RioTinto

Rio Tinto Investor Seminar, London
Transcript of 2nd Q&A session

31 October 2019

QUESTION:

I have two questions on innovation, so probably for Steve. How do you sort of deal with the challenges of incentivising mine managers to trial and adopt some of the new technologies given obviously that you've got targets and productivity and such to meet?

Then the second question is, you have outlined gains to things like downtime and digger productivity, at what point do you think this innovation push will actually lead to changes in overall output, overall unit cost guidance, or is it more just offsetting some of the inflation from external and internal sources? Thank you.

STEPHEN McINTOSH:

Thanks for that. With the first one there are two sides to it, one is that nearly all of our operations are set with targets that they have to meet, so they are incentivised to go and look for whatever can actually help them, help deliver their targets, improvements in their business.

The second thing is we use global metrics across the Group, everybody gets to see everybody else's, nobody likes to be the laggard on the wrong side of the graph, so I think that internal competition within the company around actually having full transparency and key data is a key one to get the competitive tension high.

But what we have to make sure is that what we bring to the business are options that are scaleable and will work. I think in the past many across the industry and ourselves tried a lot of stuff, it didn't always work, so we do a lot more piloting these days and go through various structured, roll-out and scaling process, and then it is about replicating it. So a lot of changes on that side of the business.

J-S JACQUES:

Bold, can you give an example on how some of your people are, for example in Boron, involved, are testing some new ideas, and maybe Arnaud if you want to cover a few examples from Kennecott as well.

BOLD BAATAR:

I will give two examples, if that is okay. The first one is, we set up a pioneering pitch which essentially is a shark tank. It is run actually by our GMs and lower bands and it's across the Group in the Southern and Northern Hemispheres, and that's driven a lot of innovation across-the-board and obviously improvement in safety performance.

The other one is on the boron specific example. This has been going on actually for a number of years. But I must say sorry, we ask for forgiveness, which is the team found a trial roaster on e-bay, we found it on the Friday, bought it on Monday, and was at the site in two weeks. So we do try things in a bit of a different way. I think now we are obviously moving to a more scientific engineering of that.

J-S JACQUES:

That's not what you were supposed to say, Bold, but anyway thank you for your point. Arnaud if you want to go for it and I will come back to Bold after and discover what you are doing on Scandium.

ARNAUD SOIRAT:

Two examples from Kennecott, one on the ESG side, which has got an impact on costs, and the other one on productivity.

On the ESG, you may have read a few months ago that we decided to change the power supply at Kennecott. We used to have a coal power station. Kennecott is based in Salt Lake City and in wintertime, because Salt Lake City is surrounded by mountains, there is an inversion phenomenon and therefore reducing the emission of dust and fine particles is extremely important to the community.

So what we decided to do is to shut down our coal power station completely and to source fully renewable energy power, and that is contributing extremely favourably to reducing our carbon footprint, and has reduced the carbon footprint at Kennecott by 60 per cent, six zero. The next step is actually to look at what do we do with our fuel usage in trucks because this is now the biggest source of greenhouse gas emissions.

The second example is the one that Steve has described on the surge loader. This is something that is being tested at Kennecott and is going to be very helpful in increasing the productivity of our fleet and, as Steve said, there is a healthy competition within the different sites about productivity. Kennecott is on the top of the league ladder and so with the surge loader that will be a step forward again.

J-S JACQUES:

Scandium, I think that's a good story on how we can extract more from our resource base.

BOLD BAATAR:

Again I will give two examples. The first one is obviously our orebody at Havre-Saint-St Pierre in Quebec is very rich and besides titanium and iron does contain scandium, so we have been working with our technology and R&D team to find a breakthrough of how to extract it at low cost.

I must say it was an excellent collaboration with our aluminium team. I think we cracked the super scandium alloy with aluminium that hopefully ultimately makes the Boeing wings a bit lighter and more reliable.

It's a great example because working with our commercial team to make sure that we find new markets for it because if we start producing at scale it will double the global scandium market. So it has a material impact on the market but we need to make sure obviously how we seek new customers and new market use.

The second example is actually the same with the commercial team. They have found a customer for our Madagascar monazite and if you are not aware but monazite contains a high percentage of neodymium which is used in heavy magnets that is used in wind power generation, so naturally fits in the EV space.

STEPHEN McINTOSH:

Great. And I think the final piece probably is the reference back to what Chris talked about, we are going right across the systems of ours looking at what we call constraint utilisation: so how do we unlock all of the potential in the system? Chris gave ones around improved performance in the rail network, predicting maintenance into the rail.

We have got one example that I showed for the processing plant, remembering Chris said we are moving more and more to below water table ores, so we have got the predictive algorithms now being designed to basically characterise the plant performance. It can be said that for the iron ore system our constraint really is in the plants, getting the availability of those as high as we can but also working out how we can actually improve them beyond their nameplate and do sophisticated work there.

I think us saying something specifically in the market around that, I'm not quite sure we are ready for that yet, but obviously we are targeting the entire digitalisation of the value chain.

Again, for those who have had a chance to look at the MAVs example, the mine automation system, you will see that we are digitalising everything from the orebody, and then Simon gave you the example of portside trading. We absolutely intend to connect all of those pieces in their real time to look for opportunities.

QUESTION:

Two quick questions, the first of which was around technology. Obviously you are not the only company that is sort of making a showcase of the technological prowess of your company, but I am just wondering how easy is this for your competitors to replicate over time?

Does this just end up with essentially a cost curve, in all the commodities it ends up moving downwards just creating deflation but, to be honest, of no actual benefit or is this something that is unique to Rio Tinto that cannot be replicated elsewhere and therefore leads to a rotation, a steepening of the cost curve and then rents?

The second question is around OT, and I appreciate the caveats, the definitive study by H2 2020, but is there anything more that you can say around sort of from that point on, time horizon, that it would take before we start seeing production from it or is it just far too early to even give any kind of indication there? Thanks very much.

STEPHEN McINTOSH:

I will start with the second question first – and we can't say any more at this time. What we need is that mine plan. So really everything hangs off the mine plan. As I said, we are working to have that with us by the first half of next year; once we have it that allows us to complete the definitive estimate. The definitive estimate will give us those times, the costs, the schedule impacts, everything, so we are not in a position to say any more than that today.

I think for the first one, we absolutely believe we have a competitive advantage and that advantage manifests in a couple of different ways. One is that we have been at it for a long time and we have kept some components of the core systems and platform technologies to ourselves, we have not pushed that outside the company.

The mine automation system and the visualisation engines that sit behind that are core to that, but MAS itself is really at the heart of that. We are able now, because of the models that we are building to ingest data at a rate that we think will be very difficult for our competitors to catch up anytime soon, and we plan to stay ahead.

There are two parts to it. Do we change the cost curve of the whole business? No, because not all ore bodies are built the same. So not withstanding your applied information on it they still have a characteristic, whether it is grade or geospatial size or its location or whatever, that is going to give it some form of disadvantage. So I think we will see the cost curves continue.

What we want to be able to do is have that value chain integration which is really hard to do for most. We believe we have assembled ourselves in a way that we think is quite unique to get at that part of the problem because that's really the sum of the parts; that gives us something greater than the sum of the parts ultimately.

J-S JACQUES:

I think you should give more details on the Autohaul®, the upside we have on Autohaul®, because autonomous trucks you can buy from Caterpillar or Komatsu, but with Autohaul® I don't know if we have 6, 7, 9 or 10 years ahead of everybody, but I think there is lots of upside and I think it would be good if you could explain next wave of benefits from Autohaul®. You know for example the safety block, moving from physical block to virtual blocks that will free up further capacity.

STEPHEN McINTOSH:

I will get Chris to talk to the upside because the business is looking long and hard at all of those opportunities, but I will just remind you how much it took to deliver Autohaul®. This is not a trivial day out at the races to deliver a system of that size and scale and complexity and we underestimated it upfront.

We now understand profoundly what it takes to do something like that; nobody else has done this in the world. So again we understand that, what are those barriers, and we also now understand increasingly what the opportunities are.

CHRIS SALISBURY:

Now at the heart of Autohaul®, the driverless strategy engine, DSE, is actually AI. That's not something which you can buy off-the-shelf, so that's at the core of it.

Just to extend Autohaul®, the reason we can do now the data analytics on our rail network is because we know everything about the way the trains perform because that came from Autohaul®. That wasn't an objective but that's because now we collect the data and again that's a unique characteristic.

And the third thing of course is building on the platform for the future should we require further rail capacity, then we can move to what is called virtual block which in very simple terms every train now knows where the other train is on the network, you can then

squeeze up the train spacing and allow virtual block run as trains pass the sidings. So you can actually build on the technology at its core.

QUESTION:

A quick question on your capital allocation of the growth component of your capex. If we were to think about the medium to long-term what excites you the most in terms of commodities or products outside of iron ore and how do you tie that into your portfolio mix in 5 or 10 years' time?

J-S JACQUES:

Everything excites me as long as it is profitable. I think there is an important point, and I will turn to Bold after, we believe in diversification and we have belief in diversification for a long, long time.

We found a document from the 1970s or even earlier, 1960s – I don't think this one is on the web – which shows what was the turnover of Rio Tinto in 1960s. There were only two commodities that accounted for 80 per cent of the cash flows of Rio Tinto. Any idea what they were? It was uranium and copper. You'll need to go back to your file on this one.

So the point is the following, we don't know what the perfect product mix will be in 20 years, 50 years, 100 years from now. But we believe that if we have a portfolio of options then we will be much better placed, so we fundamentally believe in diversification from that perspective.

However, I think what is critical from today and from a year ago, 2 years ago, 5 years, 10 years ago, what we believe, if you put aside safety, is making money. So we don't have an allocation of capital based on commodities, we allocate the entire capital pool on the back of profitability, so that's a very important point. We don't allocate on the basis of what we want the product mix to be in 5 or 10 years from now, it is all about making money.

Now having said that, we acknowledge that commodity mix may change. We are excited, with the caveat I have just said, about minerals for the future green economy, aluminium, bauxite, copper and several minerals for the battery technology from that perspective.

So we are looking at options, the job of everyone in the team is really to find options, but at the end of the day we will crystallise or trigger the options only if there is a profitability case on that.

Bold, do you want to add a few bits and pieces?

BOLD BAATAR:

The number one criteria for us is of course low-cost long-life expandable; we are not pursuing large and that actually means looking for partnerships where we can provide value, whether it's an underground technology, whether it's a processing technology, whether it is in a geographic proximity of our existing operations, and those are the types of angles that would create value.

It is very important of course to look at it on a risk-adjusted basis, so a lot of screening going on, a lot of interviews on, but at the end of the day it has to match those criteria.

J-S JACQUES:

Just to wrap it up, lots of people asking always, are you comfortable with having lots of iron ore in your portfolio? Let me put it this way, and you have heard it before, we have got an iron ore business which has generated more than 50 per cent EBITDA margin on average for the last 20 years.

You don't have many businesses anywhere in the world – and don't tell me Google or Facebook – that have generated more than 50 per cent EBITDA margin in a consistent way for the last 20 years.

Therefore I do not know what the portfolio will be in 10 years from now, but don't be surprised if we still have big share of iron ore and the target will be more than 50 per cent EBITDA. So that's how we look at it. I can only describe the way we look at it and portfolio will be whatever it is at the end.

However, we make some choices and the exit of coal, thermal coal, was a clear choice in the sense we believed that this industry, the thermal coal industry, is a sensitive industry and therefore you have two choices, either you monetise your position today, or two years ago, or you keep it for long-term and you try to harvest it like the tobacco industry. We made a choice to exit and to re-allocate the capital accordingly. So, that's where we are.

QUESTION:

It's another question on PacAl, what is the solution to the power issues and the costs? Would you actually close or curtail any of these operations?

ALF BARRIOS:

As I mentioned before, when we look at our sites I talked about the New Zealand smelter but the same challenge we are facing is in our smelters in Australia. They are very well run smelters, among the most efficient smelters in the world but they lack internationally competitive power prices.

So the focus really at the moment, as J-S said, is to protect our position as one of the leading aluminium companies in the industry with a 27 per cent margin in the first half of this year but key fix those assets which are not profitable in the current market conditions - and that's what we are doing.

We are working hard with both the governments and the power suppliers to find a viable solutions to make these assets profitable in the long run and that's work which is underway now and it includes all options, and that's is what we said at the time, and we will obviously communicate once the decision is made regarding any specifics.

QUESTION:

Two questions for Arnaud I think. First, just to understand how achieving the ESG goals can affect your financial performance, a 60 per cent reduction in CO2 emissions at Kennecott was very impressive. Was it accompanied by higher or lower cost of power?

The second question on Resolution, can you give some update on the timeline ahead? Instead of giving any precise estimate at this point as it must be very difficult, but taking into account all the steps that you are going to take what is the best time or the minimum time it will take to reach a point of where you will begin construction?

ARNAUD SOIRAT:

In terms of the cost of power at Kennecott, we haven't disclosed the details on this. However, you have seen that we have been doing the same thing at Escondida, with our partners in Escondida, and there it was disclosed that the contract which is currently supplying electricity from burning coal is going to be changing to a solar energy contract. If you look at the market in Chile, actually solar energy power contracts are extremely competitive. So this is one way to create value.

The other way to create value based on my own experience in aluminium, when I was in aluminium we did a lot of work to reduce our carbon footprints, and when you have products like at Kennecott, copper, gold, silver, low carbon footprint products, and then you can start discussing with long-term customers and look at how we can we create value together through partnerships. So out of the value creation is also in those long-term partnerships with either your customers or sometimes even the customers of your customers.

In terms of Resolution, Resolution is another incredible project with, as you know, Oyu Tolgoi. As you know, Steve was talking about the size of the deposits at Oyu Tolgoi. If you want to picture it underground where 80 per cent of the value is, the orebody is the size of the Island of Manhattan, so no longer why in the first phase we are building 200 kilometres of lateral developments; that will require even more in the future.

Resolution is also in the same league, big deposits and complex deposits as well, 2 kilometres underground is going to be developed through block caving technology, and therefore it is a complex project.

To give you a better idea of the timing, as you have asked, the first step is completing the permitting process. That has been evolving extremely well, has progressed very well, and over the past 3½ years we have met every single of our milestones either on time or ahead of time.

The latest milestone that we have met was the publication of the first draft of the environmental impact statement and that is very important because now it is giving an opportunity to the community to comment. This period of comment is going to be completed early in November and then we will be working with the Regulator, the US forest services, to address those comments.

We think that sometime towards the middle of next year we should be able to have the EIS, the final environmental impact statement for Resolution. From there, there will be the land exchange.

So, in parallel, we are progressing with the engineering and progressing with sinking the shafts. We have already got one shaft in operation and the second shaft is two-thirds of the way down and we are now sinking the remaining third.

It is very interesting to see that we are transferring the learnings and the best practice from Oyu Tolgoi to Resolution, so there is huge value in having the portfolio of growth projects that we have in Copper and transfer best practices and people from one project to the other.

In terms of the beginning of production, at this stage we think it will be in the late '20s.

J-S JACQUES:

I may ask Peter Toth to say a few words on energy and the cost of the energy because Peter, as you know, is the Head of Strategy and is leading the charge on this one, and we are working on the abatement curve so we start to have all class of assets with those abatement curves. I think if you could say a few words, Peter, to explain where we are.

And the challenge is, back to your question about the cost of power, it varies a lot from one region to another, because in Chile for example it's easy to shift from one to the other and the the cost of solar power is cheaper, but in some of the regions if you had to support the cost of firming of the grid that cost could be cheaper but the full cost could be very, very different. So it varies a lot location by location. But, Peter, if you want to say a few words.

PETER TOTH:

Thanks J-S. I think the most pertinent point to make is that we are in the process of obviously setting up new targets, as you mentioned, that we'll publish in the first quarter of next year.

Part of that exercise is obviously building abatement curves, bottom-up for every one of our assets, and those abatement curves will then look at our existing carbon footprint, apply various project initiatives in terms of energy efficiency, switching out of coal-fired power into renewable power, looking at electrification opportunities and then various pieces of other technology, such as Elysis, into reducing the carbon footprint over a period of time.

But in terms of what Arnaud was mentioning, a very big piece of that carbon reduction sort of journey will be looking at every piece of coal-fired power that we are using at our operations and looking at what opportunities there are to switch them into renewables and we expect significant reductions in power costs during that transition as part of that process.

J-S JACQUES:

Now from an energy point of view, if I am selfish as far as Rio is concerned, there could be lots of opportunities as well. At the end of the day you are going to need to have more copper, more aluminium, minerals for batteries and so on. I think it is important. We want to be part of the solution and we will be part of the solution. We have been very clear on this one.

We have been using carbon pricing for the last 20 years. So I think it is important to understand the costs and that's why we disclosed for the first time the TCFD report in March, but there are lots of opportunities from a commercial point of view and that's why, and maybe we didn't make the point clearly, the partnership with our customers and the partnership with the customers of our customers is so, so, so important.

Because if we understand properly how it is going to work across the value chain, back to my partnership with Tsinghua and Baowu, if we can connect the dots between the high quality iron ore from Canada, from the Pilbara, to the Automaker assembly lines in China, all doing the same and so on, we will then we work for this value chain that's how we will be part of the solution. That's work-in-progress but we are starting and we are making progress.

One last question before the end.

QUESTION:

I have a couple of questions around capital allocation for Jakob. Firstly, when you look at the 2022 $6.5 billion capex that you put out there, to what extent does this number already have an allocation for still unapproved projects both in terms of replacement and development?

Secondly, with regards to debt management, do you have some sort of target net debt range, more appropriately here do you have the minimum level of pro-forma net debt that you prefer not to go below?

JAKOB STAUSHOLM:

Look, when we disclose these future capex guidance we do take into consideration all our plans, so we make kind of risk assumptions around future plans. For example, Jadar, we haven't taken a decision on but we risk those things in – I got the question already in the foyer – otherwise if you only look at the approved ones why is it not tailing off? But that actually because we think it has another 100 years to go so it is a kind of 50-50 guidance at this point in time from our side.

The second point, and thanks for that question, I like that very much, we have absolutely no net debt target because if you really fundamentally think about it if you set yourself a target for your debt you are almost per se acting pro-cyclical because as soon as there's pressure for example on the earnings then you have to cut your capex and in a way you should do the opposite thing.

The key thing about a strong balance sheet is we are very, very comfortable even if we go to net debt zero because it gives us optionality. If you think about the value of leverage compared to how profitable our businesses is it doesn't make the mark, it is the right thing for us to have the optionality and the strength. So we will see how it develops but there is no specific points where we get very concerned.

(End of Q&As 2nd Session)