Coal briefing
Investor and analyst call

09:00 AEST, 21 June 2016

Introduction

OPERATOR: Ladies and gentlemen, thank you for standing by and welcome to the BHP Billiton Coal briefing. I must advise you that this conference is being recorded today. At this time, all participants are in a listen-only mode. There will be a presentation, followed by a question and answer session at which time, if you wish to ask a question, you will need to press star 1 on your telephone and wait for your name to be announced. If you wish to cancel your request, please press the pound or hash key. I will now hand you over to BHP Billiton's Head of Group Investor Relations, Adrian Wood.

ADRIAN WOOD, BHP BILLITON: Thanks, Iva. And thanks everybody for dialling in to today's briefing. I am joined here in Melbourne today by Mike Henry, President of Operations for Minerals Australia, along with Rag Udd, Asset President BMA and James Palmer, Asset President New South Wales Energy Coal, BMC and IndoMet. Mike is going to provide you with an overview of our Coal business and then we are going to take questions from the phone. However, given the time restrictions, we will be limited to one question per person. So without further ado, I would like to hand over to Mike.

Mike Henry, President Operations, Minerals Australia

Thank you, Adrian. Well, welcome everyone. I am going to spend the first 20 to 25 minutes on my overview and then I will open it up for questions. I will be using the slides that we have prepared for this briefing and I will be giving you an indication of the slides as we move along. We have included the usual disclaimer slides; this is slides 2 and 3 that I think we ask you to take note of and I will start with slide 4. In today's presentation, I will be speaking to what we are doing to improve returns in the Coal business with a particular focus on productivity.

We believe that coal will be an increasingly attractive, high-returning business in the medium to long run, and this will be underpinned first and foremost by the simple concentrated and high quality nature of our portfolio, but also by market dynamics, which we believe will improve over time. Now, of course, we are not waiting for better markets to drive improved returns. We are continuing to protect and enhance returns through improving the underlying performance of our operations and we have been deliberate in shaping a portfolio that allows us to do so with the greatest speed and certainty. We have progressively moved to a simpler portfolio of only the highest quality assets.

The management focus that this enables, coupled with our new operating model, will support our ability to continue to drive for ever-increasing levels of safe productivity. And I will touch on each of these elements as we move forward through the presentation, but, first, let us start with our people and how they come together. And I'm moving on to slide 5. Adrian has already introduced Rag and James, but perhaps I can add a few comments on the rest of the regional leadership team as well.

This is a strong team comprised of leaders with a depth of experience across all types of operations, geographies and all steps in the value chain. And the intent of the new operating model is that the whole of the team is stronger than the sum of the parts with Rag and James, for example, being able to draw upon the collective capability of the broader team to help support coal's performance, and that's already starting to happen at an accelerated pace. The new model frees up our line leaders to focus more of their time on the delivery of safety, volume and cost and they are supported by functions that are now consolidated global teams under the leadership of world-class functional experts.

The consolidation of the functions will support the development of even higher quality functional capability, will remove duplication of effort and will enable functional, continuous improvement and they will be able to provide support that is both more efficient and more effective. The new model also supports our ability to continue to drive productivity forward through the bringing of proximate regional assets together under consolidated leadership, and this is intended to enable a more rapid and systematic approach to continuous improvement. Of course, even before the change to the structure, there was some leveraging of capability and practices between the regional assets, but the new model will make this approach to improvement easier.

The new structure will help us foster the culture and focus required to more quickly progress all of the assets to internal best practice. Now, for key activities, this will be further supported by the centres of excellence that have been established for maintenance, capital projects and geoscience. The maintenance centre of excellence is led

by Brandon Craig reporting to me. It will be a major driver of future safety and operating cost production. Our belief, supported by analysis, is that through the maintenance centre of excellence, we can achieve circa three to five per cent uplift in equipment availability, improved operational reliability and substantial cost reductions.

The maintenance Centre of Excellence will help us make maintenance a profession of focus in BHP Billiton. We will drive better aligned maintenance strategies, plans and ways of working for like equipment and activities across the group. Now, of course, none of this matters at the end of the day if we are not keeping our people safe. There is nothing more important.

Then turning to slide 6 now. We believe that in the long run, performance on safety is an important indicator of sustainable, high operational performance. They are supported by the same things - highly capable people engaged in a positive way and planning and executing work in a highly disciplined fashion.

Now, in early 2015, senior coal business leaders came together and resolved to make the business even safer. We decided to replicate the field leadership safety approach that had been successfully deployed previously in our Iron Ore business. Now, to be clear, this is not simply time in field, which you might have seen from the name. It is a structured approach to infield verification of controls, improvement of processes and, very importantly, to safety engagement. Enabled by field leadership, our frontline workforce has made the business safer. Since June 2015, we have reduced total recordable injury frequency, or TRIF, by 50 per cent.

Of course, TRIF is not the only measure of safety. We have also seen similar improvement in our higher potential incidents as well. It is notable that this has been achieved at the same time as significant productivity gains and record production at six of our nine operations.

Let me turn now to the market dynamics for metallurgical coal on slide 7. We believe that the long-run dynamics for met coal are positive. It is essential for steel production and the world will need a lot more steel as the emerging economies continue to develop. For many of these, they will need to source their met coal through imports and we have the portfolio of assets best placed to meet this future demand, or simply to replace current supply as it depletes.

Not only is our portfolio well suited in terms of size and location, but we also believe that high quality hard coking coal of the type we produce will be even more valuable as the steel industry continues the trend towards larger blast furnaces. Short-run dynamics belie this long-term positive outlook and we expect this to continue in the short to medium term. Productivity improvement across the industry in recent years has led to an overall compression of the cost curve which has impacted price. We are, however, seeing signs of supply-side response to low prices, albeit slower than originally anticipated. High cost supply being displaced, US exports are down 25 per cent year on year. And around 16 million tonnes per annum of Australian capacity has closed since 2014. - productivity improvements have offset some of these cuts and year-to-date exports are down only five per cent year on year.

As part of its commitment to supply-side reform, the Chinese Government has announced plans to shut in 500 million tonnes per annum of coal mining capacity and this will assist in creating a more sustainable industry. In the province of Shanxi, this is being enacted through limiting the number of working days to 276 days a year from 330, which has resulted in total coal output declining 23 per cent in April. In the medium to longer term, we expect demand to be supported by steel growth and developing economies outside of China. For example, India represents a significant growth opportunity as accelerating economic growth there drives demand for steel. In fact, the positive exposure to India is a key differentiator for met coal from some of our other commodities and is a net plus in terms of market diversification within the portfolio. We are well-positioned to meet the continued growth and demand for met coal, given the size, location and quality of our resources.

Now, turning to the outlook for thermal coal, slide 8, we continue to see a long-term future for thermal coal, but we do recognise the way that the world will make its energy choices is inherently uncertain and that is part of the value of the diversity of our energy portfolio which covers the spectrum of conventional and unconventional oil and gas, LNG, uranium and thermal coal. And, of course, copper as renewables' share in the energy mix increases. Thermal coal's proportion of global power generation is likely to decrease over the next 20 years. However, we still expect overall thermal coal demand will grow in absolute terms as the total power production 'pie' increases, consistent with the new policy scenario of the International Energy Agency.

We expect that thermal coal will remain front and centre in Asia's energy portfolio into the foreseeable future, because it is the cheapest and most readily available fuel source for power generation, and we expect that new seaborne capacity will be required in the early 2020s.

And this brings us to the resilience of coal in the BHP Billiton portfolio on slide 9. We accept the IPCCs assessment of climate change science. We believe the world must pursue the twin objectives of limiting climate change to the lower end of the IPCC scenarios and ensuring access to affordable, reliable energy.

We have spoken publicly previously about the fact that even under BHP Billiton's Global Accord scenario which describes an orderly transition to a two degree world, BHP Billiton's diverse portfolio is resilient. In fact, even in that scenario we expect demand for the majority of our commodities to continue growing in absolute terms, although at a slower pace than our central case. Demand for high grade metallurgical coal is resilient under all scenarios. In fact, in a world in which there is even stronger focus on reducing emissions and increasing efficiency, the need for particularly high quality coking coals like those in our portfolio can be expected to increase.

We also anticipate ongoing demand for high quality thermal coal. It is a secure and affordable source of energy and is expected to be with the world for decades to come. A transition to a two degree world will, of course, impact demand but it can also be expected to impact supply with the latter acting to mitigate the impact on thermal coal market prices. We do quite a bit of work in assessing the broad range of possible future scenarios and through this work we believe that in a severely carbon constrained world, product quality and cost of production become increasingly important factors in determining which fossil fuel reserves will be brought to market to meet growing energy demand. We are confident that our assets in particular will remain resilient, even in an increasingly carbon constrained world.

So now let us get back to the foundation of our business which is our high quality assets, and moving on to slide 10. Our simple portfolio of tier one assets is aligned with our group strategy. We have a geographically concentrated suite of some of the largest coal resources in the world. Our resource base in the Bowen Basin is characterised by its proximity to tide water and market, the high quality nature of its premium hard coking coal, and by the size of the resource with over a century of inventory. This underpins our position as the largest seaborne metallurgical coal producer.

Our integrated supply chain in Queensland Coal supports our productivity, sustainably keeping our operations at the low end of the cash cost curve where we expect to remain for decades to come. And the assets in our thermal coal portfolio in New South Wales and Colombia are high quality resources and some of the lowest cost in their sector. These factors have allowed us to continue to improve costs and cash flow, and to remain competitive in the face of recent industry challenges. And the quality of this portfolio is not an accident. It is the result of deliberate shaping in recent years.

Moving on to slide 11, the demerger of South32 helped create a simpler portfolio of coal assets, primarily situated on the east coast of Australia and our joint venture in Colombia. We recently announced the divestment of our interest in IndoMet Coal which did not compete with the range of other growth options in the group's portfolio. We finalised the sale of San Juan Mine in January of this year, while the transfer of the operatorship of Navajo Coal to the Navajo Transitional Energy Company remains on track for the end of the year following its divestment in 2013.

We have also been disciplined in our response to the economics of individual operations. For example, six months ago our Crinum operations closed following the decision not to develop the final high-cost longwall panel. In August last year we outsourced the drill, blast and pre-strip operations at Blackwater to ensure the ongoing viability of the mine. And we suspended the loss-making capacity at Norwich Park and Gregory Mines back in 2012, and have reduced higher-cost production in New South Wales Energy Coal. And, of course, we will continue to evaluate further optimisation of the portfolio.

Now, let us take a look at productivity and what we have been able to achieve with the portfolio on slide 12. I do not want to dwell on past successes but I will note that we were one of the first to make the shift to reset our cost base. And since the 2012 financial year, in coal we have embedded $3 billion of productivity gains. However, success should be measured by what we are delivering today and will deliver tomorrow. We are targeting another $600 million of productivity gains by the end of the 2017 financial year off of our already low cost base. This will be achieved through our continued strong focus on the five elements of productivity: equipment, supply, people, capital and marketing.

Our focus on equipment productivity continues to be sharpest on our bottlenecks. Our bottlenecks are currently roughly evenly split between wash plants and our stripping truck/shovel fleets. This is moving progressively to the wash plant as we improve truck productivity. At most of our coal operations the bottleneck will be at the wash plant next year. We are targeting average wash plant availability of 96 per cent, average utilisation of 95 per cent and annual operating hours of 8,000 hours. Year to date we have increased operating hours from 7,000 in FY15 to

7,400 annualised year to date, and performance in recent months has been closer to our 8,000 hours annualised target.

To date the bottleneck at several operations has been truck/shovel stripping and there is a wide range between our best and worst performing ultra-class truck fleets. But on average, year to date, we are achieving 4,900 hours which is an improvement on 4,500 in FY15. It is important to note that these figures exclude the times that the trucks are queuing, so they are conservative numbers. Rag and James have been very focused on lifting our truck performance. They reached out to both Iron Ore and Nickel West whose truck fleet is achieving 6,600 hours, to determine what best practices are for each leg of trucking operations. Individual operations within Coal have then been tasked with leading the deployment of those practices across the Coal assets. And we have seen performance in the past couple of months lift to 5,700 annualised hours on average with our best operation increasing to 6,600 hours.

There is lot of examples like this where we have the opportunity to improve performance through best practice replication within the region. The benefits the Coal assets can derive from replication of best practices from the other assets are substantial. Continuing on with the example of our dirt moving activity, our Coal assets move over twice as much material as our iron ore operations. And given this volume, each 10 per cent improvement in our cost of stripping equates to roughly $100m dollars improvement in cost, BHP Billiton share.

As we move more material and produce more, we need to deal with the same or fewer people and we are targeting a 30 per cent increase in people productivity over the next five years. Building a motivated and engaged workforce with the right culture and capability, enhancing our workforce diversity and improving industrial relations - which I will touch on later - continue to be key enablers to deliver sustained improvement in both safety and productivity.

So what is this consistent focus on productivity yielding in terms of cost outcomes? Moving on to slide 13. You can see here from the charts on the right the outcome on unit costs and margins of our productivity journey. Our Queensland Coal unit costs are down by more than 50 per cent since the 2012 financial year. They are down 14 per cent since last year and, half on half, they will be down by nine per cent. They will decline again in 2017 to $52 per tonne.

At New South Wales Energy Coal, unit costs have declined by 25 per cent since 2012 and will drop to $38 per tonne next year, down to 2010 levels. I would note that this year production is down and costs up at New South Wales Energy Coal and this is due to a combination of factors: wet weather, choices taken in the face of very low coal prices and individual pit economics, increased strip ratio, and work underway to set ourselves up for more consistent productivity in the coming years.

Productivity is going to be even more important at New South Wales Energy Coal in the coming years as the mine traverses a monocline structure. Progression through the monocline is characterised by increasing depth and substantial pit deepening, which combine to increase the strip ratio and increase truck cycle time. This will see costs increase but our intent is to mitigate this through even higher levels of productivity. We are also assessing the optimal operational configuration for this period. While the pit is deeper beyond the monocline, the strip ratio is consistent and, therefore, will support lower operating costs. It is important to know that in spite of needing to traverse the monocline, we expect that New South Wales Energy Coal will remain in the lowest quartile of the thermal coal cost curve.

As I said, we are not waiting for better market to deliver improved returns. We expect our effort in cost performance across our operations to drive a recovery in our 2017 EBITDA margins despite continued lower prices under consensus forecasts. And in the current environment, all of our operations remain cash positive.

This effort has also translated into the release of latent capacity. Moving on to slide 14. We now expect to deliver 42.5 million tonnes of metallurgical coal production this financial year. This is six per cent above initial guidance and comes despite the closure of Crinum and the convergence event at Broadmeadow during the period. This will increase to 44 million tonnes next year and to 46 million tonnes in the 2018 financial year, entirely driven by our focus on productivity.

New South Wales Energy Coal will deliver 17 million tonnes this year before increasing to 19 million tonnes next year and 21 million tonnes in 2018. This represents an aggregate eight per cent volume uplift from Queensland Coal and New South Wales Energy Coal between 2015 and 2018 without major capital expenditure. Our capital expenditure is predominantly minor and sustaining in nature, and the average level we expect to be able to maintain in coming years has almost halved since 2012 to US$6 per tonne at Queensland Coal and US$4 per tonne at New South Wales Energy Coal.

We have a low capital growth option at Caval Ridge where a small capital investment in mining fleet and an 11 kilometre conveyer belt can unlock a further four million tonnes per annum of low cost volume. And we can trigger this small investment when the time is right. Under both spot prices and consensus forecasts, these incremental metallurgical coal tonnes would generate high returns. We also retain longer term growth options in the Goonyella Complex Optimisation project and in Wards Well. Neither of these two projects is in our current five-year plan but they offer high return future growth options that can be triggered at an appropriate time.

Now, I note that in this business our industrial relations are often a topic of discussion. Moving on to slide 15. I am happy to report that in the past year we have successfully concluded enterprise agreement renewal for Caval Ridge, Poitrel, Daunia and Mt Arthur Coal. Discussions continue in respect of Broadmeadow.

And, of course, BMA is currently in the process of renegotiating the BMA Enterprise Agreement 2012 that covers employees at five operating Bowen Basin mines. The aim of this agreement is to ensure terms that reflect a need to be able to work with employees to rapidly innovate in order to maintain competitiveness. This will not only ensure that our assets generate more acceptable returns. but will increase certainty of employment even in tough markets. We are also seeking a separate agreement for Blackwater to reflect this mine's different geographic location, different product quality and different financial circumstances. We are only partway through this process, but I believe that our employees understand the very challenging times we're in. They have certainly heard the case for more flexibility, drive productivity and to be able to rapidly respond to the world around us.

So, in closing, let me close with a recap. We are very well-positioned to benefit from market dynamics which we believe will improve over time. We are differentiated by a simple portfolio of only the highest quality assets. We are well positioned to meet incremental demand or depleting supply. The position on the cost curve ensures our assets are resilient in all markets. The combination of the geographic focus and our operating model is supporting our ability to continue to improve both safety and productivity. We have seen a step change improvement in safety performance and in the past year we have also reduced Queensland costs by a further 14 per cent in US dollar terms, and we are achieving record production at six of our nine operations with less capital.

We will generate more free cash flow this year than at any other time in the past five years. There remains significant opportunity to improve further in terms of both safety and productivity, and our recent run rate on the drivers of productivity give us confidence that we are on track with our plans. We are targeting another $600 million of productivity gains by 2017 with absolute cost down by a further 16 per cent. This is not just a productivity story. We retain the ability to grow the business not only through productivity and the use of latent capacity but through growth options that can be exercised when the time is right.

Thank you for listening and I am now happy to take questions.

Questions and answers

OPERATOR: Thank you. Your first question, comes from the line of Paul Young from Deutsche Bank. Please ask your question.

PAUL YOUNG, DEUTSCHE BANK: Morning, gentlemen. Morning, everyone. Mike, when I review your met coal cost guidance at $52 a tonne the progress has been pretty solid but when I benchmark your operations versus other open pit mines with similar strip ratios I think your costs would be closer to getting to $45 a tonne. When I look at your unit costs in the second half of 15 they are about $58 a tonne. You just told us now you are increasing volumes by over 10 per cent over the next three years, strip ratios will be flat, diesel prices down, you are dropping your absolute costs by 15 per cent, so I am just wondering what's stopping you lowering your costs to $45 a tonne?

MIKE HENRY, BHP BILLITON: Okay. Thanks, Paul. Look, I will ask Rag to comment on this in a second. Without seeing the analysis that you've done, Paul, it is difficult to comment on the specific numbers. What I can say, though, is that costs in the second half of this year are markedly lower than costs in the first half of this financial year. We have given you updated guidance on that basis, and we expect costs to be further down next year. So I hope that gives you some confidence around the direction that we are moving in. And we do not intend to stop there. We will continue to push costs further, but I would have to look at the specific numbers that you have got to be able to comment on the $45 specifically. Rag, was there anything you wanted to add or James?

RAG UDD, BHP BILLITON: Yes. Probably a couple of things, Paul. This is Rag here. If you actually take a look at the costs breakdown from BMA or met coal assets you will see the major components actually sit with labour as a big component. Consumables is another big area. And those are two areas that we are specifically focussing on to reduce our costs longer term. We have found that quite a few innovative processes in terms of e-Auctions, low cost sourcing in terms of reducing component parts are a real focus for us. Along with labour we are actually working very closely with our work force to actually reduce our costs in those areas, and find more ways of becoming more productive.

MIKE HENRY, BHP BILLITON: Look, Paul, the other thing, perhaps it would be good to have a separate look at this in due course, I don't know if you've looked at yield or not, but you will find that yield can obviously differentiate or have an impact on product cost, and that then generally comes back to product quality. So we have got high quality hard coking coal that achieves a premium price relative to some who might have a slightly lower quality product.

PAUL YOUNG, DEUTSCHE BANK: Yes. Obviously, yield impacts Caval Ridge and Peak Downs more than the other mines. Just the simple maths, I am just trying to think about. It is really good you are giving us guidance for FY17, and I am just examining the scope for further reduction seeing you have just told us that you are lifting volumes by over 10 per cent and you're reducing your absolute costs by 15 per cent, yet you are only giving us cost guidance down 15 per cent.

MIKE HENRY, BHP BILLITON: Yes. Let us put it this way, Paul. We do not intend to stop there. We have had year-on-year lowering of costs and increase in production. One of the great things about productivity is it is a never-ending journey, and I am confident that we will continue to be able to drive, for like activity, we will be able to continue to drive productivity further.

PAUL YOUNG, DEUTSCHE BANK: Right. Okay. Thanks. I will pass it over.

OPERATOR: The next question comes from the line of Lyndon Fagan from JP Morgan. The line is open, please ask your question.

LYNDON FAGAN, JP MORGAN: Thanks very much. Just a question on the met coal supply and demand outlook on page 7. Just wondering if your base case for Chinese steel production is to peak between 935 and 985 in the mid 2020s. Just wondering if that is one of the underlying assumptions for that chart.

MIKE HENRY, BHP BILLITON: So, Lyndon, yes, indeed. In simple terms, it is an underlying assumption for the orange curve that you see on that chart but, as we have highlighted there, we do not think about things in terms of single point outcomes. We do have a range of potential outcomes. One of the things that would impact on that range is whether you're at 935 or 985, but there is other things that would impact on the range as well.

OPERATOR: Your next question comes from the line of Hayden Bairstow from Macquarie. Please ask your question.

HAYDEN BAIRSTOW, MACQUARIE: Thanks, guys. Just sort of wondering on the development projects you have got in here and the increasing met coal production. You know, are you comfortable that there is room in the market for those tonnes, or are you actually assuming some displacement of some of the high cost production elsewhere? And, obviously, you have just sold the Indonesian met coal assets, so are they assumed to be no increase in production from Adaro now they have got their hands on those assets? I mean, that is what I just want to understand the assumptions you are making on where the market share is going to be taken for these additional tonnes.

MIKE HENRY, BHP BILLITON: Okay. Well, thanks, Hayden. A combination of elements of what you have just asked. In terms of our overall outlook for met coal demand, as you can see from the chart on slide 7, we do expect it is going to increase but we recognised that there is a range of potential outcomes around the mid-point. Now, the way that we think about productivity is and we have to differentiate here between productivity and growth projects. So in the case of growth projects, that is a much bigger decision for us.

When we think about productivity, the alternative choice of not driving productivity hard - so leaving ourselves with higher costs and less production - to effectively accommodate higher cost supply would not be a sensible outcome from our perspective, so we want to be using the assets that we already have capital invested in for everything that we want to be making maximum use of those assets. If that means that we end up displacing some higher cost supply, then that is the outcome. But our mid case for you is that there is room being created by ongoing increases in demand. Now, when we come to the IndoMet resource, that's something where it certainly did not compete for

capital with other projects available to the BHP Billiton portfolio, but as to what Adaro ends up doing with it, that is going to be something that Adaro obviously needs to make a decision on.

RAG UDD, BHP BILLITON: Mike, can I just add a bit more too in terms of the Caval Ridge Southern Circuit project. It is quite important to understand just how attractive that investment is. The reality is that we have built Caval Ridge with a preparation plant facility that is capable of accommodating an additional four million tonnes. So in order for us to bring that investment forward it is actually a very low capital cost option that is worth exploring. That said, we understand that we need to assess the market and make a decision of when and if the appropriate time is to bring that on.

OPERATOR: As a reminder, ladies and gentlemen, if you would like to ask a question please press star 1 on your telephone keypad now and wait for your name to be announced. Your next question comes from the line of Paul McTaggart from Credit Suisse. Please ask your question.

PAUL McTAGGART, CREDIT SUISSE: Hi, gentlemen. Two questions. In light of Samarco, I just wanted to ask Cerrejón, how your thinking is about the management structure there and, you know, when it might change, if at all. And, on a second note, I just want to ask about Mt Arthur. I mean, it is low cost because it does not wash coal. How much of that product, that kind of high ash product is getting sold into China, and do you think there will come a point - a time where you need to think about washing Mt Arthur coal?

MIKE HENRY, BHP BILLITON: Okay. Well, there is some coal that is washed at Mt Arthur, Paul, but let me - why don't I ask James to respond to both of these given they both sit within his portfolio. Well, one previously sat within James' portfolio.

JAMES PALMER, BHP BILLITON: Yes, great. Thanks, Mike. I will take the Cerrejón question first. So we were certainly engaged with our joint venture partners prior to Samarco, around the best way to manage that. Obviously post Samarco, once we understand all of the lessons out of that we will certainly be having a look. But it has been one of the good things with the recent change to the Global Functions and the regional mineralised functions - so when we have a look at Cerrejón moving across to Minerals America, they are able to just have boots on the ground much more rapidly than we would have been able to previously, so we will have a look at that.

I think, on Mt Arthur, we certainly do wash a substantial amount of coal there, and the qualities are determined when we can bypass the plant we do, but the majority of coal is actually washed. As for how much is landing in China, we certainly do land some in China, but it is not the basis of the model for Mt Arthur. We are achieving good premiums because of the high-quality nature of the energy coal, and we will continue washing the seams that require it to meet the ash content.

OPERATOR: Your next question comes from the line of Dylan Kelly from CLSA. Please ask your question. It looks as though Dylan has just withdrawn his question, so we will move onto the next questioner. And we have Brendan Fitzpatrick from Morgan Stanley. Please ask your question.

BRENDAN FITZPATRICK, MORGAN STANLEY: Thanks. Hello, everyone. Looking at the cost commentary around the thermal coal assets and the expectation of geological constraints and the monocline coming up post-fiscal year 17, it sounded like that will be a period of high unit costs and then they improve again, but when they improve do they improve below the current level, or do they settle out at a higher level than we see currently, but below the worst of the situations through the monocline. Or is it too early to clarify?

MIKE HENRY, BHP BILLITON: Well, look, I do not think we want to give a specific number, but what we can say is that the monocline is a somewhat temporary phenomenon. So you go through the transition, or the traverse of the monocline, but then you move into a steadier state strip ratio, which will allow us to have steadier state and lower costs. But, James, was there anything you wanted to add?

JAMES PALMER, BHP BILLITON: I think exactly as you said, Mike. In Queensland, we are used to heading down that's the nature of the resource. Mt Arthur has been in a period of being quite flat. We are moving through the monocline structure, and then again it becomes flat as well as additional seams coming on. So the strip ratio, while it increases as we go through the monocline, that actually ends up being very stable. The biggest improvement we are going to make in unit costs is all about productivity, and again replicating the work that we have been doing in Queensland. One of the examples there on truck hours, we are achieving 3,700 at Mt Arthur; over 6,000 in some of our Queensland operations. You plug those into the model, it is very compelling.

MIKE HENRY, BHP BILLITON: James, I wonder if it would not be worthwhile - once we get through the monocline, the range of strip ratio, or the postal code that we'll be in in terms of strip ratio then.

JAMES PALMER, BHP BILLITON: Yes. So as we have a look across the five-year plan – so we have been in the range of five to six, as far as strip ratio goes. We do move up, but not as far as seven, and then it stabilises in the five-year plan around that, between six and seven. So it is not a step change increase in the strip ratio, but as we move through the monocline, some of the pits that were previously economic are no longer economic, so we just approach the monocline from straightening out the pits. A few other mining aspects with in situ bridges, we are very confident that we can achieve the numbers we have got here and continue to drive the costs, as Mike said, to the lowest quartile.

OPERATOR: As a reminder, ladies and gentlemen, if you wish to ask a question please press star one on your telephone keypad now and wait for your name to be announced. Your next question comes from the line of Owen Birrell from Goldman Sachs. Please ask your question.

OWEN BIRRELL, GOLDMAN SACHS: Hi, Mike. Just a quick question on the logistics cost. I see that port and rail is roughly about 10 per cent of your total costs for both Queensland and in New South Wales. I am just wondering if there is any room to move on both your port and rail costs. Do you achieve any unit cost benefit for increasing your volumes on the port and rail. And just secondly, you have got four train sets running at full capacity at the moment. I'm just wondering if there is any opportunity or aspiration to increase that capability under your own control.

MIKE HENRY, BHP BILLITON: So, Owen, the one thing we can say with a high degree of confidence is our port and rail costs are already at, kind of at the low end of the scale. So we are in relative terms, we have got very low port and rail costs and this is underpinned by the fact that we have an integrated supply chain. And, secondly, we – as you have highlighted, we own our own rail consist and that allows us to reap the benefits of being able to run those very productively, and of course it also creates a bit of competition in the market which allows us to achieve lower rates than we otherwise would have. Going forward, if we increase volumes, will that allow us to achieve even lower costs? Certainly in port, yes, and in terms of our own rail operations, also yes. But, Rag, maybe you can comment, coming from your perspective as well. You own both port and rail.

RAG UDD, BHP BILLITON: Yes. Look, I certainly see further possibility in terms of reducing costs in this area. A couple of reasons and things that differentiate us, one, the port facility at Hay Point we own. That differentiates us from our competitors, and the ability to get more for the same, or less, through that facility is something we are exploring actively and I have a high degree of confidence as we work through that. In terms of our BMA rail investment, that's been a sensational investment. What we originally thought we would get through in terms of the tonnage through that operation we've been able to bank on the upside of in the neighbourhood of four or five million tonnes. We continue to look for additional ways to actually get more through that facility. And, to be honest with you, if we can compete actively on that we will continue to look at ways to expand that.

OPERATOR: Your next question comes from the line of Clarke Wilkins from Citi. Please ask your question.

CLARKE WILKINS, CITI: Hi. Yes, just a quick – sorry – just a question on the capex. The $6 a tonne for Queensland and $4 a tonne for New South Wales, you know, beyond 2021 is there anything that structurally changes that. And, you know, how much does that, I suppose, benefit from the cost reduction we've seen, in terms of the cyclical compression in costs? And, what is a normalised number that you've used in the past? And just – sorry – may I have a second one – in terms of that Caval Ridge Southern Circuit, that additional four million tonnes, is that included in that wrap-up of the 46 million tonnes in fiscal year '18, or is that in addition to that volume?

MIKE HENRY, BHP BILLITON: I am sorry, Clarke. Can you just repeat the second part of your question, please?

CLARKE WILKINS, CITI: Sorry, in terms of the volumes for the Caval Ridge Southern Circuit, the four million tonnes, unlocking that four million tonnes, is that included in the 46 million tonnes by FY18, or is that in addition to that?

MIKE HENRY, BHP BILLITON: That will be in addition to the FY18 tonnes. Sorry, Rag. You looked like you were going to say something to that.

RAG UDD, BHP BILLITON: Yes. Just a couple of things. You started off with a question on capital. The $6 a tonne in terms of what has been put forward for Queensland capital is a sustainable long term number we have benchmarked that off ,of history, and also in terms of our asset replacement value we're actually quite comfortable that that's an appropriate number. In terms of Caval Ridge Southern Circuit, it is not included in the FY18 tonnes. What I would add there is it is an option that we're developing at this point. We do think we've got some short-term ability to actually bring additional tonnes through that Caval plant, some of which is built into the FY18 tonnages,

but that's actually not the total component of Caval Ridge Southern Circuit, which comprises basically of a conveyor belt coming off Peak Downs.

OPERATOR: Your next question comes from the line of Dylan Kelly from CLSA. Please ask your question.

DYLAN KELLY, CLSA: Good morning, everyone. Just interested in the changes in the yields of the different preparation plants and how they are working, and in terms of lifting your production outlook and your lowering of the costs in the future. We can see historically, or particularly in the last few years, the yields have gone from around 50 per cent to around 60 per cent. How much of the future volume uplift that you are seeing over the next three years is dependent upon further increases or changes in yields, and how will that change or alter the current product mix that you have got. Are you expecting an increase in the number of products that you are trying to sell at the moment? Is that likely to change as a result of higher Caval Ridge production coming through? Could you give us a bit more insight as to how that is going to change?

MIKE HENRY, BHP BILLITON: Okay. So in terms of number of products, it varies a little bit year on year. The general principle is that the fewer products you have to handle at the port, the more efficient your port operations are. Now, where there are high-value opportunities to blend products and achieve a higher aggregate price of course we will pursue that. But the plans that we have spoken about are not predicated, fundamentally, upon more product blending or upon yield. I think yields, certainly in recent times, have been relatively constant. Maybe – I mean, swings and roundabouts. James or Rag, are you expecting any increase in the coming years?

JAMES PALMER, BHP BILLITON: I think, Mike, as you said, the yields, they have been consistent, but improving, and I think it is just the same as we are approaching our continuous improvements across the board. People are continuing to find ways of increasing yields, but we're talking about per cents, not fives or tens of per cent.

RAG UDD, BHP BILLITON: It is a good question, in terms of, if you can actually find a way to lift yield or grade that is additional tonnes you can sell to the market. Obviously the flipside of that is if you compromise your quality. That is the downside to it. For BMA, what we are seeing is that the yield is relatively constant. This is an area where you are ongoing looking to optimise, including different ways of bypassing products or product combination, as Mike highlighted, to improve quality and product numbers so that we can actually improve throughput through Hay Point as well.

OPERATOR: As a final reminder, ladies and gentlemen, if you wish to ask a question, please press star 1 on your telephone keypad now and wait for your name to be announced. Your next question comes from the line of Paul Young from Deutsche Bank. Please ask your question.

PAUL YOUNG, DEUTSCHE BANK: Good morning again, gentlemen. My question is on portfolio simplification you have touched on a little bit, portfolio enhancement, I guess. A couple of questions. Have the BMC asset - for me they appear a bit small in terms of scale - have they earned the right to remain in the portfolio? I am talking obviously South Walker Creek and Poitrel. And a second question too just as far as adding assets to this portfolio and I am sure you will make a comment on it - it all comes down to value, but there is a number of assets which are up for sale in the region of around Goonyella and Caval Ridge at the moment that have significant synergies. Do you actually have the ability to actually add assets to this portfolio? Thank you.

MIKE HENRY, BHP BILLITON: Let me speak firstly to your comments, Paul, on the BMC assets. Yes, they are smaller scale than our other assets, but they have actually done very, very well, in terms of driving productivity over recent years and, in fact, some of our most innovative approaches around productivity have come out of BMC and they have been of benefit to the broader coal business. And I will just repeat what I said earlier, all of our coal operations are currently operating cash positive, even in very trying times.

Now, in terms of your second question. I am obviously not going to comment on any specific opportunities, but let me take you back to what I said earlier in the presentation. We are quite proud of how we have managed to reshape the portfolio to be a much tighter geographic concentration of only the best of the best assets. We are more aligned to strategy now than at any point in recent memory. The focus that this has unlocked has allowed us to continue to derive productivity for cost down, production up. Even as unlocking more productivity becomes more difficult.

And our operations in this portfolio are working even better together in terms of how they go about replicating practices between them and the synergies that they're unable to unlock between them. Anything that we would do going forward in terms of small scale growth would need to be consistent with the success of the past few years. The assets that we would acquire would have to fit with strategy in terms of large, long-life, low cost and

expandable. And they would need to be resilient to all markets, and that resilience is going to come from underlying asset quality and, as you highlighted, would come from the price that you're paying for assets.

OPERATOR: Your next question comes from the line of Brenton Saunders from BT Investment Management. Please ask your question.

BRENTON SAUNDERS, BT INVESTMENT MANAGEMENT: Morning, gents. Mike, just an apology if you have to recover any ground, but I would not mind just to comment at a very simplified answer at a higher level. If I look at your results for the six months to December relative to the guidance that you have just provided, there is a big difference, you know, so there's quite a big leap of faith of following it down. So what are the main components of that, that get you from in a way you were to where you're proposing to be?

MIKE HENRY, BHP BILLITON: Well, given that we are now sitting on June 21st, I hope that the leap of faith is not too great for the second half. Yes, it is a big improvement. Where is that big improvement coming from? All aspects of the business. I flagged earlier some of what we have been able to achieve in recent months on wash plant productivity, on truck productivity. Between James, Rag and our procurement function as well, they have been driving very hard on procurement. So, overall, we have seen cost come down through all parts of our value chain and we are seeing production higher with the same equipment.

And I will remind everybody that in the first half, we had some production from the Crinum underground mine, which we do not have in the second half of the financial year, so I think the team has done a very good job in terms of making more with less. Now, there were some unusual items in the first half like a royalty charge, or a back charge effectively in Queensland, that impacted on costs in that half which we do not have in the second half as well.

RAG UDD, BHP BILLITON: I suppose just to add a bit of colour here as well. Mike mentioned in the speech about doing 5,700 hours in May and June which was a significant step up from what we have seen in the past. This actually speaks to the power of the operating model that Mike referenced earlier on. So, you know, where is the majority of the uplift coming from? It's from replicating best practice across Nickel West and Iron Ore, and bringing that into coal and basically stepping it up, and we're actually being dogmatic about how we apply that. So we have established a playbook in terms of, this is best practice in these areas and the question is no longer about should you adopt it; it is you will adopt it and then we will replicate that across our sites. So we are seeing significant gains on that and really, I think speaks to the power of this new model moving forward.

JAMES PALMER BHP BILLITON: I will probably just echo some of Rag's comments there, that the sort of benchmarking you can do internally and ability to replicate is much stronger than that which you can do externally, because you can really get access to each of the processes and even sub-processes within that, and then, as Rag said, playbook, roll it out so we can do it at a much accelerated pace than we could previously.

OPERATOR: Your next question comes from the line of Paul McTaggart from Credit Suisse. Please ask the question.

PAUL McTAGGART, CREDIT SUISSE: Just a quick follow up. In your thinking about demand for metallurgical coal now, one of the things maybe we got wrong years ago is this expectation that, all the expansion in China - a big chunk of it would be bigger blast furnaces based around the coast. But a lot of it ended up being in small blast furnaces that were not on the coast. How are you thinking in going forward? Are you thinking China is going to be more rational in the way it kind of expands its steel industry? What underpins your longer term forecasts?

MIKE HENRY, BHP BILLITON: Well, Paul, first of all, the long-term forecast isn't predicated upon ongoing growth in China. Let me be very clear. We expect that imports into China will decline over time, but they will continue to import some met coal along the coast. Growth for met coal is primarily coming out of other developing economies and it's the simple fact of as economies develop, they need steel. We haven't yet seen any major economy develop without steel and most of the developing economies do not have indigenous resources of metallurgical coal, so they're going to have to import. So unlike iron ore, for example, coking coal is not primarily a Chinese story.

OPERATOR: Your next question comes from the line of Clarke Wilkins from Citi. Please ask the question.

CLARKE WILKINS, CITI: Just a follow up to the question earlier on capex. The $6 a tonne, does that include the expansion in Queensland from 42.5 million tonnes up to the 46 million tonnes or is there any additional capital that needs to be spent on top of that sustaining capex to achieve that volume growth?

RAG UDD, BHP BILLITON: That doesn't include any capex growth required to increase tonnes. But I should note though that those projects that we were basically talking about in terms of Caval Ridge Southern Circuit is a very low cost option that will not markedly impact that much one way or the other.

OPERATOR: Your next question comes from the line of Peter Harris from AMP Capital. Please ask your question.

PETER HARRIS, AMP CAPITAL: Thank you for the presentation. If productivity is going to be the key for future cost savings, what is the options for automation for rail and truck fleet and any road blocks to potential increasing automation. That is probably what the CFMEU's view on automation.

MIKE HENRY, BHP BILLITON: Rag has just announced the IROC, or Integrated Remote Operating Centre, that we are going to stand up in Coal, so this is akin to the operation that we have in our Iron Ore operations back west. Rag, maybe you can talk a little bit about that and other automation opportunities in the business.

RAG UDD, BHP BILLITON: We did announce yesterday within our organisation that the Integrated Remote Operating Centre would be established in our new facility in Brisbane. We are basically copying and pasting what we are seeing in Western Australia Iron Ore, taking the learning there from the last three or four years and bringing that into our business. In terms of other areas of automation, probably two key areas that I would flag, one is around our longwall experience in terms of top coal caving. We've been doing a lot of work in terms of automating our longwall there. And our seam recovery is coming basically from the coal seam. It has increased from about 55 to 65 per cent up to about 90 per cent based on some of the automation processes we put in place there.

We are also doing a fair bit of work with UAVs and drones. They are having some significant impact in terms of understanding the facilities and maintaining it going forward. In terms of trucks, we actively follow what is happening in Western Australia Iron Ore. We are aware there is an automation trial in place there. For our standpoint, we will take a look at how that trial progresses. We will keep a close eye on it, and if that trial is proven ready, that is something we will be willingly to adopt.

MIKE HENRY, BHP BILLITON: Well James?

JAMES PALMER, BHP BILLITON: Yes. I was just going to add to Rag's comment on drones. So the drone work the team are doing is really exciting. When you get there on the ground and see some of the work that used to be done by surveyors having to drive out to the site - wander around all over the site, actually stopping shovels, trucks, to do that. What can now be done with a UAV flying across with much better resolution, it is really exciting. And then with some of the mini droves there, the work the team are doing on power inspections, passive integrity inspections, again not having to put people in the line of fire, so safety improvements and productivity improvements. Each time we find a new way of using these drones, our teams find ten more.

OPERATOR: Our final question comes from the line of Lyndon Fagan from JP Morgan. Please ask your question.

LYNDON FAGAN, JP MORGAN: Thanks. Just a follow up on Caval Ridge expansion, just wondering if we could talk about that a bit more. Just wondering when it gets sanctioned, how quickly can you get the first production from that? And also, you mentioned that the project looks good at both spot and consensus prices. What is preventing you from pressing the button on it? Is it that you would swamp the market with met coal given the expanded production from the productivity gains anyway? So, just a bit more colour there, thanks.

RAG UDD, BHP BILLITON: In terms of the specifics of the project itself, I understand that in terms of logistics, train load off facilities and preparation plant, is already completed. Basically it is part of the coverage of Southern Circuit. We have a clear path in our plant that is capable of actually accommodating additional tonnage. So where these additional tonnes come from, is a conveyer belt that is about 11 kilometres long linking Peak Downs to Caval Ridge and bringing coal from Peak Downs, and delivering that over to the Caval Ridge preparation plant.

This is an exceptionally low cost option for us because the coal seams that we are talking about washing here, would not get washed through Peak Downs preparation plant and they would typically be wasted. So this is actually a resource that we can bring from active pit over to Caval Ridge and beef up. So what is preventing that from actually going forward is a couple of things. One, obviously we go through our study processes and that is something that we are actively going through the definition phase of that process to understand when it is ready. And we will take that decision when and if it is appropriate to, or for them to make a decision about whether we bring those additional tonnes into the market.

MIKE HENRY, BHP BILLITON: Well Lyndon, the only other point I would make is, we are not – so I differentiated earlier between productivity and small brownfield expansions versus major capital growth. Caval Ridge Southern Circuit fits, in our minds, into the prior category, not into the latter. We do not see Caval Ridge Southern Circuit in the same light as the Goonyella Complex Optimisation Project or Wards Well. And we are not holding it back for views of the market. We're holding it back for, as Rag said, it is simply a function of where it is at currently in our planning cycle.

And the team wants to stay focused on the opportunities that lie in fundamental productivity while they continue to work Caval Ridge Southern Circuit in the background. So we do not want to pin all of our business improvements in return on capital projects like Caval Ridge Southern Circuit. Focus first and foremost on getting more of what we have. And then in due course, once we have finished the planning around Caval Ridge South Circuit, assuming that the economics still make sense, we bring that forward pretty quickly. And the lead time between sanction and first production is very short.

ADRIAN WOOD, BHP BILLITON: It is Adrian Wood here again. I think that is our time up for this call, but thanks everybody for your time today. We are going to make a transcript of the call available on the BHP Billiton website later today. But if you do have any further questions after this briefing, please do not hesitate to contact a member of the Investor Relations team. I believe we are going to be catching up with a number of you over the next few days, anyway. But that concludes today's briefing. Thank you.