

#### **Alex Vanselow**

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Ladies and gentlemen, good morning to those here in London, to those in Jo'burg, and those on the phone, and welcome today to BHP Billiton's Aluminium CSG presentation.

First of all, I'd like to thank Merrill Lynch for providing the venue today. It's very nice. And a second point, I think all of you received a little card with emergency procedures for this building. Please read it and make sure you understand what to do in the event of an emergency; safety is very high in our priorities.

Now let me start by introducing the five members of my team that will be presenting here today, starting with Rod Kinkead-Weekes. Rod will outline our views on strategy and our continuing focus on the low-cost, upstream segments of our industry.

Then Julius Matthys will discuss the market outlook for both alumina and aluminium, as well as speak about the role of marketing in the Aluminium CSG. And then from Johannesburg, Dr. Xolani Mkhwanazi, who is the Chief Operating Officer for Southern Africa, will speak about our operations' performance and also the development in those operations, followed by Ian Jacobson, who will cover the technical and business excellence programs, and finally, Vince Nicoletti, who will provide a financial review, as well as an update on key sensitivities that affect our performance. I will then recap the key points before moving on to your questions.

We would expect our presentation to take around one hour, leaving plenty of time to answer your questions. We plan to finish around 11 o'clock, London time.

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I'd like to begin by recalling Mike Salamon's "Overview on the strategic direction" from the briefing two years ago. Mike said: "We have been very focused on growing the aluminium business to date. I guess the future holds more towards alumina, for essentially two reasons. One, China, and the implications of China on supply and demand. And then the fundamentals of the business, where we have always felt that alumina was a stronger business. I guess the overriding message is that the future for the Aluminium CSG should be one of rising results". Mike was very right there. I'll come back to this.

Our strategic direction remains the same, and today's presentation will be set in the following context. Sustainability is about having a long-term perspective, which is critical to our success. We have an absolute commitment to safety, our neighbouring communities, health, and the environment. Our business is highly capital intensive and long term in nature, so sustainability ultimately means good business for us.

The quality of our assets is also critical to our success. The very best of our assets are large, long-life and low-cost, and have strong bauxite and energy fundamentals. However, it is the ability and commitment of our people, and having a positive culture that brings out the very best in them, which is in turn critical to our business achieving its full potential.

We will talk at some length about the markets, both alumina and aluminium, today, and I know a lot of you will be interested in that. It is clear that demand is very strong, and that the industry will have to rise to meet this demand. So we will outline some of our growth options which will provide excellent opportunities for us to respond to this demand challenge.

The key point about the potential growth of the Aluminium CSG, from our perspective, is that we have to create value. We see a lot more potential in our existing operations through brownfield expansions, business improvement, and other initiatives, to deliver the value adding growth that's required. We also are looking beyond our existing portfolio for growth, to a new generation of opportunities. Again, this also must deliver value.

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Our vision is to be the best upstream aluminium company in the world. The key to our success is sustainability, a word which encompasses our values and how we try to run our business, the way we deal with our people, our neighbouring communities and the environment. We believe, and we see it demonstrated daily in our operations and initiatives, that sustainability is the foundation of excellence in our endeavours.

This chart shows the performance of the Aluminium CSG and BHP Billiton for one metric, the classified industry frequency rate since 2002. The trend of improvements is pleasing, and something every person in this CSG has fought very hard to achieve. For example, our focus on behavioural safety at the floor level has resulted in a significant reduction in both injury frequency and also severity in all our assets. But our goal, we have to remember, is zero harm, and we have a long way to go to achieve zero harm. The more we improve, the greater we find the challenge to come to the next level, and to sustain performance at that level.

You might find interesting the briefing BHP Billiton gave at this same venue on October 28, on our sustainable development performance. The presentation and webcast are on our website, and they include a good discussion on the success of Mozal, which is a model for integrating sustainability into projects.

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This is just a quick reminder of our portfolio. This map shows the location of our assets and the BHP Billiton share of production for each asset in FY05. You can see from this chart that we are active in three bauxite mines and three alumina refineries, and in five aluminium smelters.

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We are pleased that a number of our assets have again achieved record production. This is something that we work hard to achieve and it's something that we need to do in order to maximize value creation in what are very strong market conditions.

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At the last briefing, in November 2003, I presented a similar slide to this, which shows our performance since FY95. Why FY95? Because in many respects it was the first year we obtained relevant materiality in the aluminium business. This chart provides an update. The vertical dotted line separates what was presented then (in 2003) from what has happened since.

This chart shows that over the ten-year period, aluminium prices, after a significant extended dip, have gradually returned to the strong levels that we saw in FY95. Since FY03, our metal production has continued to grow, but our alumina production over the past couple of years has not really increased. We will come to the future plans on alumina a little bit later.

As you can see, our turnover and EBIT have improved very strongly over the past few years, a direct reflection of our investment and positioning in prior years. It is also no accident that the rate of improvement of our EBIT exceeds that of our turnover. Our already high margins have improved over the last three years as well.

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This chart shows some of our planned growth opportunities and our thoughts about the future as well. I would like to point out that as of today, only the first three bubbles are projects that have been approved by the BHP Billiton Board. However, the other brownfield opportunities shown on this graph represent further low-cost, long-life, high-margin and high-return investments, which are currently being considered, but they will be subject to our tollgate process and Board approval.

We continue to look for greenfield opportunities in both bauxite (refining options) and energy (smelting options), and these are represented by the bubbles on the bottom. We will not be covering any details of those projects today, other than to give an expectation of when we expect them to come on-stream.



Despite some of the problems which are arising with costs and tight labor markets, which everybody is familiar with, we believe that our greenfield prospects offer the potential for value adding growth, which is the only type of growth that we are interested in.

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I'd like now to hand over to Rod, who will talk more about our strategy, our industry and our growth discipline.

#### **Rod Kinkead-Weekes**

Thanks very much Alex, and good morning ladies and gentlemen.

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The first thing I'd like to do is just to restate what we've said to you before, and that's that every time we do a strategic review we conclude that we are in the right part of the value chain, and that we're in the business of producing a metal which has got a great future. Our sustainable supplies of low-cost power and bauxite and our assets at the bottom of the cost curve are exactly where we think we ought to be.

Just a few words on the scope of the industry, aluminium industry turnover at this point in time is a little over \$180bn. Of that, more than \$80bn is in alumina and primary metal, with the balance in the downstream (being rolling extrusion, casting and so forth).

The lowest quartile, or the most competitive players, have EBITDA margins often well above 30% in alumina and primary aluminium, compared to less than 10% in much of the downstream. And we've got a really competitive suite of assets and our strategy is to operate those assets excellently, and to grow them when and where that makes good financial sense.

I'm going to talk a little bit more about supply and demand in a minute, as will Julius, and I'll also talk about our attitude to investment, but first let's look at where we sit on the cost curve.

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These are the latest cost curves from Brook Hunt, and noteworthy is the fact that in both cases, alumina at the top and aluminium at the bottom, the curves have moved upwards. The costs have increased, but our relative position is unchanged.

The top one, as I said, is the alumina cost curve, and you can see that our alumina system is better placed than any other major system. The bottom chart is the aluminium cost curve, and again you can see that of the major systems, ours is on average better than most.

Although there are some smelters to the left of our system, on a smelter by smelter comparison, if you take Mozal, for example, you will see that ranking alongside the best of the world, in other words, it would be to the left of the orange box. And as I said before, our aim is to operate the assets excellently, and we will hear a bit more about that a little bit further on from Xolani, who has some benchmarking data to come.

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Turning now to demand, current global aluminium consumption is 42 million tonnes per annum, of which 10 million tonnes or 24% is supplied by secondary material, leaving 32 million tonnes being supplied by primary metal, of which, 7 million is consumed in China. Current global alumina consumption is around 70 million tonnes, and that includes non-metallurgical demand, and current bauxite production is of the order of 170 million tonnes.



Looking forward, we see primary aluminium demand rising by more than 5% per annum between now and 2010, that is to 42 million tonnes, and then as you can see on the chart, rising to a bit more than 50 million tonnes by 2015. Generally speaking, we see Western world demand following industrial production, and the main locomotive for growth, again as you can see from the chart, is China, where we see total demand rising to 20 million tonnes by 2015, of which 16 million tonnes will be primary demand. That's a compound annual growth rate of a little over 9%.

We could spend a lot of time on this, but in the time available, I'd like to show some of our thinking in terms of the fundamental driver of this Chinese demand, which is the extraordinary demographic shift that's already occurred, and which we expect to continue over the coming decades. Our view is that China is very much here to stay.

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We spend a lot of time and effort and also money understanding developments in China. Apart from the BHP Billiton resources on the ground in China, we have people there talking to customers, visiting smelters and generally feeding our demand models, which are bottom-up, in other words, we look in great detail at the construction, transport and other sectors, and demand for aluminium in all these sectors is largely driven by urbanisation.

This slide shows what we've called Tier 1-3 cities. I won't define them because you will have the definition on the handouts, but generally speaking, a Tier 1 city is a big city, a Tier 2 city is a medium-sized city and a Tier 3 city is a city. And as of 2003, at any rate, which was when we did this work, there were 45 such cities in China, of which four are Tier 1 cities, and you can see them on the chart.

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If we move to 2010, on current planning, those 45 cities move to 86 cities, of which instead of the four on the previous slide, 10 would be Tier 1 cities...

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...and if we move again to 2025, then there will be in the order of 147 of those cities, of which 18 would be Tier 1 cities. And that's only China, because the same sort of thing is also occurring in India...

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...and if we look at India, then you will see from this chart that between now and 2025, India's Tier 1-3 cities will grow from 33 to 73, of which the Tier 1 cities will increase from five to 13. As in China, urbanisation is the main driver for consumption in aluminium intensive growth segments such as power, transport, consumer products and so forth.

As with China, we also have people on the ground in India reviewing these demand drivers which we periodically validate and model. So given our portfolio of assets, low cost and upstream as I said, this is the main reason that we believe we are well placed with a commodity with a great future.

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Let's turn now to the supply side. Firstly, while prices have gone up, and you may have seen this morning that three-month aluminium went to \$2,100/t, so have costs, and this chart shows the direction of some of the major inputs for our industry, and noticeable is the sharp up-tick in the last year or so. Vince is going to talk to you a little bit later about the specific impact on our own margins, so I'm going to stick here to addressing some of the more industry-wide issues.

In general, what we're seeing is project delays and the supply side struggling to keep pace with demand. This is good for prices, it's good for those at the bottom of the cost curve, and it's particularly good for those with locked-in or hedged input costs.



More particularly, we see this margin pressure continuing for some time. This is going to be serious for some at the top of the cost curve, particularly those with expiring power contracts. We've already seen smelter closures in Europe and the US, and there are going to be more to come, and this is fundamentally because power prices will remain structurally higher in those regions than in the past.

A word here about Chinese production. This has reached an annualised rate now of 8.4 million tonnes per annum, and it's forecast to rise to more than 10 million tonnes by 2010 and then onwards to more than 15 million tonnes per annum by 2015.

As you are all aware I'm sure, there's been this very, very rapid addition of Chinese capacity since 2000, often by enterprises who have had no alumina or power locked in. And given what's happened in the interim, in both the alumina and the power markets, large sections of that Chinese capacity are operating at marginal profitability, and approximately 2 million tonnes of capacity in China is currently idle.

And all this has occurred in a country that is structurally short of power, as a result of which China is now investing at a phenomenal rate to provide power to all those developments and those cities that we saw on the previous slides. Their current planning is to add 345 gigawatts by 2010. That's nearly double China's current installed capacity and to put that in context, U.K. capacity is currently 80 gigawatts.

So the big question for us in relation to China is will this increase in power availability be sufficient or will there be a surplus? And the reason that this is important is because it goes to the question of whether China will be a net importer or a net exporter of metal in the future. It's our view that China will not have a structural power surplus, and that therefore, on balance, it's more likely to be a net importer in the future. That said, we still see volumes of imported alumina into China increasing, but possibly at a slower growth rate than we've seen in the past. If it does turn out that China remains power short, then smelting capacity is going to need to be added elsewhere in the world, and in either case this is going to be good for alumina demand overall.

Julius is going to show you our capacity projections in a minute. Going back to the supply equation, apart from the cost increases that I've mentioned which are putting pressure on project development, the other basic ingredients for investment - which are economic power in large quantities for smelting, and economic bauxite for alumina - are both very scarce.

One could say that the fat rabbits have been caught, and the remaining known resources are in more challenging countries where things tend to move slowly and project risks can be much higher. For these greenfield investments to occur, long-term prices must reflect the reality of increased capex and opex as well as the additional risks, and in alumina, long-term contracts with traditional percentages of an LME price in the \$1,600/t to \$1,800/t range are unlikely to induce the required capacity. This is because long-run prices must reflect the enormous capital intensity of building alumina investmenta, and as you will probably recall, we've been saying this for some time now.

All this leads us to believe that, barring accidents and with the caveat that I've mentioned about uncertainties surrounding Chinese metal capacity, metal and alumina supply will be stretched for some time to come.

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What does all this mean for us in terms of growth and projects? Alex showed you before our past growth profile. We've increased our metal capacity 4.5 times and our alumina capacity 2.5 times in the last ten years. The past investments that you see on this slide show the history and the investment cost per ton of that capacity to date, and as you can see, this has been very competitive.

In all, over this period we've spent around \$4.5bn. The bulk of that's been spent to ensure that we're very cost competitive, and that's consistent with our low-cost strategy, and Vince is going to deal with the returns on this capital a bit later in the presentation.

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This next chart is a repeat of the one Alex showed you a moment ago, and it lists some of the growth opportunities we're currently looking at. These all represent potentially attractive high-return options and this is important in the demand scenario that I've painted.

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This last slide of mine puts our growth in the Aluminium CSG into the BHP Billiton Group context, and one of the great positives, I think, about being part of the BHP Billiton portfolio is that we're not under pressure to invest, and in fact we won't invest, except in really good, large, low-cost and long-life assets. And in the meantime, as I've said, we're dedicated to the goal of zero harm and to operating what we've got excellently.

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I'm now going to hand over to Julius, who's going to talk to you a bit about the market.

### Julius Matthys

Thank you Rod. Good morning ladies and gentlemen. It's my pleasure today to talk to you about the things that we are seeing in the market, and the factors that are influencing us.

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Let me start by saying that the market fundamentals for metal and alumina are attractive, and both the alumina and aluminium metal markets are expected to show a supply deficit this year.

The current rise in prices has been largely driven by developments on the demand side, as Rod has talked about. Aluminium demand has proven to be largely inelastic to the rise in prices, with the exception of some price premium pressure, and has been growing strongly, above the rate of global GDP growth. This has been largely due to the emergence of China as a major consumer of aluminium.

Alumina refineries globally have been operating at extremely close to full capacity for some time now. As the latest spot price suggests, there is little margin for error on the production side, and any downtime in global refining capacity, no matter how short, will have a knock-on effect on prices.

The latest initiatives from China to withdraw the incentives for exporting metal, appear to be having results. Monthly metal exports averaged 20,000 tonnes for August and September, while they were typically around 80,000 tonnes for the first half of the year.

Finally, we trade for a number of reasons, all geared towards optimising the value of our equity production, and the servicing of our customer base. We will cover this in more detail later in the presentation, but the key point here is the low-risk nature of our third party trading.

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This chart is interesting for a number of reasons. Firstly, it shows the market is in deficit today, and likely to remain tightly balanced over the medium term. Secondly, it clearly points out that future demand growth will need to be fed by new production capacity. The vast majority of new production is coming on stream in Brazil, Australia and China. As we would expect, there has been a supply side response to the current high prices but not sufficient to send the market into deficit.

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Annual metal production in China is estimated to increase by 18% this year to approximately 7.8 million tonnes, up from 6.6 million tonnes in 2004 and is the central reason for the current alumina tightness. The market has been tight for some time now, and this strong demand means smelters have drawn down alumina stocks. This explains the current run-up in spot prices, and will provide support for the spot alumina prices into next year.



As we all know, recent hurricanes have impacted the US Gulf and Caribbean refinery production. This serves to illustrate that when the industry, as it is now, is operating at effectively maximum capacity, any production problems will feed through to the spot market. Looking ahead to next year, alumina supply will continue to lag demand, and we believe the market will need to keep operating at very high utilisation rates.

The current alumina benchmark, the alumina spot price from Australia is around \$570/t FOB at the moment, but as we all know, that spot price is not the whole story. Despite trading at over \$400/t for some time now, metal production continues to show healthy growth rates. This is in large part explained by the structure of the alumina market with the majority of tonnes being transferred inter-company or sold on a long-term basis.

The tight market situation will certainly set the background for any upcoming contract negotiations. In our case, our alumina book consists of a range of contracts, new and old, or legacy, as well as a spot exposure notionally of around 10%. Term contract renewals happen on an ongoing basis. Our spot business is spread throughout the year in a non-linear fashion. For FY06, this is weighted to the second half of the year, as well as being subject to actual operational performance and demand.

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The alumina market is likely to post a small deficit in 2005, as I mentioned earlier, and is also looking tightly balanced over the medium term. As Rod said, how much of the existing idle capacity in China is likely to come on and when, remains to be seen as it is a function of the power situation which has yet to unfold. In general, the location of cheap or stranded power will be vital in China as elsewhere in determining the location of future aluminium production.

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The run-up in prices on the LME has squeezed physical premiums in some markets, as customers show caution when committing themselves to purchasing metal. Primary aluminium stocks on the LME exchange have maintained low levels this year. All in all, close to 1 million tonnes of metal has come out of LME warehouses since January 2004. It is worth mentioning that the flows of Chinese metal into the LME warehouses in Asia propped up falling LME stocks elsewhere. While the level of LME stocks has been lower in the recent past, the level of aluminium stocks measured in terms of daily consumption rates has not been consistently this low since the 1980s.

While the reduction of metal exports from China will first and foremost be a positive to the LME prices, it also removes the profitable sale segment for Chinese smelters. The elimination of tolling and the tax rebate schemes will impact the economics of smelting in China and could impact the level of Chinese metal production growth, albeit from a very high base.

Prior to their accession to the EU, countries in Eastern Europe built up stocks of metal in the region, and we understand that these stocks have largely been drawn down now. In the near term, rising fuel costs in the US and Europe are feeding through to electricity prices. We understand that around 20% of EU smelting capacity will have to renegotiate power contracts before the end of 2007. While recognising that rising energy costs are a global phenomena, Europe and the US are simply starting from a much higher cost base.

Domestic demand in China continues to grow in double digits, as Rod's chart showed, despite fears that the Government's recent fiscal policies would negatively impact that growth. The growing pool of urban middle-class will be key in supporting the demand for aluminium.

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Finally, I'd like to talk about our third party trading business. We generated third party revenue of just over \$2bn in FY05. The main reason for our third party activity is to support our equity business. Through this activity, we can achieve margin optimisation, mitigate operational risks, gather market intelligence, and provide improved customer service.



The pie chart shows the segmentation of this business, which helps to put some definition around it. Location, freight, and quality swaps are matched, tonne for tonne, with equity tonnes. What this activity helps us to achieve is the right product in the right place at the right time, ensuring that we supply our customers' requirements seamlessly.

The tolling arrangements take our alumina and convert it into metal. This is a quasi-equity activity. It gives us access to a larger metal customer base which serves a couple of purposes, not least of which is underpinning future metal expansions.

Purchases via marketing arrangements with our joint venture partners, both in metal and alumina, allow us to manage operational logistics, freight, customer servicing and the brand development of the assets that we operate. The component of this activity that we regard as risk mitigation is about putting in place alternative sources of alumina supply, thereby reducing the supply risk to our smelters associated with having only the single source.

There is also a trading element. Here, we take the market intelligence we gather from the broad activities across all of BHP Billiton's marketing, our customer relationships, market research, and use that to our advantage. This includes, for instance, trade that may take place within a day, or the sourcing of material at competitive premiums on a monthly off-take arrangement.

These activities, as the chart shows, are relatively small within the context of the total business. Nevertheless, they are governed by a tight trading mandate which includes a daily P&L and formalised trading limits.

This third party product activity is a key element of the BHP Billiton marketing model. We have built a marketing network which covers the global markets into which we sell. Our objective is to be customer focused, offering long-term sustainable relationships, based on reliable quality supply and a flexible product and service offering, combined with strong risk-management skills. What the third party activity analysis above shows is how we are working at making that the reality in the aluminium business.

Thank you, and I'd like to now hand over to Xolani in Johannesburg.

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# Xolani Mkhwanazi

Thank you Julius and good morning ladies and gentlemen from me here in Johannesburg. This morning I'm going to speak about our operations, and look at our recent performance and our future expectations of these operations.

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One point of achievement, as Alex mentioned earlier, is that our key assets, Worsley, Hillside and Mozal, have had consecutive production records in recent years which is just what we're looking for in the current market environment. That is the good news. I'll also touch upon the challenges in maintaining such performance. Hillside and Mozal are modern AP30 smelters and I'll touch upon their outstanding performance and how we're trying to take this even to a higher level. And finally, I'll also look at some of our growth ambitions which presently have emphasis on our brownfield alumina refinery projects.

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Turning first to Worsley, which in FY05 had another record performance of 3.27 million tonnes of alumina on a 100% basis. Running flat out is the order of the day, and our risk-management processes have worked for us. However, there was a short power outage at Worsley recently, which highlighted the challenges of reliability in the 100% operating model you're seeing today. Our focus on Advanced Process Management is about improving the performance and reliability of our process control.



In addition to applying technologies, some of which are developed in-house, we are currently completing the delivery of our own ship-loader at Bunbury Port and this will reduce the costs and risks of our alumina export logistics, and that is shown on the bottom of that chart there.

Our focus on costs has never been more important, despite the buoyant nature of the industry at the moment. Ian will also deal with this one in more detail shortly.

We are confident that Worsley has strong and improving foundations in the form of the DCP expansion to 3.5 million tonnes, which is due for completion in the first quarter of next year, and we are looking beyond that and are assessing the feasibility of expanding Worsley from 3.5 to 4.3mtpa before the end of this decade.

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Let me move on to South America. MRN, in which we hold a 14.8% stake, has increased its output production to 16.4 million tonnes of bauxite in FY05, and plans a further increase to 17.4 million tonnes. An expansion at the Alumar refinery from 530,000tpa (our share) to 1.26 million tonnes per year was considered last week by the Board. The major value drivers for this expansion are the broad-based alumina demand growth that Julius has just spoken about, the matching of our take of high quality bauxite from MRN with the refinery expansion requirements, and the positioning of the refinery operating costs in the lowest quartile of the industry cost curve.

The current operations in Suriname consist of two bauxite mines, in Lelydorp and Coermotibo. This bauxite is converted to alumina at our Paranam Refinery. An expansion project bringing this production from 1.95mt to 2.2 million tonnes per year was completed in February of this year. The ramp-up though has proved to be challenging and it will take a few months to complete.

Two small mines, Kaaimangrasie and Klaverblad, are being developed near the Paranam Refinery, and will feed the plant after the current mines are depleted in 2007. A number of options have been identified to feed and possibly grow the refinery after these two mines run out of ore. These options are located in East Suriname as well as in West Suriname where BHP Billiton has successfully carried out exploration projects.

We have initiated a process to divest our shareholding in the 90,000 tonnes per annum Valesul aluminium smelter located near Rio de Janeiro, Brazil. The strategic value of this asset to BHP Billiton is low due to its non-expandability and dated technology. We hope to complete this process early next year, in 2006.

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Southern Africa. Hillside and Mozal both continue to set production records. I will show in the next chart, which shows the benchmark of AP30 aluminium smelters, that we'll continue to challenge these smelters to give us more, and they continue to deliver. A big part of their success and again, this is the message you have heard earlier on today, is the quality of our people in the smelters.

We do have a comprehensive business improvement initiative at both plants, but ultimately the success of these programs is due to the commitment and enthusiasm of all Hillside and Mozal employees, which is the critical ingredient for past and future success.

You will have noticed earlier on this year that there were some production failures at Bayside Potline A. I'm glad to tell you that all that is behind us. Potline A is up and running and meeting its production objectives.

Finally, I would like to return again to Hillside and Mozal. We continue to see further expansion potential at both these plants in the form of higher capacities based on higher amperage. Our plants have led the field in this metric and we look to greater future production from this source.

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This set of measures demonstrate the performance of our five potlines which use AP30 smelter technology. Bearing in mind this data includes other operating owners in the user group for this AP30 technology, our



operations continue to set the benchmark. We don't simply look at the measures which show how fast we can run, but we also keep the line of sight on the quality and efficiency of our performance as well, and thus ensure that our peak achievements are sustainable. We also use this data as a base from which we challenge the status quo and thus explore the potential to go even further in performance in a fully sustainable manner.

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Ladies and gentlemen, I would like, now, to hand over to Ian Jacobson, who is going to elaborate further on how we manage our technology in this business.

#### lan Jacobson

Well, thanks, Xolani. Good morning, everyone. I'd like to cover a little more detail here on our technical and business improvement work within the Aluminium CSG.

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The technical focus in Aluminium is applied to the sustainability that we require of ourselves in health, safety and environment, as well as to the cost and quality and productivity of our existing assets. And then, last but by no means least, importantly, to our growth projects. Our technical work also supports that culture of excellence within our people and people systems that Xolani has talked about. The contribution of each and every person within our business is important to that outcome.

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In terms of technical excellence in Aluminium, the chart on the left shows the rate of improvement of operating amperage within the smelters that Xolani spoke about. In particular, Hillside and Mozal have been able to improve their operating rate by more than 15% from their original nameplate, and these kinds of improvements make a substantial difference to the capital efficiency of those assets. The technical work that we've been doing in Southern Africa shows that we've still got further potential to achieve. And every ampere that we can improve the performance by is directly attributed as metal production. It's a linear function.

Our work also supports the change in competitiveness of raw materials. In particular, it will be no surprise to you all that we're working very strongly on the supply and quality of petroleum coke in aluminium production as a key focus right now.

Our environmental performance, a key part of our license to operate, is an important part of the work of the technical team within Aluminium. Our fluoride and PFC emissions, important measures of our performance, continue to improve and those emissions performances are underpinned by both the combination of our technical work and of the work in operating excellence coming through each and every person operating in our business.

A critical objective for us also is that we have an uninterrupted supply of technology for both improvement and growth and development in the future. We've positioned ourselves so that any discontinuity in technology supply that might occur in the wider market will not affect us in terms of meeting our future growth aspirations.

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In alumina, a key enabler of future growth for us is access to bauxites that at one point in the past we may have considered to be uneconomic. These bauxites, now, are important to the future growth of our business. And so technical work in the area of the development of transportation systems, including pipeline systems, where our Group has considerable expertise, is showing encouraging results in creating potential access to those previously uneconomic resources.



And in terms of some of those resources, upgrading is an important issue for us. And again, our technical work has shown that, working together with the resources of the Group, the expertise in beneficiation and processes of that type —we are showing very encouraging results which will create options for improvement and growth.

But our technical work is not just applied in alumina to greenfield growth. Much of the work that we've been doing applies also to our existing assets and, in particular, Worsley has benefited from the application of those learnings. A key part of the capacity creep that Xolani spoke about has been the application of such developments. The photo on the left side of the slide shows a digestion pilot plant that we have operational at Worsley at the moment, and this unit focuses on cost and quality dimensions of bauxite processing and is delivering for us some pretty interesting technology development. This kind of work connects together both improvement of existing operations and the potential for greenfield value. In addition, the projects that Xolani spoke about, the Worsley DCP project and E&G project, have both benefited from the work that's being done.

#### Slide 39

I'll move on to business improvement. As we've said, the contribution of each and every person in our business is critical to business improvement. There are many opportunities and challenges, and the significant benefits, the ones that we headline, continue to be delivered. But important to us as well is the multitude of small projects that come through our teams working together within our assets and using systematic improvement methodology.

The bar chart on the lower left shows the dimensions in terms of numbers of projects that are being delivered across the CSG as we speak. And this pipeline is being continuously replenished and it's a great pleasure to work amongst people delivering so creatively the sorts of ideas that can really improve our business. And often, those improvements encapsulate all of the dimensions of improvements that we seek. So the contribution of each and every employee is important in that context.

The photograph there you see is a customer and supplier, Mozal and Worsley, working together. It represents the kind of approach that we like to see and that we encourage and that is delivering benefits to us so often.

The processes that we use, though, are not static. At Mozal, we're headlining and developing a further improvement to our business improvement framework through the Brazilian PNQ system and that will benefit all of our assets. And in that kind of way, we try and deliver improvements in a way that doesn't create re-work, asset by asset, so we try and take into account the 'not invented here' mentality that sometimes occurs. So technology and development teams looking at specific issues for the benefit of the whole CSG are an important part of the way we deal with our improvement processes.

#### Slide 40

Thank you, and I'll now hand over to Vince, who'll talk about our financial performance.

## Vince Nicoletti

Thanks, Ian, and good morning, ladies and gentlemen. In my presentation this morning, I'm going to use many of the same slides that we used last time, in 2003, but updated with current numbers. In doing so, I'm looking to provide you with a basis for comparison and to show the consistency of Aluminium's strong earnings and strong operating performance over time, and that the growth plans that we outlined to you last time have been realised and, in fact, exceeded.

#### Slide 41

The key messages underpinning my presentation this morning are as follows.



BHP Billiton Aluminium remains disciplined, both in managing its operations and in pursuing growth. Cost control remains tight. We're not taking our eye off the ball just because prices are high. Any capital, be it maintenance, improvement or growth, is wisely and prudently spent. There's been no relaxation of our standards.

This disciplined approach to managing a business built on a sound strategy has resulted in us maintaining our margins in a pretty challenging environment. The prices for many of our inputs have gone up, quite dramatically in some cases. However, through the business improvement programs that have already been outlined to you, we have managed to limit the adverse impact of these. In support of this, we've observed that our margins remain amongst the strongest in the industry. Our aim is to keep them there.

Finally, we'll illustrate the quality of our assets and our management of them and that this is delivering growth in both earnings and return on capital invested.

In summary, we'll show you that the strategy of BHP Billiton Aluminium, as outlined by the previous speakers, is delivering results and shareholder value.

#### Slide 42

Firstly, a quick recap on what our business is; that is, where the funds are invested and from where we derive our earnings. The key point to make here is that Worsley, Hillside and Mozal remain our flagship assets, accounting for 82% of the asset base. They're also 74% of our EBIT. As Rod illustrated before, these assets are low on the cost curve. Accordingly, they consistently generate excellent economic returns.

From an invested capital perspective, the mix of the asset base is basically unchanged from two years ago. That's because most of the capital investment in the expansions at Hillside, Worsley and Mozal had already been spent by then. From an earnings perspective, however, the changes from 2003 are more noticeable. They'd only just started to earn EBIT at that stage. So the expansions at Worsley and Mozal have had the effect of increasing their total share of EBIT. Mozal has doubled from 9% in FY03 to 18% in FY05. And Worsley has increased from 21% in FY03 to 25% in FY05.

You'll see that Bayside's contribution in FY05 was lower, down to 2% from 10% two years earlier. This reflects both the growth in the earnings of the other businesses, but also the loss of production from the Potline outage in April 2005. We're pleased with the progress that Bayside's made in recovering from that and would observe that it's coming back strongly.

# Slide 43

This slide shows the source of the change of EBIT from FY04 to FY05. Key points to make here are that prices, clearly, have made a large contribution to the increase in earnings. Please note the price increment is shown net of the price linked costs, and that's basically alumina and smelting power. Volume growth at FY05 prices also made a solid contribution to the increase in earnings.

The overall growth in earnings, as I alluded to before, from FY04 to FY05, was achieved in a challenging environment. As shown on the prior slide, the operating assets of BHP Billiton Aluminium are in countries with currencies that have strengthened against the US dollar. That's our reporting currency, as you know, hence there's a large adverse FX impact.

In terms of raw materials costs, the same factors that drove up prices for our finished products also drove up prices of our raw material inputs. The price of caustic soda, coke and pitch all rose. Over half of the increase in raw materials relates to coke and pitch. While the business improvement and technology initiatives outlined already did mitigate the effect of these increases, we still saw an adverse impact of \$38m, eroding some of the price gain.

In terms of energy, the factors affecting energy costs are known to you all. In a business that's a substantial consumer of energy, we did pay more for energy. However, for reasons that I'll elaborate on later, the adverse effect of higher energy costs on this business is less than it has been on other players in the industry.



In terms of labour and maintenance costs, these increased on prior year levels, in some part reflecting the record production levels at many of our operations.

Pot relining. You can see a significant increase occurred in pot relining costs as a result of the CSG commencing a large pot relining program. I'm going to cover this in some detail later, so I won't dwell on it here.

To start to wrap up on this slide, prior to taking into account the cost of the contract buyback, the EBIT for FY05 would have been just over \$1bn. An excellent result, representing as it does a 30% increase in EBIT in one year and a conversion rate of 54% of the higher net price and volume effect. In a business that's got a high rate of variable and price-linked costs, we consider that result to be a very good one.

The reported profits did dip below the magic \$1bn mark though, due to a \$36m charge associated with the repurchase of an aluminium supply contract. That was repurchased on terms which we believe to be most favorable and the benefit of that buyback will be realised over the next nine years.

#### Slide 44

A quick word on EBIT sensitivities. This slide shows the sensitivity of the CSG's EBIT in FY06 to changes in key variables of price and exchange rates of the countries in which we operate. This remains essentially the same pattern as shown in the last presentation in 2003, with the higher dollar impact on earnings reflecting the considerably higher EBIT in FY06.

In recalibrating your models, I'd note that although the Australian dollar and the South African rand were relatively stable in FY05 as compared to FY04, the Brazilian Real has strengthened appreciably. This is worth looking at. In fact, in FY04 – FY05, the Real strengthened by 9%. So far in FY06, it's up almost 20%.

### Slide 45

This slide's an update of the composition of the cash costs of the smelting or metal side of the business. Key points to make here are that smelting' is a high variable cost business, with 71% of total costs being variable. It's also predominantly a US dollar business, with 65% of the costs being US dollar denominated.

The composition from FY03 remains relatively unchanged. Alumina, here, is the largest single cost input. As prices have surged in alumina, being self-reliant on alumina is clearly a competitive advantage of BHP Billiton Aluminium. Of course, that advantage only translates to value if the smelters using the alumina are low on the cost curve. As illustrated earlier, our smelters are low-cost smelters.

Electricity is also a major input, which BHP Billiton has secured at competitive rates. The contracts are long term and are a mix of competitively fixed price and LME linked price arrangements. The only place that we're paying more for electricity is in Brazil, which is structurally short of power.

#### Slide 46

For alumina, the same update of cost composition. The key points here are that it's also a high variable cost business, at 60% of total costs. However, unlike smelting, the costs are overwhelmingly denominated in local currency terms - 85% of the total. As a result, the appreciation in recent years of the currencies of the countries in which we have our refineries has more significantly affected their cost base. Again, the composition from FY03 remains relatively unchanged, with bauxite being the biggest single cost input. BHP Billiton is self-sufficient in bauxite as well.

Just to summarize, rises in the main costs of production, coupled with FX pressures, are a phenomenon that industry watchers have generally tended to underestimate. The Brazilian Real I mentioned before, but caustic soda, as an example, went up by 16% in FY04 – FY05. So far in FY06, it's gone up by approximately 35%. Plant power for alumina, being largely oil based, also went up by 16% in FY04 – FY05, while it's increased by a further 20% this year.



#### Slide 47

I mentioned before that I'd be covering pot relining. Let's look at the impact of our pot relining program in some detail. FY05 marked the beginning of a major program to reline our reduction cells, or as they're called in the industry, our smelter pots. These, broadly, have a five-year life, on average.

The size of the actual and projected costs in total and by smelter is a function of the age of the pots at each smelter. The uplift in some years, such as FY09 at Hillside, reflects the cost of relining pots associated with expansions in recent years.

The dotted line shows the average cost that can be expected once we get to a steady state. Again, the upward slope to FY06 reflecting the increase in number of pots associated with recent expansion. Note that these figures are shown in BHP Billiton Aluminium terms, that is our share of the total cost.

#### Slide 48

This slide shows our EBITDA margins relative to an industry sample. We show this in calendar years, as most of our peers report in calendar years. BHP Billiton Aluminium's EBITDA margins remain considerably above the industry average, as you'll see, which is consistent with having smelters in refineries at the bottom of the cost curve. Our EBITDA margins and position relative to those peers has been maintained in the last two calendar years.

#### Slide 49

This next slide depicts the growth in aluminium production achieved by the major industry players over the last four full calendar years. It shows that BHP Billiton Aluminium has achieved a strong rate of growth in production, exceeded only by those increases that resulted by industry consolidation, such as the acquisitions of Pechiney and VAW. All of our production growth was organic, via the brownfield expansions of our existing asset base, as detailed by Rod earlier.

## Slide 50

Let's do the same slide for alumina. While BHP Billiton Aluminium leapt forward following the acquisition of 56% of Worsley from Alcoa, increases in production by us have been broadly flat over the last three calendar years. This is something that we're looking to change. It's in the refineries that we expect the bulk of our development capex to occur in the short to medium term. Rod presented a bubble diagram, you'll remember, Slide 20, which showed that future capex is likely to be in expansions at Worsley and Alumar, with the development of our next generation of mines in Suriname to underpin the refinery there.

As with our record in aluminium production, growth in alumina production over the next few years is expected to be via low-risk Brownfield expansion. That's going to cost some money.

## Slide 51

The profile of our coming capital expenditure is depicted on this next slide. We're expecting improvement and sustaining capex to remain broadly at FY05 levels, with the growth or development expenditure on refinery and smelter expansions to be the basis of the large overall increase in capital expenditure.

I'd stress that most of this future capex is unapproved at this point in time, but it shows the likely expenditure profile should these developments proceed. Our growth projects are constantly monitored and evaluated and we'll only bring on these projects after they've passed our normal internal toll gating and approval processes. They have to prove themselves to be value enhancing for the Group. We've got a good track record in developing growth projects for value and we intend to keep that record intact.

### Slide 52

My final slide depicts the improvement in return on capital (ROC) that the Aluminium CSG has achieved in recent years and that which we estimate would eventuate at a range of possible prices. I want to stress that



neither of the prices shown reflect the BHP Billiton estimate of price. Rather, we've taken the current spot of around \$2,000/t and the analysts' consensus low range of \$1,600/t. The ROC outcomes depicted on this slide are calculated inclusive of the substantial capex that you saw on the prior slide.

As I said at the outset, the Aluminium CSG has a disciplined approach to managing and growing its business, a business built around the strategy of being low on the cost curve and in the upstream end of the industry. The financial results prove that this strategy and our management of this business have worked, and we believe we remain on firm footing to continue to deliver these strong results.

Slide 53

And with that, I'll hand you back to Alex for his closing remarks.

### **Alex Vanselow**

Thank you, Vince.

Slide 54

I hope we have convinced you that the BHP Billiton Aluminium business is a portfolio of quality assets being operated by a quality workforce and, as we always say, in the right position of the aluminium industry. We continue to seek, always, ways to create value from our existing portfolio and also to have our sights focused on the new generation of opportunities, always upon the condition of being committed to sustainability and value creation.

Ladies and gentlemen, that concludes the formal part of today's proceedings. We're happy to take questions and, in the first instance, if you can direct your questions to me, I'll then ask for comments from my team. We will start with questions here in London. We will then move to Johannesburg and then we will deal with the phone.

# **QUESTIONS AND ANSWERS London and Johannesburg**

### Question

What is the bias on the timing of spot alumina sales? And just on your caustic soda, what's your contract position from an input cost point of view?

#### **Alex Vanselow**

Just building on what Julius said, it's not a linear process when alumina stocks will be available. And as you follow the production reports in the first couple of quarters, we had issues with production in South America, where we have reduced some stocks to cover customer positions in. So it's natural that you see the situation in South America improving, but those tonnages will become available after the second half of the year.

And on the caustic, I'm not going to go into the details about contracts, other than to say we we have multi sourcing in multi locations. And we keep the levels of engagement in those types of contracts at a very high level and look at optimisation on a regional basis as well, in terms of logistics etc. But you can understand that it's a competitive advantage, and we won't go into the detail.

### Question

A couple of questions. Firstly, just on pot relining. Could you just tell us where that spend is going through? Is that going through as capex or opex? And secondly, just from the market perspective, a couple of points.

Firstly, could you talk a little bit more about the power shortage in China? How confident you are in that situation? And secondly, what you see as the risk of an alumina surplus developing in 2007/2008?



### **Alex Vanselow**

Okay. I'll address the first question and I'll direct the second to Rod, and the third to Julius. Your first question was regarding the relining of the pots. We expense those costs, and the reason why you're seeing the bumpiness instead of a smooth line, is because of the age of those pot lines. Pot life is generally around five or six years. With time, you would expect that they will get into some stable roll forward, which is what the dotted line in Vince's schedule alluded to.

On the power issue I'll pass to Rod, and then after that Julius will talk about the alumina position.

#### Rod Kinkead-Weekes

On the power issue, I think we're very confident that there is a power issue at this point in time in China. You've only got to visit there to understand that, depending on temperatures and usage of air conditioners and so forth in the peak summer period, and also on how cold it gets in winter that industry's been curtailed in a number of provinces for the last couple of years. And it's against that background that the Chinese government has put in place this massive investment program.

I think it's an open question as to how quickly and how successfully those investments come on and are successful. For example, many of them have been made without environmental approvals. And because we see signs increasingly of the Chinese government being serious about environmental approvals and performance, a lot of those projects have actually been stopped.

So we don't know at this point in time exactly how that power supply is going to come on, and whether it's going to be successful. At the same time we're seeing huge demand for power, given the kind of growth that I was alluding to in the presentation. So for us it's an open question as to what impact on a net basis this is going to have over the next, say, five or 10 years in terms of the availability of power for smelting in general.

Another thing I'd say is that it is very difficult to generalise about China. Because different provinces, different parts of China have very different economies and very different supply and demand situations. So there will undoubtedly be further aluminium smelter expansions in China. That'll be good for alumina. Equally there will be further closures in China.

And the other open question that I was alluding to was whether or not and how quickly, and I think Julius mentioned this as well, 2 million tonnes of capacity comes back on. So the two are umbilically connected, and for us it's an open question at this point in time. But insofar as we can foresee the future and we're not necessarily better at it than many other people, it's difficult to see that enormous demand for power being supplied on a structural basis, so that China has considerable excess, long-term power capacity which will enable very cheap inputs into Chinese smelters in general. Subject again to the caveat that I mentioned about it is difficult to generalise.

## **Alex Vanselow**

Just a couple of complements to what Rod just said. One of the things that we have to understand is that usually capacity, in terms of power, comes in spurts. So it's not linear, it comes in waves, demand is a bit more linear. And another thing for you to consider is how the correlation of usage of power by the population, is linked to increasing per cost of income.

And I think you can have a few good graphs that would point that to you, and how decisions are made in terms of directing the competitive users of power - smelting or industry vis-à-vis population. So all those things you need to take into consideration. So there's quite a complex situation there.

Julius, you want to answer the alumina question?

# **Julius Matthys**

Yes. The question is on the risk of an alumina oversupply in 2007, I think. What is clear to us today is that the market is extremely tight and utilisation rates are basically at 100%. Our analysis of the 12 months



through the whole of 2006, is that utilisation rates will stay at extremely high levels, at effectively 100% capacity.

2007 - the situation there. Our view is it will remain tight. It won't be quite as high utilisation as it is today. But then, going that far out, you're a bit subject to the assumptions you make on the timing and ramp-up of new capacity, and the continued growth rates. We still believe it will be a tight market.

#### **Alex Vanselow**

We'll now take a question from Jo'burg. Any questions from Jo'burg?

#### Question

Three questions if I may. Firstly on alumina, you mentioned that you're selling something like 10% of alumina on spot, the balance on contracts. Are those contracts still linked to the aluminium price, or are you increasingly moving those contracts to some formula related to spot?

On Mozal 3, what sort of assumptions are you making in terms of power, where you're going to source your cheap power from?

And on capacity creep at Mozal and Hillside, can you perhaps just be a little more specific in terms of the potential increase on current production?

#### **Alex Vanselow**

I'll give you an oversight on the first one - the contracts link, yes. 10% is basically on spot, because that's what our portfolio really can handle at this time. You understand that alumina has storage restrictions, and also the location of our production plants limits the amount of alumina that we can carry on spot.

On the contracts, the ones that are linked, is a mix of aluminium price linkage and absolute price. In the past what we said on alumina pricing is that we were always trying to alert our customers and the industry that we are looking for the proper remuneration for the capital that needs to be applied in the industry, in terms of obtaining the adequate returns. And we continue to do that, we continue to discuss with our customers. We have had some successes, probably not to the extent that we expected. You want to add anything to that, Julius?

### **Julius Matthys**

I think that's covered the answer.

#### Alex Vanselow

The second one was the question on Mozal 3 and the power availability. We've finished a pre-feasibility study on Mozal 3, and we are in discussions with our colleagues at Eskom and Mozambique to source that power. There's nothing at this stage that we could comment on or disclose, because we are not at that stage of the negotiations yet. But that's the primary source of where we will look for power and instead of "cheap power", I would say, it's "economic power", because we're looking for something that gives a return not just to the smelters but also to the government, or the holders or producers of the power. I don't know if Xolani wants to add anything on that?

### Xolani Mkhwanazi

Spot on but just to add around the creeping power. Eskom has offered us power for Hillside 3 while we're still in discussions on creeping power for Mozal.

### **Alex Vanselow**

Okay. But it's still early stages to discuss about where we are with the negotiations. The third question was how far we can stretch the high amps program at each of Hillside and Mozal. As you understand, we are at the leading edge on high amperage in the AP30 industry - not just on the AP30, but on smelters overall. And we are now going to grounds that are really experimental, and we are testing areas of the pot lines to



see how they behave. So we would not commit to a full increase in amperage indiscriminately over the whole pot line before we understand exactly the impact that this higher amperage has on pots. But we have been successful on some of these tries, and maybe lan can share a little bit with you where we are now.

#### Ian Jacobson

Early on in the life of this particular technology, people had the belief that its operating rate was a long way below where we currently operate very reliably. We're well into the 350K region now, and our test work is showing that we do have some headroom. But as Alex points out, doing that and managing the risks across the entire asset are important issues for us.

But certainly the technical work is showing that we do have some headroom. We've got five pot lines that use this technology, of about 15 being implemented across the world. So we're in a very good position to do this particular sort of work.

#### Alex Vanselow

Any other questions from Jo'burg?

#### Xolani Mkwhanazi

None Alex.

#### **Alex Vanselow**

Okay, thanks. Let's move to the phone lines.

#### Question

Thank you. I'd just like to ask two questions. I just want to ask, on your Mozal 3 expansion, what kind of expansion in production are you planning? And any idea of what expenditure you would make?

And then my other question. I just wanted to ask what increase in Eskom's power rates do you expect from their three-year, multi-year determination, that the National Energy regulator is currently processing? Thank you.

#### **Alex Vanselow**

Let me see if I understood well. First, you're asking what size of the Mozal 3 expansion is and what capital cost we're looking at. The size is another pot line, which would add around 250,000 tonnes of capacity plus. That depends again where we are with the amperage creep. The cost – it's very hard to disclose that at this time because there is still some work to be done, of course. And when we are at the right time in our disclosure requirements to make that public, we will do that.

On your third question, I didn't quite understand. So you're asking about Eskom?

# Question

I just wanted to find out what rate of increase BHP Billiton would expect the multi-year determination to come out at, that the regulator in South Africa's currently dealing with.

#### **Alex Vanselow**

I'm not aware exactly of what you're asking but I can say that we have long-term contracts with Eskom, for both our South African plants and Mozal plant. And we expect that both parties will follow what's in the long-term contract.

#### **Alex Vanselow**

So, I'll revert it back to London for final questions.



#### Question

Just wanted to ask about the cost curves. How much exactly have you seen those move for both the alumina and aluminium smelting industries? And how much of that is here to stay, do you think? And you also talked about capacity at risk from power contract renegotiations in the West in particular. How significant do you think that's likely to be?

#### **Alex Vanselow**

Okay. I need to give Vince a bit of workout, he's been very quiet there. So what I'll say, and I'm sure Vince will complement this, is that you need to look at the nature of what was presented, and how many costs are local currency, US dollar, aluminium linked, non-aluminium linked etc. All those things play a role on the curve. So if you have power, that's aluminium linked in US currency you have some advantages there. But over to you, Vince.

#### Vince Nicoletti

Yes, you're quite right that the curves have drifted up. There's been a parallel shift up. You'll remember that on Rod's slide we've maintained our relative position though. Will they come down? Well, that's the \$64,000 question. If prices come down, costs will tend to come down as well but they're a lot quicker to grow than they are to come down, in my experience in the industry.

I showed you a sensitivity curve before, and I talked about the impact in particular on coke and caustic and power. Perhaps I should just add a little bit of detail, so you can get a view of the impact on the bottom line. Coke, for example, which is a big part of the smelting cost, if it goes up by 10% or down by 10%, you can expect a \$12m impact on the bottom line. Caustic if it goes up or down by 10%, you can expect a \$7m impact on the bottom line.

Power for Alumina, because it's not aluminium linked, up or down 10% or 12% it's \$12m, it's of that order of magnitude. So we provided you with some graphs that show the break up of our costs, and you can see generally how far the cost curves have shifted up from last time we met. So you can probably fill in the blanks about what percentage they've gone up yourselves.

As to how far they'll come down, well as I said, they're relatively inelastic as compared to the increase. So they're going to come down probably a lot slower but that's for you to decide.

### **Alex Vanselow**

Capacity risk. Well, we don't have any capacity risk like was pointed out in Europe and in the US, but I believe just yesterday there was an announcement on some closures in the US. So, as those contracts come up for negotiation, I think we will see if there will be closures or not but it is a risk. Anything you want to add to that, Rod?

#### **Rod Kinkead-Weekes**

No.

### Alex Vanselow

One more question in London and then we'll move to Jo'burg.

#### Question

You outlined four projects in your bubble chart that are under consideration. Can you give some sense of when you expect those to be taken to the Board for approval?

### **Alex Vanselow**

You're talking the Greenfield projects on the bottom of the chart?



#### Question

Well, you've got Alumar, Mozal 3, Worsley and then the Suriname Next Generation. I'm assuming the others are too far out.

#### **Alex Vanselow**

Yes. Alumar has been taken to the Board for consideration, and we are going through the process now of approval. There are some issues there we need to finalise with the joint venture partners, especially the operator. Mozal 3 will depend on when we get some formalised commitment from Eskom on the power side. And Worsley E&G, that will be probably towards the end of next year.

On the ones that are on the bottom, we would expect them to come to the Board probably four or five years before their date of completion.

# **QUESTIONS AND ANSWERS Sydney**

#### Question

Very well done. A question for you or maybe Rod or lan might have some comments, but a lot of the growth that we're seeing in the alumina refining business over the next say five or 10 years appears to be coming out of China; however statistics on the quality and the availability of Chinese bauxite are hard to come by. I'm just wondering if you've got any comments on the Chinese bauxite supply side, or whether you see them being potential importers of bauxite in the future?

#### Alex Vanselow

Well they are currently importers of bauxite and as Rod said in his speech, we continue to think that that will continue to increase in absolute terms. But the growth rate will be decreased. We see a lot of new bauxite and alumina facilities coming through and although we have a strong presence there, I think we share the view that it is very hard to have a good visual understanding of the quality. I will pass to Rod and he can complement that.

#### **Rod Kinkead-Weekes**

I think it is generally acknowledged that the quantity of Chinese bauxite is pretty significant, but the quality is also pretty poor. Mining methods have tended to be fairly simple and the big push I think from Chalco in particular is to expand their own bauxite capability in China and their own alumina capacity in China to the max.

I think it may probably help to answer to your question to say that Chinese companies are very active outside China. I think if they were confident in their own bauxite capability they wouldn't be spending the effort that they are spending in other countries to try and put their foot on bauxite facilities with a view to starting alumina refineries overseas.

#### Question

I was just wondering if we could go back to the comments that were made halfway through the presentation about Chinese exports 100,000 tonnes a month in the first half and then they dropped to 20,000 tonnes in the last two or three months. The aluminium price also dropped dramatically in the third quarter. I was wondering if you had any thoughts on whether or not that was simply a price relationship and now the price is back above \$0.90 a pound the exports are starting again, the 2 million tonnes that you talked about that's idle. I am just trying to understand how reliable are these Chinese export stats, or is this just simply a reflection of price, and when the price goes back up China just brings it back into the export market and we get to see the price come down again?

# **Alex Vanselow**

That's a very good question. We have a very good understanding of the demand side and the production side. So we have a good oversight of what's available for export. As Julius said, those export numbers have some linkages to legacy contracts that were in place that are expiring. Maybe Julius has some more insight.



#### **Julius Matthys**

What we've seen is that the average was about 80,000 tonnes for the first part of the year and then after the changes to the tolling arrangements for exports that has gradually dropped away. That didn't drop away immediately as there were some legacy type arrangements but it has now dropped to around 20,000 tonnes. Our view would be that that would probably stay where it is or even fade a bit further as some of the more tolling arrangements drop out. I think if it is linked to the LME price I don't think – we can't establish a clear link to that activity and what happened to the LME price.

#### Question

At \$0.95 does that 2 million tonnes of idle capacity come back or do you think not?

#### Julius Matthys

There is still a lot of capacity in China and that will only come back when they have power supply and local alumina.

#### Question

So you are saying it's a power issue and not a price issue?

### Julius Matthys

Yes.

#### Question

You mentioned that you think that power is going to be in shortage in China for some time, could you clarify when you think the power situation in China will move to balance this. Clinton Dines has recently been quoted as saying 2007.

Secondly could you also please comment that if that power does come on, will they automatically need the 2 million tonnes of idle capacity – if smelting capacity comes back on, is there alumina available?

Thirdly could you also comment on what BHP is doing to try to drive the change in contract structure of alumina to the aluminium price? It seems not sensible to have a really concentrated industry linked to a very fragmented industry price. You seem to be giving away a lot of the upside of alumina to the aluminium producers.

#### Alex Vanselow

Right we have about three or four questions there I will try to take them one at a time.

First is the power balance in China. Yes, I think what Clinton was referring to there are the projects that Rod referred to that will bring capacity, but if you look at it, it will be capacity in spurts. So we will bring balance for a while and then at the current growth rates or the projected growth rates that power will fall into shortage again. Then another bunch of developments will come and it will balance for a while etc. That is the see-saw that we see on the power situation there.

I will try to mix a little bit of your second question with your third question. Will the capacity come on board, the 2 million tonnes and the key differentiation between the alumina industry and the aluminium industry, which I think is what you are asking about with the price structure.

I will quote Marius Kloppers I think on this one. Having alumina linked priced metal is like having Boeing selling airplanes linked to passenger airfares. That's how we see it and that's how we have been portraying it for many years.

We have been successful to a certain extent in locking in prices that are not linked but not to the extent that we were looking for. We continue with efforts trying to show our customers the requirement for recurrence for further investment in this industry. I think that is starting to come around.



How that links to the spare capacity – if you look at the alumina industry, there is very little spare capacity. On the contrary, our plants are operating most at 97% utilisation rates and not just for this year. Have been operating at that for a few years. If you look at the metal business, there is spare capacity in there. 2 million tonnes in China that is curtailed temporarily because of power. If power comes on some of that production can come back on.

There are other examples around the world.

You want to add anything on that Rod?

### **Rod Kinkead-Weekes**

No I think it is very difficult and what I was trying to get across earlier was that I think it is an open question because to bring that capacity back on requires not only power and alumina and the function of having those basic inputs before you can come to the issue of the debate of whether it then makes sense to export that back.

Just on the question of the contract structure. We have always said that the issue is that the economics of alumina refining should reflect the economics of alumina refining as opposed to aluminium smelters. Given that they are different you wouldn't get the investment required. I would have to say that the customer base is now recognising the importance of having an investment in alumina and we are beginning to see that now in the contract structures.

It is not the linkage per se that is important, it is the fact that the alumina price should induce the required capacity to feed the aluminium smelters.

#### Question

Just a follow up question about export tax and tolling changes that were made. In your monitoring of smelter production in China have you seen capacity idled in the last three months and that's what's led to the reduction or is it being stockpiled in China.

### **Alex Vanselow**

We have seen no evidence of stockpiling and there has been capacity that has been closed over the period. The drivers of that closure are up for debate. But we've not seen the picture that there is a stockpiling of metal waiting to be exported.

## Question

Hopefully a very easy question. You talked about a lot of cost increases across the business. The level of disclosure for the aluminium is obviously fairly hard to dig into the specifics. So what sort of level of cost increases would you expect for the overall business this year?

### **Alex Vanselow**

For aluminium?

# Question

Yes for the overall business.

#### Alex Vanselow

I thought Vince was quite precise on that telling you information we don't get from our competitors in terms of increase in coke, increase in pitch and increase in caustic. Those are really the ones that we are focusing on in terms of our improvement initiatives trying to reduce consumption and trying to get a better blend of suppliers to have a better bargaining position. But more than that, I can't give you.

#### Question

Yes good morning just one question. When you were looking at the Mozal III expansion, the options you were looking at previously I believe were 144 pot expansion or a 336 pot expansion. The bubble that you've got on your growth projects, which one of those does that represent?



#### Alex Vanselow

That would be for full line and that is our share of a full line.

#### Question

Good morning Alex. My question relates to an indicative unit capital cost to build alumina capacity at this time. Do you have a feeling for what that would be. At the back of that, do you have a feel of how that relates to listed equity investments in alumina – what they trade for per se?

#### Alex Vanselow

You are talking of existing capacity?

#### Question

Yes.

### **Alex Vanselow**

I will pass that over to Vince.

#### Vince Nicoletti

The one that is bandied around the industry and always mentioned for alumina capacity is around \$1,000 a tonne. You are all probably as aware of the pressures related to construction costs that we are seeing across the industry particularly on labour and steel. At the moment there is some construction actually occurring at the moment, we are watching closely to see what the impact of those costs of steel and labour are actually going to be. But it's too early to tell. The last we knew was that \$1,000 a tonne benchmark was the benchmark.

## **Alex Vanselow**

Your question was new capacity coming on board, is that right?

#### Question

Yes that has answered the first part of it, but how do you see that comparing to the listed equity?

## **Alex Vanselow**

I'll talk a little bit more than. I don't think I can put a dollar on that because I think the most interesting part is still to be seen. What we are seeing a lot in the market is development of Brownfield capacity and that's pretty predictable in countries where we operate, the currencies that we know. Usually where there is a good infrastructure already in place. I think the next capacity that Rod alluded to and some of the other speakers are in geographies that are yet to be fully explored. Where you have differentiation in country risk. Differentiation in construction practices and availability of skills and availability also of getting the components into those locations.

As you saw in lan's presentation we are talking about looking at ways of improving those types of economics through pipelining instead of rail transportation and then beneficiating assets like bauxite before really handling it in the refineries. So increasing yield etc.

So it will be a challenge for the industry I think to stick to the historical rates that are being alluded to, especially in the new geographies.

#### Question

Let me put it another way, is M&A a cheaper way to build or buy capacity, than it is to build?

### Alex Vanselow

Okay. I see where you are going with this question. My answer to you is that we will reserve our comment on that one.



#### Question

Where are you sourcing your caustic from is it from the US gulf or Asia. What percentage of your caustic is contracted and what spot exposure do you have?

#### **Alex Vanselow**

Yes we see that as becoming more and more a competitive advantage, so I am not going to go into great details of this other than to say that we have most people sourcing with long-term contracts that have floor and ceilings. So we are quite well positioned on caustic from a security of supply point of view and from a cost mitigation point of view.

### Question

Again this is a two part question I am sorry. The first one is you talked a lot about cost impact here today and how customers, aluminium smelters are going to have to pay for alumina in the long-term. Have you increased your long-term alumina price that you used in your project evaluation? We had Rio Tinto confirm they had the other day.

The second part of the question is could you give us some insight into the 100,000 tonnes of aluminium that hit the LME about a week ago and where that possibly could come from? Rumour has it that it is Russian.

#### **Alex Vanselow**

On your first question, no I am not going to answer that. On the second question I really have no idea. That's something that we don't spend a lot of time trying to understand. The price is what the price is. We focus on things that we can really make a difference to, and that is just what we tried to show here today. Making good decisions, having our people and our assets operating in an excellent manner.

### Question

Maybe another way of elaborating on the previous question is your 2003 presentation you provided a chart which showed inducement price for new alumina refining capacity coming on. I think it was around about \$250 tonne. How do you see that that inducement curve has moved over the past couple of years?

# **Alex Vanselow**

I will give you a general view on that. Coming to a point where we are looking at new geographies, you look at that side it moves up a notch and if you look at the inputs, like Vince presented to you of caustic, energy and just mining equipment and everything else, transportation – it moves up a notch as well.

So I think if anything, it has gone up quite a bit. Exactly how much depends on your views of what those factors really influence new capacity. I'm not going to give you the numbers.

### Question

Can I get you to clarify just in terms of when you renegotiate the contracts, to try and get your customers to reflect the fact that your costs have gone up – capital and Opex. Are you looking at still staying with the link and just making it higher long term, or can you get away from it. If you can clarify that.

#### Alex Vanselow

I'll clarify that it is a combination of all of the above. There are cases where there is a requirement of link from a client, and we have been fairly creative lately in how we establish those links, and how we work with the client. That you're not stuck in a certain event for a long period of time. Maybe Julius wants to elaborate a bit more on that.

# **Julius Matthys**

Thanks Alex. I think what Alex is saying is right. What we're trying to do is when we sit down with the contract renewal or new long term contracts, we're trying to discuss with our customers, opportunities for reflecting what we think the market circumstances are, rather than using an historical link as a certain percentage to the LME, which creates risk for both parties going forward. I think that's the conversation that we're trying to have.



I can't give you any specific details. Some of these are still in negotiation, but we are trying to look at other ways of doing it. It's not just increasing the percentage. There might be other mechanisms that might allow both parties to feel that the environment is being reflected in the future, and we're not just setting a single point now, and projecting it forward for the term of the contract.

#### Question

Could I also just ask then just quickly about Suriname, what's actually gone wrong? Why can't it be tied in -- and then just quickly, any power contracts expiring that we should be aware of?

#### Alex Vanselow

The second one, the answer is no. The first one, expansion was a de-bottleneck expansion, where the operator identified a series of options that we could de-bottleneck and increase yield and flow, and get a higher production at the end of the day. So it's not just simply putting a couple more pots in terms of processing units at the end of the refinery, and expecting to get more output.

So it was a very financially attractive expansion, but technically complex. The structural part of the expansion was completed in February, as it was announced. To get the flow and the yield and adjust the plant to achieve its objectives has proven to be a lot more complex than we imagined.

What we have now, is both a co-technical team, BHP people are in a technical team, working on further bringing the capacity on stream. If you look at the last quarter production report, you will have noticed a slight improvement on the Suriname production, and we expect that to continue, quarter on quarter.

#### Question

A question with regard to your Greenfield project. There's been a few reports, one originally from India. That mentions there agreement and MOU in Malaysia. I'm just wondering if you could put comment on those new frontiers.

### **Alex Vanselow**

I'll comment on those. I'll briefly talk about India, and then you can get Don to really elaborate on that.

We are in India. We have established office in Delhi and in Orissa. The main focus of the office is intelligence gathering contact and looking for opportunities. What I can tell you at this stage, we don't have absolutely anything in India that we are involved in, from exploration or anything like that. We are looking at opportunities in India, trying to understand the environment there.

In Malaysia, there is the MOU that you refer to with Mitsubishi. Mitsubishi is our partner in Escondida and BMA and has proven to be an extremely valuable partner at Mozal. Japan has very good trade relations with Malaysia; so does Australia. So teaming up with Mitsubishi was a natural thing for us, and together, we're going to be looking at opportunities in that part of the world.

#### Question

Where else are you looking?

## **Alex Vanselow**

Everything that's going on elsewhere, I said at the beginning, I'm not going to go into detail; they're embryonic. Some of them are in different stages as the others. We follow rules of SEC, ASX on disclosure, and when they get to that point, I'll make a full disclosure on them.

#### Question

Just looking at expansion comment there 4.3 million tonne. It's not the big step we're talking about, you know with some of the other ventures in the West, but they have commented recently on a lack of attraction of development capacity in Western Australia given low demand etc.



I just wanted to see if you could make a comment in that context, and also how does BHP reconcile the decision of effectively competing against yourselves for labour. It is one of the biggest users of labour in Western Australia, with iron ore and Ravensthorpe, how do you make sure that you're not actually destroying your own value?

#### **Alex Vanselow**

That's very valid. Efficiency and Growth, maybe is not as large a step as some of the other announced, but is the logical step it is the maximum we can bring that plant without significant further structural changes. So it is getting to the optimum.

When we announced this expansion, there was a quick move to capture the strong market signals that we were seeing, and that has proven to be the right decision. We're bringing the DCP in line with what we expected, around early next year, despite a five week strike that we had there. I will link this to the second question. So we're bringing it on time, on budget, the DCP, so we're very happy we took the decision when we took.

Now we're looking in detail at the feasibility study for Efficiency and Growth. It's looking very promising but still early days of feasibility. Part of the feasibility study in BHP Billiton, is the tollgating that we refer to over and again here, and that's not done by the Aluminium CSG. That's done by group. And all the factors that you mentioned there are considered by group. We have very good intelligence about workforce utilisation, and when you get to a saturation point.

But what you see as the weakness there, I see as a strength, because some of the workforce that are currently employed in other projects, will become available when Efficiency and Growth is there, and we can do it back to back on that. So you have to look at all the dynamics, and as a group we do that. It's not isolated to the aluminium industry.

### Question

Two quick questions. Firstly, can we have some clarification on alumina? You mentioned that likely to remain in deficit and if you could just give us those figures again on the alumina demand and domestic supply from China, would be appreciated.

And my final question is regarding sustaining capital. That chart, with the sustaining capital going forward, it looks quite steady, and given the cost increase environment that we're in, just make some comments on why that is so.

#### **Alex Vanselow**

Okay. We didn't give you any figures on alumina deficit, so I can't refresh that, other than saying that we see what the graph shows. We gave you the components of demand to look at, we gave you the components of supply, and what we believe that behaviour is.

We see that both markets, alumina and aluminium, very tight going forward. And the pace of new capacity, and that's your judgment, will be required to incorporate the hole there. If you believe the pace will be faster or slower, or demand will behave in a certain way, you have different results. We believe the fundamentals are very tight. It can go either way; just depends on little changes.

Your second question was on the sustaining capital. Sustaining capital, we see a reasonable correlation between sustaining capital, capital invested and nature of capital invested. What we see there, going forward, is our best view of what that correlation is.

Our assets are reasonably young. You have Mozal and Hillside, and in reasonably good condition of maintenance. So it's not something that we are in a catch up mode or anything like that. So I would expect some steadiness, despite some of the issues we discussed here, in terms of inflationary cost affecting those works.



That's it ladies and gentlemen. We'll bring this presentation to a close. Thank you very much for coming today.

**ENDS**