

## Rio Tinto 2018 Half Year Results Q&A transcript

**1 August 2018**

**J-S JACQUES (Chief Executive):**

On this note, I will open the Q&A session. We will start with the room here.

**QUESTION:**

You mentioned the quality premiums being paid in iron ore right now. Could you talk a little bit about how the organisation thinks about the sustainability of those premiums and to what extent is that informing your view on bringing forward capex in iron ore to sustain that quality?

**J-S JACQUES:**

You asked me the same question last year or one of your colleagues did. We believe that the shift between high-grade and a low-grade in iron ore in China is becoming more and more structural.

We had the opportunity to meet with , the chairman of SASAC, a few months ago, and there is no doubt that the restructuring of the steel industry is here to stay., The push for environmental performance is there as well and therefore they will continue to reduce capacity.

That doesn't mean they will reduce production, and you saw the latest stats on the production, steel production is still increasing in China and therefore for them to continue to produce with a reduced capacity you need higher grade. We believe that the spread, the difference, the discounts, the premium, call it whatever you want, between high-grade and low-grade is here to stay. That's the first point.

The second point is we are delivering to China the reference product, the Pilbara Blend, and despite everything you can hear about trade and so on and so forth today we don't have an issue in the placing of the Pilbara Blend in the market place in China, quite the opposite, people will ask for more.

As you know, we do consider on annual basis, what should be the right production, the type of production we should have in the Pilbara and so on and so forth? So we go through the cycle. The next conversation will be in September to see how we position.

Remember what the Pilbara is about: 16 mines, 1,700 kilometres, 4 ports. It's a big system and what we have been focusing for the last two years and will continue to work on it, and what we are working on, is to continue to increase the flexibility of the system, and it takes a lot of time.

Autohaul®, and the announcement a few weeks' ago, is helping us in that domain but what we want, the vision which we are implementing, is that we want to have a capable system that we can flex up and down to meet our customers in a better way. So that's what we are doing; we are progressing along this journey.

Now in terms of capex, it's a value over volume question, which is always the same question, and is to say if you bring capex forward you need to make sure you have the return on your capex, keeping in mind that if you add too much volume in the market place at any point in time you could have an impact on prices.

And the metrics have not changed, \$10 of price is worth \$2 billion of free cash flow after tax for Rio Tinto. We do this optimisation every year and at this point in time we are comfortable with the guidance of 330-340 Mt for this year.

We will provide a new guidance at the end of this year. And then we have our guidance in terms of capex for the next three years where you see some slightly higher replacement capex for iron ore. I can't tell you much more than that.

I can give you only the principles and how we look at it but at the end it is really about value, it is really about how can we maximise the free cash flow yield of our system in the Pilbara, keeping in mind for the medium to long-term we need to have a capable system, highly flexible, and we want to be in control of this system. I believe what we have achieved this year, what the team has achieved this year, is moving in the right direction.

#### **QUESTION:**

I've two questions, one for Chris and the one for you. Judging by the reaction of the shares this morning, considering that the Company is returning \$5 billion, it suggests that maybe some people are worry that the Rio Tinto is losing out on some profitable growth options. What would be your reaction to that statement? Do you think that's right or do you think you're catching everything that's out there?

And secondly, Chris, on the costs, it is slightly boring but central costs were up quite significantly to \$560 million this half. Is that the run-rate we need to think of going forward? And things like turning that into your waterfall, the \$200 million headwinds post-tax cash flow in the mine-to-market programme, is that a run-rate for the second half or is it going to accelerate given the statements made on inflation?

#### **CHRIS LYNCH (Chief Financial Officer):**

I'll do the cost one first. In the mine-to-market, we have the input headwinds. I think they will persist but they are probably easing a little bit terms of the second half. Where we have seen these most pronounced was in the aluminium business and I think if you went across to some of our competitors in aluminium you'll see the same sort of story coming through there.

With regard to the central costs, there is a series of things going on that are sort of placing the Company in position to go forward. We have been working on the operating model and there is spend connected with that.

We've had a programme what we call 'Fix the Basics' in the RS&T and some of the shared service areas.

The second half will be slightly slower than the first half was but it's within this year type event.. If I give you a bit of a breakdown on that though, that operating model and restructuring stuff is about \$80 million, there is some work going into the further establishment of the Commercial Centre in Singapore and IS&T fixes, combined and the majority of this is in the IS&T side which is about \$75 million.

Then we have got a higher charge going through central for our insurance and pension costs, the insurance is something we are taking through the central rather than within the product groups at the moment, so that's a change this year but that's about \$40 million basically in there.

That's the \$200 million give-or-take in that central cost; I think the run-rate in the second half will be lower than that.

**J-S JACQUES:**

I am going back to your shares question; the shares have been trading for a few hours.. I understand, vis-à-vis the summer, there are very few volumes and so on and so forth. We have been around for 146 years. You don't expect us to run the Company just to optimise the share price for the next five minutes. Do you agree with that?

**QUESTION:**

Yes, I agree with that.

**J-S JACQUES:**

Thank you very much. So I'm not sure I am going to draw too many conclusions on the back of the share price.

What we have delivered today is exactly what we deliver against our commitment, which is to deliver superior value for our shareholders. I hope you agree that \$7.2 billion of returns is pretty good and that comes on top of the nearly \$10 billion of last year. We are clear about our commitment to deliver to shareholders and actually believe we are delivering against our commitment, so am I going to read too much into the share price through a few hours? No I am not going to read too much about this one, to be honest.

Shall we take one question from the phones and then I'll come back to the floor?

**QUESTION:**

J-S, two questions for you actually, the first one is on the bauxite market.

I noticed a statement in the results about there being significant uncertainty around the direction of the bauxite market. That appears to be new. You had a decent increase in realised price during the half but based on what you are seeing in Guinea and Guinea supply, has this changed your view on long run fundamentals and pricing?

A second question, J-S, is on Oyu Tolgoi.

The underground development seems to be progressing very well, but I am interested in the exact capital requirements of the power plant and the benefits actually on the cost side, and also your view on the current government study around implementation of the Investment Agreement? Thanks J-S.

**J-S JACQUES:**

Okay, no worries. I'll share some of it with Chris.

On the bauxite, what we are highlighting is that more and more bauxite is moving from Guinea back to China. It is still early days, and what we are highlighting here is that there is a lot of volatility, what we don't know going forward is whether the bauxite market will be priced on the cost-plus or on commercial terms between Guinea and China, and that's the only thing we are highlighting.

Now let's be clear, we have no doubt that the investment in Amrun, that should come on stream next year, is a good investment. It is a very good investment for us; it will be a world-class asset.

As I said, a high level of uncertainty but the statement I am going to make is definitely true across all commodities of Rio Tinto and that is there are things we can control and there are things we cannot control.

So let's focus on the controllable and today what is important is to focus on having the right cost structure, the right quality of product, the right relationship with our customers, so whatever market conditions we are in, whatever volatility in the market place then we will continue to be profitable.

We will continue to generate a lot of cash and we will be able to do two things: one, is to continue to invest for the long-term, which is very important in the mining business; and the second point, is to reward our shareholders with superior returns and I think what we have experienced and what we have delivered today is a good example of it. So that's where we are on the bauxite.

On Oyu Tolgoi, do you want to pick up the power stuff, Chris?

**CHRIS LYNCH:**

The OT power plant is in pre-feasibility stage and currently there is a range of capex between \$1.0 and \$1.5 billion. There are a lot of conversations going on with the government as we speak about the various options available to us for that development.

If I give you a simple example, the degree to which it meets European standards or local standards or other global standards can have a difference on the capital cost. So that's something that has got to be negotiated on the way through here, and then once we get to a stage where we have got a permitted path forward that's when we will come back and revise any cost estimates.

But what we have got in our capex guidance and part of that increase in the 2020 year is actually an increase from what we'd previously had which was about \$250 million in that year. We think there will be slightly higher spending in that year of 2020, and that's part of that half-a-billion dollars of increase in that guidance we've given you this morning about capex.

It's still very much a live conversation, it's really still quite fluid and once we have got something further than that we'll come back.

**J-S JACQUES:**

The other question is around the agreement in Mongolia. We have been very clear about the sanctity of this argument and no matter what they are, IA, ARSHA, UDP, discussions are underway with the government. There are multiple work streams, some of it has been triggered by the cabinet, the government, some of them have been initiated by the parliament, so discussions are underway.

There has been a slowdown in terms of discussion during the summer because it is Naadam, which is a big summer festival. They stop for a few weeks but the discussions will restart soon, they are restarting as we speak, but we have been very clear about the sanctity of the agreement.

What I can tell you is, remember we are not alone on this one the \$4.4 billion of project finance includes the World Bank, all the main banks and all our interests – it doesn't matter if you sit on the government side, on the Rio Tinto side or the Turquoise Hill side, it's in everyone's interest to unlock the value of this absolutely world-class deposit that will be producing copper and gold for the next 100 years.

The benefits we are already providing to Mongolia are significant, 14,000 people are working on site, 9 out of 10 being Mongolian nationals, and if you look at the integrated supply chain, we have around 40,000 people today, and remember there are only 3 million people in Mongolia just to put in context.

So 40,000 people across the supply chain, we have placed \$1.5 billion of local procurement last year and so our interest, our joint interest, is to unlock this value and that's what we are working on.

Now my personal experience over the last five years is lots of emotion, lots of drama, lots of things in the press, but at the end of the day common sense prevails. I can even step further, you know, Rio has been around for 145 years or 146 years and that's what our job is about, it is to operate in challenging jurisdictions, to find a way to do it and to unlock value for the short, medium and long-term.

All in all, discussions underway. I am sure there will be further announcements including potentially the power station in the second half of this year.

I'll take another question from the phones?

**QUESTION:**

Just a couple of questions from me, and one probably for Chris I guess, cash flow versus EBITDA. It seems to have been in a bit of a decline the last few years despite your revenue and EBITDA being pretty flat. I'm just wondering whether there is anything in that or is it just tax payments and other sorts of variability in the business?

And J-S just a question on the tariffs out of Canada into the US, just how that is impacting the business? Are the premiums adjusting enough to cover that or is that becoming a bigger issue for you. Thanks.

**J-S JACQUES:**

I will pick up the question on the tariffs and aluminium.

Just to set the scene, the bulk of the aluminium produced in Canada is sold in the US and we are supplying one third of all the aluminium consumed in the US, so we are clearly watching this whole trade situation, or potential trade situation, between the US and Canada very, very carefully. Today, we don't have any problem whatsoever.

Remember you need to look at it through the lens of a consumer in the US. If you are a consumer in the US you want to have access to a low-cost reliable source of aluminium.

You could argue some of them want to have a green access to source, to have access to green aluminium as well, and the best aluminium you can think of is coming from our smelters in Canada.

I mean, they are not in the first quartile of the cost curve, they are in the first decile of the cost curve. They are hydro based, and then on top of it when you think of the joint venture we signed with Alcoa and Apple to develop the inert anode technology, we are a few years away from having a purely green product there.

At the end of the day from the consumer's point of view in the US I have no doubt, because the supply chain is so integrated between the US and Canada, that common sense will prevail.

Now back to your question about the premium and the duties, the way the pricing formula works is that there is no material impact for us at this point in time, and you saw it in the margins that we presented in the presentation today.

The impact that we have in aluminium, which started last year and Chris did refer a few times in his speech, is about the inflation which has nothing to do with it.

From the purely trade standpoint today the whole situation in relation to NAFTA, between the US and Canada, had no material impact on our business at all.

Do you want to pick up the other one, Chris?

**CHRIS LYNCH:**

On the cash flow, it is always a bit hard to talk about where people are versus their expectations because we can't get inside the head of everybody's expectations, but we have observed I guess a slightly higher capex, there is an increase in working capital, trade working capital, and about half of that is good because it's higher prices on receivables and the like.

But probably the biggest single difference that some people fully understood is what we were saying at the full year and some haven't, is the timing of that tax payment of \$1.2 billion to the Australian jurisdiction that actually pertained to 2017. It's a good outcome for us because we had hung on to the cash for an extra 6 months in our own balance sheet.

The net debt at the end of last year, if you recall the presentation, we talked about \$3.8 billion and we had a pro-forma for that tax payment, it was in the numbers. That would have taken us to \$5 billion at the end of last year and if you go there this year it's at \$5.2 billion.

I think all up we have got a strong bias on cash generation and we'll need some more detailed attention on the working capital to make sure our guys don't relax on that. Some of it is good because it is price related in our favour, but our number of average working days has gone up a couple of days, so that's work we have got to get the businesses focused on.

**QUESTION:**

I've just three quick questions. On aluminium costs, just maybe push you a bit further on the H1 versus H1 2017 performance, you saw roughly a 30 per cent increase in unit costs driven by raw materials. How should we think about the second half this year, do you think there is capacity to keep that flat or should we be thinking about further raw material cost increases in primary metal?

Then on Grasberg, obviously a reported \$3.5 billion potential exit, should we expect any tax payable on that amount in CGT?

And then a final question on diamonds, about \$100 million of EBITDA diamonds in H1 or roughly \$50 million of free cash flow, does that remain a core division?

**J-S JACQUES:**

I will deal with the Grasberg one. We signed a Heads of Agreement, as you know. One thing I said in the speeches, there are three teams, because there are three parties, working very hard to come to conclude the documentation, and the target still is to sign and have the cash before the end of this year.

As you know, as in all transactions until you sign, and until you get the cash on the balance sheet you don't have a deal, so let's be absolutely clear. Back to what happened during the night, I know there are a few people in the back row here who were slightly concerned that we wouldn't get the cash on time. So, we are working hard to get it.

On the taxes, discussions are underway. From today we don't see a material tax payment on the back of it, but those discussions are taking place with the relevant tax authorities and we'll clarify the situation closer to the closing transaction.

On diamonds, today we have two mines. Do we like diamonds as an industry? The answer is yes. The next thing I'd say is if people think copper is difficult, and we always use copper as a base line, between the time you have a nice rock and the time you have cash flow, its only 25 years on average; in diamonds it is only 30 years.

It is a very attractive industry but it is very difficult to find world-class assets in that space. Are we spending money, resources, in the context of exploration of diamonds? The answer is yes, and you see it in the QOR we have an extensive programme of exploration in that space.

In that sense, to answer your question in a very direct way, diamonds are important for us. Now we need to acknowledge that we have only two mines today and they are on their last legs, we can see the closures coming and a big chunk of work is taking place, as we speak, to make sure that when the time is right and when we have to close those mines we will do it the right way.

So yes, we like diamonds. Yes, we are spending money and resources in the exploration space. We will have to be patience. But trust me, I'm putting our friends from Exploration under massive pressure to move fast in that space, and I will continue to do it.

I would love, absolutely love, to find a new pink diamonds mine, to be honest, but I may have to wait for 30 years. So whoever is standing here in 29 years may have a good piece of news, but it's not for me to tell about

**CHRIS LYNCH:**

Unit costs, the key, the year on year increase is about \$200 million and your question was really about going forward. I really can't give you any guidance and probably maintain the same sort of basis into the second half; they seem like they are stabilising and levelling off but time will tell.

It's primarily the inputs of caustic, pitch and coke, they are the main inputs into that mix, and you see that across our peer group's numbers as well with the same items coming through. The carbon materials are also a factor for us in the TiO<sub>2</sub> business, the RTFT business, with the furnace activity there. I don't think I can give you much better than that really.



**J-S JACQUES:**

I am going to build on what Chris has said, let's be clear inflation is going to hit, is hitting all commodities and all players across the industry and I am going to use one metrics.

We did check a week ago or 10 days ago, in Australia today if you go to sites where you look for a job, you have got 40 per cent more postings for jobs in the mining business than a year ago.

I slightly smile when people say inflation is not going to impact us., If you've got 40 per cent more requirements for a job in Australia guess what will happen? So our position is very simple on this one, we acknowledge the point, we did highlight this concern, this risk around inflation in November/December last year and we are taking actions.

Our approach is to say, we acknowledge it, it's a major challenge and try to take as many actions as we can in order to mitigate the potential issue. I think what you saw in the results this morning, the fact that we were able to deliver 43 per cent EBITDA margin on the back of our mine-to-market productivity programme, is a good example of it. So acknowledge the challenge and we get on it.

Mine-to-market will be absolutely essential in the coming years because inflation is coming back. If you look on the capex front, all majors in Australia have announced in the last few weeks major capital programmes in Western Australia.

Once again, what's going to happen? Inflation is coming and therefore it's even more important for us not only to apply mine-to-market for existing assets but to apply our mine-to-market approach to the capital space as well, and that's exactly what we are doing.

**QUESTION:**

I've a couple of quick questions. You alluded to supply side reforms in China in terms of steel capacity but we have also seen that in terms of the domestic iron ore production in China. It's come down quite markedly year on year and I'm just wondering if you could give us some thoughts about what you are seeing there?

Secondly, in terms of the Pilbara Blend and of course Koodaideri feeding into that, but how long can you actually maintain the quality of the Pilbara Blend in sort of roughly today's specifications given the reserve base that you have got?

And finally in terms of Grasberg, Heads of Agreement at the minute; are you still involved in that discussion process or does this essentially now represent Rio Tinto sort of taking a step back from those discussions? Thanks very much.

**J-S JACQUES:**

On the Grasberg piece, it's pretty simple, we are still involved in the discussions because at the end of the day, Rio will have to sign the SPA with the Government of Indonesia and only Rio Tinto will sign it. We are not going to delegate anybody to sign it on our behalf. So we are involved on this one and, as I said, the three teams are working hard and the sooner we can sign the better it is.

On the iron ore in China, we have 200 people in Shanghai – we have a big team in China – and part of their job is to find out about it. If you go back a few years ago our understanding was the local domestic production of iron ore was around 400 Mt, it dropped at some stage to 225 Mt.

We believe in the first 6 months of this year, post winter cuts, we are back to - there is some uncertainty but if we had to pick a range between 235 and 245 Mt - slightly below 250 Mt if you want to be on the top side. Interestingly enough, our understanding is primarily a lot of it is underground and not open pit because of pollution and environment concerns.

Compared to the question asked one year or two years ago, we have full confidence that the domestic iron ore production will continue to reduce because it is high cost but, more importantly, the environmental concerns are very significant hence my comments about open pit versus underground. That's the best view that we have today.

Once again we have to acknowledge that there is risk around this one and therefore, back to my first point, we need to work on what we can control. Today what is important in the iron ore business or the aluminium business or the copper business is making sure we have got the right cost structure. You saw the cost structure in iron ore, which is pretty good. I know some people had some concern and you saw the hard work to get to this point.

Having the right quality of product, and I will come back to you second question, and having the right relationships with your customers. Because, all in all, if you have got those parameters right then you will have a strong market share, you will generate a lot of cash and, as I said earlier, be able to continue to invest in the long-term and be able to reward your shareholders as per our commitment.

On the question of the Pilbara and the ability for us to maintain the Pilbara Blend, if you think about the next 5-10 years because we have a long-term plan for this reason, I mean you have got a resource of more than 100 years, if you look at the short-term 5-10 years – I know people smile when I say that – do we have a concern about our ability to maintain the Pilbara Blend? The answer is no.

Now on a regular basis we do these long-term mining plans and we are going through this process at this point in time, but for the next 10 years we don't have a concern whatsoever. But as we have said many times, and you know better than anybody else, 10 years in the mining business is pretty short-term.

**QUESTION:**

First of all, is there any pressure internally and from shareholders to deliver more than just 2 per cent volume growth over the next five years? Are you seeing, and related to that, more opportunities on the M&A side, the right assets sort of at the right price, or is it still effectively a no-go?

And then secondly, maybe with Pilbara iron ore and the unit costs you are doing a good job in the first half of this year. As we look forward with Autohaul® with the volume increase, is there potential for unit costs to go down on a two year view despite inflation or is best case stay where we are?

**J-S JACQUES:**

On growth, the last one of the conversation we had with investors on this was at the time of Bank of America and Merrill Lynch – conference in Miami and the subsequent investor roadshows we had in New York. We are not under pressure in terms of growth today.

Yes, there are some questions about where are you going to go in the long-term. We fully acknowledge that in the mining business you need to grow because depletion is a reality and therefore if you don't grow you can have a problem, but today we are not under pressure from that perspective.

Now what is important for us is to develop the pipeline of attractive growth options. But today when I look at what we are delivering, we delivered Silvergrass, we are talking about Koodaideri now, we have Amrun around the corner which should come online pretty soon, we have Oyu Tolgoi. We never stopped investing, including at the bottom of the cycle. For us it's about delivering high quality growth.

You know, some people have the mantra of being big. The mantra of Rio is to be focused and to be profitable and to deliver superior returns for our shareholders. It is better to be very focused, making sure you deliver the project on time with the right quality, right safety performance and so on and so forth.

It's not just growing for the sake of it, and not having your A-Team working on it and ending up with lots of overruns which if you look at the last 10-15 years in the industry, it has been a feature of the industry. I would rather grow below GDP, if I'm honest, but it has to be high quality growth and making sure we deliver on time and, as I said, on budget. So that's where we are.

On M&A, you know what I'm going to say. Everybody knows which assets I would love to have in the portfolio but we are not going to do anything stupid, absolutely not. We'll keep a watching brief.

If there were to be what would be described as smart M&A, where you have synergies because you have got the logistic advantage or you have got technology advantage or whatever, yes, we will look at it but you need to have the right level of synergy to justify any kind of premium.

Do we have teams looking at all kinds of options? The answer is yes. We have been very transparent on this. We have a watching brief on M&A, but today, at this point in time, there is nothing that really excites us. We have to be patient. You know better than anybody else I guess that sometimes in the mining business you have to wait for 20 years for the right asset to come at the right price.

Having said that, I'll repeat what I said last year, the last trough was not deep enough, long enough, for the premium assets to be release. All of us had lots of expectations that it was coming but, unfortunately or fortunately depending on how you want to look at it, the market recovered. Some people had some near death experiences, let's put it this way, and the assets were not released to the market.

We will be very patient. History shows that the bulk of the M&A don't create value anyway so you need to be very safe, very focused, and the history shows that the best growth options at the end of the day are your organic growth options. So we are pushing hard on the organic growth option and we keep a watching brief on the M&A.

If you could pick up the iron ore and the inflation one, Chris?

**CHRIS LYNCH:**

Iron ore is not immune from the threat of inflation and our challenge is to offset that, so that is where we will be targeting with the productivity agenda. Obviously things like the oil price are showing pretty healthy increases over the course of last year and we will be entering more below-water table type mining as well, and we are going to have longer haul distances, so we do have some challenges coming our way, which it's important that we get the productivity agenda in full run there.

Where we need to attack our costs is on the first line of entry into the business, so the volume absorption is one thing but the first spend is really where you want to attack it.

The guys have done a great job over the last 6-12 months in easing that rail bottleneck so we have now got a position where the rail is more attuned to the port capacity. We have got a bit of flexibility there in the system there that wasn't there until about, well, early in this half.

We don't give you guidance about the costs, as you well know, but I think there are a series of factors there, there is a good challenge there, and Chris and the team are more than up for the challenge. But that threat of inflation is there and it will be there and it is going to be a constant.

Then once we get the early works on Koodaideri, that's an encouraging thing, but once we get that in play assuming that comes through the normal approval processes and the like, that is going to be very exciting mine. I'd loved to be around when it happens.

It's pretty much going to be a fully automated mine and you will have on display, on one site there, quite a lot of the functionality that we have been working on for the last decade.

**QUESTION:**

I've just a question on bauxite and then also on iron ore. Just on your comment earlier about the uncertainties around that market, when you look at your volumes and your increasing volume from Amrun as well as from Guinea. Is it primarily a price risk or is it also a volume risk? Is there any sort of off-take volumes for those projects or perhaps you might put a shorter term sale contract depending on what happens in the market? Is there a volume risk there?

Also just in regard to iron ore, the comments around the sort of grade discounts being more structural, we have already seen recently impurity penalties rising quite significantly and, given your comments around China domestic supply continuing to fall, is there a chance or potential for impurity penalties in the market, turning more structural, and is bringing forward Koodaideri a potential way to sort of adjust the quality of that Pilbara Blend?

**J-S JACQUES:**

They are two very good questions. On bauxite, the key question for us is merely about Amrun. Remember that half of the additional capacity of Amrun is replacement capacity and the other half is really growth. Do we have any concern today about our ability to place the growth element of Amrun when it comes on line? The answer is absolutely no. So we don't have concerns from that perspective.

On the iron ore pricing, without going into the detail too much, the impurities are already priced in, so if you look at the pricing formula it is not only the content, there are adjustments for the impurities in the pricing so these are already taken into account.

But your question is absolutely spot on. Our experience is because of the pressure from SASAC and the Government in China in relation to the environment the measurement of the burden in the blast furnaces is becoming more and more important.

Last summer I went there and I met with some of the engineers or some of the people at our customer sites. I can tell I have never seen - and I have been travelling to China for many, many years in the context of steel, remember I used to work in the steel business before joining Rio Tinto - I have never seen our customers knowing how well to manage their burden, how well to run the performance of their blast furnaces. It is absolutely clear that all customers in China are becoming closer to the customers we have in Japan - very aware of how you optimise your blast furnaces - and I am sure the question about impurities, the first, for example, alumina, will become something which is going to be a feature. But the point is the pricing already accounts for those adjustments.

**QUESTION:**

Just on the Canadian aluminium expansions, you have been flagging them for a while so if the market does tighten can you give us a sense on timing? Could we see these approved early next year or are these much more long-dated options?

**J-S JACQUES:**

We are a few years away. For us to take a decision to build a new smelter in Canada we need to be absolutely convinced that the structural changes in China are there. I have got no doubt that in the medium and long-term China is moving in the right direction and that China will become more and more balanced, but until we get to this point we do the work, we do the study, we are ready.

We will become option-rich/option-ready - but we are still a few years away before taking the decision to add capacity in the aluminium space. Having said that, we are looking at options, to expand the capacity of our aluminium smelter on the back of brownfield, on the back on creeping, because that is productivity.. But before we take a decision to build a brand new half a million tonne smelter in Canada we are still a few years away. And I invite you to open the smelter, Chris, when it happens. (End of Q&A Session)