

BHP

Jansen briefing

Q&A session 2

15 September 2021

Rag Udd:

Hello everyone, and thank you so much for joining us today. I hope you had the chance to watch the replay of the presentation that we delivered earlier today on the recently approved Jansen Stage 1 project. In addition to taking you through a deep dive into the project, the key messages that we hope to leave you with are first, that Jansen is an attractive, future-facing commodity with strong fundamentals. Secondly, that Jansen is a world-class, high-margin, long-life asset.

Stage 1 delivers both healthy returns and a platform for potential future growth and the embedded competitive advantages that the team have talked about in that presentation are challenging for our competitors to replicate, meaning Jansen is well set up for decades to come.

Finally, the third point is that we have built the capabilities we need to unlock value. We have an experienced and diverse team across mining, marketing and social value. We have a clear, well-scoped plan for the work ahead and are ready to take Stage 1 into production and construction.

Now, joining me today in the Q&A session to help answer all of your questions are Huw McKay, our Chief Economist; Mark Swan, the Head of Sales and Marketing for Potash; Giles Hellyer, our Vice President of Potash Operations; Cheryl Godwin-Abel, who is our deep expert in terms of the borers and the mining systems, is, the Manager of Project Delivery; Mike Elliott, the Project Director who you would have seen in the video cast talking about the shaft, the process plant and outbound logistics.

Simon Thomas, our Vice President of Projects, who will talk about project management and has actually joined us from the South Flank project in iron ore that was delivered over the last two to three years; Lindsay Brumwell talked about social value, is our Manager of Corporate Affairs; Adil Currimbhoy, our Manager of Finance for Potash; Tanya Smith, the Head of Planning and Technical for our Jansen asset; and Catherine Gale, the Head of HSE for Potash.

With that, I'd like to open the lines for any questions you may have. The dial in details are on the screen should you wish to ask a question.

Jason Fairclough: (Bank of America, Analyst)

Thanks for taking the questions so late in the evening. For those dialling in from Oz and I guess Canada it's just morning, so we're fine. Look, just a question on the wider strategy in the basin, and I know you guys love to invest in basins and obviously your land position surrounds a lot of the incumbents. We have this mooted Nutrien JV. How do you think about the potential for synergies within the basin? Could they be in the hundreds of millions? Along with that, what is it going to take to get Nutrien to come to the table? Do you actually have to build the project first, so this is six, seven, eight years away?

Rag Udd:

Jason, thanks for your question. In terms of what is it going to take to get Nutrien to the table, I think that's probably a question best directed towards Nutrien. For ourselves, when we think about potash, what we like about it is the commodity. We like the asset that we have in terms of Jansen and if you take a look at our landholdings in terms of some of the preview that Giles would have put through, we've got about a 37% stake of the tenure in the basin at the moment.

Now, we see huge growth potential for Jansen, both in terms of what we flagged up in terms of Jansen Stage 1 – obviously, there's potential for a Stages 2, 3 and 4 that comes at a much, much lower capital intensity and obviously a higher IRR behind that. There's a whole suite of other basins or mines that actually sit behind that if and when the market is actually ready to take that on. We're not against partnering, we actually see great value in doing it.

If you take a look at what we've done in other basins, whether that's the Bowen Basin with our met coal asset or what we've done in the Pilbara, most of those actually do have some involvement with partners. But as we've said a number of times on this project, while we're not against partnering, we don't need a partner, and so we will partner but it will be for value and we just have not actually seen that come through to fruition at this point.

Jason Fairclough: (Bank of America, Analyst)

But just to push you a tiny bit here, so if we were to think about synergies, what would be the nature of the synergies and can we start to think about what the prize is, if we wanted to put pressure on Nutrien?

Rag Udd:

Look, I think there are a number of synergies that actually could play across, similar to what we've seen in terms of the basin plays in the Bowen Basin and also in iron ore. There's a number of synergies that can actually play out in terms of the – when you get into scale and the logistics that play out there. We haven't spent a great deal of time actually defining those synergies specifically to a whole basin play at this point.

That said, we've had a number of conversations over the years to actually get clarity around what that potential looks like and as I said, not satisfied based on the value that sits behind that for our shareholders. Giles, is there anything else you'd like to add to that conversation?

Giles Hellyer:

Well, I think, Rag, you've covered it fairly well. There's a range of possibilities but as we've said, we've got a very attractive asset and we've got very attractive growth plans. We've got a very attractive land position and at this stage, we don't need a partner.

Jason Fairclough: (Bank of America, Analyst)

Okay guys, thanks. Very clear, appreciate the Q&A session again. Thank you.

Rag Udd:

Thanks, Jason.

Alain Gabriel: (Morgan Stanley, Analyst)

Yes, thank you for taking the time for the questions. I have two questions from my side; I'll do them one by one. The first one is on your marketing strategy. So, you're clearly not part of Canpotex and your competitors have years of experience marketing their potash product. Are you worried about getting outcompeted or outwitted by your competitors and what are the risks to your realised net back prices that you need to be thinking about and how do you plan to address these risks? That's the first question.

Rag Udd:

Okay, Alain, look, I might start on that question and then I'm going to hand it over to Huw for a bit of a conversation. One of the things I noticed about the Canpotex story and the conversation that plays out against it is our concern around that. I think it's important to actually recognise this. We highlighted it in the presentation that Canpotex only forms up about 20% of the sales in potash at the moment. It is one way of selling potash.

There's a lot of other ways of selling potash that others are doing very, very well and I think it's important to understand the expertise that we've actually developed over a long period of time in terms of how we think about selling iron ore, met coal, copper and the other commodities that we're actually familiar with. We do recognise that potash is different and it is a different commodity, which is why we've actually spent the better part of the last decade actually building up the expertise and marketing around that.

That said, Huw, I might hand it over to you, if you could start with that and we might – if Mark's got anything to add on that at the end, we might take it from there.

Huw McKay:

Yes, actually I'll pass it straight to Mark on that one. I think he's best placed on the strategy. Mark.

Mark Swan:

So, obviously Canpotex and other established producers can sell products and they've got established relationships with customers which we respect. I think it's something we identified early on as a kind of not necessarily a threat but something we needed to address, and that's why we really started to engage very early and we've been talking to customers now for five years.

We've recruited into BHP or consulted with a lot of people who have got hands-on marketing and logistics experience, so we're not going in as a green marketer as such but we're going in with experienced people who know the industry and know the market and we've made sure we've talked to customers to understand their requirements and needs.

I think whilst Canpotex are established, for us our value proposition is very much centred around being a new, independent source of supply. It's a concentrated industry and suppliers have quite high shares of wallet and I think many of those customers are keen to diversify their supply and BHP represents that opportunity. I think at the same time, if we look towards the former Soviet Union, I think the political instability which you see increasingly develop in that part of the world, I think people are looking towards Canadian producers as being a more sustainable source potentially of supply over the longer term and I think that plays to our strength as well.

Rag Udd:

One element I do want to build into here is, your question's actually really, really appropriate. Please understand that as a company, we've spent a lot of time challenging that ourselves in terms of going, look, while we may have sold a whole bunch of other commodities, we recognise we haven't sold a tonne of potash yet, what do we need to be looking out for and developing, and I think that really touches to the point that Mark's made in terms of how we're thinking about the strategy.

Alain Gabriel: (Morgan Stanley, Analyst)

Thank you, that's very clear. Another question, product related as well. Hearing your presentations, your product appears to have a clear ESG advantage from, let's say, the carbon footprint and the water consumption and so on. Are you able to and if yes, how do you plan to capitalise on your superior ESG credentials to enhance your pricing or to enhance your market position, so to speak?

Rag Udd:

Great question and look, this isn't something that we're limiting to potash in terms of how we think about that. If you look at some of our other commodities – and I'll use copper as an example – the reality is that we're actually leading in that position in terms of Scope 2 emissions basically being eliminated over the next three or four years from our operations there. Our use of water in other commodities is actually much lower than - particularly in copper - much lower than others, in terms of what sits out there.

I suppose the primary guide we've got here though, is that we feel this is just the right thing to do, in terms of our charter values and how we work as an organisation. We also see the economics in the efficiencies that actually sit behind that.

I think ultimately, though, with this question, it will boil down to how others actually put value on to those, some of those concerns in terms of ESG. What premium will people pay for basically a product that is emissions-free, in looking forward? That's actually something we'll pursue over time, because obviously, there's advantages of that, but nonetheless, this is something that we feel quite committed to.

Alain Gabriel: (Morgan Stanley, Analyst)

Thank you.

Rag Udd:

Huw, is there anything you'd like to add there?

Huw McKay:

Yes, just very quickly here, there's a very concrete advantage, which will start to come through, in terms of cost curve position, once carbon pricing becomes more pervasive around the world. It will have an impact to steepen cost curves, in potash, as in other commodities. So it will increase the wedge, which already exists between conventional and solution mines.

Solution mines will be paying higher carbon taxes in future, because of their lower efficiency, with respect to energy. We feel that we have just about the best of the conventional, and so we'll be in the best position, in terms of a world where carbon prices are escalating within the conventional space, and the advantages which exist between conventional versus solution will become amplified.

Danielle Chigumira: (Bernstein, Analyst)

Good afternoon, and thanks for taking my questions. Firstly, in terms of the ESG profile of the mine, it's obviously great to see that 80% of the equipment by usage will be battery electric. Could you give some colour on what that mix looks like on a volume basis, as in what proportion of the fleet, in absolute terms, is battery electric?

Then, related in terms of the ESG profile, you mentioned the use of natural gas in processing. Have you looked at using hydrogen as a fuel source, instead? How feasible is that, over what time period would you expect to make that kind of change?

Rag Udd:

Great questions on both fronts. I'm going to hand that one straight over to Giles and the team to actually talk a little bit more about in terms of the battery electrics and also the natural gas versus hydrogen considerations.

Giles Hellyer:

Yes, thanks very much. On the fleet side we would aim to have at least 90% of our fleet, our equipment, which is battery electric. We are somewhat limited until manufacturers can advance their complete range of equipment to fill out our requirements, which we would hope we can get to 100% battery electric by 2031 is the aim.

So, we will maximise the amount of battery electric for a range of reasons, and particularly for our mine with potash, we are looking also to the benefits for health, through these emissions underground as well. So a range of reasons why we want to do this.

When it comes to hydrogen, what I can say is that in the process it's very much where the natural gas comes in, it's in the drying circuits, and that is something which I would dare say that we've looked at many alternatives, but natural gas use is one of those areas where we probably can't get away from that. In fact, we do have plans, though, to be able to capture the emissions that come from using that gas in the drying circuits. We are fully exploring in our next lot of studies is whether we can capture that and use the carbon and sequester it into the ground below.

As you may be aware, we have been very actively involved with the local utility, SaskPower, who has created the ability to capture off a commercial power plant, off gas, and then put that into the ground, at the boundary dam. We are sponsors of that particular knowledge centre that goes hand-in-hand with that, and we're looking to be able to leverage that experience potentially for capturing carbon emissions from that, quite intensively as a process, and place that into the ground.

So, we have lots of plans to address those emissions.

Back to you, Rag.

Rag Udd:

Thanks Giles.

Tyler Broda: (RBC, Analyst)

Good evening, gentlemen. Thanks very much for the time today.

Just noting in the appendix, just looking at the demand growth forecasts for potash, it looks like there's a fairly wide range on a regional basis. I'm just wondering if you could go into some of the dynamics around that.

Further to that, the chart on page number - oh, I can't find it in front of me, but the extrapolation for the demand, supply/demand basis is based on the last 10 years, but that's quite a much stronger pickup in potash growth over that time. With some of the potential long-term implications from the change in the way that we approach methane from cows, for instance, or from some of the agricultural technology, happening at the moment from a lab grown basis, et cetera, how do you look at the risks from a more longer term basis, to that demand forecast? Thank you.

Rag Udd:

Thanks, Tyler. I think the graph you're referring to is actually on slide 13, which actually shows it going back to 2010.

Tyler Broda: (RBC, Analyst)

Sure.

Rag Udd:

Fair to say, though, if you look at that trend, going back the last 50 years, it's actually quite consistent. Huw, I think you - there's no doubt about it, you're the foremost expert on this, I might hand it over to you though, to comment a bit more on that, if you could?

Huw McKay:

Yes. No problem at all. There's a number of aspects to that question. Some of them are very, very complex themes. I'll do my best.

Very quickly, on 10 years' worth of demand, versus back casting further. There are three stats in the paper, which I love, which is actually the increase in population, crop production and potash demand, going back to 1960. Very easy to remember - 2.5-fold, 3.5-fold, and 4.5-fold. This is not a new thing. It's not a flash in the pan. These are very, very stable, fundamental relationships between the growth in the population, rising living standards, scale and scope of diets, and soil fertility.

In terms of what we have in the 2020s, what we've disclosed on that chart, we still expect a lot of the growth to be coming from the populous emerging markets. We're not expecting the 4% plus, as we saw in the first decade of this century, but we're certainly expecting healthy growth from those jurisdictions. We actually think North America, which has actually been relatively stable, in the last 20 years or so, is actually probably going to reaccelerate.

You can also see that the external analysts agree with us there, in terms of what they're projecting for the 2020s versus the backward-looking CAGR, and that's because yields increased a lot in North America. K uptake from the soil has also increased, and basically, that's potash drifting, and it's unsustainable. The FAO tells us that soils in the USA are poor and deteriorating, and that can't go on forever.

Finally, your point about land use, dietary change as a lever for decarbonisation. We've done some really interesting work on this. We've run a vegan scenario, and most people think, oh, gosh, that sounds terrible for potash, because there won't be any meat and that'll change the feedstock.

The arithmetic is actually - it's net neutral or slightly positive to potash, and really quickly, because I've been talking for a while now, you lose the meat, you also lose the manure, and the manure is actually providing up to one-third of potash uptake to crops today. Chemical fertiliser is the other third, and the soil is providing the other third.

So you take out the manure, then that's a huge source of the potassium which you'll have to get from somewhere else, because it's not going to come from the soil. It's going to come from chemical fertiliser.

A final point there, there will also be some offsets. You'll have to grow those extra calories that were coming from meat. That's not one-for-one, that's a net loss, but it is a partial offset. It is the loss of the manure, which is the big one.

So, potash could actually handle an overnight shift to veganism, with aplomb.

Rag Udd:

So if I was to summarise that, Huw, I know with some of the conversations we've had, this is really less about what people eat, but more about how many people are actually eating. So, if you believe in population growth, you probably believe that the growth in potash looks pretty solid.

Huw McKay:

Yes, it does indeed.

Rag Udd:

Thank you, operator.

Richard Hatch: (Berenberg, Analyst)

Yes, thanks very much for the call and the presentation. A couple of questions, or a few questions. Firstly, on the 80% of the fleet being electric, what 20% is not? Can you clarify that?

Then secondly, just on some of these assumptions in terms of recovery rate 92% versus say to 85%, plant up-time 8000 hours a year, versus the industry average of 7000 to 7500. Are you comfortable that you're not overestimating this, and you're not using - are you comfortable with the technology that applying there? Are you comfortable it's tested well and enough, you've done the work on it, so that it's not going to disappoint the market when you - inevitably you bring it online and potentially run into some challenges of reaching these targets? Thanks.

Rag Udd:

It's a great question, Richard, and I can assure you, one of the challenges I think we had with this project was when you've got a decade to study it, that the team actually has done some really, really good work in terms of optimisation. The flip side of that, though, is just when you go through that optimisation, you constantly get challenged on what percentages and what that looks like, and I can assure you that level of challenges has occurred quite extensively within BHP.

Nonetheless, let me get you a bit more detail on both those questions. What I'd suggest, Giles, could you handle the what 20% is not electrified, and Mike Elliott, I'm going to actually turn over to you to talk a little bit about the recovery on the plants, if that's all right? Giles.

Giles Hellyer:

Yes, thanks. Just to reiterate, our design intent with Jansen has been very much that we will not place diesel in the underground through a connected pipeline, which is very typical of underground mines today. So, we are very committed to ensuring that we eke out every last drop of diesel, such that we don't need to use it in the early 2030s.

The equivalent question is, actually, ironically, it is usually the smaller fleet, the smaller equipment that becomes problematic in this particular transition because our larger mining equipment tends to be either entirely electric, from day one, like our borers, but the mobile equipment, the more larger equipment underground, we do have options, which we're pursuing, and are actively going to put those into the mine, and they're quite well proven. It's really just more ancillary equipment which becomes problematic in that transition to 100%.

So I might hand to Mike on the next piece of the question.

Mike Elliott:

Thanks, Giles. So I'll start by saying the flow sheet, as Rag mentioned, has been developed over many, many years, working off a proven potash flow sheet that we've integrated the latest processing and digital technology into that.

Through the last few years of estimating what will Jansen actually do, we opened it up to over 25 external subject matter experts who know potash, to arrange key value drivers which dictate the overall nameplate and there's a lot of focus on the bottleneck. Particularly grey recovery throughput and utilisation or uptime and we arrange the potential or possible outcomes around those key value drivers.

The figures that are quoted and the overall 4.35 million tonnes per annum is an expected figure, it's not the design figure. The design figure is higher, but we take into account various effects, likely operating effects, as well as effects through the chain, to arrive to those expected figures.

So we are comfortable that we haven't overestimated it and we get that comfort through SMEs, external subject matter experts, as I mentioned, extensive testing of the equipment that we have done with vendors and I should also mention that our procurement program is quite advanced. We have engaged with all of our major equipment vendors and we have already conducted a level of scale and bench testing of that equipment already. So we are comfortable with our estimates for the reasons mentioned. Back to you, Rag.

Joel Jackson: (BMO Capital Markets, Analyst)

Hi, good morning, good afternoon, thanks for taking my questions, a couple of questions on the fertiliser end. I had a couple of questions; I'll ask them one by one. Thank you for the detail on how you see Jansen will comp cost-wise versus through the full operations of Mosaic, Nutrien and other comps.

I was wondering if we look at what everyone probably concede is the lowest cost mine in Saskatchewan for potash, so Rocanville and how you think that Jansen S1 and then S1, S2 will comp to Rocanville. Rocanville is obviously mining north of a different seam, the Esterhazy seam, not the Patience Lake seam. It's low impurity, it's not got a lot of clay. I understand how you're talking about the larger boring machine and new equipment. Can you maybe talk about how you might comp to Rocanville?

Rag Udd:

Sure. Giles, I'm going to hand that one over to you to take that through, because I know you've done a lot of work in this area.

Giles Hellyer:

Thanks, Joel, for the question and it's relevant from the point that mines such as the one you mentioned are very efficient in those terms and they do provide what we would regard as a benchmark which we look to judge Jansen against. What I can say, certainly there are many other mines in the district which vary in age and efficiency and of course, affect the average.

But with respect to say comparing Jansen to Rocanville, I think it's interesting that we do have a number of inherent advantages, but when it all comes down to it, we think that the differential between say Jansen and Rocanville on a cost of tonne basis is within roughly 5% or 6% in favour of Jansen, given that Jansen is a brand-new mine. It's got the very latest in technologies, it's bringing all of those synergies together from a very detailed, integrated mine plan from day 1, matched to the very competent, capable hoisting and processing system, with a very innovative approach through to logistics to get product to market. So we think that complete combination still provides inherent competitive advantages against even the best of the best.

I think also if you had looked at the presentation yesterday, where Cheryll talked to the mining system, which is really the heart of a lot of our advantage, that in itself offers probably at least a 15% cost advantage over most of our competitors.

So the heart of a lot of the efficiencies we gain at Jansen, given we've matched the mining system to the ore seam and that being in the case of Jansen, it is much a taller seam, it's around the four metre mark, whereas say some of those mines in the south-east of the province are smaller seams and they do take more effort to produce the same tonnes per metre of advance, for example.

So I think the Jansen advantage comes to the forefront, it's a great deposit, in a great location and I think matched with that technology overlay we've talked about and even in the processing area, where yes, we do have some inherent variances in the ore body, I think we've very well placed to capitalise on that complete highly efficient, modern flow sheet from start to finish. Back to you, Rag.

Rag Udd:

Joel, I know you said that you had a couple of questions there. Do you have another one you'd like to throw over?

Joel Jackson: (BMO Capital Markets, Analyst)

Yes, thank you. So your main Saskatchewan competitor is Mosaic and Nutrien, especially Nutrien over the years decided not to push through big operations to make let's say SOPs, so some of the downstream, or some of the specialty potash fertilisers, which if you've got such a low cost asset coming up down the road here you could probably make SOP in some of these chloride-free sulphur/potash fertilisers quite low cost. Is this something your team will be looking at? If you want to extend capacity so much, maybe having to go into some of the specialities too, the Mannheim?

Rag Udd:

Joel, at this point that's not going to be our focus. The reality is that we've got a fairly big capital program in front of us in terms of Jansen. If you look at that, that's CAD7.5 billion basically over the next five to six years. Our focus will be actually establishing that and making an entry into MOP to begin with and actually getting that foundation set up. Where that goes to longer term, I think we're pretty good at adapting and evolving over time, but nothing's on the horizon on that at this point. Mark, anything you'd like to add on that one?

Mark Swan:

No, Rag. I think just obviously the first round we're producing only red, granular and standard, so usually white surfaces in SOP operations and we won't have that in Stage 1, I think.

Rag Udd:

Thanks, Mark.

Carsten Riek: (Credit Suisse, Analyst)

Thank you very much for taking my questions, there are two from my side, I'll take them one by one. You showed on one of the slides that capital intensity would come down quite substantially reaching Stage 2. Can you actually tell us when exactly you'll expect Stage 2 to kick in? And what exactly will bring the capital intensity down? Could you just talk about the drivers? That's the first one.

Rag Udd:

Sure, thanks, Carsten and look, twofold here. One, in terms of the exact date for Stage 2, no, I can't actually give you that timing at this point. Suffice to say we've got that option being prepared, so Giles and the team at Jansen are actually working on Jansen Stage 2 in terms of the study work that's associated with that.

What will trigger that inflection is basically when we actually think that the returns are active for that investment longer term. So it may be that we trigger that a few years after the delivery of Jansen Stage 1, we may actually bring that forward depending on where we think value lies longer term.

In terms of what delivers lower Capex intensity, if you look at Jansen Stage 1 there's a number of elements that we actually build and set up for the basin play here, if you will, that actually results in higher capital intensity for the first stage. So specifically, the shafts are the big piece, so the shafts are actually high cost and probably high risk in terms of the project and future phases. So we spent a lot of time and the better part of US\$3 billion in terms of establishing those shafts which will actually be scalable basically for Stages 2, 3 and 4 without requiring the expansion of those shafts.

Other elements that would come into that is a lot of the NPI or the non-process infrastructure, a lot of that is established basically to service basically the full setup. And lastly, the rail setup where we will have spurs basically linking CN and CP we make that investment in Stage 1. Once that's established you no longer have the need for that infrastructure in Stages 2, 3 and 4 in terms of establishing that.

So that's what lowers it primarily for us and what you'll see in Stage 2 is, it's really about adding additional borers and mining systems, adding another processing plant that sits behind that, and additional ore cars and other elements to service that to the port.

Carsten Riek: (Credit Suisse, Analyst)

Perfect, thank you very much. The second question I have is on the supply side. There seems to be an increasing number of new projects coming from Africa which claim to be also very low cost, just to mention Kore Potash with the Kola and DX mine, or Sarmin's Kanga mine in the DRC.

Did you consider those projects in your increase in supply? Because the reason why I ask is that the total rise of potash volumes indicated in chart 14 of about 10 million tonnes to 12 million tonnes per annum looks like it's only reflecting the additional capacities coming from CIS players such as EuroChem, Belaruskali, Uralkali and Acron. Do you consider those kind of African volumes coming from DRC and Ethiopia in particular?

Rag Udd:

Great question and Huw, I might hand that one over to you in terms of how we factored in the supply and demand considerations.

Huw McKay:

Absolutely, we do a global demand supply build and so any prospective project we will consider. There are other frontier regions, so we have some smaller assets such as Laos, there are some central Asian jurisdictions as well. You even have some smaller projects in Australia, where you have some potential developers coming forward, so we do look at all of that.

In terms of the overall market balance, I would say at this point that it isn't actually material. The biggest impact in terms of new supply versus what produced 70 million tonnes in calendar 2020 to get to our 86 million tonnes of achievable capacity in 2030, is the return of the capacity which is currently not utilised but could be in the future. Most of that is voluntary curtailment in Canada.

And you also do have some projects which are already committed or close to ramp up, but these are predominantly from the other two big basins in Russia and Belarus. So everything that you've talked about we do look at, what's really material for timing market balance is the three big basins.

Sylvain Brunet: (Exane BNP Paribas, Analyst)

Hi, good morning, good afternoon, thanks for your time at this hour. So three questions, if I may, let's start with the first one on capex and cost. Huw, if you could please be a bit more specific perhaps on the inflation assumptions that you've made on key items built into your contingency to give us both capex and cost please, that's the first one.

Rag Udd:

In terms of the capex and the cost, Simon, would you like to take that on, if you could, in terms of how we thought about that for the project?

Simon Thomas:

Thank you, Rag. I think one of the starting points is just to look at the maturity of our design, and the maturity of our procurement to date. That informs us quite well, in terms of our cost base, and the makeup of the estimate. With engineering at over 50% complete, our scopes and our vendor information is quite mature. With our procurement now at over 45% of our procurement packages locked into the market, that gives us quite a lot of confidence also on inflationary. Most of the supply is through the Canadian market, aside from some of the mining systems and mining equipment that is international.

We did quite an extensive amount of modelling, we're quite mature in the way that we model our escalation, dating all the way back to pre-GFC, and we know how commodities reacted to both that phase, and also through the oil sands boom. We're quite well informed, and we made the appropriate allowances in our contingency for escalation due to cost pressures on those commodities.

Rag Udd:

Thanks, Simon. I think it's worthwhile noting here that Simon's talked a fair bit in terms of our awareness of the market, how advanced we are in terms of the engineering that procurement that sits out there. I think it's important to understand too, on this project, our exposure to, for example, steel, is only about US\$200 million, in terms of the total spend, which actually gives us a relatively high degree of certainty around some of the commodities in the profile from the escalation that actually sits behind that. Sylvain, you mentioned you had a few other questions, though.

Sylvain Brunet: (Exane BNP Paribas, Analyst)

Yes. On marketing please, you mentioned non-binding agreements with a number of customers already. Could you please give us a bit of a sense of the geographical split that was on slide 20, but I don't know if it's the proportion in there, between Brazil and China.

A related question to that, will Jansen have any exposure to palm oil customers, which are not potash customers, but a bit more sensitive energy topic?

Also, as we're talking marketing, if you could just confirm that all these pricing discussions are based on spot? That's my second line of questions, please.

Rag Udd:

Sure. What I'd suggest, is Mark, I might ask you to talk about the MOUs that we have in place with our customers and the geographical distributions around that, and a bit about the pricing discussions. I actually missed, Sylvain, your question about exposure to oil, something got garbled in the call. Let's go through those first two, though, Mark, if you could, and if anybody else picked up that other question, we might need to clarify that one. But over to you, Mark.

Mark Swan:

In terms of MOUs, they're non-binding, obviously, when we were discussing them, Jansen wasn't yet sanctioned, so it was an appropriate type of arrangement, and we're still binding these up. They're all confidential between us and the buyers, so I can't go into great detail on them. What I can say, is we do have two MOUs which were agreed in China, which were made part of it, which were with Sinoagri and Sinochem. Then the rest are with highly credible counterparties across south-central America, southern Asia, southeast Asia, China, and North America, so covering all the major regions.

I think we've had some discussions with people in some of the smaller regions, but we haven't signed MoUs, on the basis that we like to keep that contestable. We've got a lot of interest from certain areas where we're trying to keep that a little bit live, so we have a bit of competition, competitive tension. On the pricing discussions, can you just clarify the question, please? I didn't quite understand what was being asked there.

Sylvain Brunet: (Exane BNP Paribas, Analyst)

It was just, I just wanted some confirmation that when you're talking non-binding agreements, that's volumes, and that prices would be the spot of the day, when you deliver the product?

Mark Swan:

Oh, right, yes, sure. In terms of MOUs, what we agree is agreed as a framework from various different things. We have things like volumes and then we agree some others on framework terms within that. What we don't have agreed, obviously, is price. On price, we've kept that open for now. I think when we get to actually pricing up those agreements, converting them to binding agreements, then we'll price. The price is likely to be in line with custom and practice in the different regions, and we provide a little bit of detail around pricing fixations in the presentation. If you look in there on the slides, you can get an idea for the sort of exposures you might expect to see in all the different markets and geographies.

Sylvain Brunet: (Exane BNP Paribas, Analyst)

Thanks. My last question was on exposure to palm oil customers, mainly in Brazil.

Mark Swan:

Okay, that's maybe one I can take, Rag.

Rag Udd:

If you wouldn't mind.

Mark Swan:

Yes, if we look at palm oil exposure, Brazil is predominantly, as you know, it's predominantly soya, corn, and palm there is some exposure on that in southeast Asia. That typically is where a lot of that stuff is grown and developed. A lot of that market is palm, for sure, and it's been driving very strong growth over the last few years. There will be some exposure to that, but I think it forms part of a global crop portfolio, and that crop portfolio, perhaps I'll jump over to Huw in a moment. But that portfolio, crop is driven by population, and that's really what's driving it at the moment. I don't know if Huw, you have anything to add on palm oil?

Huw McKay:

No, I think you've covered it very well, Mark. I think there's nothing additional there, thanks.

Christian Georges: (Société Générale, Analyst)

Thank you very much. I only have a couple of questions, a quick one, just to clarify a couple of things, and I haven't had time to go through your PowerPoint yet, so maybe it's obvious. First on the Canpotex, I just want to make sure that you're ruling out joining Canpotex, and as a side question to that, would you consider setting up an independent organisation with other independent players in it? That's the first question.

The second question is just to clarify if you are intending to, within the revenue you have, is there a reflection on selling forward some of your volume to finance capex at some point in the future, and especially within the context of China, seemingly being keen to find alternative supply? That's my two questions.

Rag Udd:

Good stuff. In terms of Canpotex, let me start first here, I noted you mentioned you hadn't had a chance to go through the PowerPoint yet. I strongly encourage you to. I've heard it's pretty good. In terms of the question on Canpotex, we have decided to rule that out at this point. A couple of points there, Christian, that I want to emphasise, when it comes to Canpotex, it's really important, and one of the slides, actually, in our presentation talks to it, is that it's really important to understand that that only forms up 20% of the way that potash is actually sold in the market. The other 80% is sold in a whole bunch of different mechanisms and manners to actually sell to the market.

Based on our experience, number one, in terms of working in other commodities, and secondly, recognising that we will be, or we expect to be very low-cost producer, in terms of in the first quartile of production. We actually think it better serves us to actually not be restricting supply, in terms of the capacity that sits out there. On that basis, we actually don't see any benefit in actually joining Canpotex at this point.

In terms of forming up a consortium to work with others to consider marketing and selling potash, at this point, no. That isn't something that we're considering. What happens in the future, who knows, but at this point, I think it would be fair to say that that's actually not on our agenda at this point.

In terms of the second question, I missed a little bit of that, I apologise, Christian. I think it was on futures and China. Huw or Mark, is that better sitting with you? We may need to clarify that question, I do apologise.

Huw McKay:

I think the question, as I heard, might have actually been China's approach to ensuring security of supply of strategic commodities, and I think potash would certainly fit that criteria that China would be naturally thinking about its long-term supply of this critical commodity. I agree with the premise, that China will be looking further afield. They have 17 million or so of consumption, 7 million at home. But I'd also be very clear that China is not that competitive on the operating cost curve, and besides, the major producer, they have a lot of very, very small assets which are struggling to be

economic, even at today's very attractive prices. There is a strategic question, I think, there for China, and I would expect them to be active in terms of foreign acquisitions over the next decade.

Andrew Stott (UBS, Analyst)

Yes, good morning and afternoon. Thank you very much for taking the time. Very good presentation, by the way. A couple of things from me. First of all, I heard what you just said to a previous question on pricing that you basically will follow the current regional balance, so 25% of the market is obviously contracted globally. I assume that's plan A, though, plan A is a demand-driven market, you can do that, you will do that to place product. Plan B, though, if by 2027 you're in a supply-driven market, would you be prepared to expand that contract market for your own scale up? That was the first question.

The second question is to the slide on demand growth. A big part of your pitch is soil depletion. What work have you done, I'm sure a lot, but what specific assumptions have you made around precision farming, big data, and the effect this has on application rates? Thank you.

Rag Udd:

Great questions. Let's start with the second one, which is around demand growth and some of the work we've done on that. It would be fair to say, we've done a heap of work here. I actually don't want to steal Huw's thunder, so I'm actually going to hand that over to him to talk a little bit about what we've done in that regard, and then we'll come back to question one if we could, around pricing and the regional balance.

Huw McKay:

Thanks very much, Rag. A sophisticated question, thank you. In terms of precision ag, we see this as a very large opportunity for the potash industry. Many people put precision ag out there as the reason why North American fertiliser demand has plateaued a little this century. We don't ascribe it to that, and if there has been an effect, it's been more in the nitrogen and the phosphate element of the fertiliser industry. Potash, we don't really see much of an effect.

But the really important thing to note here, the future demand here is coming from populous emerging markets, they are a long long way from the productivity frontier in agriculture, as defined by the US, and they've got a huge amount of catch up to come, in terms of their basic yields and their potash intensity per unit of production. Precision ag is really exclusive to industries where they are all operating at the frontier. Getting to the frontier means you may adopt precision ag at a future point in time, but you have to go through a rapid growth phase and a modernisation before you get to the point of actually being precision ag. It's a great opportunity for potash and the more scientific farming practices to come in the emerging world the quicker we get to that balance point that we are all waiting for.

Rag Udd:

Thank you. Look in terms of, Andrew, where you talk about plan B how we are thinking about selling potash in the future in terms of plan A and plan B. Look plan A is the main game plan in terms of ourselves at this point and the reality is, as I mentioned earlier on, is that 80% of potash is actually sold directly to customers through different mechanisms around the world.

We are actually very, very comfortable with that setup based on our position of where we think we'll sit on the cost curve and also our experience basically working in other commodities as well. So we are not planning to work into a plan B at this point. I don't kid myself though that we haven't sold a tonne of potash yet and so we'll remain malleable to other ways again different ways of actually maximising value for our shareholders. But at this point plan A is the main game plan.

Jason Fairclough: (Bank of America, Analyst)

Hi guys. Sorry back for a second one here. Just a couple of questions around the project schedule and the capex. So the shaft and the pre-works haven't gone well but one way or another they have ended up over-capitalised and you have had to take a write down on them. So you have highlighted the Company's success at Spence Growth and at South Flank but then why should we believe that this translates into success in this project given the track record to date? As a small aside, could you tell us what steel price you have used in your capex estimates?

Rag Udd:

Good stuff, look I'm going to hand that onto to Simon to talk a little bit about what gives us confidence. What I do – I'll talk a little bit high level before I hand it over to Simon. Jason, it would be fair to say we are as an organisation not happy about the shafts and where we got to in terms of that investment. Important to understand that a lot of the investments and some of the lessons that came out of the shaft was we invested too much too early in this project.

So going back to about 2012, 2013, and what I'd say is the lesson that we took out of that experience has actually been applied to the South Flanks of the world, the Spence Growth options that have actually led to a bit of success. Now the realities here that sit with this project given how long we have had to study it and some of the lessons we have got on the ground here, and the high level of engineering that has been completed on this project and the high level of procurement planning, it stacks up very favourably with some of the South Flank and SGO work that we have done in the past.

So that has definitely given myself a bit more comfort in terms of how we think about delivering this project. But, Simon, given we have delivered South Flank and are now coming over to deliver Jansen, why don't you give us a bit more colour on that one if you could.

Simon Thomas:

Yes, thanks, Rag. Now I didn't have Spence in the mix, but I've been across there and had a good look at it. Actually, I think one of the things I saw coming into Jansen and one of the things I mentioned in the presentation yesterday is that having a really high-quality study, and actually having completed the study in 2018 and then spending the time we spent to look at optimising, understanding the construction market, understanding labour productivity in this region, understanding how things and projects have performed in Saskatchewan Basin in the past. Along with as Rag said, very solid and maturity of our engineering, the maturity of our procurement plans, the test work that we've done on the mining system over a number of years in Germany actually set a really good foundation for success.

Jansen is actually more advanced in those key aspects and also in terms of team establishment, numbers of personnel that we've actually secured in the senior roles, and through the design teams that have potash industry [experience]. As I said, we are more advanced than I have seen in projects that I've been involved with in the past.

Greenfields - large greenfield projects like Jimblebar, you talk about South Flank, we are actually ahead of the profile there at this point in time. So that gives me quite a lot of confidence that this project will be successful.

Now because we understand those risks well, they do inform our schedule and they do inform our capital estimates and they also inform the contingency on both. That may represent some opportunity down the track but we're at the starting gate. So the time now is to continue to work and how we manage those risks to secure an outcome in line with our schedule.

In terms of the question on steel price as in say dollar per tonne, maybe Mike Elliot may have an answer there. I don't have that as a finer detail in my mind.

Rag Udd:

Well, listen, before we get into that, it's fair to say, Jason, it's only US\$200 million is what we have mentioned up front in terms of the total spend on US\$5.7 billion so it would be fair to say that it's actually a fairly minor amount and we have been conservative in our pricing in terms of what we've assumed on that one. Huw, anything else you'd like to add to this one.

Huw McKay:

Yes, I'd just say, Jason, that with the steel price we won't tell you the steel price we use because you'd then be able to very quickly back out our iron ore and metallurgical coal price. We do that very internally consistency across the Company, so with just as much effort into thinking about key procurement inputs as we do to the products that we actually sell. So won't be disclosing the steel price, you can learn too much from it.

Danielle Chigumira: (Bernstein, Analyst)

Thank you for letting me ask another. Another strategic question, so you mentioned a couple of times your continued openness to partnership. Obviously, Jansen was impaired at 2021 results with fairly specific commentary that it's to a level that the markets participants would attribute to your investments. So with this impairment out of the way is a partnership now easier to achieve than it was in June for example?

Rag Udd:

Look, I'll be a bit patently boring on this one in terms of the messaging on this. In terms of partnership, we're receptive to partnership but the conditions precedent we want or need in terms of any partnership is around value. We actually just don't see that playing out in terms of any of the conversations we have had in the past. We are receptive to it but understand we don't need a partner on this project, we are actually very comfortable coming into this basin.

We have demonstrated throughout our history an ability and a confidence to do that, and this is a commodity that we are coming into and really look forward to working with others in the competition that actually sits in potash around that. It's an area we thrive in, Danielle, and something that I look forward to.

Danielle Chigumira: (Bernstein, Analyst)

Great, thank you for that. Just one follow up on a completely different tack, but on slide 26 you highlighted that with future expansion Jansen would have four identical mills compared to the peers which have different mill types. Could you give colour on whether there's an operational benefit from having identical mills rather than different ones?

Rag Udd:

So Danielle, let me talk to that on a couple of fronts. So the answer is, yes, there is an advantage and why, because if you have a workforce that's actually been trained up in terms of how you think about operating and maintaining a plant, well, it's broadly consistent. If you have the same parts basically mill to mill, well, that means that your inventories are lower. It means that you can actually carry lower working capital that's associated with that.

It means that the ease to construct it once you've actually put one in place you actually learn a fair bit similar to putting Lego together for the first time, the second and third time you put it together it becomes much easier and the lessons that you actually capture of that. One of the elements we know we have to be really careful on here though and some of the lessons we've taken up particularly out of iron ore is ensuring that we actually do stay true to that replication piece.

Because as we have seen through some of our rapid growth projects in Western Australia is we have gone through rapid growth projects four, five, and six, there's always a bent to want to improve and shift a little bit away from the standard or the standard design that sits behind it. But at this point what I would advocate is the benefit of standardisation far outweighs basically any customisation that you might put it in at later stages, the fact that we do have to create an allowance for new technologies emerging trends that will no doubt present themselves over the next couple of decades.

Richard Hatch: (Berenberg, Analyst)

Yes, thanks very much. A few more follow-ups. Okay, one by one. The first one just on rail, I know that's the last perhaps piece of the puzzle that you are trying to square away. Do you have any worries or concerns that that US\$100 a tonne opex number may squeeze up if the rail cost is going to be higher?

Just on the rail, can you just clarify, if you take the mine all the way up to 16 million to 17 million tonnes have you got – forgive me, do you need extra rail capacity, have you got it, or will you need to secure it? Thanks.

Rag Udd:

So look a couple of things on this one. In terms of rail and US\$100 a tonne actually quite confident in that number in terms of the pricing that we have put in place over time. What I would say, Richard, though is – well, let's talk about what gives us confidence on that. Is that one of our commitments basically is so that we have dual access to both CP and CN Lines and that's actually part of the capital that we are putting in place in stage 1 is to ensure that we've actually got spur lines connecting both CN and CP to the Jansen train load out.

So we actually think that that will induce basically a competitive environment in terms of transporting the ore to Westshore over a longer period of time and sets us up well. Now do we have those contracts established at this point? No, we don't. Why? Because we are 5 years to 7 years out basically from production. So we expect that those conversations will take place over the ensuing couple of years as we get closer to market and actually bringing that forward.

In terms of the 16 million to 17 million tonnes capacity we are not concerned about the rail line capacity in Canada to actually accommodate that. Obviously, there is additional capacity that would be necessary in terms of rail cars to actually transport that material into Westshore or another port as we get into stages 3 and stages 4. Mike Elliot, is there anything else you would like to add to this conversation though?

Mike Elliot:

I just think on the rail capacity it's something we have modelled through all stages. It is equally about the storage as well that we have master planned at Jansen as well as at the port to provide that buffer to the rail network, and we have master planned that out in the footprints of both the terminal as well as the mine in order to ensure that that rail network continues to operate and as Rag said, yes, we will scale up our rolling stock accordingly to meet those tonnes.

Rag Udd:

Thanks Mike, back to your operator.

Joel Jackson: (BMO Capital Markets, Analyst)

I have a couple of questions that I'll ask one by one again. Just on the MOU I mean I think a lot of the people on this call – well, the question is this, obviously the public you see a lot of ceremonial and political MOUs signed between Belarussians, the Russians, the Israelis, the Jordanians, with the different Chinese buyers, 3 year and 5-year MOUs very ceremonial leading to political signings and political visits. Is that the nature of your MOUs, same story, just an agreement to work together down the road and we'll figure out price in likely contentious annual negotiations?

Rag Udd:

Look Joel, a great question and I'll turn to Mark in a second, but I suppose a couple of things I do want to highlight here is when you are 7 years out from first production it's actually pretty difficult in genuine terms of to actually set up sales contracts in terms of what sits out there in the future. So on balance, I fully respect the argument that well, how much are these MOUs actually worth. It really is just a memorandum of understanding and as we get closer to operations, we will actually secure those and actually put those in place.

The second component that I would flag here is what we've taken out of most of those conversations though is actually a real desire coming from a number of customers, looking for additional and different sources of supply from potash. And when you look at the global market that we're talking about basically when we come into the market in 2027 and circa 80 million tonnes at that point, we think that this 4 million tonnes actually fits in very comfortably and shouldn't be a big stretch for us or others to move forward.

Mark, I might hand over to you though for a bit more detail in terms of the detail around those MOUs, if there's anything additional you'd like to add there.

Mark Swan:

We talked about MOUs a moment ago, I think you've covered all the key points there, Rag. So I've got nothing else to add.

Joel Jackson: (BMO Capital Markets, Analyst)

Thank you for that.

Rag Udd:

Joel, you mentioned you had a couple of questions though.

Joel Jackson: (BMO Capital Markets, Analyst) Okay, so my second question is this. So you made a comment, the team made a comment that you think that China - in your view, that China would see potash as a strategic resource and something they'd want to secure a supply in all those words. Now, as someone's that covered potash for 15 years maybe you can let me know how you think about this, I've seen the Chinese look at every single junior potash projects for 15 years and they never took more than a US\$20 million or US\$30 million investment in anything.

They've got projects south-east of China, they have projects everywhere, they never seem to actually want to put real money into a real project. And so I just wanted to know, has something changed, or in your conversations where you think the Chinese actually want to put real money into real projects, or are they just planting a bunch of seeds around the world and nothing ever happens?

Rag Udd:

Interesting observation, Joel. What I would say, not talking specifically to potash though, but what we've seen in other commodities though is never underestimate this longer term. And we've seen that basically play out in terms of some of the iron ore markets over the last decade and also met coal in terms of some of the practices that were playing out. So while I respect that the Chinese might not have put significant investments into potash at this point, I don't - based on what we've seen in other commodities around security of supply, I actually wouldn't underplay this longer term.

Sylvain Brunet: (Exane BNP Paribas, Analyst)

Thank you, just a final follow-up on fiscal terms please, just referring to your slide 49. I just wanted to clarify that the project would qualify for the tax holiday on production for the first 10 years that you mentioned. And if you could help us a little bit on the effective tax rate we should expect in the early years of production altogether please, thanks.

Rag Udd:

Sylvain, thank you so much for your question. I know that Adil has been hanging out for a question on tax all morning, so I might throw it his way so he can talk a little bit about the rules of thumb around tax of Jansen.

Adil Curimbhoy:

Sure, thanks, Rag and thanks for the question. So with regards to taxes, there are three key tax areas to think about. So from our perspective there's the federal and provisional corporate income tax at 27%. So from our perspective, if you then think about the carried forward losses from historical spend and future spend, as a rule of thumb we would not necessarily be paying considerable amount of corporate income tax for the first 10 years from first production.

With regards to the second aspect of taxes, there's provincial royalties and research surcharge which collectively is from the province and equates to about 6% that would start when we sell potash. And then with regards to your question on the tax holiday, which is part of the provincial production taxes, the PPT, we would qualify for the 10 years and broadly speaking that is a big chunk and that would not be paid until the middle of the 2030s, so around the 2035 time period.

So that's the three areas and we can certainly work through any other specific tax queries offline with yourself through our IR team. Over to you, Rag.

Rag Udd:

Thanks, Adil.

Rag Udd:

Okay, well listen, I really want to thank you as a team for basically coming together. I thought it was really important to actually spend a bit more time actually talking about this commodity and what we as an organisation were actually planning to do over the next couple of decades.

Now, from our standpoint, what I would like to do is just highlight a couple of key points in terms of this project and specifically, one, in terms of the commodity itself, we like potash, we actually think it's a fantastic commodity, something that we'd like to be a part of. Secondly, coming back to Jansen, we think it is a fantastic deposit in terms of large, long-life and scalable basically for the future in terms of stages 2, 3 and 4.

And in terms of, thirdly, our capability and what we've developed over the last decade, we think we're well positioned in terms of coming into potash and what we think we can bring to the market. So look, thanks very much for your time today, we look forward to further follow ups in the future. Thanks very much.