

# BHP Billiton plc – Investor Relations

## Steelmaking Materials Briefing

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## **Introduction and Markets**

**Marcus Randolph**

**Chief Executive Ferrous and Coal, BHP Billiton**

### **I. Preamble**

Good morning London and good afternoon Sydney and welcome to BHP Billiton's Steelmaking Materials Briefing. My name is Marcus Randolph. I'm the Group Chief Executive for the Ferrous and Coal Group. The Coal CSG, which we will cover today, will be specifically directed toward the metallurgical coal, although that CSG also includes our energy coal business.

### **II. Disclaimer**

Now the disclosure statement. I think these are... you've probably become used to these. I'm sure you've all read this one closely. We're onto three pages.

### **III. Today's Agenda**

Um, as far as an introduction, let me introduce the team. Er, joining us from Sydney, we have Ian Ashby, who's President of our Iron Ore business; Dave Murray, the President of our Metallurgical Coal business; here with us in London, on my far right, is Peter Beaven, President of our Manganese business; and, of course, our CEO, Marius Kloppers. Today, um, my role in this presentation, I'm going to give you a general overview and introduction, and I'll talk about the supply and demand situation for iron ore, metallurgical coal and manganese, and then we'll hand it over to each of the Presidents to talk specifically about their businesses.

### **IV. Introduction**

#### **1. Iron Ore, Metallurgical Coal and Manganese Are Integral Components in Blast Furnace Production**

The opening... the opening for this is really an introduction about... about steelmaking itself because I think this is pretty fundamental to understand what we're going to talk about today. Now, steelmaking basically comes through two processes: one is a blast furnace/basic oxygen furnace mix; the other is an electric arc furnace. The one that's particularly relevant to the discussion today is a blast... is the blast furnace process, which is about two thirds of the steelmaking. Electric arc furnace uses scrap so it doesn't take the iron ore and the metallurgical inputs that the blast furnace does. Now, noted on the bottom right hand corner of this slide is the typical inputs into the blast furnace process, so we've noted, for example, that we'll use about 1,600kg of iron ore to make a tonne of steel, about 600kg of metallurgical coal and about 7kg of manganese.

The right hand column on that... on that table on the bottom shows the cost per tonne of hot-rolled coil, which is the primary steel output product, based on those input prices. Now, I'll note all the way through this we've assumed an iron ore price increase of this year we've put into these numbers so we'd have something to work with. We've put in a 71% increase. You would have seen yesterday's announcement about an agreement between Rio Tinto and Baosteel. As we go through these numbers today, in order to give you some equalisation, you've got a 71% number that's embedded in these, but you can make the adjustments, I think, in your mind.

Now, the other reason to talk about this is the blast furnace process itself is about 84% of China's steel actually comes from the blast steel... er, the blast furnace process, and it... it's been a process that has been in a process of evolution. So, as it's evolved, it... it started with small furnaces, and these would be 100 to, say, 300 cubic metres. They're small, little nasty things. I mean, you put stuff in, they're energy-inefficient, the emissions are a problem and, as the China steel industry has grown – and we'll talk about that a bit today – the requirement has been to steadily shift from smaller furnaces to larger ones and, as that's happened, it's brought along with it the need for higher quality raw material inputs.

So, for example, the iron ore that's going in today is largely similar and largely consistent to some degree around the world when it arrives at the blast furnace. The metallurgical coal, though, differs substantially and we'll talk about that today. The hard coking coal, which is strong enough to stand up to the strong height of a large furnace and also doesn't substantially expand in a large furnace, is increasingly in demand as technology shifts from smaller furnaces into larger ones.

The other point, and probably many of you are wondering, you know, 'What in the world do you use manganese for?' The iron ore and the coking coal go into the blast furnace on the front end. The pig iron comes out of the blast furnace and goes into the basic oxygen furnace. Manganese is injected at that point and it's used to deoxidise, remove sulphur and as a strengthening/hardening agent.

## **2. Blast Furnace Steel Production is Continuing to Increase**

Talking a little bit about... about blast furnace production itself, we've seen a steady upward trend in the percent of steel that comes from blast furnaces, um, and this graph's actually showing what's happened, and what you see is an inflection point about year 2000. That inflection point is the China story. So we had... we had... You know, China has been chugging along with, you know, with GDP growth of around 10% or maybe a little more some years, for about 30 years, but starting in around 2000, it got big enough that it started to make a difference, and that inflection point is really when China started to take off, so you saw actual output from blast furnace go from about 1% a year growth to about 8.4.

The other thing that happened is, when production takes a rapid step-up, there's not the scrap in the process to feed into it, so you see increased demand for pig iron and metallurgical coal because the blast furnace route takes the raw material input rather than being dependent on scrap.

### 3. BHP Billiton's Businesses are Leaders in Their Own Right

Talking about our businesses its... its... itself, now, again, I'll refer to this graph and we... we... we've used that nominal number of 71% in order to equalise this, but what you're looking at on this graph is the relative size of our carbon steel materials business relative to the other players out there. So, on that graph, yellow or, I'm sorry, the orange colour is iron ore, the blue colour is coking coal and kind of the greenish tinted colour is manganese. What you see on that is that our... our coking coal business is by far the largest seaborne producer in the world, our manganese ore business is the largest business in the world, and we're number three in seaborne iron ore.

I think it surprises some people that actually realise that, with the... with the latest round of prices, our metallurgical coal production is actually larger than our iron ore production. The second is that all three of those businesses are largely Australian-based. So as you think about what do you want out of your business when Asia is your market and China is producing four times more steel than anywhere else, you are substantially location-advantaged from an Australian production source, which is why a lot of our production being Australian and Bowen Basin in an Australian metallurgical coal and our single best manganese mine in Australia is a substantial advantage for us.

### 4. Three Large, Low Cost, High Quality and Expandable Businesses

There are three common characteristics between these businesses. This is, again, iron ore, metallurgical coal and manganese: one, the location advantage that I just referred to; second, these are all long-lived, low cost and expandable assets. In other words, as we talk about BHP Billiton's strategy, these assets are at the heart of it. This is the core of BHP Billiton that we're addressing today; and third, the Australian... largely Australian location for these three sources gives us, er, gives us political risk... um, low political risk uncertainty.

Now, I will give you the highlights of the business – I did mention that the CSG Presidents are going to be talking about the businesses... their own businesses, but the quick highlights are:

- Iron Ore, in seven years, we'll be tripling our production and Ian Ashby will be walking you through that today. I think the sense you'll take away from it is those plants are substantially advancing. We are on track, on budget, on schedule and proceeding down that path. Second, the great location: I mean, when you're dealing with a bulk product and you're primary market is Asia, it's a great ... it's a great advantage to be shipping out of Western Australia.
- Second, to Metallurgical Coal, we're quality-advantaged. You know, I... I opened in the beginning of this presentation by mentioning that we're seeing a shift toward larger furnaces and a... and a requirement for stronger coals. 80% of our metallurgical coal is hard coking coal. We are able to produce – and are... and are unique in this – pretty well the full suite of blending requirements that our customers require across our metallurgical coal product offering. The third... the third advantage that... that happens in metallurgical coal, I mean, and probably more so to the Australian audience, but most of you would have seen photographs in the newspapers or on the media of the ships queued off the eastern core... off the eastern coast of Australia. We have a situation now where the metallurgical coal industry – and the coal industry in Australia generally – is constrained by availability of ports. We ship 70% of our metallurgical coal through our own port, Hay Point, located on the eastern seaboard.

- Um, we will talk a little bit about Manganese. Now, I'm aware that the overall knowledge of the audience to manganese is probably lower than iron ore and... and coking coal, so we're... we will... we'll go a bit more into industry structure on that one, but I think the message that you should take away from this is, as you've seen the big run-up in manganese prices recently, that's driven by the high quality product that we have. So it's a story that says that the demand for the higher quality end of the product, as in coking coal, is very strong in manganese and it's resulted in abnormally high price increases.

## **5. One Coordinated Business Unit**

Talk a little bit about how we operate. We operate... we call them CSGs – that stands for customer sector groups. The basic principle of our business is that we create standalone business groups that... that... interface with their customers. We bundled all the carbon steel materials businesses together so that we would present one face to the customer, one view of the steel industry and one risk book, but our CSGs operate as standalone businesses. Their purpose is long-term value creation. It's not short-term profits; it's long-term value creation.

Now, they do have some other criteria that they have to operate under and the ... the first of those is what we call zero harm, and that encompasses our safety, environmental and our other objectives, but basically says that long-term value creation, if you don't do it in a safe way, you don't... you... you... you haven't succeeded. We also have targets around net present value, costs, volume and growth. The purpose of my office is really to oversee the strategy, investment and approval of the key objectives for those businesses; it's to coach and mentor the business presidents; and I'm measured against BHP Billiton's CSG and CSG leadership performance but I don't have any staff. My only staff is one PA.

Now, Marketing: you'll notice Marketing has a dotted line on that slide. We operate under a single marketing model. However, all of carbon steel is bundled together under Nelson Silva. Nelson's here in the front row today. Um, Nelson is a dotted-line report to me and is part of the... the single Marketing entity, but... but Nelson oversees all of the Carbon Steel Materials group.

## **6. Marketing Reflects Customer Requirements**

Now, the old model for marketing – and this has had a bit of play so I won't belabour it – but the old model for marketing and mining was we... we produced a product that's sitting on a dock and we want somebody to buy it. We've switched this model aft... shortly after the BHP Billiton merger but it's particularly relevant in carbon steel materials because we don't produce, in general, a screen-traded product. We don't have a financial customer to buy. We need to lock in volume contracts in order to continue to grow, which makes your marketing operation critical to the success of the business. So, under our model we run, with a single face to the customer, which is especially key in Asia, where relationships are important, we offer pricing options so we... you can do current pricing, future pricing, on freight, you can do it on products. We take a single book of carbon steel materials, a single book for risk, and a single IT infrastructure that connects mine through transport through delivery to the customer.

We generally try to sell delivered rather than FOB; in other words, our strategy is that we can more efficiently book shipping. We're such a large shipping customer we can generally contract more efficient, we can load more efficient, we can manage our demurrage, so we try to have a substantial percentage of our sales CIF. Now, as we talk about our marketing objective, the word that I used in this slide is we try to delight our customer. Effectively, we try to delight our customer in everything around meeting all of our commitments, exceeding customer performance expectations, and to do so with the market price, and we'll talk a little bit about this market price as we walk through the presentation.

## **7. Safety Performance Demonstrates Operational Control**

I did mention safety and said that the first responsibility of everyone in man... of every of our managers is to deliver a safe... is to deliver a, er, safe working environment. We haven't succeeded as a company if we create value but our employees don't expect to go home every night having successfully and safely worked through their working day.

The second indication of safety is: is your operation in control? In other words, safety is... is very procedure-driven and, if people can't follow procedures around safety, you have to ask yourself: is that business really in control? So I'm delighted, as I show you this graph, to show you three businesses that have steadily improving safety performance. What you see here is three lines, representing the total recorded in... incident frequency rate for iron ore, metallurgical coal and manganese, and what you see is all three steadily declining. Your takeaway from this should be (1) we run a safe operation and highly value safety but, second, our operations are in control.

## **V. Steelmaking**

### **1. Steel is an Essential Input as Nations Industrialise and Urbanise**

I'm going to move in this presentation to supply and demand for steelmaking raw materials. This is a graph that's been out there a while. Um, as you look at it, what it's plotting is... is steel consumption per capita on the y axis and GDP per capita on the x axis. And... and what... what you tend to see is, as countries... as countries start to industrialise, they get steady increases and rapid increases in their consumption per capita, which starts to level out as the GDP reaches certain levels.

So... so, plotted on this graph, you see a couple of lines that are moving off to the right hand side. Those lines are Germany, the US and Japan, which are largely domestic, and they levelled off at about 600kg per capita. So, continued increases in GDP has not resulted in continued growth in steel demand in the corresponding percentage. Korea and Taiwan are the steeper lines, where you see that the lines have continued to go up, and that's actually because these are predominantly export markets. So they're up in the area of 100kg... 1,000kg per capita.

Now, the... the two little lines in the lower left, the orange line, which is at about 250, is China. You can see the line is rising rapidly and, in fact, in a couple of the major cities – Beijing and Shanghai – you'd see consumption of steel that's approaching industrialised country. But if you look at the rest of China, it is not. That line is continuing to accelerate. You would expect that that line will stay steep and, as it approaches somewhere between 600 and 1,000, it's going to start to level out. You can barely see it on the slide but, way down on the left, there's some yellow colours and that's India, and the logical expectation is that India's going to follow that same trajectory.

Now, the other comment about this, and I think the one we'll probably cover a bit more later in the presentation: what does this mean for the US? You know, what does a slowdown mean on this? And the reality is that, you know, that graph is built around the industrialisation of China, the industrialisation of India: 2.5 billion people that are seeking to have a better way of life. So as you actually put that against what's happening in the US and the fact that their per capita consumption is relatively flat, to a large degree – not completely, but to a large degree – we're insulated from the slowdown in the US in these businesses.

## **2. China's Urban Population is On Track to Reach One Billion**

I talked a bit about the trend toward urbanisation. There's a lot of information on this but let me give you a statistic. Europe has 35 cities that have a population of more than a million. China today has 117; we're expecting that, by 2025, they're going to have 221. Every one of those cities is looking for major roads, new apartments, mass transit systems, railroads, opera houses, football stadiums. Every one of those things is a major consumer of steel. So, as you walk through this, the story that we're actually telling you is about that 2.5 billion people between India and China and others in other parts of the world that have actually decided they would like to have a wealthier way of life. As they pursue that, demand for our... our raw material products is high. So the underpinning for all of this is that process of urbanisation of those... that 2.5 billion people.

## **3. China is the World's Largest Steel Producer**

You see that as it's reflected in this slide, which shows China's position as the world's largest steel producer. I've got a little quiz that I play with people and it... and it... and it sort of puts it all in perspective a bit. It's that Japan produces about 120 million tonnes a year of steel, US does about 100, Brazil does about 34. Now, how many tonnes would you expect China does? 500 – four times larger than the next biggest producer. I think people are surprised when they hear that but their production has doubled in just over four years. And if you look at the graph on the right, what you're actually seeing is that that growth rate, magnified by the number of people, has actually caused China to become very large and it is now about 66% of the growth over the last 10 years of the steel industry as a whole.

## **4. India Metallurgical Coal Demand – the Next Wave**

I'm going to shift a bit and move over to let... and move over to metallurgical coal. Now, the story in China was one that had... you had... you had a Chinese, er, endowment of minerals that was very long on coal, not particularly high quality but long on coal, large resources – it's by far the world's largest coal producer – not particularly long on iron ore, and so as that market started to take off in steel in that earlier graph in 2000, iron ore demand went up many-fold and the demand for seaborne went up even faster because China was unable to fill their iron ore requirements from prod... domestic production.



Now what's happening is that's actually to shift to... to India, which to some degree is a mirror image of China in that India is long on iron ore and short on metallurgical coal. So as you look at this graph, what you're seeing on the left is India domestic metallurgical coal consumption, and it's falling at a rate of about, er, 6% a year, slightly higher. This is at a time when their steel industry is growing rapidly. So, on the right hand side, you see India's seaborne metallurgical coal consumption rising at about 13.5% a year. So you're seeing what happened in China happening in metallurgical coal and, when you think about that, it starts to put in context the big jump in coal prices that we had this last round of negotiations.

## **5. Australia is the Natural Supplier to Asia**

This is another graph that sort of gives you a framework to think about that. Now, those... the tables that are shown up on the... up on the top of this is actually the ratio of domestic supply to domestic demand. So think about the comment that I just meant... just made about China and its iron industry. If you look at that, you'll see that, on the upper right hand corner, the green bar, 34% of China's iron ore is actually supplied from domestic sources, but about 99% of its metallurgical coal. If you come over to Asia, you see that 235% of India's iron ore is supplied – or 220, I'm sorry, it says 226 – is supplied from India's domestic sources, and the rest of that's exported, largely to China. The metallurgical coal story, though, you see at 17%, basically meaning that there is a massive shortfall in metallurgical coal in India, so that puts into perspective that balance.

If you think about what that means going forward, I think... I... I think it means a couple of things and it's underpinned by those trade flows in the bottom. One, in a world where the larger consumers are in China and in India and energy prices are increasing, it's a major advantage to be an Australian producer. You see those big bars that are coming out of... coming out of iron ore and metallurgical coal in Australia, largely headed into Asia. In a high energy, high diesel world, that's a huge advantage. The second point I think to take away from this slide is that the upside in metallurgical coal could actually be bigger than it is in iron ore.

## **VI. Market Pricing**

Now we're going to switch a bit to talk about market pricing. Now, many of you would have seen the announcement that came out yesterday. I referred to it briefly in my introduction. This was about Rio Tinto's agreement with Baosteel that resulted in an... in an 80% increase in the prices of fines and a 96% increase in the price for lump. As I go into this, these slides were prepared before that agreement was announced, so this should be an interesting discussion. I hope you'll bear with me.

### **1. The Price Received by Australian Producers Does Not Reflect Its Superior Value**

Um, on this graph is the price received in China for delivered product and I'm... I'm going to take you to the lines on the far right, so there's three lines on there and you're seeing the time graph going through time. There are three colours. The orange colour is Newman fines – the price for Newman fines – delivered into China. That price – and this was in early June – um, it's assuming that we received a 71% price increase. The price in early June was about \$140 a tonne. The black line is Carajas fines, so this is Vale fines for material coming from Brazil delivered into China. Their price, er, same time, early June, was about 183. The spot price, which is effectively the market... the market clearing price in China, was about 200.

So when we talk about the freight differential, that's the gap between the Brazilian price delivered into China and the Australian price delivered into China. On the date we're talking about it here, that difference was about \$45. So as we talk about a freight differential, what's effectively happening is we are not getting paid for our product the same price as somebody else is that sells a very similar quality product delivered into China. Let me put that into perspective: if you think about buying a TV set, you buy a TV set, you're a customer, you buy that TV set and you pay for it based on performance, on service and on delivered cost. That's what you care about: performance, service and delivered cost. Where that TV set was made is irrelevant to you; you care about delivered costs, performance and service. So as we talk about, this is no different. As we talk about performance, service and delivered cost, we actually are producing a very similar quality product, our service is better – we made the point earlier that we deliver against our commitments 100% of the time – but we're substantially disadvantaged on price.

So the freight settlement that we had yesterday, or actually the iron ore settlement that occurred between Rio Tinto and... and... and Baosteel, actually had embedded in it an increase above the Brazilian settlement of about \$7.50 or just slightly higher. And, you know, the question that I know is going to come, so I'm going to take it right here: we're delighted to see that progress. You know, that's progress. It doesn't actually cover the full \$45-50 difference we actually have on freight, but it's progress.

## **2. Transparent Pricing for Bulk Commodities Will Maximise Supply from the Most Efficient Producers**

Now, the question that then comes is: well, how does this end? And I actually think a discussion about freight is a short-term solution. We started talking four years ago about the need for a transparent pricing mechanism in iron ore and you see a line on the left hand side where it walks through benchmark pricing, through over-the-counter forward delivery, to, er, basically a financial swap market. This happened in energy coal four or five years ago and it happened quickly. We got to... we got very quickly to a market where the financial trading volume swamped the physical trading volume.

On the right hand side is a screen shot – and I... you can't read the numbers very well – but this is the iron ore futures curve. This is a screen shot of Deutsche Bank's forward pricing for iron ore over a five-year period. So the message you should take out of this is that we have now arrived where there is a futures market in iron ore and it trades over the market. You can look on the screen and see future pricing, and that pricing is based off the delivered price of iron ore into China for a standard product that happens to look very much like what we sell out of Western Australia.

Now, this is an important concept because a freight differential means that you're going to have a zero sum game. You're going to have a discussion with your customer about what should this be, and we've just been a through process where we've negotiated for almost six or seven months to arrive at a 12-month settlement of our contract price. That isn't the kind of relationship we want to have with our customers. We'd actually like to have a different kind of a relationship where we could work about how do we do our business better, how do we get a better product to you, how do we make it perform better? And the model that we've had has had people very concerned about: is the price fair? So our actual long-term objective is to move a price that is fair, that is based on willing buyer, willing selling, willing seller transactions, off the screen, that's fair for both parties, and it gives us a chance to actually move to a different relationship with our customer. This is happening now.

Now, I will add that our intention in our existing contracts is we are going to honour them. We have contracts that are structured at the benchmark price. We have to conclude those agreements in some form, you know, so discussions about an index is really about creating an alternative to that method. It isn't about scrapping the system that exists today.

### **3. Raw Material Prices Have Risen but Are Still Low as a Percentage of Steel Price**

I'd like to close by talking a little bit about what does this all mean for the steel industry generally. The graph on the left hand side shows commodity price movement from 2001 through 2008. We've had big increases. I mean, if you look at those iron ore 380%, almost 600% for metallurgical coal, manganese almost 500%, those are big numbers. The question that gets asked a lot is: can the steel industry afford it? If you look at the graph on the right hand side, the red line is actually the hot-rolled coal... hot-rolled coil price over time, and the blue bars on the bottom are the percent of that price that is taken up by raw materials cost. So, effectively, the 2008 number shows that 34-35% of the cost of hot-rolled coil is raw materials and, if you go back over time, that percentage hasn't meaningfully changed. It's been substantially similar. The conclusion that you should take away from this slide is that steel prices are actually driven by supply and demand. They aren't driven by raw material prices. So as you look at that graph and ask yourself, 'How are the steelmakers doing?' they're doing pretty well – they're doing pretty well.

## **VII. Conclusion**

So I'd now like to move away from... from the marketing discussion and now take you directly into iron ore. I mentioned at the introduction that we had... that we had a couple of our Presidents in Sydney. I'd like to introduce Ian Ashby. Um, Ian Ashby's the President of our Iron Ore CSG and he's been the President since 2005. Ian, with that introduction, I'd like to turn it over to you.

## **Iron Ore**

**Ian Ashby**

**President Iron Ore, BHP Billiton**

### **I. Preamble**

Er, thanks very much, Marcus. Um, welcome to everyone here in Sydney and to those of you in London. Today, I'm going to give you an update on the excellent performance being achieved by my team in iron ore. I'm going to give you some details on the key achievements of 2008 and then upd... update you on how we are continuing to develop what we believe is a premier iron ore business.

### **II. BHP Billiton Ore**

#### **1. A Premier Iron Ore Business**

Let me first give you an overview of our business and some of the key advantages that we enjoy. Um, the heart of our business is in the Pilbara of Western Australia. We have an outstanding existing business there and they are... and we are continuing to grow that business, supported by our long life, high quality, low cost resource base. We also have Samarco in Brazil, in which we have a 50% share and which is also undergoing significant growth. Samarco recently completed the construction of its third pellet plant, which has increased its capacity by 50%. Beyond these existing operations, our exploration and business development teams are actively pursuing opportunities internationally. We've continued the drilling activities at the Nimba deposit in Guinea, in which we have a 40... er... five... 43.5% interest. We've recently completed a concept level study, which we are evaluating. So we're active in... in three major global locations, although clearly our main focus will be in the Pilbara of Western Australia.

#### **2. 12 Billion Tonnes of High Quality Resource and 21-35 Billion Tonnes of Mineralisation Concentrated in Two production Regions**

I now want to talk about our re... resource position in the Pilbara, where we have access to a very large resource base. We have to date identified more than 12 billion tonnes of JORC-compliant resources. Additionally, we believe that our tenements hold between 21 and 35 billion tonnes of potential mineralization. Our resource drilling and evaluation programme has delivered a 46% increase in resources this year and an additional 17% increase in potential mineralization. This represents an increase of 3.7 billion tonnes of resources and an additional increase of around four billion tonnes of potential mineralisation. Given our high equity ownership, which is between 85% and 100%, these resources will be creating value for BHP Billiton shareholders for decades to come.

Furthermore, these resources are primarily concentrated in two relatively small geographical areas. This allows us to pursue fewer, larger integrated mining hubs and to leverage our existing infrastructure for their development. We're able to derive tangible benefits from this advantaged position in terms of both costs and resource optimisation through blending. We've two areas of resource concentration, which we refer to as the Central Pilbara and East Pilbara.

Based on our most recent resource evaluation work, we estimate that the East Pilbara, which is broadly centred around Newman, contains around 13-18 billion tonnes of our resource and mineralisation base, or just under 40% of the total. The East Pilbara is the focus of the RGP4 expansion project, where we are currently building the Newm... Newman hub. The Central Pilbara contains around 19-27 billion tonnes, or about 60% of our resource and mineralisation base. The Central Pilbara will be the main focus of our growth post-RGP4.

### **3. Low Cost Supply to Customers**

Er, this next slide shows the iron ore delivered cost curves for 2007 and 2008. It clearly highlights the low delivered cost position we enjoy to the Asian growth markets, as mentioned previously by Marcus. While other iron ore basins such as Brazil and Africa have low cost resources, they also face a much higher freight cost than from the Pilbara, which is pr... particularly critical now, given the recent, er, freight cost increases, and likely into the future with predicted and sustained higher fuel prices. As Marcus said, under the current benchmark system, our freight cost advantage is simply not reflected in the prices that we obtain. However, we believe that the market is moving to better reflect the true delivered cost of the various ores. The Pilbara will retain its cost advantage. This gives us real confidence in the economics of our growth plans, which I'll describe in some detail in a moment.

## **III. 2008 – A Record Year**

Fiscal year 2008 is drawing to a close and we've had an excellent year. It's been a year in which we've improved our safety performance, set a number of production records, held operating costs relatively flat in a strong inflationary environment, and delivered our projects on time and on budget.

### **1. 45% Increase in the Pilbara Resource Base**

The extensive resource evaluation programme that we put in s... put in place several years ago is clearly bearing... bearing fruit, as evidenced on this slide. During fiscal year 2008, we drilled over 300,000 metres across our tenements in the Pilbara. The combination of this drilling with our resource evaluation and mine planning work has delivered an additional 3.7 billion tonnes of resources and about 600 million tonnes of reserves. The increase in resources is a combination of new resources at undeveloped deposits and additional resources at our operating hubs. This is important for two reasons: firstly, we will be operating our existing mines longer, making full use of our infrastructure investments. Of the 3.7 billion tonnes of additional resource, 1.4 billion tonnes is at the existing mining hubs at Area C, Yandi and Newman.

Secondly, we have defined major new resources to support our aggressive growth plans. Specifically, we can confirm 2.3 billion tonnes of new resource at our undeveloped Jinayri and Marillana deposits in the Central Pilbara. The announced reserve increase is also significant and increases our JORC-compliant reserves to around three billion tonnes.

## 2. Growth Projects Delivered

Now I'm going to turn to our expansion performance. We've completed RGP3, which adds 20 million tonnes per annum of system capacity. I'm particularly pleased to report that the project has been completed on time and, in fact, under budget, despite the challenging construction market we have in Western Australia. As part of RGP3 at Area C, we opened up a new mine at E Deposit and built a second crushing and screening plant with stockyards that effectively doubles our processing capacity. We also took the opportunity to upgrade the existing crushing and screening plant and made the necessary changes to split the fine stream and the lump stream in the stockyards, which will improve our efficiencies and unlock further incremental production capacity.

At Port Hedland, we built Berth C to accommodate 250,000 tonne deadweight ships, and upgraded the ship loader to 10,000 tonnes per hour. We also joined the new Berth C with the existing Berth D to allow ship loaders to access either berth, which will facilitate greater flexibility and increase system capacity. Er, we loaded the first ship from Berth C in October 2007. We completed commissioning at the inland facilities at Area C early this year and I'm very pleased to report that we've ramped up the RGP3 project to its design capacity of 20 million tonnes per annum inside three months, which has beaten our own internal targets.

Whilst I'm going to talk primarily today about our Pilbara business, it's worth mentioning here that we've also been successful in bringing on stream the third pellet plant at Samarco in Brazil. This project comprised the expansion of the mine and development of a new concentrator at Germano, a second 425km slurry pipeline linking the mine and concentrator with the new pellet plant at the port of Ubu, and associated port expansions. The commissioning and ramp-up is progressing well, with the new pellet plant already operating at design capacity of 7.5 million tonnes per annum. Samarco will enter fiscal year 2009 with total pellet cap... capacity of around 22 million tonnes per annum.

## 3. Continuing Excellent Operating Performance

Now I'd like to talk about our financial year 2008 business performance in some more detail. We've had an excellent year, especially when I consider the need to work around all the interferences in... interferences involved in our capacity expansions. Our safety performance continues to improve. The total recordable injury frequency rate has fallen by 45% on top of a 25% reduction in fiscal 2007. Our objective remains zero harm. We'll simply not be successful until there are no accidents resulting from our activities.

Mine production, railings and shipping are all ahead of plan for the year, with exceptional results coming from our Yandi and Area C operations. Our rail system is meeting the challenge from the strong mine performance. Our rail system is truly world class. We run the heaviest axle loads in the world and operate some of the longest trains. This allows us to achieve the highest track productivity of any haul... heavy haulage operator. This performance is a direct result of the extensive investment that we have made in proprietary rail technology over many years. At the port, we've achieved excellent performance from all of our ship loaders, including the upgraded Ship Loader 3.

Now, whilst our large hop, er, hub operating strategy is not yet fully developed, we're already seeing the benefits. Our strategy is to produce on-grade material at our mines. This allows order flow directly from the trains into the car dumpers straight onto ships, thus bypassing the stockpile and reclaim process. At present, 20% of our product is loaded directly onto ships, while a further 40% of product can go directly to port stockpiles without the need for further blending. This streamlined ore flow reduces our operating costs and increases system capacity.

#### **4. Volumes Growing at an Average Annual Rate of 9%**

Turning now to growth, this slide shows the historical growth of our iron ore business. Since fiscal year 2002, we've grown our production at a compound average growth rate of 9% on an equity accounted basis. This has been achieved solely through organic growth. We ad... advised last year that we were aiming for production in fiscal 2008 from our Pilbara operations of 120 million tonnes, which would be a record for the business. We have achieved that target already this year. Not only are we delivering more product to our customers, but we're delivering 100% of our contractual commitments. The iron ore business is one where strong customer relationships are essential. We believe that secure and reliable supply is hugely important to our customers and we will continue to give that our respect.

### **IV. Continued Rapid Growth**

I'm going to talk in a little bit more detail about our growth. Although I believe we can be justifiably proud of our achievements over the last few years, we have even bigger plans for the future.

#### **1. Clear Plan for Growth to 300 MTPA and Beyond**

This slide shows our Western Australian growth stairway. The RGP and Quantum series of projects will support our growth plans. The RGP projects are focused on development of the Port Hedland inner harbour. RGP3 has already taken us to 129 million tonnes of annum... per annum of capacity. RGP4 is scheduled for completion in 2010 and will add 26 million tonnes, taking system capacity to... capacity to 155 million tonnes per annum. RGP5 is expected to advance system capacity to just over 200 million tonnes per annum and we have commenced study on RGP6, which is expected to further increase capacity to 240 million tonnes per annum.

We're also pursuing the Quantum projects, including an outer harbour facility at Port Hedland. The first Quantum project is expected to take us to an installed capacity of 300 million tonnes per annum by 2015, as previously announced, but we don't plan to stop at 300 million tonnes. I've previously outlined our extensive resource base and our potential mineralisation. Together with the core infrastructure that will be built to support 300 million tonnes per annum, we will be ideally positioned to capture further growth opportunities. There are no resource nor logistics reasons that we can identify that would stop us expanding beyond 350 million tonnes per annum to support... to support future demand for iron ore.

## **2. Resource Evaluation Programme to Support Growth**

Of course, underpinning all of these projects is a very active resource development plan. I spoke earlier about the programme that has increased our resource-compliant resource base by 3.7 billion tonnes. As you can see from this graph, it will be even more active over the coming years. We expect to increase our drill rate to around 450,000 metres annually. Er, this programme will be oriented to two main areas of activity. Firstly, we'll continue to convert resources to reserves to support the existing operations. Secondly, we will continue to improve our resource position, which is an area that we believe we have significant upside. This drilling will also support the preparation of greenfield mines necessary to support our growth plans over the next decade.

## **3. Rapid Growth Project 4 – Capacity 155 MTPA**

Let me now talk about the development projects this resource base will support. As I said, RGP4 will increase system capacity to 155 million tonnes by 2010. The RGP4 expansion is an integrated package of mine, rail and port expansion work. The RGP4 mine work is focused on our East Pilbara hub, in particular at Jimblebar and Newman. Ore from Jimblebar, Mount Whaleback and other satellite mines in the East Pilbara will converge on the Newman hub, where they will be processed and blended ready for direct shipment. The project is currently about 40% construction complete and will be delivered on time and on budget, and we're currently investigating opportunities to improve upon project completion.

## **4. Rapid Growth Project 5 – Capacity 200+ MTPA**

RGP5 will deliver an additional 45 million tonnes per annum, increasing the total system-wide capacity to just over 200 million tonnes per annum during 2011. We'll expand the Yandi mine to more than 80 million tonnes capacity to support RGP5. Downstream of the mines, we will add approximately 300km of rail duplication and, at the port, we'll build two new berths and ship loaders and upgrade existing plant and equipment. In February of this year, the BHP Billiton board approved US\$1.1 billion of pre-commitment funding to support the acceleration of RGP5. These funds are being used... put to good use for long lead equipment purchases and critical field activities such as dredging. We plan to load our first ship during the first half of 2011.

## **5. Rapid Growth Project 6 – Capacity 240 MTPA**

RGP6 is currently in pre-feasibility study. We expect to be able to increase the inner harbour capacity to around 240 million tonnes per annum. The scope of RGP6 includes an additional two berths, with two ship loaders, further rail duplication and greenfield mine developments. RGP6 is leveraging off the RGP5 works to shorten the project cycle. For example, we have tendered the berth pocket dredging for both projects under one package. Similarly, we have bundled long-lead equipment supply such as stackers, reclaimers and ship loaders. We plan to have RGP6 capacity available in 2012.



## **6. Quantum Outer Harbour Development – Capacity 300+ MTPA**

I'll now turn to the first stage of the Quantum series of projects. I can report that we are making excellent progress and are currently completing the pre-feasibility study. The original concept for the outer harbour envisaged dredging a new shipping channel. Since then, we've carried out an extensive bathymetric survey and capacity simulation in conjunction with the Port Hedland Port Authority. The results of that work have been very positive. We've been able to conclude that the existing channel has capacity to meet our initial needs, although ultimately a duplicate channel continuous to the existing channel will be needed. This will allow... allow us to stage our capital deployment in line with market demand.

As a result of this work, we've relocated the new jetty and loading wharves adjacent to the existing channel. You can see this clearly on the slide. Importantly, this innovative approach brings significant environmental benefits, as the proposed footprint is largely within previously disturbed or impacted areas. More specifically, the project team has advanced the work on long-lead activities such as dredging. Here, we are working on potential synergies with RGP5 and RGP6. We're also advanced on the design of the marine structures of the jetty and wharves, and have involved marine construction contractors in that work, so we're very confident that we'll be del... able to deliver system capacity of 300 million tonnes per annum by 2015.

## **V. Key Messages**

Now, my key messages, just in summary:

- Um, we have a clear strategy to achieve our 300 million tonnes of installed capacity by 2015 and we'll have the core infrastructure in place for further expansion as the market demands.
- We continue to expand our resource base, which will support our growth plans... plans and operating strategy of large, long-life, low-cost hubs.
- We're delivering on our committed volumes.
- Our growth projects are being delivered on time and on budget.
- And we'll continue to enjoy an advantaged cost position into the growth markets of Asia.

## **VI. Conclusion**

Of course, as Marcus described in his introduction, carbon steel raw materials is not just about iron ore. It's my pleasure to hand over now to Dave Murray to update you on our premier metallurgical coal business.

## **Metallurgical Coal**

**Dave Murray**

**President Coal, BHP Billiton**

### **I. Preamble**

Ian, thank you very much for that introduction and good evening Melbourne and good morning to London. Just to reiterate what Marcus said, I'm only going to be talking about half of me today: I'm only going to be talking about the met coal business. No doubt, we'll leave the energy coal business for another day. As you're no doubt aware, the met coal sector has entered a very dynamic and most exciting time, and it's easily the most dynamic period that I've seen in the seven years that I've been directly involved in this market, and yet I suspect we haven't even started yet. I suspect that the fun is still to come.

### **II. The Premier Metallurgical Coal Business**

I want to leave you with a very simple message today, and that is just how well-positioned BHP Billiton is to further capitalise on this rapidly expanding seaborne met coal market. We, together with our joint venture and alliance partners, Mitsubishi and Mitsui, currently hold, without any doubt, the leading, er... hold the, er, leading business in this sector, fully-enabled, wholly-owned, and multi-user infrastructure, and I speak here mainly of port, but it goes to other things like water as well. We have a set of growth options that are the envy of our competitors and we have a portfolio of tier one assets and resources that will ensure that this business – the metallurgical coal business – will return significant shareholders to BHP for a number of years, er, going forward.

In a few slides, I really want to talk about what really, er, makes our business stand out. Marcus described in his introduction why high quality metallurgical coal is a key component in the steelmaking process. These slides will go to the heart of our competitive advantage as a metallurgical coal producer – large, low-cost, high-margin, long-life expandable assets – but also, in the course of the presentation, just touch on some recent events in the market, er, look very briefly at operational performance, the global supply picture and, finally, at the end, I'll talk about some of our growth options.

## 1. Leading Supplier in Seaborne Metallurgical Coal Market

Let me start by, er, just thinking about and reflecting on the make-up of the seaborne met coal market, and this slide really indicates that we're head and shoulders of our... above our peers. Together with our joint venture partners and alliance partners, we have a significant market share in the seaborne traded coking coal market, but the industry structure is really a function of relatively few met coal basins around... around the world. Australia today, er, supplies about 64% of the seaborne market, up from a... virtually a zero base a mere four decades ago. And I guess this leading position is a... is a result of four decades of investment, er, reflecting the belief in the region, um, reflecting a belief in its competitive advantage, of particularly good quality coal but also long life and low cost, but also its geographic location compared to where its major market is, er, or one of its major markets in Asia.

## 2. BHP Billiton's World-Class Operations

Met coal is quite rare amongst bulk... bulk... bulk commodities and BHP, er, Billiton is privileged to have a leading footprint in two of these premier seaborne supply basins, with a third one to follow. We have a broad customer base and supply coal to over 60, er, customers in five different continents.

- Within the Bowen Basin on the east coast of Australia, we have two entities. We are 50% owner of the BHP Billiton Mitsubishi Alliance, or BMA, which controls seven operations. And the second entity is BHP Billiton Mitsui joint venture, owned 80% by BHP Billiton, and operates two mines. These nine mines are a mixture of opencast and underground, but they are predominantly opencast operations.
- The Illawarra operation, which is south of Sydney, is 100% owned by BHP Billiton and serves the local BlueScope steel plant at Port Kembla, as well as exporting into the seaborne market. Illawarra has three discreet underground operating long ore mines.
- And Maruwai Basin is the new baby on the block in terms of production. This basin has been... was discovered by BHP Billiton in the 1990s and you will have seen from the announcement today that we will be starting production on one of our deposits very soon, and I'll talk more about that, er, a bit later.

## 3. Low-Cost Coal Operations Drive Competitive Advantage

To our cost position: we have some of the lowest cost operations in the world. This, together with the fact that much of the production is a high quality coking coal of all types, generates higher-marginal... higher-margin outcomes. Our competitive advantage is further enhanced by the fact that we are relatively close, er, to the coast. By comparison, our Canad... Canadian competitors are up to 16... er, 1,600km from the coast versus our approximately 260km, er, to our productions... from the port... to a production area from the port. Geographically, we are also well-positioned... positioned relatively... relative to some of our traditional, er, customers and, er, very well-positioned if you look at some of the key... key growth market areas in the Asia-Pacific region.

#### **4. A Broad Range of High Quality Metallurgical Coal**

The slide plots our assets on three dimensions: the size of the resource – that's the size of the... the round circle itself; the research qu... the resource quality and production. And I don't believe any other producer can boast such a deep portfolio of large long-life assets. For example, Peak Downs and Goonyella are, in their own right, very large operations but have sufficient reserves to continue mining for decades, and yet the asset isn't even fully explored at this point. And finally, our blending capacity at the mines, at the plant, at the port allow us to utilise all our coal qualities that we produce in ways that achieve very high, er, value outcomes for BHP Billiton but, importantly, supply the specific requirements of each of our customers.

#### **5. BMA/BMC – Large-Scale, Low-Cost, High-Quality and Expandable Operations**

As I've said, but I'll say it again, we have a large resource base and a large volume of good quality resources. But one of our biggest strategic and operational advantages and a key differentiator with our competitors is our proven ability to, er... to operate reliably. And one of the critical components of this is the capability of our infrastructure position and specifically our wholly-owned, dedicated port called Hay Point. This is truly a world class facility, with a track record, er, in... in very good and safe operational reliability. Although we have access to four other terminals at two other ports, 70% of our product goes through BMA... goes through BMA's own port. More than any of our competitors, this gives us control of product flow to customers, including rail, but, very, very importantly, it gives us control and the ability to blend at the port, er, again to meet the full range of our customers' requirements.

#### **6. BMA/BMC – Recovering Well from Flooding**

Just a word on where we stand with the recent events in Queensland. As you may be aware, there were two very significant, extreme weather events – rainfall events – that occurred during January and February of this year that impacted quite severely on the BMA and BMC operations in Queensland. These rainfall events in some areas up there were one-in-100-year events, and this was on top of what was already quite a wet year, or certainly relatively wet year. And the slide here shows quite graphically the extent of the water impact on some of our operations. The production impact, the declaration of force majeure in January and the lifting of force majeure, er, recently, in June, I think, are all pretty well-known by now.

Now, these two flood events not only impacted on our mines and, indeed, most mines in the Bowen Basin, but they also impacted on the logistic routes. There were many days, if not weeks, when the roads to the mines were, in fact, closed and we couldn't transport the basic essentials like, er, explosives and equipment and so on. Um, in fact, some of these events were that severe that, er, at several of our operations, personnels were actually... personnel was actually released from work to attend to flooding of houses and commercial buildings in the nearby times of Emerald, Moranbah and Dysart, as well as at Mackay and Gladstone.

Now, the recovery operations are well advanced and the mines – difficult to determine, but the mines are at about 90%, er, recovered. However, it will take some time to get the mines' production elements back into sequence, to rebuild stocks, both in the pit and at the processing plants and, indeed, at the port. This is because, even though the rains have come and gone, er, that we still have to manage some of the lingering issues around changing mine plans, um, ongoing pit pumping activities and mud removal and so on. Notwithstanding the fact that we did lose tonnage and cause disruption to our customers, I'd like to applaud the effort of our mining crews and logistics personnel. The impact would have been... I can assure you the impact would have been far greater and longer-lasting had it not been for the enormous coordinated effort of literally thousands of people and community members.

## **7. Illawarra Coal – Performing Strongly**

A brief word on Illawarra. Er, it's had a great performance. It's had a great year, especially considering that we were working through a significantly modified underground mine layout. As you may recall, we made a decision over two years ago to adapt the underground, er, mine plan to minimise any possible disruption to community, er, roads, surface roads, rail and water and so on. So it's with some sense of real achievement that we can report a record production and shipments at Illawarra. That doesn't mean to say they're entirely out of the woods. There are some difficult sections still to wind through in the next 12 to 18 months, but really the... the last year – and in particular the first six months of this year – gives you a very... a very good indication of what Illawarra can do.

And over the next years, we plan to grow that business via incremental operating improvements. This incremental tonnage growth stems from, um, some very efficient capital-efficient add-ons, er, longer, er, long-wall panels, er, more efficiencies through de-bottlenecking of the underground coal, er, clearance, er, system, and then, of course, um, some capital spent on the washing facility.

## **III. Global Metallurgical Coal Supply**

### **1. Bowen Basin is the Pre-Eminent Global Supply Basin**

I'd like to spend some time on the supply situation, er, touch on the global seaborne markets, the infrastructure situation in the Bowen Basin in particular, and then a few... I may say a few words about the China supply balance. As I said earlier, the metallurgical coal is relatively rare amongst bulk commodities. The orange circles here show the three main regions that supply over 90% of the global seaborne coal market. The Bowen Basin is clearly the biggest contributor, with 64% share, followed by sea... southeast British Columbia and Alberta regions in Canada, and the Appalachian region in the United States.

The green circles show where the major markets are. Australia, with its competitive advantage, primarily in terms of its high quality hard coking coal... coal or coking coal, and large resource base, is set to increase market share, specifically if you look at its proximity to Asia. As Marcus said earlier, with rising... raising... rising freight rates, our position, er, is improved by that close proximity to the key markets in north Asia and the growth of markets in Asia-Pacific... specific, including India and China.

Right now, many of the key supply regions are experiencing some constraints. I'll talk more about Australia in the next slide but, in the rest of the world, the Canadians are somewhat rail-constrained. The United States, who are really the marginal supplier of coking coal, exporters have increased supply to take advantage of the higher prices. However, the United States regions, as important as it is to the supply, is a very mature supply basin and faces increasing costs and, er, longer-term depletion of the resource.

But clearly there are new potential basins around the world and they will come on line and they include places like Mozambique, er, potentially Mongolia and Russia. However, what's common to all of these is... is the new supplier regions have significant challenges, including building large-scale rail and port infrastructure, sometimes in some very remote regions of the world. And such developments, obviously, as you can imagine, come with a significant price tag and long lead times and, therefore, it is likely that the current supply regions, especially Australia, will need to continue to expand rapidly to meet the demand of the world.

## **2. Global Supply Limited by Infrastructure Constraints**

Given the critical significance of resources and reserves of the Bowen Basin in the global picture, it follows that the Bowen Basin infrastructure is a key part of that story. However, as many of you may be aware, metallurgical coal supply out of the region has been, to some extent, constrained by the inability to build infrastructure quick enough to meet the demand. And the photograph here really shows what could happen if you get it wrong. There's a huge rail and port construction programme already underway in Queensland – in central Queensland. However, the, er, construction environment, as you well know, is extremely tight and some players are experiencing and have experienced cost and schedule limitations. It's my view that, because of this ongoing infrastructure constraint and the inability to bring it on stream quick enough, that, in the near term, the growing market is likely to remain tight for some time.

## **3. BMA/BMC Has a Strong Infrastructure Position**

I show here the ports down the eastern coast of Queensland. We currently export through four terminals, with two more to follow. At Mackay, we export through DBCT, or Dalrymple Bay Coal Terminal, and through our own port of Hay Point. At Gladstone, in the south, we export through RG Tanner Coal Terminal and a smaller terminal called, er, Barney Point Coal Terminal. New capacity is being built, is planned to be built, um, by the industry at Abbot Point. In fact, the initial construction at Abbot Point – phase one of the expansion – is already underway, er, and the other terminal at Gladstone, called Wiggins Island, um, is being planned. We will, in due course, have access to these, er, two new terminals as well: Abbot Point in the north for our northern coals, and Wiggins Island in the south for the southern mines.

This gives us an enviable position of having access to all ports in Queensland, with the added advantage of owning Hay Point, which comes with the operational and blending advantages, but it's also a port that, er, we can expand as and when we want to. We've just completed the expansion of Hay Point, um, and we're now looking at the next expansion. We call this HPX3 and it's currently in pre-feasibility study. And on top of that, we have and will continue to take positions in port and rail expansions in the other ports, um, as our production requires it.

#### 4. Chinese Structural Shortage of Supply Emerging

Some word on the Chinese supply and demand. Marcus discussed growth in demand from India and indicated that India has... has insufficient met coals to meet its own requirements and, therefore, has to import the lion's share of its own needs. So I think we can safely say that the coking coal story has a very strong Indian bias. On the other hand, China is a huge met coal user but also has huge metallurgical coal resources of its own and, today, is largely self-sufficient. However, we see China as a wild card, which presents a very, very significant upside in the demand story. Pig iron has more than doubled over the past four years, but you can see from the chart on the left that China has changed from a net exporter to now being a net importer of met coal. And perhaps this is a sign that the domestic coal production is not keeping pace with the increase in demand. Maybe to that point, the government has also put the brakes on met coal exports by lowering export, er, quotas to a trickle for metallurgical coal.

Maybe China has some significant issues ahead of it that may impact on its ability to self-supply, and I say that because the underlying drivers of this apparent emerging shortage are evident when you look at the regions that the Chinese are mining in today, and we make the comparison with the Bowen Basin.

- Mining areas are generally very old and the easy, shallow, er, resources have been greatly reduced over the years that they've been mining there.
- The newer mining areas are also generally deeper and some of them are at depth, which clearly adds costs and lowers inefficiency and productivity.
- The Chinese metallurgical coal mines are mostly undergr... underground, requiring geological definition – or greater geolog... geological definition – which, in our world, translates into the longer lead time to develop.
- And lastly, but very significantly, they tend to have relatively high gas concentrations, which impacts on safety and, er, potentially can reduce productivity as well.

China is a... a huge market – it's more than twice the size of the entire current seaborne traded market – and, therefore, if it runs short of coal – metallurgical coal – presents a very significant wildcard upside for seaborne, um, import demand.

#### IV. Strong Resource Position and Growth Options

So, what's it all mean for BHP Billiton? Well, given our huge resource base and our very strong infrastructure position, I think you'd agree with me that's a very positive story, and this will allow us to bring to market a series of low-risk brownfields and greenfields expansions over the next several years.

## 1. Our Premier Resource Position Facilitates Low-Risk Expansion

This is a very telling slide which shows... shows the extent of our growth opportunity. What we've shown here is, er, not a... a number that you see very often but we call it the resource line. This is simply a ratio of the resources that have been adjusted for historic resource to reserve yields for these... these mines and these resources, divided by the curr... current annual production. It shows that we are, er, are and will continue to be very well positioned for decades of production, even at significantly higher production rates, er, than our current mines are operating at. And furthermore, our total mineral inventory of all coals, although they're not JORC-compliant, is, er, in the order of double the resources reported here, so approximately another 10 billion tonnes of coal.

## 2. BMA/BMC is Accelerating Growth to Capture Demand

So, what are we doing? Well, BHP and our partners are very seriously trying to further accelerate growth plans right now to meet this, er, rapid... to meet this demand as rapidly as possible and bring new tonnage to the market. Up to financial year 12 is indicative of what our current five-year planning and think... thinking is. However, given that we know the resources very well – and we are confident in indicating what is possible beyond that point as well.

But there's two aspects to... to growth: speed and volume. The volume slide is focused on our Bowen Basin expansions first, and here I talk of production creep, and that's about maximising our installed capacity, mainly around our installed capacity at wash plants. What's obvious is the overburden stripping is critical to the ultimate mining coal output. So by increasing the stripping, we can mine more coal and, by mining more coal, we can what we call stack the tip, which means we can... we can put large stockpiles of coal in front of each wash plant and that will then optimise the... the efficacy of the wash plant.

And we are operating... our operating... our operators are working on this. We have the Daunia development, which is adjacent to our existing Poitrel mine. So we understand the geolo... geology well. Critical here is the various regulatory approvals, but when they come through, we'll be, er, ready to construct. Caval Ridge is a... a very big opencast operation north of the current Peak Downs, um, and, again, here, the logo... geological confidence and approvals will be critical, but we're confident that we'll be ready to construct when those come through.

The Goonyella Open Cut expansion requires an additional earthmoving equipment and a new wash plant. And we have a team working on the Caval Ridge wash plant and the idea – and there's no reason why we can't just take that design and copy it straight across to Goonyella, which will reduce design time and, we believe, potentially, construct time as well. In a similar vein, the Goonyella Underground is being mirrored on the adjacent successful Broadmeadow mine, which we believe and we know will reduce the time to market.

Looking beyond these projects, we have a number of alternatives: Wards Well, North Goonyella, Red Hill, um, east of Goonyella, Peak Downs, Saraji and Blackwater. But a... a new dimension to our thinking and a big focus for our study team right now is... is a very deliberate attempt to even... to hasten, er, coal to market, and that's looking beyond what we've done in the past and that's a linear approach to projects. We define the resource, we plan it... er, plan the project and execute.



We're trying to do as many things in parallel and, er, shorten delivery times as possible, so we're looking at low-risk options to bring forward some of the longer-lead items. For example, whereas in the past we've maybe bought one drag line at a time, it's possible for us to order... to bulk order drag lines. It's possible for us to bulk order wash plants, or certainly the longer-lead items of certain wash plants. It's possible for us to place an order for a number of stacker reclaimers at the same time, so... so design and construction crews can move from one to the other. And then, lastly, but, er... but very importantly, we're looking to lock in, er, bolt slots with our earthmoving manufacturers so that we can... we can actually plan delivery of those going forward.

### **3. Maruwai Basin**

Maruwai Basin was discovered by BHP in the late '90s and up until now it has been largely an exploration plate. Today we announced the approval of stage one development of, er, what we call a trial mine, or Haju, with an investment of approximately \$100 million for a relatively small mine of one million tonnes, but it has the capacity to be expanded beyond that, up to about two. Construction will start immediately and we expect first coal in mid calendar next year. But we continue to aggressively drill, er, in the area, so, and we are still finding, literally, daily, more out, more about that, er, particular area in that basin. What we do know, there's a lot of coal in the seven CCWs, or contracted works that we control. We already know that we have a full range of coke and coal qualities, as well as thermal coal. We believe that the qualities that we've found will be sought after by our customers in the Asia-Pacific region and I think the Haju trial mine will help, er, confirm that.

Further exploration and mine development will phase in as we learn more about the resource, clearly, as we learn from the trial mine about, er, logistics and operational experience in that particular area. The stage beyond the trial mine is, er, under study, er, and approvals and permitting for this mine will be sought in parallel. Importantly, we are working with NGOs in the regions on our key operating strategies. We clearly want to ensure that these strategies – our biodiversity strategy, our sustainable development strategy and indeed our mining strategy – are appropriate to the region and in every way world-class.

## **V. Key Messages**

So, in conclusion, what are the key points that I think you should be taking away from today? The market is strong and likely to remain that way in several years to come, driven by demand from India, but very importantly potentially from China as well. BHP Billiton is fortunate to have a great set of assets that are generating very significant returns right now and given the quality of our resource space, allowing large, relatively low-cost long-life and low-risk expansions. I believe we are uniquely positioned to continue to expand the business to take advantage of this growing market. We are extremely well positioned in respect to infrastructure, which is critical no matter where you are in the world, such that we can reliably supply now and are well positioned to enable new developments going into the market. So that's the end of it from the coal desk. Thank you for listening to me, ladies and gentlemen. I'd now like to hand over to Peter Beavan, the CSG President for Manganese to tell the Manganese story.

# Manganese

**Peter Beaven**

**President Manganese, BHP Billiton**

## **I. Preamble**

Thanks, David. Good morning to everyone here and good afternoon to all those watching or listening remotely. Er, despite BHP Billiton's leading position as the number one, er, supplier of seaborne manganese ore and the top three global producer of alloy, er, investors tell us that, er, the manganese CSG is possibly one of the least well-understood CSGs with, er, our portfolio. We've seen recent price increases, er, for high-grade manganese ore of over 400% and, er, we think that investors are seeking a deeper understanding of the markets, er, in which we operate, er and the assets that we operate. So, um, unlike the previous two presentations, I will start out by providing a fair bit of detail on the industry dynamics and then I will actually go on to, er, some detail as to why we believe we will continue to be one of the leading manganese players, er, and also talk a little bit about, er, our exciting growth opportunities.

## **II. Manganese Demand Chain**

Manganese is primarily used in the steel industry; 94% of all manganese is consumed by the steel industry, with a balance going to other metals and chemicals industries. Er, on average, every tonne of steel produced consumes between, er, 7-9kg of manganese, and so whilst it is a relatively small component, um, of the overall cost of a tonne of steel, as Marcus showed you earlier, in fact it's, er, a very vital one. In steel making the manganese is used as a hardening agent, er, in the finished steel and it also acts as a desulphurisation and, er, a deoxidising agent in the steel-making process itself. Er, today, there's no practical substitutes for manganese. The steel industry generally consumes the manganese in the form of manganese alloy. Er, the alloy is, in turn, produced from ore in a smelting process, using, er, submerged arc furnaces. Total demand for manganese alloys in 2007 was just over 14 million tonnes. That required about 37 million tonnes of manganese ore as feedstock to produce, er, this alloy.

## **III. Major Producers**

Most of the world's, er, alloy production is located close to the major steel-producing centres, hence, er, the biggest producer of alloys is China. Other large steel-producing regions are also major producer of alloy with the balance of production in countries with, er, combinations of low-cost, er, power and high-grade ore, such as Australia and South Africa. The majority of alloy, er, produced is silico manganese. Er, it is typically used in construction steels. Er, the balance is high and medium carbon ferromanganese. That is typically used in making flat products and better quality steels. Silico manganese grade is typically around 65% manganese. Er, lower grade ores can be used to make this silico, given its lower-grade contained grade, er, whereas high and medium carbon, er, ferro manganese typically have grades around 76-80% and therefore require higher-grade ore, er, to produce, er, economically.

As with alloy, China is also in fact the world's largest producer of ore. It produces around 14 million tonnes out of a global total production, er, of around 37% - sorry, 37 million tonnes per annum. Er, but the quality of their ore is quite low, typically, and it is generally lower than 30%. There are other large lower-grade ore producers, and those include the Ukraine and India. Um, the high freight costs involved in shipping low-grade ores typically requires that those producers smelt their ore domestically close to the mine. High-grade ore, er, is typically around 45%, er, grade. It dominates the seaborne, um, trade. Major producers, Australia, South Africa and Gabon. The total seaborne market's around 14 million out of that 37 million total production around the world.

## 1. Dynamics of Ore Industry

I'm going to take the next couple of slides just to explain, er, explain what we think of the dynamics of the ore industry in particular, and some of the possible reasons for the recent increases in the manganese and alloy prices. Now the first thing to really remember is that all ores are not alike. Low-grade-ores performance in alloy production is substantially inferior to that of higher grades. What we've shown on this slide is, er, the difference in terms of inputs and outputs that are required to produce one tonne of high carbon ferro manganese using different grades. So if you use a typical Chinese low-grade ore, it results in significantly higher input costs than using high-grade ore, and as you can see here, if you use high-grade ore rather than low-grade ore, you typically require less than half of the amount of the ore feedstock; you're going to use a lot less reductant, a lot less flux and, er, about 50% less, er, electric power.

In addition to the higher input costs, low-grade ores produce a great deal more slag. A furnace has, er, a fixed capacity, er, so if you're going to produce more slag, you're going to produce less saleable product. The final product is also lower-grade because, unless you use higher-grade ores, you can't produce the finished grade in the alloy. So, in fact, for certain grades, er, of alloy, you can't actually economically produce them using low-grade ore. You have to use, er, high-grade ore in order to produce them. So if an alloy uses low-grade ores rather than high-grade ore, they face high input costs they produce less volume of saleable product, er, and, er, they probably produce an alloy which has a lower grade and therefore a lower selling price.

So you can see very clearly there is a triple whammy to the bottom line for the alloyer, assuming, in fact, that he can actually produce this alloy at all. And therefore, you can also see how an alloy producer would be willing to pay more for a tonne of high-grade ore versus a tonne of low-grade ore. This is what we call the value-in-use differential and it's a term that I'm gonna make reference to, er, a number of times in the next couple of slides.

## IV. Value-in-Use Highlights the Benefits of High-Grade Ore

So now, this is critical to understanding how the market for ore works. As we've explained, the true cost to an alloyer of using a particular ore is the combination of what he has to pay to the miner, what he has to pay to the transport provider, but also, particularly important, the relative productivity loss or gain, depending on the type of ore that he uses, compared to an, an alternative ore. So, there's three basic components to the cost to an alloyer. Now, alloyers understand this, and they recognise the impact of, of, on this on the bottom line, from using the different ores that are available to them. And or, and they understand the value and use in their particular circumstance from these different ores. And because of that understanding, they are willing and they do pay for the value-in-use differential between one ore versus another.

So this graph that we're showing on the slide here, um, illustrates the true costs of an ore to an alloyer. This is by adjusting the delivered cost of ore – something you're familiar with; that's the mining plus the transport cost – and then we add on the value-in-use differentials. So, what we show here is a cost curve, a cost curve from a consumer's perspective. And I think for manganese ore this is the only relevant cost curve, if you're trying to understand how the industry works.

So, for convenience, just a technical point: we've calculated the theoretical, er, value-in-use differential on all the ores relative to a benchmark ore. In this case it's our own GEMCO siliceous lump product; it is typically regarded as the benchmark ore in China. The reason also, by the way, I've shown this, this is the China cost curve, the delivered value-in-use cost curve, China is the biggest market for manganese ore in the world and it tends to be the price-setting portion of the curve. So that's why I've illustrated simply the Chinese portion of the curve.

Now, what's quite clear from this graph is that, as Chinese grades tend to be very low, in fact they average around 22%, um, these ores, and they're shown in blue here, they have very large value-in-use differentials. And that relative to the seaborne ores, which are shown in green. So to replay the theme mentioned by Marcus, Ian and David, competitive ores are those which combine low mining costs, low transport costs and high grades, or in our case high value in use. And also, as we've shown on this graph here, you can see where BHP Billiton's mines sit on this value-in-use curve. We're very, very well placed, er, in, um, relative to the balance of the ore industry. And that's again due to this combination of low mining costs, low transport costs and in particular, very high-quality product that we produce.

## **V. Chinese Alloyers and High-Grade Manganese Ore Demand**

So, if I can move on from this explanation of the industry structure and of value drivers that in, inside of it, the question is, 'So, how does it actually explain some of the, er, recent price movements?'

You know, after many, you know that after, the last few years have seen very, very stable prices. Profitability's been relatively constrained and we've moved away from that in the recent past. And I believe the basis of the movement is the move from, from pricing for manganese ore from a regional basis to a global, er, basis, and I'll explain a little bit more about that right now.

In the past, the seaborne industry was, was somewhat disconnected from the domestic ore industries in China and Ukraine. Little seaborne ore was sold in the CIS and China. Basically they were self-contained markets; in other words, they produced their ore, and they smelted it and they made the finished product and they, there wasn't very much connection between those three basic, er, markets.

The pricing of manganese ore was, was, was obviously set in these separate markets and the capacity in the seaborne industry always exceeded demand, and so pricing of seaborne ore was driven by the cost of the cost of the marginal seaborne player – again, a concept you'll be reasonably familiar with. Demand for ore was flat. The cost curve for seaborne ore was also quite flat, and as a result, prices remained stable. The profitability was also quite constrained.

Now, with the extremely rapid growth of the Chinese steel industry, the Chinese alloy industry has grown at an equally rapid pace. In fact, in addition to meeting the needs of the, of the Chinese steel industry, it has in fact become the dominant exporter of alloy for, for certain grades, particularly silica and manganese. So this very rapid growth in alloy induced a very speedy increase in the demand for ore. And initially, producers increased their capacity, particularly in the seaborne supply, and you can see there, the seaborne in the grey moving up very rapidly and in fact increasing its market share in China.

However, in late 2007, the combination of hitting capacity limits and the removal of some ore from the seaborne market resulted in the seaborne industry being unable to keep up with demand. And you can see the, the downturn there, um, in 2008.

The Chinese domestic ore industry has in fact responded very well, as we can also see, so they've taken up the slack, but the seaborne players have been effectively sold out. The marginal tonne of ore for an alloyer in China has to be, now, low-grade, low-value-in-use Chinese ore. As a result, the alloyers that now recognise the value-in-use differences, um, are now willing to pay more for the scarce high grade ore. So, effectively what we see now is that the markets for domestic and seaborne ores have merged and, whilst the prices are still set by the cost of the marginal producer – nothing's changed in terms of that paradigm – this marginal producer is now, in fact, is very high cost to the alloyer, because it is a low-grade, low-value-in-use ore.

So, the ore market is now far larger and far more efficient. That's the critical point as far as BHP Billiton is concerned. And vitally for our profitability, the cost curve is also now very much steeper, as we saw on the slide previously, and that obviously allows greater profitability for those who are at the bottom of the curve.

And you've just heard Ian discuss the need, or Marcus discuss the need for, for have fair pricing for iron ore, in China. We face the same basic issue of fair pricing, except that iron ore is facing the issue in regard to getting fair pricing for its transport. It's the transport component of those three. We've been facing a similar issue, but our issue has been getting a fair price for our value in use. So, er, I'm very happy to be able to stand here to say that we are trying to do the same thing, which is fair pricing, but we're also very happy to say that we have actually come, we appear to have come a long way in terms of that. And um, you know, I'm also very pleased to say that, er, we have a very strong technical marketing team that assists our marketing effort and it's, you know, they've spend an awful lot of time going around and explaining and getting folks to understand this whole value in use, and the actual value of our high-grade ore relative to some of the other alternatives. So, it's been a great team effort, er, I think, from the folks at, er, in our Marketing organisation.

## **VI. Alloy Pricing**

So now I'm just going to take a few brief words on the pricing of alloy. Er, you've seen rapid increases in, er, in the costs of ore. Everybody's been hit by increases in freight. Power's gone up in many parts of the world, labour and, er, and most recently, reductants. Reductants are in use are coal and coke. So, as Dave was explaining earlier, that's, that highering cost of coal and coke has come back to impact us, on the alloy industry as well.

Chinese producers, er, represent about 48% of the current global alloy production and they've got the greatest influence on global alloy prices and they've also, in fact, been hit by a switch from an export rebate regime. They used to be subsidised if you like, to use a rather ugly word, to export, um, er, alloy. In fact, the Chinese have decided to turn that around and they've gone from a rebate regime to, actually, to an export tariff regime, and currently that sits at around 20%. So for a Chinese alloy producer, that's obviously a very big impact on his export costs.

Um, that's, those increases in, in, in, in the cost of alloy have, in fact, been able to be passed on to the steelmakers, and that's because basically there is no substitute for alloy, and in addition to that, it's not a particularly large part, of, the cost of a tonne of steel.

Now, alloy producers outside of China have not been equally exposed to these cost differences, other than ore costs. And the outcome of this has been an additional steepening of the alloy curve, so that alloy producers such as BHP Billiton, with inherent advantages of access to high-grade, high-quality ores, large, efficient smelters, cheap power, tend to be at the bottom of the curve. And we've, we've benefited from this, this steepening. And that's what you can see on this chart, and again in orange, are our two smelters and you can see how very well placed we are on the cost curve.

## VII. BHP Smelter Ownership

Now, before moving on to discuss our operations in more detail, I just want to address the reason for BHP Billiton's ownership of alloy smelters. Um, you know, smelters may appear contrary to our general corporate strategy of focusing on upstream businesses, but we believe our position of alloy adds value to our overall business. It allows us to access different markets through the optimal mix of ore and alloy. It improves our understanding of our own ore's performance in a smelter, providing us with a marketing edge relative to our competitors, we believe, and that's that whole issue around the value in use, the performance of our ores in somebody's smelter.

Um, we can vary and we can optimise our ore and alloy production to suit market conditions, clearly, you know, on a tactical basis, or an alloy market can move, er, in terms of relative attractiveness. Er, and most importantly, our alloy plants, um, are located in, given they're located in the lowest quartile of the steepening cost curve are actually significant profit contributors in their own right.

Having said that all, 80% of our ore that we produce actually goes to third parties, so, yes, we are an integrated player, but we are essentially an upstream player in, an ore player, in the manganese market.

### 1. Questions

So, that was a little technical, I guess, and I hope that you all followed it. Hey listen, if there's any questions, you know, I'm very happy to take some questions offline after the presentation. You know, I find it fascinating; I love this topic, so be careful if you ask me too many questions. Um, but let's move on to something a little simpler to, I hope, a bit simpler to explain, which is actually our operations.

## VIII. Samancor Manganese

### 1. Introduction

We hold our, BHP Billiton holds the manganese interests, er, in a joint venture with Anglo American. It's called Samancor Manganese. We own it 60/40 with Anglo, and BHP Billiton is the operator. Um, we're the largest producer of ores globally; we've got about a 22% market share on a global basis; er, and we're one of the top-three alloy producers in the world. We've got very large, long-life resource base – I'll talk a little bit about that in a moment – and, as I said, we produce this high-quality range of very complementary ores. In fact, our ores work in combination with each other, somewhat coincidentally, extremely well. It's probably the premier mix of ores that you can have if you're an alloyer in the world.

### 2. Operational Issues

Um, as I said, we do sell 80% of our ores to third parties at market prices and, er, operationally I believe we're in fine shape. We've managed to extract the successive production records from our operations and, at the same time, we've significantly improved our safety performance, as you saw on the chart that Marcus showed you earlier, and that safety performance is something we're very proud of, obviously. We've achieved all of this while we've had to cope with some interesting challenges, er, including the well-publicised South African power issues, and also some of the transport issues that, er, we face in South Africa. But I'm pleased to say that we are coping with these issues and these challenges, and in fact we have some excellent plans to mitigate any, any of these losses, which I have to say are not particularly material at this point in time.

### 3. Ore Operations

#### *a. Overview*

A couple of words on our ore operations: um, the ore operations are centred around the GEMCO mine in Australia, and our two South African mines, which are located at Hotazel in the Kalahari Basin of the northern Cape. Um, the South African mines produce a range of products, and it grades between 37 and 49. Thirty-seven percent comes out of the open-cut mine called Mamatwan, and the higher-grade product comes out of the underground mine called Wessels. Er, these ores don't require any further material processing: we just have to crush and screen it, put it on the train. So they are in fact excellent, simple operations. Er, we do take some of the fines from the open-cut mine; er, we upgrade them in a sinter plant. You can, you can upgrade a 37 to about a 46-45%, so again that's a very, er, sensible way to deal with fines.

*b. GEMCO mine*

In Australia, the GEMCO mine, er, is located on Groote Eylandt. It's in the Gulf of Carpentaria. Um, it produces high-grade products between 43 and 48%. And, as I said earlier, the GEMCO products have generally been the benchmark for, for manganese ores around the world for some, for many, many years. The run-of-mine ore at GEMCO is upgraded in a simple wash plant, and it's located on the coast, and so what we do is we just truck the ore from the wash plant, which is 20km down a haul road, and we ship it out of our own port. So, it's a unique mine in the world of manganese in that it is, in terms of its grade, in terms of its location, in terms of its cost, and it's very high value-in-use product, so that's why you see that GEMCO has that inherent wonderful position right at the bottom of the global cost curve.

#### **4. Manganese Alloy**

*a. Metalloys*

On to a couple of words on our alloy plants: we do operate a large alloys plant; er, it's called Metalloys; it's near Vereeniging; it's just south of Johannesburg. Er, it primarily produces high-carbon ferromanganese. Er, the three main large, high-carbon furnaces we operate there are amongst the world's largest and therefore some of the world's most efficient. Um, with these efficient smelters and with the access to low-cost power and the very high quality mix of feedstock from the Hotazel mines, Metalloys is also one of the lowest-cost producers, er, of alloys in the world. Again, I showed you that earlier on the cost curve.

*b. Manganese Metal Company*

We do own 51% of the Manganese Metal Company: it's a small metal plant; it produces, er, 99.9% metal. It's actually the only non-Chinese producer of metal in the world and, as a result of its very high-quality product – most metals are actually 99.7; this is 99.9 – and the combination of being the only non-Chinese and having a very high-quality product means that we can get significant premiums from the general manganese metal price for the product that we sell out of, er, out of Manganese Metal Company.

*c. TEMCO*

The Australian alloy plant is TEMCO. It's located at Bell Bay in northern Tasmania. Er, it's operated on a very lean basis with the power supplied from local hydroelectric plants in Tassie, um, at very cost-effective rates. Again, it's very well positioned on the cost curve.

#### **5. Industry Leader**

A couple of words on our position within the industry: um, as I've already said, we're the largest oil player globally; we're a top-three alloy producer. Er, as we all know, being large is a strength, but being profitable is more important. Again, I'm pleased to be able to show you that, er, not only are we the largest but, er, for those competitors who report EBIT margins, er, we are also the leading player in the global industry, so pleased to see that.



## 6. Market Footprint

Um, our market position is very strong. We have a global market share on a manganese contained basis, around 22%. Our share of the seaborne market is higher, around 35%. Er, and Dave explained earlier how important India is to met coal. You know how important China is to Ian. In manganese in fact we have access and we have a very strong position in all of the developing markets. So, we have the best of all of those worlds in fact and, as you can see from this chart here, you know, we have good strong positions in all of those key, expanding markets. And, with our, you know the close proximity of our global suite of high-grade ore products to these emerging markets, you know, it bodes very well for our expansion plans. Again, I'll talk about those in a second.

## IX. Future Growth and Resources

### 1. Manganese Ore Production Ramp-up

#### *a. GEMCO*

So, we have great opportunities; we have great latent capacity and value; so what are we doing to pursue those growth opportunities? And I'll just deal with that in the next couple of slides. Um, here is a chart of our ore production ramp-up that we are planning for the next five years. Um, initially the near-term growth production will come from our GEMCO mine. We have an expansion project underway at the current moment. Um, it's going to produce a further 700,000 tonnes of ore on top of existing capacity. Um, the capital cost of that is about US\$110 million for BHP Billiton's share. Um, it's on track, er, for commissioning in the first half of calendar year 2009, and that's in line with feasibility study, er, expectations. Similarly, for local currency capex, also in line with feasibility expectations. In addition to that, we believe that there is a further expansion on top of that that's possible. I think maybe we could take GEMCO up to 5.5 million tonnes. That's currently in pre-feasibility and, you know, we'll talk about that in due course as we get more information.

#### *b. Hotazel*

Hotazel, the mines, are also currently in expansion mode. You know, the nature of the ore bodies and the simple processing required, er, means that these operations can be very easily expanded. And, er, we believe that the current combined mines can be expanded by 2012 to around the combined 4 million tonnes per annum. Er, we are also confident that the required access to additional rail and port capacity in South Africa can be secured. Um, at Wessels, we're working on an expansion of a further 700,000 tonnes of product over the next three years. It's an underground mine so we have to go and develop further faces, but it's also great to see that those faces, um, are going to be developed into the higher-grade portion of that ore body, so we will not only get more tonnes, but we will get better grade out of it too, so that's going to be, er, an excellent project. Mamatwan requires, it's a very simple mine. It just requires, er, repositioning and expansion of the input primary crusher, some additional mining equipment. We can get another million tonnes out of that mine. And you can see that reflected by these very modest capital, er, BHP Billiton share of the capital that's likely to be required for these. So we believe that, due to the modest capital, very simple steps required, both for the GEMCO and Hotazel expansions. You know, we've got a suite of very low-risk, very fast paying-back and very high rates of returns on these, on these expansions.

## 2. Manganese Mineral Resources

A couple of words on our resource base. We've announced today this very substantial increase in our resource base. Um, it is a very substantial one; it's going to support long-life mines in Australia, as well as in South Africa. You know the expansions that, the additions that we've announced today, are really primarily focused on our South African mines. Um, we've still got drilling to do at – did I say the 'South African mines'? Yes. Er, we've still got drilling to do at GEMCO. We hope to be able to announce something there. You know, I think what you see here today is a combination of drilling; it's some new product and new market developments and, in addition to that, we agreed a joint-venture arrangement with a black economic empowerment partner in South Africa. These partners are called Ntsimbintle. They held some ground, er, contiguous to, to Wessels and Mamatwan, and we've agreed a joint-venture arrangement whereby they take a 9% equity stake in Hotazel mines, then they will then end their resource base. So, you can see, that's a very sensible arrangement, but it will also, importantly, it'll help us meet our obligations under the Mining Charter in South Africa.

## 3. Exploration Plan

Now, in order to build on top of our strong resource base, we've got a focused exploration plan; we have both brownfield drilling and greenfield drilling. The greenfield drilling programme is, er, is focused on two regions. There's Gabon. I've already spoken about the fact that Gabon is, er, is a great producer of high-grade oils, so it's a good place to go and look. And also the Northern Territory – it's on Arnhem Land; it's just on the mainland opposite where GEMCO – again a great place to go and look for manganese. We've also got in-fill and step-out drilling underway at the mines at Hotazel and at GEMCO, as I just mentioned. Um, and we were recently granted a prospecting licence. It's over in Hotazel. It's over a lease called the Middelplaats Lease. It's a very large underground resource. It has been mined in the past, and, er, the shaft exists. It's 5km from Mamatwan, so we'll go and, er, continue the drilling programme there and, in due course, you know, there is every opportunity to develop a new mine there, and, er, also benefit from the obvious synergies with the existing Mamatwan infrastructure.

## X. Key Messages

So, what are my key messages today? Well, BHP Billiton operates a very high-quality business in Manganese, and it's very much aligned to BHP Billiton's strategy. It's got large resource bases; they support long-life assets. These are simple operations; they have low capital basis and they have a global spread. We produce very high-quality products, both individually but particularly in combination with each other. Er, we have low-cost ore and alloy operations and we generate very strong EBIT margins as a result. We have excellent exposure to both the developed and the developing markets on a global basis. The globalisation of the ore market has led to, to the accurate, the fair pricing if you like, of high-grade ores on a fundamental relative value-in-use basis. The addition of the relative value-in-use differential to pricing has created a much deeper cost curve and, er, the combination of these changes has led to, to higher prices but also the increased profitability of our underlying business, given our position on the cost curve.

The assets are currently performing at record production levels, er, and safety its trends are very, very good, and that's great to see at a time of record prices. So, and then finally, with significant growth opportunities available to us and, er, when you combine that with the current market environment, er, that means that we believe that manganese in fact will be a significant contributor to the BHP Billiton Group's bottom line in the future. Thanks very much for your attention and I will hand over to Marius.

## **Concluding Remarks**

**Marius Kloppers**  
**Chief Executive Officer**

### **I. Preamble**

Thank you, Marcus, Ian, Dave and Peter. Ladies and gentlemen, I hope that these presentations have provided you with a better understanding of these businesses and how they come together in providing an absolutely unique and exceptional, er, proposition. And I, er, also hope that you, um, through the very transparent focusing on all of the issues around this business understood that, when we talk about how enthusiastic we, er, we are about all of these businesses, it's fully cognisant of the full set of issues that we've got to manage around there.

### **II. BHP Billiton's Businesses**

#### **1. Iron Ore Production**

Er, in the steel industry, the must-haves, as Marcus has said, are iron ore, metallurgical coal and manganese. We are the only mining company with a top-three presence in all of these raw materials. We have a portfolio that is leveraged towards, er, Indian growth and we have a portfolio that is leveraged across all three of these must-haves.

#### **2. Industry Position**

Um, the mines and ore bodies that we've described today are excellent examples of our, er, strategy that we always describe as focusing on tier-one assets that are low-cost, long-life and expandable in the face of strong demand conditions. These assets are enhanced by the quality and breadth of the infrastructure that we've built, er, and infrastructure access, er, infrastructure that is crucial to get this material out of the ground and, er, to our customers.

### **3. Resource Growth**

Um, I hope you've got a keen understanding of the quality of the resource base that we're talking about here. And I also hope that you understood that, as we continue to delineate, er, those resources, um, we are very optimistic about what is there. Our resource base is expected to, um, support production for, er, over 50 years in each of iron ore and metallurgical coal, and we also have a great position in manganese. We're currently expanding production capacity in each of these businesses, and I want to note again the majority of this growth – in fact all of the growth almost that we've spoken about today apart from that Indonesian new entry – is brownfield expansion that in many cases amounts to no more than sequential debottlenecking, significantly reducing the costs and the risks associated with that expansion.

### **4. Transportation**

As Marcus has pointed out, er, and Peter reflected on in his talk and Dave as well, steelmaking materials are bulk materials. Transportation costs are a significant percentage, er, of the cost delivered to our customers and our Australian-based operations and the quality of our products deliver an absolutely great value proposition to our customers, er, and a significant advantage, er, transportation advantage to our key markets, particularly China and India.

### **5. Talent**

Lastly, and most importantly, um, we have a great team in place to deliver results across all three of these businesses.

## **III. Growth Profile**

So, just to recap a couple of things then: since BHP Billiton was formed in 2001, we have consistently delivered volume growth, strong volume growth, across our diversified portfolio, about 8% per year. For the next five years – and that five years is our normal planning period – our forecast volume growth of 6.9% in copper equivalent production reflects a very robust expansion pipeline. But we also showed you some of the stuff that's coming beyond that and, er, I'll talk about that in just a minute. To illustrate the volume growth across such a diverse range of materials, we have here, um, as is our custom, converted everything to a copper equivalent. We base on our analysis on 2007 production, and it's a five-year planning period, which is our normal planning period. And um, from this graph, we can see that steelmaking materials will deliver some 41% of the growth; energy 38%; and non-ferrous materials about 21%. And I trust that today's presentations and the, er, the growth programmes that we outlined demonstrate to us why I am so confident that this growth that we show here can and will be delivered.

And er, just for reference, in the carbon steel materials numbers that we sought today, the 13.6% compound annual growth rate in iron ore that you saw for the five-year period, in met coal 6.4%, and in manganese 10.2% per year, for an average of about 10.9% across this portfolio, we've shown beyond that five-year plan all of those plans based on existing resources, existing technology and in existing geographies which, I am sure you will agree, positions us extremely well to continue the growth from that \$85 billion pipeline that we, er, that we show every time we talk to you.

## IV. Offer for Rio Tinto

And now, while today's primarily about Marcus, about Peter, about Dave and about Ian, and the absolutely wonderful businesses that, er, that they have built and are continuing to build, um, it would be amiss of me if I didn't say a few words about our offer for Rio Tinto. Our offer for Rio Tinto is consistent with the strategy that we've again highlighted today. Um, I want to emphasise about, based on what you saw in the Petroleum presentation a couple of weeks ago, based on the presentation that we've made here today on our Carbon Steel Materials business, and the upcoming presentations that we'll make in our other businesses, that there is no need to acquire Rio Tinto. But I believe and our Board believes that the acquisition of Rio Tinto is a logical move given our strategy, given the volume demands of our customers and we believe that this combination is a compelling one. Rio Tinto offers a uniquely complementary asset portfolio and a close fit, both strategically and culturally, which will allow us to unlock value beyond what we've, er, we've got in, er, our own portfolio on its own.

- Firstly by optimising mineral basins and infrastructure, combining assets that are in the same geographically, allows us to produce, um, more product, more quickly, more cheaply.
- Secondly, we will create an enhanced platform for future growth. We will deploy our resources to the areas of highest-value opportunity; we will high-grade the combined portfolio, again delivering the highest-value opportunities more quickly.
- Finally, and uniquely in this, er, set of assets that that overlap so much, synergies and combination benefits divide, derive from economies of scale, elimination of duplication, of overheads and non-divisional, er, operating costs.

Together, this set of factors make for a unique value proposition for both sets of shareholders. And let's not forget, again, that this is a bid or our offer is an all-share offer that is specifically targeted towards having both sets of shareholders remain invested in the, er, in the resulting entity. So our 3.4 offer, share for share, represents a compelling value for Rio Tinto shareholders, who will receive not only a 45% premium on the undisturbed share exchange ratio, but will also receive 44% of the combined company and 44% of all of that additional synergy and uplift that we're going to create. We believe that our offer is attractive for the Rio Tinto shareholders and, importantly, we believe that it is attractive for the BHP Billiton shareholders as well.

## V. Conclusions

And to conclude, BHP Billiton is the leading diversified resources company. We've increased over the last five years through opportunities of the kind that we've, er, looked at today, our EBITDA by 400% to over \$23 billion. We are benefiting from high margins across our three broad commodity areas – Carbon Steel Materials, Energy Products and the Non-Ferrous Materials. We have an outstanding, industry-leading portfolio of low-cost, long-life, tier-one, expandable assets. Our high-growth and high-margin Petroleum business, particularly in the circumstances that we find ourselves in today, provides significant earnings differentiation, and our growth pipeline positions us extremely well in the context of continued supply-side constraints to meet the growing demand of our customers.

BHP Billiton's near-time project pipeline is low-risk, focused on existing brownfield operations – er, expansions – and you've seen how simple some of those expansions are today, based on that extraordinary resource base that we've got. In addition, we have an expansive list of very large and valuable longer-range growth opportunities. Our tier-one operations have delivered strong returns to our shareholders in the past, and we believe will continue to deliver strong returns to our shareholders in future.

The proposed acquisition of Rio Tinto does not deviate from our strategy by one inch. The combination is compelling but, as you've seen today, in, in the portfolio that we've presented to you, with or without Rio Tinto, BHP Billiton will continue to show the strong performance in the future, as we pursue our absolutely unchanged strategy described here.

## **Questions and Answers**

### **Marius Kloppers**

Thank you very much. I'm happy to, we are happy to spend some time answering any questions, er, you may have. The procedure that we're going to follow is that we're going to take a couple of questions here in London, then we're going to take a couple of questions in Sydney. We'll move on to the phones and we'll continue to rotate through until all of the, er, the questions all the time for today have been exhausted. I will, in the first instance, take the questions, and direct them to the appropriate member of the team. So, can I have the first question here in London, please? Jason?

### **Jason Fairclough, Merrill Lynch**

Morning, Marius. Two questions, if I may. It's Jason Fairclough from Merrill Lynch. Um, the first question is for Marcus probably. Marcus, you mentioned, er, this idea that your negotiations with your steel customers are zero sum. We're struggling to see more and more some explicit pass-through of raw material price increases. And I guess, is this appropriate and does this change this from being a zero-sum, er, negotiation? The second question would be for, er, probably for Marius. Just looking at the amount of growth you're going to squeeze out of these existing operations it's quite staggering, and, um, obviously you're fortunate to be in that position. Do you ever think about what it might cost to actually replace all these assets on a greenfield basis?

### **Marius Kloppers**

Um, Jason perhaps two comments on the two parts, and I'll try to finish the second part before I hand over to Marcus for some more comments about pricing. To your first question about price pass-through of raw materials, I think one of the most important slides that we saw today was that slide that showed that, by and large, we have, the steelmakers pay approximately 30% of the steel price in raw material costs. It's a very, very important slide, because it basically shows that the very high steel costs have been driven almost entirely, certainly in majority, by constraints on steelmaking capacity, tightness in steelmaking capacity and not raw material costs. And, er, I always say we live in unprecedented times, um, as a, and I'm very happy to be in this business, but I probably wouldn't have been that unhappy if I was in the steel business at the moment as well.

That's, that's perhaps one comment about, about, er, pass-through of raw material costs, and the question that I would pose perhaps, er, to reflect upon is that, given this tightness in steelmaking capacity, which evidently is driving, steel costs, um, I'm not, I'm not sure whether that directness of the raw materials price-through is, is actually realistically a major driver of steel prices here but, Marcus, you might have some observations on that as well.

### **Marcus Randolph**

Where a customer doesn't want to be is paying more than, in a relative way, than other customers. So as we talk about trying to lock in, you know, this payment or that payment, the possibility that someone ends up disadvantaged, be it in any part of that transaction leaves people exposed. So when we, what, when we started the discussion about we want to get a fair price for our product, we and we said really what that means is the transparent price. It's easiest for us to do that and it's easiest for the customer. So it really is, I called it 'zero-sum' in that, if they pay us more for freight we get more, but they have to pay it. Marius, I think, has clearly made the point that that doesn't directly translate to steel prices, but it does create a situation where one consumer of our products can end up out of step with another one, and they don't want to be in that position; we're trying to make it easy for them.

### **Marius Kloppers**

And it's much easier for us if we've got transparent prices that, that just demonstrate what we in reality do every day, which is to accept prices based on the supply/demand of our product. To your, er, to your second, er, question, I think our main activities, um, that we do once a year is what we call our 'portfolio-evaluation review'. Largely the exercise that we do is based on what I would call 'visible cash flows' out of, um, the existing operations plus the cash flows that go beyond that. Um, but I should state and, er, you know, again it's perhaps an illustration of the, er, of the cultural similarities between us and Rio Tinto is that the methodology that we look at for real option valuation, when we look at tier-one assets and the optionality embedded in them, would not be in concept significantly different to what Rio Tinto described a couple of weeks ago, Jason. So I think the majority of that work and the real option work though comes to when we look at, er, the existing – sorry, individual decisions – that we, er, that we, er, take to expand assets and so on. And it's perhaps been less of a tool that we've used to explain to the market what the aggregate stock, er, should be valued at.

May I have the next question here in London please?

### **Justin Baring, Citigroup**

Um, it's Justin Baring here from Citigroup. Um, just a quick question on and a bit more detail on exactly how, what percentage of your iron ore sales will be on the spot market, um, over the next five years. I know it's an aspiration to get a lot more of it done on a spot-market basis, but can you give us some guidance as to exactly what percentage that'll be?

## **Marius Kloppers**

The real guy to answer that question in exact detail is Nelson, who's sitting here right in front of me but, you know, I'll give two things which just recaps what Marcus said. Um, I think that they're going to be two factors that happen in the iron ore market, going forward. One is that the, er, the market-clearing price and, er, the benchmark price will converge, and we've seen at least a start of that in this year's price settlement. Um, I think that that recognition of the value in use on a delivered basis is an extremely important thing, and one that we've, we've agitated about four or five years ago, when we saw the freight market take-off. I think that the one thing that we're going to see is that those two things are going to converge, going forward, very important. Eventually, you know, our expectation is that they will completely converge, so I think it would be wrong to say, 'This is this price and that is that price.' Our view is that the transparency of the one market will facilitate the convergence of the other – very important point

The second thing is I think Marcus commented in his, er, in his, er, um, presentation that the existing volumes that we had, you know, some time ago, of just over 100 million tonnes or so of, er, of production, essentially were contracted on these volume, um, er, long-term-benchmark volume-based contracts. Er, we've undertaken that we're not going to sign any new contracts, some time ago. So, from that you should take that, as they expire, which will take some years, er, we will sign new contracts on new transparent marking terms. And all of the incremental volumes that Ian described will be sold on, er, on new contract terms, so for the next couple of years, you know, the figure that I would use is sort of roughly 100 million tonnes or so of contracted material, or a little bit north of that.

## **Marcus Randolph**

There is one point that's probably, if I may add to that, just finally: it's the difference between spot and market price. We actually don't wish to sell at spot; we wish to sell at a long-term contract, under a long-term contract, where that contract references a market-clearing price. There's a difference between the two. We still want to have long-term relationships with our customers; we just want those agreements to reference a clearing market price, rather than an agreed annual negotiation.

## **Marius Kloppers**

Thanks for adding that, Marcus. That's extremely important, because all of our drivers you've seen today and all of our drive over the last five years, or last seven years, has been to get value recognition of our products. We cannot get that proper value recognition without our customers understanding our products, um, as well as we understand them, as Peter has illustrated.

Sorry, I think Tobias had a question as well.

## **Tobias Woerner, MF Global Securities**

Yes, Tobias Woerner from MF Global Securities. Just one question with regard to your consumers or competitors also in China: they will be more and more dependent on Australia as consumers. They must be thinking of plan b. How do you see them thinking about plan b? What are they doing, in terms of the supplier? Are they looking closer at Africa, in terms of iron ore and in, er, in met coal, maybe to, er, to Russia and China, and so on and so forth?



**Marius Kloppers**

Um, Tobias, thank you. Clearly there's a great degree of interest shown by all parties to all of these new, er, developing geographies. And we have, as many others have, no doubt that those geographies, in due course, will become very important suppliers. I hope we've illustrated though today that there are two factors to take into account here. One is that the relative, er, competitiveness of Australia has just gone up as the, er, as the fuel price, er, has gone up. That's a very, very important issue.

The second thing, um, that we hope we've illustrated to you is that the resource base that we have in Australia is an absolutely enormous resource base across a variety of products, um, and provides expansion opportunities that are going to last for many, many years. Er, and, you know my last point in wrapping those two things together is that the market works in rational ways and works in increasingly rational ways. It is the low-cost producers that can supply product most efficiently that will capture the market share. And, in our mind, as we very clearly illustrated today, er, we believe that Australia will capture a very large chunk of market share on known very high-quality and low-risk resources. But no doubt, er, those other new geographies, er, will become important in due course, um, but they are certainly of a very different, er, you know, degree of difficulty to exploit properly, er, just given many, many different degrees of uncertainty.

Okay, I might at this stage just move to, er, to Sydney for a couple of questions. I'm not exactly certain who will moderate in Sydney, but if I could have the first question please, and if you could just remember to state your name again, please, at the, er, at the start of the questions.

**Tim Gerard, Austock**

Er yes, Tim Gerard from Austock, and a question for Ian and David. Ian, on slide, um, 36, where you talk about the, er, the incremental capacity growth, and we can see there for instance 2007 you might expect to have a capacity of 132 million tonnes and, er, by 2012, building up to 240. Can you just give us, um, colour please on the sales profile of that? There's the capacity there, but any thoughts on the effective ramp-up on the sales? That's the first question. Um, and, um, Dave, could you just, um, remind us please? When you formed BMA with Mitsubishi, er, there was an originally there an agreement that, um, you each had back-end rights to 50/50 of global coking coal opportunities. I just wonder if that agreement still exists and, if it does, can you take that a step further and say, if you end up getting Hay or Creek or Kestrel that would have to sell half of that to Mitsubishi.

**Marius Kloppers**

I just wanted to take those two questions. I'm, er, I'm very specific in wanting to keep Ian, Dave, Peter and Marcus away from the transaction, er, because, I mean really what we've got here today is, in the same way that we've got, um, the Petroleum showcased, um, today is about the, er, the, er, the productive assets, so I wouldn't like us to speculate on, on exactly what, what could or would happen in, er, should a transaction be completed. Dave is not the person doing that transaction, so if I could perhaps just forestall that, that second question a little bit, um, I should note that the agreement with, er, with Mitsubishi is a global one, but we've clearly got some areas like Illawarra, Maruwai and so on that are not, not part of that global agreement, so could you please, please forgive me for that, er, for that, Tim?

Um, in terms of the question on capacity, um, and sales, Ian, if you could perhaps take, take that question.

**Ian Ashby**

Thanks, Marius, er if I understand that question correctly, we are planning to have the 240 million tonne base, which is the RGP [loss of audio]. Okay, we plan to have that upstream in the first half of 2011, and I would expect that we ramp that up to full in [loss of audio] an 18-month period.

**Marius Kloppers**

Thank you, er Ian. If somebody could just check the sound a little bit in er in Sydney, we er, we seem to have lost a little bit of er of sound there. If I can have the next question in er, in er, in Sydney please.

**David Murray**

It's on its way, Marius.

**Marius Kloppers**

Thanks, David.

**[Lawrence?], Macquarie**

I had a question about er logistics, the [baux?] business is about winning minerals on a low-cost basis, and also having low-cost logistics. At a time when um, you're investing in your logistics chains at port, rail, etc, it's logical doing this and integrating your operations. Regulators are looking at that process and that um that competitive position. I'm just wondering er, what er what you see as the challengers there from a regulatory point of view, and er whether those challenges may be eased or compounded by a merger with Rio Tinto?

**Marius Kloppers**

Lawrence, thank you er, um, we believe that the er combination of the of the two companies has got no impact on the er, on the fundamentals of er of, of, of regulation of the two businesses. Er, so I wouldn't like to comment on, on, on, on any impact there. Clearly, there is the well-publicised series of events, in Australia, I think our position as, as Rio Tinto's position indeed is very clear. That these sets of infrastructure are, are very efficient; they form an integrated production system. Um, and I think the difficulties the coal industry has had on the er on the east coast of Australia to coordinate things across a er variety of ownership structures and therefore incentives, are a clear illustration of what sort of efficiency losses you would suffer er should this infrastructure in the west be set, be set, er, be, be given access to that set of infrastructure.

However, um it would be amiss of myself, or indeed of the company, to speculate on er on any eventual outcome of the process as it as it is running in Australia. We clearly are unchanged in our position and unchanged in our er conviction that these integrated production systems are the most efficient way to bring the maximum amount of tonnage to market most quickly. David if I could have the next question in Sydney please.

**Neil Goodwill, Goldman Sachs**

Hi, just a couple of questions. One: in manganese, could you just provide some comments on how sustainable you think the high prices are? You know, we've seen a supplier response in this business um before, and you're obviously increasing production quite a lot, so I'm just wondering what your competitors are doing and how you see er see the supply response? In iron ore, could you just give some colour on the value and use of the iron quality, and how that's changing with higher input costs, high coke costs and higher energy prices?

**Marius Kloppers**

Neil, it's um it's obviously very difficult for us, particularly in a closed period, to talk about er prices. I think, and I'll ask Peter to make some comments about the resource basins, and, and, and expansion opportunities that are available to the other high-quality manganese producers, but I think the overall picture that Peter painted today is one where there is increasing differentiation by type of ore – in terms of value of use, and he spoke about these markets becoming more sophisticated and more interlinked in recognising that. Um, and he also commented on the fact that the majority of the supply response that we've actually seen has been in very low-cost and therefore low-value opportunities, but Peter perhaps you could say a few words about how you see the opportunity of the other high-grade producers to respond to, to this, to, to, to the demand issues here.

**Peter Beaven**

Yes, just to reiterate what Marius just said, I mean we've got a widening of the supplier side, and you know and that's very important, so you have er a bigger position in which to absorb any supply increases. In the old days you just had a narrow market, it was seaborne so small increases in supply had a bigger impact. As well you can see the shape of the curve, so as new high-grade sources come on – as undoubtedly they will – there is more space for them and there is a different shape on that curve. So, I think you can make your own conclusions.

**Marius Kloppers**

Thank you Peter. Um, I'm afraid that, um as I said, because we were focusing here today on, on, er, on production, volume and so on, our real expert on steelmaking is actually sitting in er, in the audience and valuing use of iron products, as, as, as, as, as impacted by other factors, but I can't add, unfortunately Neil, any knowledge to er to that. I don't think we've, we've, we've done much thinking about, er, how that value in use has been impacted, but Ian I don't know...or Marcus have you got some comments on that?

**Marcus Randolph**

Sure. Largely the Brazilian and the Australian iron ore products are substitutable for each other. The issue that the Australian iron ore production has is that it does have higher levels of impurities. So if you're running at 50, 60, 70% Australian-produced iron ore, the value in use difference is quite small. As you get above that the levels...you start to get to the level where blending alone won't be able to deal with the impurity issues and the costs start to go up. So, at modest to relatively quite high levels of Australian production the value in use is not meaningfully different, as you get up to the very upper end of the curve it becomes quite valuable.

**Marius Kloppers**

I think...thanks Marcus. Neil, but, but as to your question and how that is responding to changes in input costs we'll have to take a little rain check on that today. Um, if I can move to the phones perhaps, and I will come back to Sydney, and take the first question from the phones, please.

**Operator**

Our next question is from Cecilia Kiambo from Platz Cecilia, please go ahead with your question.

**Cecilia Kiambo**

Yeah, I'd like to ask Mr Murray, Dave Murray. Mr Murray, in Indonesia Central Kalimantan governor, Teras Narang has emphasised he does not want ore produced at Maruwai to be trucked through East Kalimantan and shipped out through that province. The governor and his aides have publicly spoke about the construction of a railway in South Kalimantan to end at the town called [Malkarti?] at the Barito river. What are BHP's interests concerning this proposed railway and its feasibility? And my second question, three or so years ago BHP was trumped on metallurgical coal pricing when another metallurgical coal producer obtained significantly higher prices. This same company is trying to achieve deal this year, and buyers are complaining that this company is distorting the market, and is setting dangerous precedents in a region, where as you have said relationships are valued. Mr Murray, can you share with us your thoughts about this? Thank you.

**Marius Kloppers**

Yes Cecilia thank you, the er the line was a little bad here, but um on, on terms of the second question on market-clearing prices, um we are very comfortable that what we have tried to discover today, er or this year in er in our price settlement, through the mechanisms that are in place for coke and coal, as indeed we did a couple of years ago, um was the market-clearing price for the bulk of the volume and, and, and the bulk of that high quality material. Um, in a tightening market, um and particularly on a, on a, on a product structure that has got fairly small spot volumes, um the marginal tonnes pricing is always reasonable volatile, and, and I think that we saw that a couple of years ago, and we probably seen that today as well. And I really wouldn't like to comment on, the, the, the interaction of any of our competitors with their customers because that really is, is, is, is, is more or less not, not my affairs. But, we do feel very comfortable that this year we discovered a price, with a mechanism in place that was, um, reflective of the settlement. As to the railway line that, that you spoke about, it would be difficult for us to er, to comment on, on the viability of somebody else's project. Um, and er, as such perhaps I, I unfortunately need to class that in the er, in the same category as commenting on, on other people's interaction. It would be very difficult for us to comment on other people's project viabilities.

**Cecilia Kiambo**

Mr Murray can I ask one last question? Er, there is no such thing as index-linked pricing for metallurgical coal, although this is possible for iron ore. What are the chances of setting prices for metal contracts annually on an index-linked basis? If this is at all feasible for metallurgical coal.

**Marius Kloppers**

Um, Cecilia, thank you. Um, for most of our products if we go back in history, there has been no market trading price, or easily discoverable price, and if you look at the suite of products that we produce, aluminium perhaps was first transparently traded in, I forget, the late '70s, early '80s. Er, nickel about the same time, and so on. Before that it was producer pricing, or what we would call benchmark pricing. The same thing has actually, er, happened in, in most of the other markets, that as market sizes grow they tend to become more liquid with more suppliers and more customers, er, and the pricing mechanisms change to become more transparent. Um, and that process is underway in, in iron ore. Now, if I look out really far, and I'm talking about long, long, long term, towards a substantially larger coking coal market, one could envisage that the coking coal market is not likely to respond in a different way from what all of the other products have responded over time. But I should note that the coking coal market is very highly differentiated; there are vast differences between different qualities of coking coal, and there is a continuum of that into soft coking coal and, er, and PCI. So any development that, that, that I can personally foresee, um, I would say would be well beyond the planning horizon.

**Cecilia Kiambo**

Thank you.

**Marius Kloppers**

Thank you Cecilia, if Ii can take the next question from the phones, please?

**Operator**

Thank you. Our next question is from Rob Clifford from Deutsche Bank. Rob, please go ahead with your question.

**Rob Clifford, Deutsche Bank**

Good morning, Marius, just a...

**Marius Kloppers**

Morning Rob.

**Rob Clifford**

... couple of quick questions. You talk about a CAGR-rated iron ore growth of 13%. Now, you also talk about the fact that you can speed up delivery of iron ore with a merger with Rio. What sort of growth rate in iron ore do you think you'd be able to achieve above 13%? Um, the second one is just on, on coke and coal. A couple of years ago at the met coal briefing we talked about a potential, you know, 85 million tons out of, out of Qcoal and 100 million tons out of BHP by 2010. What, what, what have you learnt since then in terms of, in terms of ramp-up that gives you the different profile, or the lower profile, now? Um, and just my final question, just a quick one on, on met coal. What differences are you seeing between met coal, iron ore and manganese production that gives you an injury frequency rate that's about double the other two, er divisions?

**Marius Kloppers**

Er, Rob, yes, three questions in there. On the first one on the speed-up, we wouldn't have an update on the, er, on the graph that is in our presentation pack that I think we released just before Christmas. I think that that wedge of extra production that we indicated then would, would still be our best estimate of the, the speed-up rate, so... and indeed, the er, the works that Ian showed us today, the work in progress and the forward trajectory really is just a confirmation of the er, plans that we've put out in terms of volume, aspirations and so on last year already. So, er, what, what today was more aimed at is to give you the, er, the real understanding that these projects have been delivered, that they are being built and, and will deliver the volumes. But we've got no update on the, er, on the, let's call it the volume, volume synergies.

Er, to your second question on er, the, er, the ramp-up rates of met coal, I think, Robert, it's fair to say that um, we are working quite hard to take advantage of the, er, what we see is going to be a very strong market. I think it's fair to say that we, er, we had a little bit of a pause in our foot on the pedal in terms of, of met coal production, because I think that the Indian coking coal consumption, that China market opportunity that Marcus spoke about, perhaps we were, we were not as confident as we are today about that realising. So, um, I wouldn't take any, um, structural change in our aspiration to produce volume. We've got greater clarity on our, on our resource base, and while our presentation a couple of years ago was, you know, more conceptual in nature than how we're going to go forward, I think what we've seen today is a concrete set of plans with real names, volumes, er, attached to them. I mean, Marcus, I don't know if you want to make any additional comments to that?

**Marcus Randolph**

No, I think that's fine.

**Marius Kloppers**

Um, and Rob, just remind me again what the, what the third part of your question was?

**Rob Clifford**

The third part was just in, just in the steelmaking materials divisions, what you're seeing differently in coke and coal that leads to a, er, safety performance which is sort of twice the rate of the other two.

**Marius Kloppers**

Oh, okay, yes. Probably Marcus is the person that has, that has got best oversight between the two businesses and can explain some – three businesses – can explain some of the differences we're seeing there. Marcus?

**Marcus Randolph**

Yes. We, in our coal mines, we run a number of underground mines, including a number of underground long wall mines. And so you're effectively comparing the safety performance of underground long wall mines to, for example in our iron ore business, largely open-cut iron ore mines. There are inherently different risks, and you see as a result, you see different safety performance.

**Rob Clifford**

Do you think it reflects an element of, level of control?

**Marius Kloppers**

Er, no, Rob. I think if you look at all of those graphs, I think that you can, er, that you can look at them and see that there's been a dramatic reduction. I think also the relevant thing as Marcus has said is to benchmark the performance in the Queensland coal industry against each other, and if you do that you'll see that our performance is, er, extremely respectable. And just, just by way of illustration, you know, our petroleum business would have an injury rate that is lower again than Ian's iron ore business, even though we are extremely proud of, of Ian's business. That, that doesn't mean that we think we are doing a better job of running the one than the other, because, again, that's a different set of risks. So we should just be a little bit careful here in comparing, comparing apples to oranges. Um, I'm going...

**Rob Clifford**

Thank you for that.

**Marius Kloppers**

I'm going to loop – thank you, Rob. I'm going to loop back to London and just take a set of questions here from London. David?

**David Butler, Cazenove**

David Butler from Cazenove. Um, a couple of questions. Firstly on steel production growth. There are reports coming out now that both carbon steel and more particularly stainless steel production growth rates are slowing this year. Do you see that as a temporary effect and does it concern you at all? And then whilst we are on iron ore, you have given us a \$1.1 billion figure for the approval of early works for RGP5. Is the final... can you give us any idea of what the final sort of figure is going to look like to get up to that 200 million tonne capacity. Um, and then moving on to met coal, again you have given us volume and timing to get to that 85 million tonnes. Are there capex figures attached to that at all as well?

**Marius Kloppers**

Yes. On the steel production growth, David, I think we take our decisions for the long run. I think the most important figure that we saw today was that Marcus showed us, that the Chinese per capita steel consumption is about 250 kg/tonne. China is not going to build, as he showed you, a modern economy without getting that consumption figure to 500kg per - sorry, what did I say; 250kg per person per year, they are not going to build a modern economy is they don't get to, um, 500. And so, um, you know, all of our planning is done on that long, long-range demand growth for iron ore, coking coal and manganese, based on a higher materials intensity. And so by conclusion, if there is any steel production growth slow down, we would view that as a temporary feature and not something that impacts our planning. On RGP5 and on the, er, on the coal mine capital costs, our, er, custom and practice, and I think the only prudent one, is to always only give capital costs at the time of sanctioning. And, you know, er, as such we will be in a position to provide you with the full RGP5 costs, um, Ian, just remind me of the exact date of when we hope to sanction that, that project?

**Ian Ashby**

Late this year, Marius.

**Marius Kloppers**

Towards the end of this year, and on the coal opportunities you can look forward to those costs becoming available as we sanction those projects one by one, as we did for, er, the Maruwai one today, David, so no update there.

**Sam Cataloni[?], Macquarie**

Sam Cataloni from Macquarie. Just a quick one specifically on Maruwai. Dave showed the metallurgical coal cost curve. Where would Maruwai sit on that on the basis of it being a trial operation, and then how would that shift if you did go to Phase 2?

**Marius Kloppers**

Yes, Sam, obviously this is a start. We have got the seven lease areas and we've highlighted they are Phase 2, and we obviously hope to do, you know, phases beyond that. But Dave, I don't know if you want to give a little bit of granularity on how you see that this basin could eventually profile?

**Dave Murray**

Well as you say Marius, this is a start. It is actually quite a small volume on which we are building quite a bit of infrastructure. The costs will be high but obviously coming down as regard to the stage 2. I think it is worthwhile noting that the infrastructure that we are building for the operation now, all of it - well, 95% of it, can be used for the next phase. So, the road and the port and all that infrastructure is actually usable when we do expand into the, into the next project, which is unknown really at the moment.



**Marius Kloppers**

So Sam, I think the message that you should take from there is that we are really trying to open up a province there with this, with this trial mine test, obviously, a lot of conditions, environmental, operational and so on, and Dave and his team have put in an absolutely tremendous amount of work there. But it really something that we'll build out over time. If I could get the next question.

**Brett Foley, Bloomberg**

Thanks, it's Brett Foley from Bloomberg. This is slightly off carbon steel materials, but on the stainless steel issue, and I think you have made some comments in relation to the impact of the gas situation in WA. There is some research today suggesting that the total cost will be AUD\$500 million in earnings, and that BHP may be hardest hit in dollar terms. Can you just give us a bit of an update on whether you think that is correct and whether you do see a greater impact than perhaps first thought?

**Marius Kloppers**

Yes, thank you. Perhaps I'll ask Marcus to just comment after, after I've commented as well. Um, we, we clearly have costs associated with the rebuild of our Nickel West furnace. Those are the normal costs associated with a rebuild of this nature that is done, you know, sort of between every seven to 10 years. Um, and we see no real guidance that is different on this rebuild process from any other rebuild process that we would do, in fact we, we're basically just taking the furnace and rebuilding it, in the same way that we rebuilt that last time.

In terms of our overall gas position, well we remain, obviously, extremely vigilant on the overall picture. Um, we have not released any, any guidance of additional material impact on our operations, and given our policy that every piece of news of a material nature gets, gets out immediately, I would take my guidance from the fact that, that we've given no, no new guidance on, on cost impact there, as meaning to say that we have not identified any, er, impacts beyond just the pure rebuilding costs, which is non-gas related in any case. But Marcus, you might want to just give a quick snapshot of how the various operations of which you run the majority in Western Australia are doing under these energy-short conditions?

**Marcus Randolph**

Yes. The iron ore, the iron ore actually buys its gas from the North West Shelf, so it wasn't impacted at all. Western Australian iron ore has no issues with gas. The very end of the pipeline, you get down to Worsley and Marius mentioned that we're doing the furnace rebuild in Nickel West, which allowed us to shuffle some of our gas receipts from one business to another business. Without going into details, he did mention that if we had a significant change we would have announced it. You should probably, Sam, from the fact that we haven't made an announcement, that there hasn't been a major loss.

**Marius Kloppers**

We might even be selling some net gas into the system at the moment if I recall. Okay, perhaps one more question here in London before I loop back to Sydney. I have got no more questions in London, so I'll... David, I don't know if you've got more questions in Sydney?

**Dave Murray**

We have a taker, Marius.

**Brendan Harris, Macquarie Bank**

Marius, Brendan Harris here from Macquarie Bank. A couple of questions just on water. First one around a port; just interested, obviously, in your plans for, obviously, iron ore in Western Australia. Increasingly you've got a neighbour there now who's looking to grow very aggressively in both the inner harbour and potentially in an outer harbour. Firstly wondering how you will be working with that neighbour going forwards, but also, more importantly, what level of capacity do you see for the inner harbour at Port Hedland, and do you think there is scope to, er, you know, increase that to give you I guess the flexibility that you and others need. And I guess as an adjunct to that there's others who are looking at capacity there as well, so I'm just interested in your thoughts. And, just, a second question around water, this time the impacts in Queensland. Just around operating costs within the met coal business, insurance receivables, just some guidance as to how you see things flowing into the accounts.

**Marius Kloppers**

Yes, Brendan, perhaps the second question is obviously those insurance claims are progressing. We haven't divulged exactly when they will flow into the accounts, so we haven't said whether it's this period or the next period and I wouldn't like to give any additional guidance around that. On the, er, on the iron ore question, I think Ian in Sydney is best equipped to, to answer that question, but let me preamble that by saying that the, er, that the harbour plans that, that Ian has outlined today would be our P50 estimates of what volume would be available to us in the configuration we are planning, but Ian, I don't know if you want to add anything to that.

**Ian Ashby**

Yes, just quickly Marius. The inner harbour, I mean, as people know, we don't own the inner harbour. The Port Hedland Port Authority operates, we are a key contributor in the operation of that, of the inner harbour through our participation in the Port Hedland Port Authority board. We've got 40 years of experience of understanding the tidal constraints and ship movements in the harbour. And secondly, the Port Hedland Port Authority allocates capacity. So it's really their determination as to how they, how much capacity of the various classes the inner harbour can support.

**Marius Kloppers**

Thanks Ian.

**Brendan Harris**

Just back to the met coal thing, is there any guidance we can get just on underlying, you know, cash costs? You know, we are seeing significant pressure across a range of businesses. Is there any clarity around met coal?

**Marius Kloppers**

Yes, Brendan, I think it would be difficult, we're obviously in a closed period, to give you any indication that, that we haven't previously released. I would, however, er, point to the fact that obviously the revenue line in the met coal business is an extremely important one, especially given the step change that we've seen in prices, and hence the release of a couple of weeks ago when we lifted the *force majeure* that gave a revised, you know, estimation of where we would find ourselves with carry-overs, or carry-forwards of previously priced product, probably would be the best information that I could give you on, on, er, on calculating what our earnings impact here is going to be. Beyond that, it's actually quite difficult today, here, for us to give you more guidance, Brendan. But that revenue line and the carry-over tons, especially given the fact that one lot of coal is priced at three times what the previous lots price - those volume figures are very important as we contemplate what the profit contribution of these businesses are going to be. David, is there another question in Sydney?

**Tim Gerrard**

Yes Marius, Tim Gerrard, another two questions. The first is just with regard to the coking coal markets. We have had the step change in the price, and you have alluded to India as being extremely important on that, and China as being a wild card, but can you comment please, the most significant reason, surely, is at least 10 or 15 million tons of hard coking coal have been taken out of the Bowen Basin because of the flooding? So can you just talk a little bit in the near term and going into next year, or, you know, twelve months time, as you build stocks, presumably we're going to... we may be in quite a different situation if India doesn't accelerate from here in the near term.

That's the first question. And the second question is more of a corporate one, coming back to the European antitrust documents and considerations. I think that was due, the first phase, on the fourth of July or early July. Can you just clarify please whether or not BHP has any, sort of, dealings prior to that date, such that you might come back with some sort of suggested changes to the regulator's requirements? Thank you.

**Marius Kloppers**

Yes, Tim. Absolutely, the rains were an important event this year. But I'd like to just have a step back on the overall equation that we, that we're seeing here. We've firstly seen, and we've had earlier comment on this call, that the spot price for coking coal at the moment seems to be well north of where that settlement was. Um, and we heard a figure, I think somebody mentioned, er, a figure, and I have certainly read in the press, figures of \$360 per tonne in the spot market being obtained by third parties. So the market clearly, the market clearing price on an instantaneous basis is probably even north of where the settlements were some time ago. We've got to take that into account.

Secondly, we've seen that there has been quite a dramatic swing in terms of Chinese met coal exports, and I think Dave commented on the fact that China is by far the largest met coal consumer in the world. So even a relatively small swing by China is, is a large swing on the overall supply/demand conditions in the market. Thirdly, India is adding met coal consumption at about, er, you know, 15% a year on a 22 million tonne import base, which is let's call it a rough three million tonnes per year. Brazil is adding steelmaking capacity and have basically got zero met coal of its own. If I add all of these things together, and I take a more, not only a short-term view but a longer-term view, I'd just like to reiterate the picture that we've got here today, that we feel extremely confident that this is going to be a very good market for us to participate in, and we are extremely happy about the resource base that we've got to support that. So yes, the rain's a significant event, but against a total backdrop of other events that are taking into the market, plus where the markets is in terms of tightness today, I wouldn't, I wouldn't, er, take that as a, as a, the only defining event in the system.

On the EU, look, our planning has always been that this basically is a process with the EU regulator. Given the complexity, given the thoroughness with which the EU regulator will examine this, that this will go into Phase 2, and so while the Phase 1 is theoretically a milestone, I think all of our planning has really been towards the, er, the completion of the entire process, which culminates with the completion of Phase 2, and as such I wouldn't like to generate any expectation that there is going to be much news before that is completed towards the end of this year.

David, perhaps one last question in Sydney before I go to the phones again?

**Dave Murray**

I think that's it from Sydney, Marius.

**Marius Kloppers**

Thank you David. Perhaps then on the phones.

**Operator**

Our next question is from [Lyndon Fagan?] from ABN Amro. Lyndon, please go ahead with your question.

**Lyndon Fagan, ABN Amro**

Thank you. I was just wondering if you could talk a bit more about the development projects in Africa and India, and specifically on the infrastructure requirements and whether you've got any preliminary production and timings for those that you are prepared to share?

**Marius Kloppers**

Look, now, well beyond what we would normally forecast, in fact, some of those exploration projects that we showed today doesn't even make it yet onto our longer-term bubble chart, which, which means really that they're beyond that and outside the \$85 million that we've indicated, but certainly there's nothing that we can give you more granularity on on projects that we haven't sanctioned. I'm not too certain about what project in India you would have been referring to, Lyndon, so perhaps you could just talk about that again?

**Lyndon Fagan**

Yes, I was just looking at the iron ore map, where there is India shaded in green and also the Guinea Project.

**Marius Kloppers**

Yes, no, the iron ore projects in India are the opportunities. What Ian merely wanted to indicate is that that is an area of business development, we have got some things that we are contemplating there but, but nothing that makes it on to our bubble chart at this stage, and therefore well beyond anything that we can give any price or cost estimates on.

**Lyndon Fagan**

Okay.

**Marius Kloppers**

Thanks Lyndon. If I may have the, er, the next question on the phone, please, perhaps the last question?

**Operator**

The next question is from Martin Creamer from *Mining Weekly Online*. Martin, please go ahead with your question.

**Marius Kloppers**

Good morning Martin.

**Martin Creamer**

Good morning Marius. Three quick questions, all relating to manganese in South Africa. BHP Billiton personnel from Australia have been carrying out some manganese logistics studies in South Africa in cooperation with Transnet. What is the progress if any on that to streamline the logistics through Port Elizabeth and Durban, and what chance is there of some sort of cooperative arrangement to use Saldanha as a dedicated bulk port?

**Marius Kloppers**

Okay, um, perhaps Martin, you can just state all three of the questions and we'll... if they're all related to manganese, that might be the easiest.

**Martin Creamer**

Okay, then the other issue is the large diesel generator sets have been brought into Hotazel. Have they been commissioned yet, and are they really to improve safety or are they also production-enhancing. And then the third, is the second BEE initiative likely to be fulfilled in the near future this year?

**Marius Kloppers**

Martin, I think, thank you for those questions, I think Peter is probably best positioned to give us answers on all of those questions.

**Peter Beaven**

Yes, right, on the first one of the questions on Transnet, yes we have got some folks helping us from our broader operations, and, you know, I'm pleased to say that that cooperation is in place with Transnet. They will help us understand what the steps are to and the various options we've got to expand in South Africa. And that really takes care of the second question, because it includes in fact, our cooperation with Transnet in fact includes any potential options out of Saldanha. So you know, at this point in time we are very please with our cooperation levels with Transnet, and we think that's absolutely the way to go.

In terms of the gen sets, they are not in place at this point in time. They are not really a safety issue because we wouldn't compromise safety, er, in the event that there was any power issues. Obviously, as you know, we would simply shut down operations for the duration of the power outage. So it's really around production, and certainly those gen sets are on the way and we should be able to mitigate any production issues from power-related losses in due course, shortly in due course.

Third question on the BEE, the second BEE: remains under negotiation. I've got no particular concerns around that, that transaction, and we'll be well within the deadline of April 2009.

**Marius Kloppers**

Thank you, Peter. I think I've got to close off there. Ladies and gentlemen, thank you very much for attending today, and thank you for the time that you have spent with us. And thank you to our team for staying up in Sydney, and Marcus and Peter, thank you very much.