become and we have been very focused on our business processes, and whilst we have been engaging we hadn’t really been listening. So as we now start to really deeply listen part of that is ensuring that we get feedback.

So I regularly go back round to multiple stakeholders and ensure that they are seeing progress and asking what else are they wanting from us, and that includes the Traditional Owners, Indigenous Australians, includes our Governments both State and Federal, includes influential stakeholders particularly in Australia.

What they are overwhelmingly saying is that we are listening, that we are taking a different approach, we want to work together but actions are always louder than words.

So I think the work that we have done with the Governments in different States and Federally has significantly changed and commitments that we are making into the different States has changed, most recently a Statement of Co-operation with the Queensland Government. Very, very pleased with the work that we are doing in Gladstone and the future commitments that we want to make into the regional area of Gladstone.

But we will always have a long way to go with Indigenous Australians and rebuilding the trust with Traditional Owners. We most recently published the CSP Report, which has feedback from the Traditional Owners, which we are pleased that they took the time to let us know what they are thinking, and we are going to continue to report on that feedback.

**QUESTION:**

Just a question, the gigawatt of renewables in the Pilbara, can we put a hard number on that, how much is that going to cost and then what's the cost for electrification? Then just on the Scope 3 goals, why not come out and set a hard Scope 3 target like, say, Vale has? Thanks.

**JAKOB STAUSHOLM:**

Mark, you can answer the first part of the question. The second part of the question, we will. But you know today we are actually telling you a lot about what we are doing to help on Scope 3 but we also need to assess what the industry is doing and that's the work we are undertaking now.

So, I expect we can be much firmer at the Annual Report talking about where do we see Scope 3, because we cannot just from our own actions determine our Scope 3 goals, we need to understand what the industry is doing.

**MARK DAVIES:**

Look, I think the best guidance we have at the minute is \$1.5 billion over the next three years and \$7.5 billion until the end of decade is what we think we need to spend to move our projects forward.

**QUESTION:**

[Thank you folks. You are looking to invest \$7.5 billion of capex to decarbonise, plus the additional \$200 million-odd per annum opex. I guess I am struggling to understand here why markets shouldn't immediately despite all this value off Rio Tinto's share price here. What's the value accretion associated with and what's are the advantages of moving this earlier without there being any kind of value accretion or additional green premium price point actually in place yet?

**JAKOB STAUSHOLM:**

I must say I am struggling a little bit on the question about the value accretion from the capex. But I do want to really make a plea; it is what we are covering in the second part of the seminar, so if you don't mind we will take it in the second Q&A, and again if everyone who ask questions here in the first Q&A please do it to the presentations we have done so far. This one is specifically being addressed in the second part of seminar.

**QUESTION:**

Good morning Jakob. I was just wondering if you could maybe talk a little about whether if you have made any changes to your views on Chinese production around steel, aluminium and the capacity cap in aluminium - Will they stick to it? – because obviously their goals and their policies are changing quite rapidly and we are seeing that impact short term production. But I was just wondering if you could talk a little bit about how that's impacting your medium term production views of China? Thanks.

**JAKOB STAUSHOLM:**

Why don't we ask Vivek, how do you see the medium-term outlook?

**VIVEK TULPULE (Chief Economist):**

Look, we haven't fundamentally altered our medium-term outlook. For example, just take the aluminium production cap of 45 million tonnes in China, today its production level is only about 38 million tonnes, so they haven't yet hit that 45 million tonne limit and so we don't see a fundamental shift in that.

In terms of the other commodities, again the fundamental views we had formed based on the idea that urbanisation and industrialisation would continue to be drivers of demand haven't really changed.

We are now at that one billion tonne plus mark [in Chinese steel production] and we've essentially taken a view that levels of production like this are broadly sustainable in China for a little while, but obviously ultimately they will plateau and then come down over a period of time. So I think we haven't really changed our views on any of this since the last time we presented.

**QUESTION:**

I have question on how you trade off between the growth agenda of a host country like Mongolia, that's looking to develop a coal industry and utilising its resource verses the Scope 1 and 2 emissions targets that you have committed to today?

**JAKOB STAUSHOLM:**

Thank you. Look, it is actually in a way covered in our good old capital allocation framework. You could almost see that some of the things we are doing on decarbonisation is kind of sustaining capex, it's about future-proofing your existing business, and I think you can actually look at it quite separate whereas in more directly focused growth capex it is kind of a different angle. We'll cover that in the second part with a panel debate.

I think we have an exciting future. It might be for the same reason, namely the energy transition that gives us extra demand, but it is actually two very separate things and different parts of the organisation are dealing with it etc., so you are not too dependent on the one for the other. Thank you. But we'll cover it later on.

**QUESTION:**

Just a question for Vivek thinking about some of the long-term goals of China, if they are looking to cut carbon emissions of the steel industry by 30 per cent by 2030, what does that mean for pig iron production and iron ore demand? Are we looking, with the growth of scrap coming through surely we are looking at a very, very weak demand environment for iron ore in the second half of this decade?

**VIVEK TULPUL:**

Again, the assumptions that we make on China are that China will plateau its steel production during this decade. We still think that has legs, that their consumption still has legs, and that we will start to see growth in consumption from other jurisdictions, so ASEAN and India for example and other developing economies. There is, in a sense, a view that we will continue to see growth in steel demand globally while China does slow. Those issues are captured.

In terms of scrap, I think a rough rule-of-thumb is that it's about 30 per cent of demand, is basically met from scrap, it is not just the case for steel, it is approximately true for other commodities as well, and we see those ratios broadly holding constant over the next 10 years or so.

They will increase a bit as the availability of scrap improves and as we move towards a greater decarbonisation, but again we continue to see growth in steel demand certainly, as Jakob said, certainly not at the sorts of rates that we have seen over the past decade or two, but nevertheless some growth.

**QUESTION:**

Just a question on the green steel transition. We've heard from other competitors that they are actually going down the value chain because you need to be close to your customers, steel in particular. So what is your strategy with regard to DRI and HBI

because that will be the new product out of iron ore going forward and that needs more capex and the steel industry is not really willing to put the DRI and HBI facilities in place themselves?

**JAKOB STAUSHOLM:**

Time will tell and, as Mark said, it's early days but we are starting it. It depends a little bit, if you have the combination of ore and competitively priced renewable energy next to each other, it is worthwhile considering the next step.

**MARK DAVIES:**

We are about creating options right now I think, and then if those options are 'in the money' that is something we will look at. But, as Jakob said, if you are thinking about the future of transitioning to a net zero steel, the advantage of low-cost renewable energy is going to be the key competitive advantage and, as we showed on the slides, some of the regions in which we operate actually are really highly advantaged in terms of their low-cost renewable energy.

So if that optionality around resource and low-cost energy comes together to create an attractive option that's something we will pursue but it is going to be driven by the attractiveness of the option.

**QUESTION:**

One follow-up on the biomass, it's lower carbon footprint but it's not a zero carbon footprint. Is that just a middle step in order to bring down the carbon footprint on the Scope 3 perspective for you guys and the industry as such or is something which you would actually consider a longer term strategy because you need a lot of bio-mass in order to transfer that into lower carbon steel?

**MARK DAVIES:**

It is one of the options, and the process we are working on is really deliberately using waste biomass. We are trying to make sure it doesn't come from a few food or energy sources, the lignocellulosic biomass and also it is combined with microwave energy so that the energy source can come from renewable electricity. Look, it's a step but actually you can combine it with other things to actually make a material impact.

**QUESTION:**

My question was on the renewable power opportunities. So we've got the number for the \$7.5 billion capex, but can you help us put our fingers on again some of the longer term costs benefits?



**JAKOB STAUSHOLM:**

Absolutely. We are going to cover it in the second half; I promise you we will cover it there and you have asked the question.

**QUESTION:**

In terms of you getting a much more ambitious 2030 greenhouse gas reduction target going to 50 per cent, what work have you done internally to drive that high ambition – is it using a \$75 carbon price, is it something else?

**JAKOB STAUSHOLM:**

We have gone through a very extensive strategy process, we have activated our organisation and we realise there's limits on how much we can do by 2025 but we can do certain things and there's a lot we can do by 2030, and that's why we've come to the 15% and the 50%.

But I would say to you, I was trying to emphasise it in my speech, I don't think we have activated all our engineers in our organisation and that's what we are starting now because every time I go and visit a site there are so many opportunities to reduce our carbon footprint.

I think we have not emphasised it enough in the past and what I expect coming out of this is that right now, yes, it has been a deep strategy process, it has been deeply thought about, but when we really get engagement from all our engineers around the world many more things will arise that we might not have seen yet. So we have started the journey but I'm quite confident that we can deliver.

It's not easy, but I actually think we need to put some stress targets. I was trying to make the point that in Rio and the world we haven't really made a lot of progress, we need to force ourselves to make that progress, it's doable today, and quite frankly, many of these things are actually creating value standalone, plus you future-proof yourself. What if you suddenly have to pay a high carbon tax? Then if you have done nothing you are in a very, very difficult position.

**MARK DAVIES:**

Just to add, I think we showed you that marginal abatement cost curve, about half of the projects on that cost curve are value-accretive at a zero-carbon price.

**QUESTION:**

Thank you. So are you still identifying projects that will help you get to the 50 per cent, given you said that engineers are still coming up with ideas?

**JAKOB STAUSHOLM:**

Well, targets are here to be beaten; I am not going to promise you anything more. What I am saying is that we already have a lot of projects. You can see the abatement curve in the presentation, but what I am saying is I am absolutely convinced that we will find more because the reality is there is only a percentage chance of achieving every project. I realise that.

But right now the biggest thing that really can make a difference is decarbonising our smelters on the east coast of Australia, but of course we are dependent on the willingness of State Government/Federal Government and other partners to make that happen, so I cannot stand here and completely 100 per cent promise that, but if certain things don't happen then certain other things will happen. Thank you.

(End of 1<sup>st</sup> Q&A Session)