

BHP Billiton Aluminium



Briefing - Sydney 14 November 2003.

MIKE SALAMON: Ladies and gentlemen, welcome. A fairly full day of presentations today. We are doing the Aluminium CSG briefing and then for those of you who might be interested there is a Health Safety Environment Community briefing this afternoon as well at 2.30. The presentation we will be giving today is also going to be done in London and Johannesburg on Tuesday, so sadly for most of the presentation team we will not be at the rugby tomorrow.

Aluminium has been a major growth factor in BHP Billiton and previously Billiton as well. So a great deal has happened, I guess, since the last time we did a similar presentation which was about 18 months ago, and I think today we will be giving update on what has happened and where we see the world going forward.

Just to give you a sense of what we would like to achieve through today's presentation. Firstly, to demonstrate the quality of the asset portfolio that we built in the Aluminium CSG. It is a completely upstream asset portfolio by design. It's a smelter business based on stranded power and an alumina business based on excellent bauxites and again, by design, a long alumina business. Also we are going to try and show you in quite some depth why we believe there is still a lot of improvement that we can achieve notwithstanding the strength of the existing asset base, and that there is still a lot of brownfield opportunities meshed into what we have, again notwithstanding the projects that we have already delivered.

Then I think the other important element is a somewhat change in emphasis. 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've always in fact felt that alumina was the stronger business. I guess the overriding message is that the future for the Aluminium CSG should be one of rising returns.

The agenda for today, quite a range of speakers. I think, as you will realise from most BHP Billiton presentations, quite a united nations of speakers as well. Firstly I will be doing an overview on strategy, then Rod Kinkead-Weekes our Marketing Director will look at marketing but with a specific focus as to what is going on in China as it relates to the aluminium industry. Paul Everard, the Deputy President of Aluminium, will then review some other broader strategic issues for the industry. Mahomed Seedat, the COO of our operations in southern Africa will look at the smelter base and opportunities for continuous improvement there. Colin Agnew, the General Manager of Worsley, will then look at Worsley with a similar focus of continued improvement. Ian Jacobson, who is Vice President technical and COO of our South American operations will then look at the totality of the brownfields opportunities still embedded in our business and what that

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might mean for us, and then Alex Vanselow, our Finance Director, will pull all of that together in terms of the finances, the asset base, the returns, the sensitivities, the capital and the margins.

We titled this presentation "Aspiring to be the best aluminium company in the world". That is a subset of what we are trying to do in BHP Billiton, which is aspiring to be the best resources company in the world. Now, that's quite a big ask and a good start point with that is to have a look at a scorecard; what are the metrics that we think are important and how are we travelling on those metrics.

Firstly, very much an HSEC zero harm focus and that focus - increasingly as we understand what we are aiming to get, we are realising that HSEC is the foundation of excellence. It is the vehicle which gives rise to excellent people who can deliver excellent outcomes. The predictability of performance, elimination of non-conformances and then very, very importantly in the resources businesses, the licence to operate and the licence to grow.

How are we travelling? I think we are travelling well. Good outcomes and an absolute focus on them. Costs. This is a very, very robust portfolio and it sits right at the bottom of the world cost curve. Clearly that, however, just means that we are a target for those that are following and clearly, also in an industry where real terms prices have been going down, clearly the cost focus has to remain in order to maintain the margins.

Growth. We serve a high demand industry and our portfolio has many, many growth options built into it; some which have been delivered, some which still are to be delivered. Delivering those growth options, however, is absolutely critical in terms of delivering the returns that we wish to give to our shareholders. There is another element to that, of course, and that is any business which stands still tends to die. So we have to keep moving forward.

Size and materiality. This business is a big non-integrated player and that's exactly where we want to be. We believe the rent is in being non-integrated. Also from an industry point of view, size and materiality count. Opportunities tend to flow to the big players and with the BHP Billiton balance sheet behind us we can punch significantly above our weight in the industry on a continuing basis.

Value. Return is going in the right direction but remember this is a substantial and young undepreciated asset base. Critical for this management team is squeezing that asset base to get the returns. Then the ultimate measure of value, of course, is cash generation and clearly a great focus there.

Just a quick overview of what the portfolio is. In southern Africa the smelter base is based on LME linked US dollar power, US dollar linked very low cost power contracts. In Australia, 86 per cent of the Worsley operation, one of the outstanding alumina operations in the world, and in southern South America refineries in Suriname and in Brazil, and two smelters in Brazil; the refineries in partnership with Alcoa and the

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Valesul smelter in partnership with CVRD. As you can see from the figures beneath, a continuing period of growth. In fact, the last decade has been growth, and that will continue.

Just again looking at performance measurement, this time against the BHP Billiton strategic framework, and I guess the key elements of that from our perspective, the scorecard that BHP Billiton uses, most importantly the metrics as regards outstanding assets. Safety performance, as I mentioned before, trending down and trending down very, very positively. And then continuous improvement. We give there both, in terms of output, throughout and cost the consequences of continuous improvement. Those are not necessarily driven by a brownfields capital project, those are creep that we've got from the system.

Growth. Excellent delivery of projects thus far in the smelter base and now very much a focus on delivering a similar sort of growth from the options embedded in our alumina base. Marketing. The customer centric marketing value driver, very much about establishing ourselves in China, both in metal and in alumina. Innovation. Really those are just shorthand for using advanced thinking, technology and processes to try and keep ourselves ahead of the pack.

Looking at a few of these in somewhat more detail. Firstly, our safety performance. That's classified injury frequency rate. The classified injury is the lost time plus the restricted work, plus all restricted work injuries per million man hours. You can see the Aluminium CSG there in that blue one trending well, albeit with a kick up in the wrong direction which was the early days of the Mozal project which was then subsequently fixed. Today way down compared to both the average in BHP Billiton and indeed the mining industry, but still a long way to go. That is where DuPont sits right down along the bottom, and I think that is part of the message that we will be giving, that this is the foundation for continuous improvement and there is still a lot to be done.

Emissions. A very, very important part of the licence to operation and the licence to grow is our environmental performance. These are two metrics; fluoride emissions in the smelters which you can see trending down very positively. That's significantly as a consequence of some capital projects, and then the greenhouse gas, some positive moves but you can see also areas for opportunities for improvement. A lot of thought going into process controls to get more stable operations which in turn will also give us creep from our smelter base.

Growth. You can see on the left-hand side there the growth that we've exhibited in metal and the expectations in the coming two years. Principally driven by project but also a lot of creep. Likewise in alumina, but in alumina also a big element of acquisition where we upped our stake in Worsley from 30 per cent to 86 per cent. You will be hearing more during the course of the presentation about projects that have not been that visible before.

Looking at the financial results, this is akin to the slide that we show for BHP Billiton

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quarter by quarter since the merger. You can see a strong growth notwithstanding movements in currencies and notwithstanding the LME price. That's demonstrative of a very, very robust asset base. What's interesting there is I think how big the smelter contribution from that is. People have asked me why don't we sell our alumina on the spot market and not supply our smelters; that's the answer. Our estimation today at a \$1,500 LME price is that the alumina price would need to be in excess of \$500 per tonne before it made sense not to feed our own smelter system. At that same alumina price, some 80 per cent of the world's aluminium smelters would be cash negative. The rising trend there is as a consequence of the continuous improvement and a consequence of our growth projects.

Just taking a quick look at the Brook Hunt evaluation of the refineries. You can see we have the best system in the world, Worsley being pretty much at the bottom of the world cost curve, and then the other two refineries, especially if we add back the dividend we received directly from the MRN bauxite mines to the LMR cost well placed in the second quartile. Likewise the smelter base, Mozal and Hillside right down there at the bottom. The overall system again the lowest cost in the world with the three southern African smelters very, very well entrenched in terms of long-term local cost power contracts, principally producing ingot although Bayside and Valesul do produce value added products, so albeit they are higher up the cost curve they do benefit from some premium prices.

You are going to hear a lot about continuous improvement this morning and I thought it would be quite useful to go through with you how BHP Billiton thinks about continuous improvements and its very many different elements. The foundation, Zero Harm. I have said it already. It is the way we drive the elimination of non-conformances from our business. We deliver continuous improvement through our people, through our processes and through our technology. We measure it in terms of revenue improvement, cost reductions and capital efficiencies. On the people front, the leadership focus, the aspirational targets are set, benchmarks given, gaps identified, strategies to fill those gaps developed. The networks, the BHP Billiton empire is approximately 100 assets. There are a lot of commonalities and a lot of learnings. We have created an internet based series of networks from mine operations, mine planing, beneficiation, maintenance and so on and that allows sharing of best practice and the finding of best practice very quickly and very efficiently and at a very low cost.

In terms of processes, I think what most people think of is continuous improvement and so-called operating excellence. As you can see, it is just a small part of the total. Those are the methodologies such as Six Sigma, the things that you will be hearing later on from Colin and Mahomed, to the things like the KPI value driver tree, Bayos visual workplace. These are all ways of getting the entire work force wrapped up in the levers which drive continuous improvement.

Then to the right of the quadrilateral there, the transformational change. When operations have their backs against a wall, that is an opportunity to deliver significant change. A typical methodology there being McKinsey's Delta P. But another one is

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something we learnt in the merger. We actually now have a tool kit that we can download to operations. We have done it recently in Suriname where we merged the BHP Billiton mining operations with Alcoa. We also did it at Cerrejon Coal.

Then our commercial activities which leveraged sourcing in the aluminium portfolio, the most important being there caustic and coke, and of course the one bookmarked, for example, freight. Technology underpins it all. Enhancing technologies in order to get creep out of the smelters we have to create stability of the pots and the technologies, slotted anodes and others which give rise to that. Transformational technologies, the one you keep hearing about in the BHP Billiton portfolio, the Falcon exploration technology, but also something that is now exercising our minds, that is how do the Chinese build smelters so cheaply? Is there transformational technology in there as well. Colin, Mahomed and Ian are going to talk a lot about these aspects, and the specifics of those as how they relate to our portfolio.

Looking at our strategy going forward, as we stand today we have delivered a significant amount of growth from the smelter portfolio. Where we go from here onwards is a greater focus on alumina from the reasons I have described and you will hear more about those reasons as we go on. Initially deliver what is embedded. Worsley 3.5mt taking it from the current 3.2mt, stretching Suriname stretching Alumar, and then continuing with the work on the smelters. I showed you how much money we still make out of those smelters. Those are great businesses and businesses that we will continue to develop. Then things which are a little bit further down the radar screen but still largely within our control. Again, a lot of focus on the alumina portfolio, a new deposit - well, it is not a new deposit but it is one that we are now exploring with Alcoa in Suriname, taking Worsley beyond 4million tonnes and doubling Alumar. Then in South Africa there is still a lot to be done with those smelters. Some big projects there but they will need new power contracts. Marketing, really capturing the rent from the very high spot price in alumina.

Then the more aspirational stuff. We are looking extensively for uncommitted bauxites outside of our portfolio and opportunistically for stranded power. I guess one message is that the current world is not one which lends itself to growth easily through value adding M&A because quite frankly the values are very, very high.

That gives you the overview. I am now going to hand over to Rod to deal with the marketing.

ROD KINKEAD-WEEKES: Thanks, Mike. Good morning. As Mike indicated, I am going to spend most of my allotted time talking about China where I think it can accurately be described as a phenomenon, and it is a phenomenon which has impacted us considerably to date, but what happens to China in the future has an enormous capacity to impact us in the future.

Before we do that, though, let me just talk a little bit about where we stand in the global metal and alumina markets. In metal our rationale is to add value by maximising net

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premiums wherever we can, I will show you a market mix chart in a minute, but creating the necessary flexibility consistent with good customer relations to be able to switch metal from one market to the other to take advantage of locational premiums and the freight rates that impact getting the metal to those geographic locations is really what we are on about. We have this fantastically strong physical base which we then augment by trading an additional amount of physical metal and engaging in a very small amount of proprietary trading on the LME. At all times, and particularly with much greater emphasis on increased corporate governance, doing those within systems that - an order of magnitude today more sophisticated than they used to be to control and manage risks as part of the BHP Billiton marketing model.

In metal we are probably number two in the world, unlike the Alcoas or the Alcans who actually have greater production capacity than we do. We put everything that we produced from our smelters on to the primary metal markets and, as such, we are a major player because we don't put any metal into any proprietary downstream. In alumina, first and foremost, as Mike indicated, our job is to supply our internal requirements which are clearly growing. At the same time, as we will see later on in the presentation, we are intending to grow our alumina production portfolio. From the marketing point of view we need to position ourselves for that further growth. We also actively trade over and above our equity portfolio and with a particular emphasis recently on China where we have come a long way from, prior to 2000 where we sold virtually nothing into China, we are now one of the major players in the China market.

In addition to that, as part of the overall BHP Billiton marketing model, we are now in a position to do things that we haven't done before in the marketing context and by way of example I would cite the ability to trade carbon credits, for example, that might emanate from one or other of our operations which we can do through the Energy Marketing and Trading desk now in the Hague.

In terms of the movement of production worldwide for alumina and metal, you can see from these charts that metal consumption has increased steadily over the last 20-odd years, but you can also see that a real price decline is obvious. That's the blue line on the top left hand chart. Alumina production and consumption has kept pace with that, but you can see again from the blue line the spot which represents the spot price that has been, generally speaking, more stable but that the two do not move in tandem. This is why we have suggested now for some time that linking the alumina and the metal prices at a time that the world needs new alumina capacity is not smart because alumina pricing needs to reflect the economics of the alumina industry, and in particular the inducement prices that are required to induce new capacity at a time when the world now needs it. Paul is going to talk in a minute about inducement prices.

If we move to aluminium sales by destination, these are export metal sales, you can see that our primary focus is on the major markets of Europe, Japan and Asia. You will see also that from 2004 onwards we will see a slight shift probably into the US. One of the advantages here is, from the Hillside III expansion, that we are now in a position to cast shapes that the US market requires and that gives us a greater ability to service that

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market and take advantage of hopefully what is going to be an increase in activity in America in that time.

If we look at the market mix for alumina, the message I think to take away from this slide is that whereas we are pretty spread around the world we have a good spread of markets. You will see from this that because of the increased internal requirement as a result of the expansions in Mozambique and at Hillside, we will supply more next year to our equity smelters than we have in the past. That will come out of the third party market to the tune of about 800,000 tonnes of alumina a year and clearly that is going to have an impact on the third party market because, as I'm sure you are aware, alumina prices are currently very tight. That market is not easily supplied by additional capacity, and I would expect that, of itself, to have an impact on spot alumina prices.

This chart illustrates the composition more or less of the global alumina book. As such it is a proxy illustration, if you will, of our own alumina book. There are some points that I would like to make here so I will go through it in a little detail. The blue section at the bottom represents, if you like, the integrated or the equity tonnes for the global book. So the majority of alumina goes from the owners of the refineries to those same owners' smelter systems. As such it tends to be passed through at transfer prices that reflect transfer pricing regimes, local tax office rulings and so forth. Therefore, it is not susceptible to the rapid increase or spot prices generally.

The purple line in the middle represents third party contracts supplied, generally speaking, under term contracts and those terms vary obviously from 1, 2, 3 to 20, 25 years in some cases. Again, those contracts by and large are not susceptible to any rapid increase in the spot prices.

The yellow section at the top represents what you might term the spot or the free market in alumina. Generally speaking what happens is as those contracts in the purple section decay over time they tend to get replaced on a longer term basis, and therefore you don't actually see what you see on the graph there, you don't see that yellow section, the spot section, increasing in quite the same way as this chart depicts because those contracts tend to get renewed.

I think there are a number of messages to be taken away from this. The first is that despite the much higher spot prices that we have seen in the market in the course of 2003, firstly they represent only the tiny yellow portion to the left which in general comprises less than 10 per cent - this is on a global basis - less than 10 per cent of the global market at any one time. Secondly, most of the - and this was certainly the case in BHP Billiton Aluminium but also I think for most other suppliers as well - the contracts that were entered into for 2003 for the most part, not entirely but for the most part, were priced and contracted in the latter part of 2002 at the prices that then obtained. It wasn't until the first quarter of 2003 calendar that the spot price really started to take off.

So I think there is a feeling perhaps amongst some external commentators that this is an enormous bonanza, and indeed it has the makings of that in some respects but it is not a

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bonanza that is occurring as rapidly, perhaps, as some people would believe because of the nature of the way that alumina is contracted and because of the size in a relative sense of that spot market portion. Of course, it will have an impact over time but there is no guarantee that if you go to the 2007/2008 timeframe that the situation won't have changed then in terms of increased production on the supply side.

Turning to China and aluminium demand, there has obviously been very, very rapid growth in Chinese metal production capability. 3.5 million tonnes produced in 2000, more than 5 million tonnes produced in 2003. China is currently operating at an analysed rate in excess of 6 million tonnes, and from the work that we do we can quite easily see by 2007 China consuming of the order of 10 million tonnes per annum. I guess we are learning that in relation to China the surprises tend to be on the up side.

We have done a lot of work in our local office and in conjunction with the analyst that serves the other BHP Billiton CSGs of looking at the various drivers. I don't intend to go through this slide in detail but the construction industry is obviously a major driver of aluminium consumption in China. We look very closely at what lies behind growth in construction in China and it is clearly a function of things like the renewal of housing stock itself, urban population of growth per se, and also the urbanisation of China in general. The figures here are absolutely staggering. Added to that is the fact that Chinese dwellings are tending to increase in terms of square meterage per capita and all of these factors combine to create an absolutely amazing construction boom. Any of you who have been to China recently can see it with the naked eye.

We have done a lot of work to better understand each of these Chinese drivers. Bearing in mind that we didn't know a hell of a lot about China even a few years ago, I think we have come a long way in a short time and we are not just guessing now or extrapolating, but we are making a much more sophisticated effort to really understand these drivers in China.

Added to that - I must thank Macquarie Bank for this slide here - the aluminium use on a per capita basis is very, very low in China and it is interesting to see that, unlike the Japanese model which took much longer which are the little blue dots which you see there on the right, China's development in aluminium usage is mirroring much more closely what happened in Korea and Taiwan, and from the next chart you will see that per capita usage in China is right down the bottom in the little blue triangles there, relative to OECD averages, if you like, and relative to the other Asian countries. Per capita usage is still very, very low. Not only do you have this extraordinary demand but history suggests that as GDP consumption increases so the per capita consumption of aluminium metal is also going to increase.

All of this leads us to believe that Chinese production growth makes not only intuitive sense but I think there is some hard data in now to back this up, but there are some interesting points that arise out of the detail. This chart shows that the growth in aluminium production in China where China's market share has gone from 5 per cent in 1990 to over 20 per cent today and, as I said, it is still going to grow. Alumina

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production on the other hand is lacking and the chart on the right shows that whereas Chinese share of the global market in metal has risen to 20 per cent, in alumina production it has really only grown from 4 per cent to about 10 per cent today. Clearly this divergence in China's ability to meet its own internal metal consumption requirements creates a large opportunity for the aluminium exporting industry to supply that market.

We believe that the future, this high production growth is highly probable, and in terms of alumina what this means, and you can see the chart there, the red line is the historical import line. The blue range there suggests that for the kind of 10 million tonnes per year of consumption that we could see in 2007, China is going to require of the order of 10 million tonnes a year of alumina imported in addition to what it is going to supply itself, and that that could grow to between, say, 11 and 13 million tonnes by as soon as 2010.

The yellow line that you can see there just by way of noting is the spot alumina price over that same period and you can see that the spike in 2000 was caused by the explosion that occurred at Gramercy. That took just over a million tonnes out of the market at that time and had enormous impact on the spot market. At this point in time the alumina industry is going flat strap. Capacity utilisation rates are extremely high and, as I have said, the demand remains very, very strong which suggests that any interruption on the supply side, in circumstances where spot prices are currently more than 20 per cent of the metal price, might have a very significant impact on the spot market.

So what does this mean for us? Well, in metal we believe, as I've said, that China will continue to grow strongly and on balance we believe that despite this strong consumption growth metal production will keep pace, very probably meaning that its net exports are going to increase. There should probably be a question mark after that because I think clearly the extent to which China is a net exporter or importer is going to depend very much and is a function of IP growth within China, and any significant changes in that can have a very significant change respectively on that net export or import figure.

In alumina, as I've said, not keeping pace with metal growth and the real issue at the moment, in the shorter term at least, is where is this alumina going to come from and when is it going to be available because I think we have seen just recently in some announcements that expansion projects around the world have been delayed. I don't think they are going to be delayed for too long because the economic imperatives suggest that they shouldn't be, but it is pretty difficult to accelerate significantly a big alumina refinery project. That is a question that I don't know the answer to and it is going to be an interesting one to watch. Thank you.

PAUL EVERARD: Thanks, Rod. I've got three slides and those slides are both going to compliment what you've heard from Mike and Rod in an industry context, and hopefully provide a stronger industry context for the subsequent presentations of our own

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portfolio.

Now, the first slide is really dimensioning the industry. So on the left-hand vertical axis you have revenues in billions of dollars and on the X axis going horizontally we segment the business via the value trains; bauxite, alumina, metal and then down into the downstream. The first observation I would like to make with regard to the orange columns is that you are looking at a business which in its totality globally - and for the last ten years we have seen the industry move from sort of western world to truly global - we are looking at a revenue value of \$150-\$160 billion. In fact, if you look at the market cap and estimate the market cap, it comes out with roughly the same level of value. So a significant industry in non-ferrous metals terms.

If you look at the blue line and the blue dots, they are looking actually at the gross margin as we segment the business going from bauxite alumina through to the downstream and that is very significant because what it shows is that the gross margins in alumina and metal are significantly higher than what we see in rolling and casting and extrusions; ie, in the downstream. That is indicative of the fact that the sources of competitive advantage and the barriers to entry are stronger in the upstream than in the downstream where establishing a source of committed advantages is problematic.

If we move on to the next slide what I'm looking at here really are sort of seven or eight actually key industry factors which essentially we feel are going to be key in driving the overall profitability in the industry as we look forward over the next decade. I am not going to talk my way through each of those points, I am going to just talk about the ones highlighted in blue. If I start on the demand side, recycling, what could argue is a threat to primary because it will substitute out primary, increasing lower energy use and so on. What our analysis suggests is that in fact certainly over the next decade recycled metal is going to grow differentially fast vis-a-vis primary, particularly in transportation, but it is going to complement primary and the primary is still going to be required.

It is attractive for environmental reasons, the amount of sort of carbon dioxide emissions associated with it, particularly in transportation, it is significantly lower than primary. If we come to the environmental point below recycling, in that overall context the International Institute of Aluminium have in fact now developed a model which I think is available on their website which suggests that by the end of the next decade if aluminium continues to substitute steel in cars along the lines announced by some of our large competitors, then the savings in carbon dioxide emissions simply from the transport sector, say a quarter of total aluminium consumption, will more than compensate the carbon dioxide generated in the production of aluminium, including bauxite, alumina, power sources, metal and on into the downstream. So that is quite a significant, we feel in the materials competition, source of competitive advantage.

If I go to the last point, industry structure was weak in the '80s and that weakness was stressed or highlighted by the surpluses which existed in the market. If we look at the industry now, certainly in metal government ownership has dropped globally from something like 60 per cent to under 30. You've got fewer stronger competitors in the

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downstream markets in Europe and the States and you have the growth in China which Rod has highlighted. So I think industry structure rivalry looking forward is likely, other things being equal, to show higher returns and higher profitability than we have seen in the last two decades.

Perhaps coming back to the strategic focus of our interests in the industry, which is alumina and metal, entry and exit barriers. Entry barriers are quite high. That provides the source of competitive advantage. Access to economic bauxite as opposed to just bauxite is scarce, long lead times along the lines that Rod has indicated, and the same to a lesser extent but still very true is access to stranded power as a source of competitive advantage for your metal.

In the sort of world that we are painting, I think driven by Chinese growth in the way Rod has characterised, I think that points towards attractive profitability. In the sort of surplus world that we saw in the '80s and to some extent in the '90s where you get surplus capacity, we have to recognise that in the upstream exit barriers have been relatively high, partly because of environmental liabilities so people haven't wanted to step away from plants and have kept capacity in the market which the market doesn't really want, and partly because of the joint venture nature of the upstream.

That is all I intend to say about industry factors and if we go on to my last slide, and then I do really come back to the upstream and bauxite and alumina. There is growing pressure on the supply side of this segment of the business. Clearly in the first instance we will get - there is very little creep left in existing capacity but we will get brownfield in Australia, in South America, then we will move on to greenfield. According to our own sort of economic calculations we are looking at prices which reward the capital which will have to be invested - bearing in mind that this is almost the most capital intensive of all natural resource businesses - is going to have to move between sort of \$200-\$300 a tonne as we look forward over 16 million tonnes of new capacity. Again, I think other things being equal, that augers well for low cost producers in bauxite and alumina. Thank you ladies and gentlemen.

MAHOMED SEEDAT: Thank you, Paul. I am now going to talk about the smelters in southern Africa. All of these smelters are located on the eastern coast of southern Africa; two in Richards Bay and the one in Maputo. The Bayside smelter, the oldest of the smelters was established in the early 1970s. I think in the last year what is very important is we completed a significant environmental upgrade of quadrants B and C leading to a sixfold improvement in the fluoride emissions from there, and we have also just completed a significant upgrade of the Bayside cast house enabling it to produce value added products at a higher quality and a higher volume.

The Hillside smelter, built in the middle 1990s, initially designed for 466,000 tonnes per annum, currently operating at about 535,000 tonnes per annum and as soon as we fully operational should be in excess of 660,000 tonnes per annum. We are about 60 per cent of the way through with the commissioning of the expansion and, as I said, that capacity would then make Hillside about a 660,000 tonne per annum smelter. Then Mozal, built

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in late 1990s, with the first line that was commissioned in 2000/2001, and then the second line has just been commissioned at a fantastic rate and Mozal's capacity lies at about 536,000 tonnes per annum.

If you look at the progress with the two projects that I talked about earlier, Mozal II has been completed, a significantly improved performance even based on Mozal I's performance. Zero harm as an ambition was certainly demonstrated in this project where the lost time injury frequency rate was extremely low, much lower than the budget we had set ourselves, and certainly a significant improvement on Mozal I. Hillside II, that concept of zero harm was taken further and the safety performance there, as you can see, has also been fantastic.

Speed of delivery. Both of these projects were delivered very well, very fast. Mozal II in 21 months against a target of 27 months, and Hillside we think set another new industry benchmark of 18 months. Also on the cost side, Mozal came in significantly lower than budget and all of Mozal's targets and Hillside's targets were based on when Mozal I was built. \$200 million below budget on Mozal I, and Hillside is going to be about \$34-\$35 million below budget as well, and that is in spite of the fact that the rand had strengthened over the period that Hillside III was being built, and about 30 per cent of Hillside III costs were rand based.

Looking at how the smelters are performing, this slide shows some comparisons with AP30 technology smelters around the world. Clearly Mozal indicating fantastic performance in most of the key areas, and those of the pot output being the industry's best, and that's reflected by the higher current efficiency that is being achieved at Mozal and also by the significantly lower energy consumption at Mozal compared to the sister smelters. Hillside is also there amongst the top smelters. There is a slight technology difference between Hillside and Mozal in terms of pot controls, which does explain some of the reasons for the differences.

Not only have we focussed on capital projects to improve the performance of these smelters but we have also embarked at all three smelters on initiatives that are related to improving the efficiency of these smelters, both individually and collectively, and to date just between Hillside and Mozal we have about 74 continuous improvement projects. All of these are intended to deliver on a concept of predictable continuous improvement, using the methodology that has come out of OE, the Bayos, the BHP Billiton Aluminium Operating System, amongst two tools.

The one project I am showing here is one that involves all three smelters, we call it Project Simunye. Simunye in Zulu means "we are one". We have three smelters located within about 350 kilometres of each other. We own 4.5 of the 11 AP30 pot lines around the world, therefore there has to be opportunities for us to do things even better than other smelters that are located individually from the other smelters would be able to achieve. In Project Simunye we focused primarily on the service functions looking at how we can maximise the efficiencies across the three smelters and further improve the synergies. The little table on the right-hand side of the slide indicates the kind of

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benefits we see just by looking at three of the eight service functions we are going to be focusing on. So certainly a lot of value that we believe can be delivered from here will practically no spend on capex.

The last slide, we try to give an indication here of what opportunities still exist within the smelters by operating the key levers which is amperage and current efficiency. A 5 kiloamp improvement in amperage will lead to a significant improvement in both EBIT and obviously NPV. We have initiated a project about a year ago developing what we call 350kA technology. We have done significant modelling. We have done significant materials testing. We now have a test section operating at Hillside and we hope that this technology will be developed sufficiently well to be able to be implemented on the pot lines as we go through the pot change out programs at the smelters. Thank you very much.

COLIN AGNEW: Thank you, Mahomed. We have a mantra at Worsley in the Alumina Division, and our mantra is really the key idea of the business is more tonnes, less cost and improved HSECQ. Let me just take you a little bit through how that mantra actually converts into the practice.

The first thing is the increased production, you can see Worsley moving up with the purchase of Reynolds' interest, plus what we call capacity creep which is very cheap alumina. We have moved from 3.1 million tonnes per annum nameplate capacity to 3.25 million tonnes per annum capacity. That additional 150,000 tonnes per annum is worth approximately US\$18 million a year initial EBIT on a very conservative alumina pricing structure. The drivers for increased production are both flow and yield. You can see here we have done it both ways. Interestingly enough, every hundred cubic metres an hour increase in flow gives you the same benefit as a one gramme per litre increase in yield and that gives you about an extra 50,000 tonnes per annum which is approximately US\$6 million per year benefit to your EBIT line.

That is why we look at our business in terms of driving extra production. Preferably you do it without any capital expenditure and that is what we have done so far in the capacity creep. The other thing is we look into how we manage our cost and how we manage our business. I will talk a little bit about our KPI driver tree. Inevitably you will get your deviations from your main targets and they are the key performance outputs. You need a system that measures those deviations and you also need to have a system that measures in such a way that you can do something about it. So how do you pick up the deviations of the drivers that impact on your key performance outputs, and we do this with this tree. At the same time the tree gives us the economic impact of those deviations. So we can understand not just the physical parameters of being out on our underflow densities and our caustic losses, but we understand the economic consequences as well.

I am not going to take you through every single line obviously, but the important thing about the KPI driver tree it starts right at the SVA level, and you can move down through EBIT and capital charge, and EBIT you can move down through revenue and cost of goods sold, and obviously your EBIT is impacted on your tonnes of production

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which in turn is flow and yield, so you can follow the tree down. Likewise, if you follow down the cost line, down the cost of goods sold, you can get to the soda cost. If you want to follow that further, this is our soda tree, soda cost is a function of the tonnes or kilogrammes of soda consumed at any period of time. It is also a function of the soda price per tonne, and soda is consumed at various segments of the plant and you can follow this tree right down to the CCD circuit where you look at Tank 3 per cent sold as underflow density, and not only that you can see that in this particular month our actual of 37.1 per cent - our target was 41 per cent and we are A\$19,000 off target. So the impact of being those few per cent solids has an economic impact and this gets communicated through to the whole work force and then it can lead to improvement benefits such as this where you see over a period of time we have something like 520,000 per annum US dollar benefit to EBIT by managing our underflow density, and in fact by raising the target over time and this is how the work group then understands these levers that help us to generate less cost.

The other thing we do also is to have this benefits capture system which we, the whole Aluminium CSG, has in place. At Worsley we used to call it the Continuous Improvement Project list, it is the same thing, where we have something like 216 individual projects on our list. This is an example of one where again we are getting an improvement in underflow densities from a particular tank and that is benefitting something like a million dollars a year. A specific project that gets tracked through very clearly allocated to a manager for its accountability and quite clear about the measurement of the benefits.

Finally, to show how this cascades through the organisation, this is part of what Mahomed mentioned as the BHP Billiton Aluminium operating system, at the level 1 level it is a visual workplace type system where the primary work groups we call them, the supervisors in his work group have a daily analysis of where they are on their key performance drivers. That cascades to a level 2 where the superintendent level lies where there is a daily and weekly summary of what is happened. And at level 3, which is more of my level and my executive management team, where we look at on a monthly performance where we are going in relation to the more tonnes and less cost.

That is how we do things. That is how we integrate this whole concept of the more tonnes and less costs at Worsley. Thank you.

IAN JACOBSON: What Mahomed and Colin have described is really what builds the basis for us to get the best out of the assets that we have and to build on those. I am going to talk about growth and I am really going to talk about growth as it focuses on the assets that we already have.

If you look at our position in southern Africa, the two assets there that have very high potential for growth are Hillside and Mozal. On the right-hand side you can see a chart which shows opportunities specified by the number of pots that we could potentially put on to those assets as they currently are. The challenge for us is really to use the latent capacity, if we can call it that, that is built into those assets as we increase operating rates

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and improve the operating efficiencies of all of the things that support the pots themselves that we can potentially put quite considerable capacity on to these assets. As a guideline, if you think about the AP30 pot of which Mahomed has said there is 11 pot lines around the world, these pots are getting pretty close to producing a thousand tonnes a year each. That is quite substantial capacity. There is no other pot that even approaches that in today's technology market.

These are a couple of scenarios. They are not mutually exclusive but in a linear sense the pot lines that we have already built in Richards Bay and up at Mozal are capable of being lineally extended at quite high value because we can get those capacities in place at much lower unit capital costs.

So that the issue, as I said, is what we need to do is to ensure that when we build this capacity that the existing assets will support it. We are in the process of studying these options right now. We have a team in place doing the study work and for us the real potential is in this low capex, low opex, low risk type of expansion from those existing asset bases. So really the way to consider it is that the OE process, a continuous improvement process, unlocks the potential for us. It gives us assurance that our people can get the value that is capable of being delivered from these assets and allows us to map the way forward.

In terms of alumina, I think Colin is pretty modest about his asset but Worsley really is our flagship refining asset, and it really defines what we are in terms of alumina business. Colin has described very well the OE process that we use to keep moving that asset forward. And capacity creep, you hear about it all of the time I expect, but capacity creep really has been a key value driver at Worsley, built off an asset that has very recently expanded to 3.1 million tonnes and has now demonstrated its capacity at 3.25 million tonnes.

So this slide shows a couple of expansions that we think have the potential to add substantial value. They don't sound a huge amount of capacity compared to 3.25 million tonnes already but we are confident that there is huge value in both of these pieces of work for us and for our partners in Worsley. We expect a capex in both of these models of around about and potential less than US\$500 per annual tonne. That is our focus and that is really what we are working towards in the studies for both those projects. The 3.5 million expansion is under study and in fact, if feasible, by the middle of next year we expect a decision on that project and capacity flowing from it in 2006.

In the case of the expansion that may get us out beyond 4 million tonnes and we factored it into our thinking at around about 4 to 4.1 million tonnes, we have a little more work to do but the concepts as they sit today are giving us some encouragement that we should keep going with that work.

In Brazil in alumina we believe there is substantial upside capacity available to us in the Alumar refinery and we are working with our joint venture partners there in order to understand the potential and unlock that same potential. Capacity creep as it sits today

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will take that asset to about 1.5 million tonnes from the 1.3 million tonne operating rate today, and it is a pretty important base that we need to build to go beyond that. We think about 3 million tonnes is within the capability of the asset and we, as one of the partners, have the bauxite to support that sort of capacity. When you consider the MRN mine dividend stream, then this refinery has a very, very good operating cost structure and we see it as something which we should focus very strongly on and we are doing so.

In terms of smelting in Brazil, just a few short words so you will all know that we had an outage of line two there. It is my pleasure to report that that capacity is now coming back on line. We expect all pots to be back on line by the end of this month and then, through the process of re-establishing full operations and full current by March next year, we think the plant will be back to full capacity. Most importantly I think the work has been done in a very safe and healthy way. It was our objective when this unfortunate incident occurred to make sure we didn't hurt anybody or damage the environment in the process of getting restarted, and it has been a great pleasure actually, despite the adversity that it represented, to see what has been done there.

There is a real ongoing challenge for us in Brazil in power for the smelting side of our business and we've taken some quite significant steps there to signal our willingness to undertake investment to underpin the power requirements for our investments in Brazil. So that's work in progress. We have made a start on the feasibility, on a couple of projects there which are pretty well publicised and I expect that we will see some benefits flowing one way or the other from that work.

In Suriname - which is a place that many people can't put their finger on on a map. When I went to school it was called Dutch Guinea; that might ring a few more bells - we have got a terrific set of assets there with some very great potential. We have recently realigned our joint venture relationship in Suriname with Alcoa. We have aligned our economic interests there and I think importantly also we have aligned ourselves very strongly with the government's interests in us as well. I don't mean financial interest; clearly the government of Suriname has a very strong interest in us being an effective industry partner in that part of the world. It has given us some opportunities to build on work that is being done already aimed at getting that refinery to 2.3 million tonnes, part of which is an expansion of about a quarter million tonnes which has been approved since the economic realignment.

But also as a consequence of that we have started the exploration of an existing ore body, Mike touched on it. You can see it there shown in brown on the map. It is right out in an area of very heavy jungle in Suriname. It is about 300 or 400 square kilometres of known ore body which has not been fully explored as a resource. So we are in the process of doing that now and we believe that it has the real potential to help underpin what we already have in Suriname, and potentially lift it beyond the sort of capacity that it will reach with the current expansion plans, and potentially also in the future a greenfield refinery out in that area or somewhere in the region. So a very important piece of potential.

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So what might we look like if we get all of this done? Well, I hate to say that the lines are shown in shades of grey but if you look at this as a ten year period of time there is clearly some very substantial upside. I haven't talked about all of the things that we actually have in mind now for the existing assets. Some of the things that were shown on that earlier slide for the southern African smelters are not fully reflected in the grey bar here on the left that shows the aluminium production that could be achieved. So you can call these, if you like, a little bit on the conservative side, that is the engineers coming out in us, but it does show that in terms of the portfolio we do keep moving forward and we keep moving forward and are working on the things which are tangibly important.

Very importantly the high value growth that comes from being able to use what is already there and the capability of the people that are already there has to be based on the values that we hold and, in particular, the one that you keep hearing about, and you are going to keep hearing about it as long as all of us are vertical, and that is the standard of zero harm which must underpin all of the things that we do. Thank you.

ALEX VANSELOW: Thanks, Ian. For the best hour now you have been listening about growth and value and I will do just that for the next ten minutes, talk about growth and value. To start with growth. Last time we had a presentation the NOA, net operating assets, was totalling about US\$4.7 billion. Since then we have grown to US\$5.1 billion. Also the mix has changed. The smelters now represent 55 per cent of our assets compared to 50 per cent before. Southern Africa has moved to 50 per cent from a previous 43 per cent. This is mostly due to the two expansions that were just mentioned at Mozal and Hillside.

EBIT at the end of fiscal year 2003 was US\$582 million, coming from US\$492 million in fiscal 2002. We will cover the details of this variance in the next slide, but it is also important to notice the change in mix. Smelters were responsible for 70 per cent of our EBIT from 60 per cent before, and southern Africa has moved to 56 per cent from 52 per cent. In fiscal year 2004 we expect southern Africa EBIT, the weighting on the southern Africa assets on the EBIT to increase with the full commissioning of both Mozal and Hillside but we do not expect too much change in terms of the mix of the product due to the Alumar power outage, among other things.

The next slide now will have a look at the EBIT variances between 2002 and 2003. The graph shows in the first part less controllable variance drivers, which are price, exchange and inflation, coming to an adjusted EBIT and then moving into a more contractible type of variance drivers. I will talk a little bit about all of them.

Price. There was very little change in alumina price between the two fiscal years; basically \$1/t on the cash price, but in the three month average there was a fall of \$14/t. So that has a little impact on the cost of the smelters. Exchange was basically a mix; the rand and the Australian dollar appreciating at 12 per cent and the real depreciating about 24 per cent. In inflation basically we have low teens inflation in most of the assets except the ones based in Australia.

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On the controllable variances, volume increased for both alumina and aluminium. Metal volume increased by 82,000 tonnes, mostly generated by capacity creep at Hillside, but also with the end of the power rationing of the Brazilian assets. Alumina grown by 265,000 tonnes and it is represented by capacity creep at all assets. Costs is the large number there, US\$106 million. It is a combination of cyclical with the lower pot relining at Hillside. That was about US\$30 million of the US\$106 million, with the full return to operations in Brazil as mentioned before with about US\$20 million. Also the lower consumable prices of things like caustics and other major consumables, US\$30 million, and continuous improvement that you heard so many times over contributed US\$26 million to that.

So far in 2004 we have seen significant movements in all three major currencies due to the appreciation of both the Australian dollars and the rand, but also appreciation in the real. We have also seen quite a significant lift in the LME price. The next slide shows how sensitive we are to these changes. So a mix of positives and negatives with the exchange rate and price, but what this translates at the end is how important it is to be effective in those costs that we have control over, which is the volume and the cost.

To have a look at how our costs have behaved on a normalised basis we have these two graphs. Normalised back to 2001 exchange rates, 2001 LME and 2001 inflation. The dotted line shows the minimum target of 2per cent reduction per annum and the blue target shows how we are behaving in relation to our target. In alumina we have achieved the cost production rate close to 3per cent per annum, and in metal we have achieved slightly higher than 3 per cent per annum. These rates of reduction are not sustainable in the long-term. Our challenge is to continue to focus on the operation, improvement and continuous improvement through the several tools that you heard here today; the Bayos, the KPIs, the operating excellence et cetera, and to stay in a position well below the 2 per cent line. This is not a very simple task. The nature of our costs and the breakdown, the profile of our costs makes this quite a challenge and I will show you what I mean by that with the next slide.

If you look at metal cost, these are cash costs and they include sustaining capital. The top graph shows that inputted materials such as alumina, electricity, coke and pitch respect over 70 per cent of our cash cost at the smelters. The remaining 30 per cent are the fixed costs and the ones that are exposed to local price. If you look at alumina and electricity these are 60 per cent of our costs and there are mostly aluminium linked, but there are some power contracts especially that are not alumina linked and are local currency based or capped at a local currency. They swing between alumina and local currency sensitivity.

The next slide I will show you what is the picture for the cash for alumina. Alumina cash cost also includes sustaining capital expenditures. The top graph shows caustic and electricity, and again electricity being a mix between local and US dollar currency. So the two together is about 69 to 88 per cent of the cost and there is almost a reverse picture of what we had in metal. Fixed costs represents just under 40 per cent of total

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cash costs and are mostly local currency based. Caustic soda is an important component, it is 12 percent of our cost, and prices of caustic by nature are very volatile. Our sensitivity to price of caustic volatility is that for every \$20 per tonne that the price of caustic changes it impacts to the range of \$7 million EBIT.

So as I mentioned, this cost includes sustaining capital and the next slide will show not only sustaining capital but how the development capital and the improvement capital have performed over the years as well.

So this is by category by fiscal year and in hundreds of millions of dollars. The large development expenditures between fiscal year 2002 and 2004 are being completed now in 2004. The rate of expenditure over those three years was at the amount of US\$300 million per annum on average. With commissioning of both Mozal and Hillside expansion, that is coming to an end now. The forward rate reflects all the projects that were mentioned before, or some of them, at a rate of US\$150 million per annum. The numbers that are there are just an indication.

Improvement capital has been hovering around the US\$50 million per annum and these are projects like the ones presented by Mahomed and Colin that has a very high rate of return. Sustaining capital, which manages part of our cash cost, has been consistently below 1 percent of our asset base which, again, is set about a very young asset base.

In the next slide I am giving you an idea of how this capital is being paid off. This is EBIT ROC. If you are looking for ROC it would be a figure slightly less than this, and this is by fiscal year and the fork at the end from 2004 is to accommodate different levels of LME price. You can see that from 2005, which is the first year that we get full pay back out of Hillside III and out of Mozal II, there is a reasonable spike on the curve. From there on significant increases and a very positive result.

The next slide will give you an idea of how value has developed over the years. I will start with the first line. As you notice, it starts in '95 and the reason why we picked '95 is that was the date that the old Billiton was acquired from Shell. It really brings to light the first reasonable critical mass in aluminium in the company. For example, Hillside started in 1996 at 97,000 tonnes, so it is a good starting point.

The first line represents LME cash over the period. At the beginning LME was sitting at the mid 1,700s. It gradually deteriorated but with a significant dip in 1989 to the low and mid 1,200s, ending at fiscal year 2002/03 at the mid 1,300s. So that is 23 percent lower than where it started. The second line is production. This is metal units in alumina being converted of 12.5 percent into metal units. It shows extraordinary growth rate close to 20 percent compound. As you heard Ian say and my colleagues, the challenge is to maintain this growth rate or to be close to this growth rate for future years, which will be a significant challenge for us. The next line is a combination of lower prices and this production gives us the revenue over that period. Revenue growth over the period was in excess of 13 percent compound. And the final line brings us the EBIT over the period. Until the fiscal year 2000, growth of EBIT was very close to the

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growth of revenue except for '99 with the sensitivity of the price dip. But since 2000 we have seen the EBIT growth exceeding or meeting the revenue growth which is a clear sign of value growth.

As Mike said, cash is extremely important and the next line shows a measure of cash which is EBITDA and how we have grown our EBITDA compared to the industry. In the five and a half years that are demonstrated on this graph we have extended our EBITDA margins, whilst others in the industry have cleared contracted that EBITDA margin. This is the end of my presentation and I will pass it to Mike for his closing.

MIKE SALAMON: As I said at the beginning, hopefully we have demonstrated to you a quality asset portfolio in the right part of the industry, but still a lot of juice to be squeezed from the asset base in terms of continuous improvement and brownfields expansion opportunities. Then there is increasing focus on alumina for hopefully the right reasons.

Ladies and gentlemen, that concludes the formal part of presentation. We are happy to take questions. I will try and moderate. We have people on the phone as well so we will start with questions from the floor and then after a few minutes we will move over.

QUESTION AND ANSWER SESSION - SYDNEY

Q. Maybe a question for Rod actually, but I wonder if you could comment on the extent to which you think both alumina and power availability in China could cap aluminium production there. And given the ongoing growth in demand in China, how you see the differential outlook for alumina versus aluminium prices, whether in fact constraints on aluminium production could lead to aluminium prices outstripping alumina prices in percentage terms and, if that is right, whether delinking from the aluminium price is a sensible proposition?

MIKE SALAMON: Just this delinking, before I am going to hand it over to Rod, don't forget that slide that demonstrated that in fact the vast majority of this industry, you remember that three bar slide, all but the yellow, in essence. So the delinking as a concept is not something which is going to affect results in any sort of hurry, whichever way you go. The spot market is - the yellow bar is part spot tonnage and part annual or shorter term business, some of which is delinked. I think it is a concept which got currency on the back of the analogy to iron ore, but it is not something that the industry can do anything about in any sort of hurry. So I think it is important to put that into the right perspective.

ROD KINKEAD-WEEKES: If I could just add to that, the other point to make that we made originally was what is important is the alumina price itself and the kind of traditional percentage linkage of around 12.5 or 13 per cent was something which didn't make a lot of sense to us at the time because it was that which capped, in effect, the alumina price and would stifle growth. That was the point we were making.

On your first question about alumina and power, the answer is yes. In principal both of

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those can be a break on China. The Chinese smelter cost curve ranges from the very, very good to the very, very poor and the impact of alumina and power on Chinese smelters is going to depend very much on where a particular smelter fits on that cost curve, and the regional differences in power consumption and prices in China are very significant. So it is very difficult to generalise about either of these issues in the Chinese context. What is clear is that Chinese smelters who have access to, in most cases, coal-fired power may have their own associated mine and power station, have their own anode plants, et cetera, can be very, very competitive. In those circumstances power prices aren't going to be a problem.

MIKE SALAMON: I think just remember the Three Gorges, so there is not going to be a huge shortage of power. Also the comment I made about our own smelters. Before we think of switching off alumina supply to our own smelters, we need over US\$500 a tonne alumina prices. Now, the assessments we have made on the more recent and more - the 300 kiloamp smelters which are being built in China now is they are not dissimilar. In theory yes, in practice we are seeing some phenomenal technical evolution of Chinese smelters and consequently we don't see it as a huge risk.

Q. Just in relation to China again, just wondering if you are seeing any potential for a road bump coming up in China and, in particular I am thinking there you have seen central bank monetary tightening recently, you have a property bubble occurring there and the government is looking to perhaps burst that bubble, and I am just wondering if you're factoring any of that sort of thing into your thinking in the shorter term for China?

MIKE SALAMON: I think you are making, in a way, assertions. We are actually not seeing any of that in reality. I think there is a lot spoken in the western press about it but on the ground we are not actually seeing - it is just going gang busters.

Q. I have a couple of questions for you. In South Africa you have talked about stranded power and the ability to actually get the stranded power has been, and world best power prices has been one of the real links for Mozal and Hillside. When we were there last week we heard that potentially the demand for power in South Africa will exceed supply by 2007 which could put a little bit of a strain on the expansions that you are looking at Mozal III and potentially a Hillside III. Could you talk a little bit about that and the ability you might have to take power rationing at your manganese and ferrochrome assets and keep your aluminium assets actually going full pelt.

The second question, you have talked a lot about your internal contracts and how it makes sense except for above \$500 a tonne alumina to keep providing your own. Can you tell us a bit more about those contracts; what is the length of them, I understand 25 years, how often prices are actually updated and what potential we should use for taking the 12.5 per cent that is historical and actually ramping that up so we see more profitability in your alumina and probably a little bit less in your internal aluminium.

MIKE SALAMON: Very, very briefly, firstly there are two considerations on the power in southern Africa. One is interruption; in other words, I think you are all aware that power

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demand on a 24-hour basis spikes twice a day typically. Now, one of the things that happens when a power system gets stressed is people get shed by the authority, or the power which they can off-take from the grid reduces. That is where we can play around within our existing system of other businesses. We cannot substitute long run with manganese and chrome for aluminium, and quite simply it is different shareholders. We do not own everything 100 per cent. I am sure the shareholders in the various businesses would look a little askance if we just played long run games. On the short run - Mahomed, maybe you want to make a few comments on how you do the short run substitution between the manganese, chrome and aluminium.

MAHOMED SEEDAT: We have reached an agreement with them where in the short-term we could prevent the smelters being shut down and they take the load shed on our behalf, but it has to be cash positive for both sides. It has to be as beneficial for the chrome and manganese operations as it would be for us. We are doing that on a trial basis, so it's in place for about a year or so and we are going to review after that.

MIKE SALAMON: As regards the longer term, clearly this is one of the reasons why it is important to differentiate between continuous improvement and brownfield projects. The continuous improvement will push the 350kA concept, and none of the guys said it but remember we started at somewhere around 290ka, so I think there is a lot of credibility. We have gone from 290 to 335 and going to 350. The 350ka on the existing pot lines is well within the existing power contracts.

Once we start talking about Mozal IIIs and things like that, that is where we need new power contracts. Almost certainly the source of that power has to be addressed. Now, the potential exists both on the western side of the continent and on the eastern side of the continent. There are big hydropower projects that are yet to be launched but could be launched and the intention is to launch them in the not too distant future on the Zambezi and on the Congo River.

Now, the timing of all of that, exactly how it unfolds I am not sure. Another big unknown of course is whether the big Pashina smelter which has been mooted actually gets built or not. That in fact changes the supply and demand situation quite significantly.

Just switching to the alumina question, Rod, do you want to make any comments on horizons as regards change?

ROD KINKEAD-WEEKES: The first comment that I would make is that our southern Africa system is supplied not only by ourselves, so we have other contracts that supply that system. I am sure you will understand that the suppliers of those contracts wouldn't appreciate me telling you the prices in public. In the Mozal case where we do supply the tonnage both to our own interest and to that of our joint venture partners, the contract pricing is in line with the traditional kind of contract pricing and is stepped from 2012 onwards. There will be a renegotiate of those prices in 2012.

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Q. Does that mean both the tonnage and the price is fixed - I understand the tonnage is a 25 year contract?

MIKE SALAMON: The typical alumina contract would be a band, a put call band, and if you sort of said to yourself something between 11 and 14 per cent that would be the range. There will almost infinitely be variations in between but that is not a bad model; hence, 12.5 is not a bad long-running number to look at but in fact the reality is they tend to be in a put call range depending on whether it is a buyers market or a sellers market on an annual basis.

Q. So even though they say price is negotiated annually you wouldn't expect that any of those prices would exhibit anywhere near the 20 per cent plus we are seeing on the spot side?

MIKE SALAMON: That's correct.

Q. It's always within that band?

MIKE SALAMON: Yep.

ROD KINKEAD-WEEKES: It is negotiated annually but within that put call range.

MIKE SALAMON: The aluminium smelters of the world were essentially built on - financiers wanted long-term power contracts and long-term alumina. If you think of 20 years that is not a bad horizon. This is not an industry which changes on tuppence. That is why we drew that graph. Obviously we don't know what the world book looks like but it looks something like that. At most that yellow bar can grow relatively slowly.

Q. Three questions. Firstly, you talked a lot about China but perhaps you could talk a little bit about your metal sales into Europe and what is happening with the European economy. Secondly on your chart, if you look at aluminium used per GDP capita India is actually below China and I was just wondering if you see India maybe taking the same sort of steps forward as you are seeing in China. You said that you expect China to remain the net export of metal. Their export rebate gets cut in half from 1 January and I was just wondering if you thought that may have any implications for imports. Then the black empowerment to come through as we are seeing on the mining side.

MIKE SALAMON: I will make a comment about India, I will ask Rod about China and then Mahomed. As with India we have just not seen the same sort of industrial activity in India. I think there has been a fantastic services evolution in India in the recent past but we have not yet seen it in terms of industrial activity. So we are not seeing it in demand. Another area which we have been hugely challenged by is trying to put production facilities, get production facilities off the ground. Orissa, one of the states in India is very well blessed with bauxite and it has been very, very difficult for a whole variety of reasons. I mean, I guess the bureaucracy makes it very, very difficult to get that forward.

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I think it is there, it latent. It is a billion people. One senses that surely it should follow but it is not moving at anywhere near the same rate. Rod, do you want to make some comments on the Chinese question?

ROD KINKEAD-WEEKES: I think the export rebate regime changes will have an impact on exporting. One of the other drivers of exports has been the Chinese import licensing regime whereby people importing, or having licences to import alumina for tolling purposes have to export the metal tolled. Some of that metal goes out and then actually comes back in again. But the point I was making earlier, I think, is that in the longer term the fact of China's production capacity is very important because if Chinese growth falls below the current rates, then China will have the capacity to put an awful lot of metal on to world markets. How that pans out exactly we don't know. What we do know is that the Chinese aluminium industry is very proud of its kind of number one status in the world now as a production nation, and they are very much looking forward to playing a role in the global metal markets.

MIKE SALAMON: Rod's continually negotiating his annual bonus with me and he loves to do it in front of large audiences so everyone can witness it. I mean, if I stand back and say what did we budget and plan for and what actually happened, we expected there to be much more substantial net exports out of China in the current year than we have actually witnessed. They have been much lesser, hence we have seen the LME prices trending up whereas we thought the expectation was for them to be trending down. Clearly anything that is growing at the rate that China is growing makes one very nervous because it is very unlikely to be stable. As we stand today, that is not happening. When it changes, I don't know.

MAHOMED SEEDAT: On BEE, in terms of the Mining Charter we are not affected by the smelters. We have seen other charters come out since the mining chart, the Financial Institutions Charter, the banking charter as they call it, the Maritime Industry Charter but to date we have seen nothing on the beneficiation industry. Having said that, one of the key indicators in the scorecards, for example, associated with the Mining Charter is around beneficiation and you get a very high score if you do beneficiation and clearly the aluminium industry in South Africa, the primary aluminium is very well positioned there because we are certainly very much in the valuation creation business.

MIKE SALAMON: Maybe you want to make some comments about what the overall scorecard looks like and how you guys rank up.

MAHOMED SEEDAT: That is one component. The other components in the scorecard are around employment equity and certainly we have an Employment Equities Hearing Committee in southern Africa involving all of the operations, and relative to the rest of the industry we think we are doing very well there. There is also other components in there around purchasing from BEE companies. We monitor that and when we stack ourselves up against the other industries we are doing very well there as well.

As an example, on the Hillside III expansion we'd budgeted to spend about 480 million

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rands in the local area; we spent in excess of 600 million rands and predominantly on BEE companies. So we think we are doing very well. Finally I would like to say that we are Looking at downstream opportunities, facilitating those, not getting involved ourselves, but as industry's approach is to establish industries downstream to the smelters, we certainly encourage them to look at BEE involvement there as well.

Q. Just quickly following on Rod's themes on China and the potential for excess exports out of China, could you extend that into your thoughts on the long-running price for aluminium. There seem to be two sort of camps there, some camp obviously expecting significant exports in price weakness in aluminium which will obviously feed through to alumina. The second question is on freight rates, if you could just comment about that. There has been some wild movements in freight rates and how that is impacting your business and how you mitigate risk in that area.

MIKE SALAMON: Quite honestly, your view on price is as good as our view. I have said what I am going to say about price. Our expectation was that it would be weaker than it has been. You know, long run view on price, I guess the nearest you are going to get to that was Paul's slide on what we think needs to be for inducement prices on alumina.

As regards freight rates, that's been something that has really been driven entirely by China. The breakout of imports into China of dry boxes has consumed the world's ship capacity and it has had the same impact on alumina. We have not run out of vessels but we are paying substantially more than we used to pay. We have some cover and in some places we are not covered. In relation to iron ore for example, the cost of freight is a fraction compared to in the case of alumina. Alumina is a much higher value product. It is not going to be the same sort of driver, where in iron ore you might argue that it could actually change trade flow patterns because freight has become such a big component of the total value. The same doesn't apply in alumina.

I guess our view is we shouldn't run out of ships. Clearly there is a lot of financial benefit in being more efficient now as a ship owner and as a harbour operator, and clearly vessels are being built. I don't think the barrier to entry into ship building is not huge and there is a lot of financial incentive to build ships.

Q. Two questions. The first, again, coming back to China. Can you just run over for us a little bit on the nature of the possible deals that you can do in China. We hear for instance it is very difficult to write contracts there because of the reliability of what is a very, very fragmented market. So if you could just sort of make some comments on the possibility of long-term contracts in China. Secondly, just a question on Mozal and the 1 per cent sales tax rate there. Clearly a very, very profitable operation and it is going to get more profitable. Do you see much political risk of that tax rate getting renegotiated in the future?

MIKE SALAMON: Alex, you haven't had a chance to talk, do you want to make any comments, and Mahomed you correct him if you think he's gone wrong.

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ALEX VANSELOW: I don't think I will comment on China, I will talk about the Mozal question. The 1 per cent tax rate is there. The government is our partner in the venture and we are continuously discussing with them not only the expansion that's just completed, but possible future expansions. So there is a very close and interactive relationship. If there is any possibility of change this has never been discussed or questioned. They are directly benefitting from the success of Mozal.

MAHOMED SEEDAT: Just to add to that, this is part of the investment authorisation that was done by the government. It is essentially legislated and it is not likely to be changed.

MIKE SALAMON: I guess you are aware that Mozal is sort of a poster child project for the country and I think from the point of view of Mozambique to secure further foreign investment it is very important for the government for that project to be seen to be successful.

As regards counter party risk in China, I guess the simple reality is that we are doing business there on the same terms and types of terms that we do anywhere. The fact that there is not long-term contracts being entered into is more a reflection of what we want to do, I think, than what others want to do because people still haven't come to terms yet with a world where long-term contracts are at a materially different price arrangement to that which has prevailed to date. People are not yet willing to do that, and I guess if you are selling alumina, available alumina north of \$300 a tonne, we are pretty comfortable with doing that on LCs.

A point which maybe we should have made along the way which we haven't made, our role in China is very much to be a seller. The types of risks that one has to contemplate when you are an investor, those are not risks that we really necessarily expect to have to deal with. Our sense is that our Chinese customers have the money and have the technology and have the will to do what they want to do, and really our role there is very much as raw materials supplier.

Q. Mike, we have seen you make some moves towards investment in power generation. Is this a change in strategic direction for the company or for the Aluminium CSG, or is it opportunistic, and what do you see the effects on margins and capital intensity if you do go down that track?

MIKE SALAMON: The changes have been actually very, very minor. I mean, the only places where we have in fact invested in power in any sort of serious way have been - we have done a little bit in our manganese business. Colin has a Cogen plant which in fact I think we have moved off our balance sheet anyway at Worsley. We have done a bit of an investment in Brazil in the Matradeano hydroplant. To characterise a move to power is not correct; we haven't actually done anything material.

I guess where we are at is, from an aluminium business point of view, we are looking for stranded power. So by definition you don't want to be a major investor in stranded power. We will be, I guess, looking to see if we can catalyse things rather than

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necessarily be a major investor in things. From the overall business perspective, really we are not there. We are a supplier of fuels of various descriptions. We do face, have certain contracts which have power components in them from the point of view of pricing but we are not really in the game of power for the sake of power. Power is a very important part of our business because we supply it and we consume it and so we clearly are going to be shifting around that space always, but we are not in the game of generating power for the sake of generating power.

Q. Just a couple of questions. Just coming back to the alumina, I just noticed in the first quarter the revenue per tonne for alumina actually went down a tad. I am just wondering is that because you are now selling more to your own smelters rather than on the spot market?

MIKE SALAMON: I am not going to try to answer questions quarter by quarter. This business is not run on a quarterly basis. I think one tends to read into quarterly figures what you shouldn't read into.

Q. I guess what I was getting at, should we actually expect alumina earnings to either plateau or go down from here because you are selling more on contract to yourselves than on spot in the world market, rather than go up?

ALEX VANSELOW: It is important when you read the numbers that you do not just read the revenue that is part of the equity sales, you also read the revenue that is part of the trading sales. We are not going to go into the detail of breaking down how much alumina goes into trading and how much alumina goes into equity, but if you look at what Rod explains in terms that our book is a mixture of equity and trade. We allocate that between the different markets according to the most valuable proposal. You get a good idea in that. If you look at the trading results and a combination of alumina you have a good picture, a complete picture.

Q. The second question, would you mind just expanding on the alignment of economic interest in Suriname, just what that did for you, with Alcoa?

IAN JACOBSON: What we were able to do there was to align the mining process so that the mine ownership was aligned with the refinery ownership, and we are now the sole managers of the mining operation. What that has enabled us to do is rather than look at the interface between two mines and try to get the balance of raw materials going into the refinery optimised that way, we can optimise it on a sort of a whole mine basis. We have already seen some significant benefits in being able to pull from the mine without any sort of fear or favour of any interface where people may get touchy about levels of ownership and cost and those sorts of things.

MIKE SALAMON: Effectively we now have everybody aligned around maximising the through put of alumina at the lowest cost, and that is the first time we have actually had that because when you have ownership structures which are not the same all the way through, you inevitably cause some optimisation to take place. The refinery was producing at records levels since we had that. I mean, the mine is now totally aligned to

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supplying something to the refinery which maximises through put and minimises costs. Again, Paul, you have a long history there but my understanding is that has almost never been the case.

PAUL EVERARD: That's right, it never has been the case until this year. I think the other thing to add to what Ian and Mike is saying is that we have established continuity of those assets with that congruence for at least the next 20 years. I think it was in the public domain that our joint venture with Alcoa needed renegotiate before 2006. With the asymmetry we had historically that could have been quite turbulent but all of that is now behind us.

Q. One question which is maybe just a little bit abstract, but the recent price increases you have seen in aluminium on the spot market, are you actually seeing that being reflected in physical orders and interest from your customers, or do you feel that is more speculative?

MIKE SALAMON: The short-term stuff, quite honestly, tends to be funds playing more than reality but, Rod, do you want to add to that?

ROD KINKEAD-WEEKES: I think the Metal Bulletin Conference every year which takes place in September after the European holidays is always a bit of a bellwether. There was a much more positive attitude at that conference than subsequently. The OECD leading indicators are all ticking upwards and I would describe the physical business as being steady but not showing signs of massive improvement at this point in time. The increase in the metal price which you referred to, as Mike indicated, is largely a case, I think, of funds and others beginning to front run a recovery, if you like.

MIKE SALAMON: Short run changes in metal tend to have nothing to do with the real world. So what you see happen on the LME yesterday is typically decided in New York or London or Sydney and people who - they don't even know what an ingot of aluminium looks like and care less probably.

Ladies and gentlemen, it looks like we got to the end. We are available to continue the discussion next door. For those of you who don't need to rush off to your offices please join us. Thank you.

QUESTION AND ANSWER SESSION - LONDON

Q. Alex you've just shown us a slide show of your EBITDA margins for your aluminium business compared to your peers. Are those a like for like comparison or do you benefit from not having the processing activities that depress the margins of others?

MIKE SALAMON: Those are the companies, the EBITDA margins, Alex, do you want to take that?

ALEX VANSELOW: They represent the published numbers for those companies and many

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times the companies do not separate their upstream business from their downstream business. But based on Paul's slide that shows that there is a clear difference in EBITDA margins from the upstream to the downstream. It's not "orange for orange" in terms of likely businesses, but it's "orange for orange" in terms of aluminium businesses.

MIKE SALAMON: I think there's a point there, Alex, that slide, it's divergence, not so much the absolute number.

Q. Just a couple of questions. First one just in terms of the alumina expansion and I guess my question is, why sell to China if there's a high likelihood that a big percentage or a percentage of the product that goes in there is going to come back out into the market in the Western world as metal and potentially depress earnings. The second question just relates to the alumina refineries. Perhaps a question for Ian, just in terms of Alcoa and I guess it's got this 'de-costidisation' program which it's running out at the moment starting with I think Pinjjara. Is it likely to continue to roll that out across it's other refineries and is that part of the yield gain that you're talking about, and what's the timeframe for that?

MIKE SALAMON: I don't think we can answer questions on Alcoa, I suspect you should actually really ask those from Alcoa. Maybe Rod, do you want to make any comment on the other one?

ROD KINKEAD WEEKES: If I understood you right, the question was why sell alumina to China if it comes back as metal. I think the whole question of China being an importer or an exporter of metal is an open one at this point in time. Up until now we've seen most of the metal produced in China actually consumed in China, with some "playing around the edges" if you like, which derides in part from the way that import licensing regulations in China for alumina are set up. And whether that will continue is ... your guess is as good as mine. It is quite possible that China will be a net metal exporter and that that could be significant but as Mike indicated earlier, we make a lot of money out of selling alumina to China and the extent to which it's going to cannibalise the price it really remains to be seen.

MIKE SALAMON: I think you've got to accept that the world of alumina and aluminium are free markets. I mean if we choose not to supply alumina to China others will, so I think there's really a bit of a fallacy in the assumption that one can sort of prevent flows of material. I guess, if we sort of stood back a year ago with taking a view on the BHP Billiton businesses going forward in terms of the LME metals, we were very confident about nickel, we were reasonably confident about copper and we were quite concerned about aluminium, because we actually I think expected China to be a greater net exporter of metal today, and yet that has not transpired. In fact the Chinese consumption of metal continues to err on the upside of our expectations. The possibility of that turning round is of course why we have to focus so hard on smelter portfolio being absolutely low cost. So that notwithstanding what goes on in terms of metal flows and consequent price impacts we can carry on making a decent margin and decent profit in our own smelters.

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Q: A question on alumina again, and particularly the inducement price. It seems to me that page 16 suggests that really, the linkage price we currently see, I guess around 12.5%, would be insufficient in the long run to really see the expansion in alumina that we need to match aluminium capacity. Do you see that there's an element of cross-subsidisation in some producers' aluminium capacity, and then how do we address that to see that more aluminium smelters and alumina refineries are built?

MIKE SALAMON: Rod tried to sort of give an indication of the structure of the industry. This industry for the last 25 years, as independent smelters have established, they've based themselves on long term power contracts and long term alumina contracts. That's how they've been financed. Alumina contracts, typically 12.5% of metal with a put-call range say 11% to 14%, so when the alumina market is tight, it will err towards the 14%. That range is pinned down annually but the long run contract could be 20 or 25 years so when the market for the alumina is tight it goes to the 14% and when it's weak it goes towards the 11%. If you go back through time that's worked reasonably well and the stock market has tended probably to be weaker than the range and so to argue I think that the industry has ... historically there has not been any subsidisation. I think looking forward you could argue for a need for higher, and I guess what's an open question going forward is, as the long term contracts Rod referred to decay, how are they renegotiated? That's still pretty much an open question. Clearly I think the people long in alumina would like to see that in a rising trend. On the other hand I would imagine that people who are smelters or long metal would harp back to history. That position is yet to unfold and indeed will unfold very, very slowly. Remember for example when we built the Hillside smelter, we were not an alumina producer. We financed the Hillside smelter on the basis of 20+ years of power and alumina, so you know it takes a long time for those contracts to decay.

Paul, do you want to add anything?

PAUL EVERARD: Well just to say that if you go back as far as I can and you look at the 60s and 70s, you were looking actually at an emerging, sort of non-integrated alumina market where the realities of the economics of producing alumina was reflected in the contracts. It was a percentage of metal – there was a percentage of metal that were costs, there were fixed elements and so on. Now with the recession in the 80s and surpluses in alumina, inevitably prices did come down to sort of the high part of the cash cost curve and smelters who had a choice clearly wanted to sort of hedge their raw material. With growth, I think there is a case to be made to say that the economics required to underpin new alumina capacity will again be reflected in the price. Now that could be a percentage of metal, a sort of higher percentage of metal, but it could be some other formulation of the type that we've seen historically, or of the type that you see being practised in coal or iron ore.

Q: Mike, you've talked a lot about power and stranded power in particular, and I know in the past the group has sort of grappled with its long position in petroleum and energy coal and obviously the requirements for the aluminium business. Can you maybe talk a little

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bit more about the longer term strategic implications of that? I'm thinking about obviously your oil and gas position in Trinidad, which is not a million miles from Suriname and obviously the North West Shelf. Are there any longer term strategic concepts you can outline in terms of brownfield and greenfield expansions?

MIKE SALAMON: To be perfectly frank, right now there's no connection, and so when we talk about stranded power we as an aluminium business are actually looking to acquire power at less than the cost of production typically. So clearly within the company there's a disconnect there. I mean it's pointless trading from one business to another where one loses money, the other makes money, so we look for stranded power in the context of truly stranded power, where there are no other outlets so consequently the generator of that power is willing to look at price formulations which don't necessarily reflect costs. That connection is not being made between the different parts of the BHP Billiton business. We're not into the game of power as an aluminium business, we're into the game of purchasing power, to the extent that in certain places we need to underpin – as Ian mentioned in Brazil. The game of power in Brazil has moved on from where Brazil was very low on power and you had a big hydro projects with stranded power. We're now having to move beyond that period and there we're sort of looking to underpin, in certain instances, some of our power offtake but it's very specific to certain assets, it's very specific to the CSG, it's not a global event as such.

Q: You mentioned that you're looking at how smelters are built so cheaply in China and whether that offers opportunities. I wonder if you can comment some more on that, you know, can this smelter performance in China be transferred out of China or are there opportunities for yourselves to invest in smelters within China? Do you believe that the way that smelters are built and perform in China fits in with your philosophy of zero harm?

MIKE SALAMON: I'll let Ian answer most of that, I just want to make one comment about investing in China. In all honesty I think our view is that the Chinese have the technology, have the money and really what they seek is raw materials, so we don't see ourselves bringing competitive advantage to investing in China, but Ian, maybe you want to make a few comments about the cost of sales?

IAN JACOBSON: The little we know – and I think there's a lot to know – certainly points us towards things that we can learn and apply in the West. I wouldn't be so bold as to predict for you what it would mean to capital costs of smelters outside China, but we certainly have some things to learn. In particular in terms of schedule and how quickly these things can be brought on stream but with that, there's obviously the management of risk, which is an issue that is seen differently here to there, or for us to there, if I can put it that way. But in terms of zero harm, all I could say is really we shouldn't underestimate what's being done in China as an enterprise going forward and we certainly shouldn't underestimate what we're capable of learning from it, despite our experience in the construction of five potlines in Southern Africa over the last few years. So we see it as a learning exercise and we see it as working with our alumina customers too.

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MIKE SALAMON: I guess the bottom line is aluminium is our main game. We are the benchmark in the Western world by a very, very long way and these guys are beating us in terms of delivery of project so clearly that is a wake up call. And I think the third point is that pretty much everything we've looked at – and Rod you might want to comment – but it's turned out to be better than what we expected. So I think people always tended to be a little sceptical, and as our people get to see more, I think we're more and more respected for that.

Q: I noticed that the brownfields South Africa expansions are already sort of pencilled in tentatively in the second part of this decade. Can you just comment in terms of any discussions that you've had with Eskom with regards to power. Because if Coega goes ahead it's quite clear that there would be a potential shortage of power in South Africa, and maybe just comment in terms of whether those power contracts are likely to differ from those that are currently place?

MIKE SALAMON: Mahomed, can you make some general comments? Please don't try to speculate on the nature of the contracts, because I'm pretty sure we're not in a position to do that.

MAHOMED SEEDAT: Currently, we're just now completing the expansions we have, so these are thoughts, these are concepts. We just started discussions with Eskom and there's still a long way to go, so I really can't comment.

MIKE SALAMON: I think the big issue is the one you highlighted upfront, is whether Coega will happen or not and that will clearly make a very major difference to the extent of available power in that region, so that's one big marker. Then there's both on the Western and the Eastern sides of the sub-continent, there's a lot of hydro potential ultimately. Now how that develops, and that is under a lot of discussion between Governments and between generators and indeed between potential power consumers, and all of that will determine what might be possible. It's work in progress is all that can be said and clearly the opportunities to use the power are there. A big challenge we've got now is to make sure that the power is there to be used.

MAHOMED SEEDAT: Yes perhaps Mike just a comment as well is that it really is people that we're short of rather than base levels so the focus has to be on how we substitute for the key power.

Q: I just really wanted to ask, I think you mentioned Mr Salamon that you're considering at Mozal changing from coal to gas. Can you confirm that and would that be trying to use gas from Sassol natural gas project? Just regarding expansions that you mentioned within Southern Africa, are potential expansions looking any more positive than earlier in the year and what kind of timing have you got in terms of that? And just regarding China; what's making them relative to the Southern African ones? Thank you.

MIKE SALAMON: Mahomed do you want to have a go at the Southern African part of that

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question?

MAHOMED SEEDAT: Yeah sure. In terms of Mozal there's no plan to convert the smelter entirely from coal to gas. In fact we're looking at converting from oil to gas in the bake and the cast house where we need heating energy to bake anodes or to keep the metal liquid before we cast it. We're looking at using Sasol gas, we have initiated a project. We're looking at the feasibility and it's not big numbers in terms of costs or in terms of consumption, but it's going to be useful for the development of the area if we can convert to gas. It's still again being explored.

The other question on expansions, what is the question again Justin?

Q: You mentioned that expansions were more towards the later part of this decade – is it anymore positive than that at this stage? Are your plans still to expand Hillside, or Mozal further, later rather than earlier and is it looking anymore positive than previously?

MIKE SALAMON: Yes, I think that question was actually answered in the previous questions. I mean it actually depends on the availability of power. We cannot expand aluminium smelters without actually having the firm power and the expansions being mentioned there were fairly substantial ones, but continuous improvement will continue.

Q: Would expansions really be for 2007/2008 then, as you've previously said?

MIKE SALAMON: Yes.

Thanks very much and Ladies and Gentlemen thank you. That then draws the proceedings to a close. Thanks.

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